

## Electrical Utilities and Public Administration Training Council Industry Workforce Development Plan

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**Plan Details:**

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**Endorsement:**

Department of Training and Workforce Development

**Signature:****Date:**

# FOREWORD

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The **Electrical, Utilities and Public Administration Council (EUPA) Inc** is continuing to promote Vocational Education and Training as the means to supply industry with highly skilled labour both now and into the future. EUPA has established networks with influential industry peak bodies, industry leaders and associations as well as training providers across its scope of operations to deliver on this outcome.

EUPA has an industry coverage which is the foundation for all other sectors of the Western Australian economy. The state relies upon the sectors EUPA services to provide social infrastructure, administer government services, ensure communities are safe, build and maintain public utilities, enable power and provide community safety.

This 2014 Industry Workforce Development Plan is founded on research and advice received throughout the year. This year we implemented a new strategy to develop online environmental scans that are now continually being updated. Issues relating to each industry sector are now presented in chronological order at [www.eupa.com.au](http://www.eupa.com.au).

For the first time, our Workforce Development Plan has been deliberately written to refocus attention on the industry coverage EUPA is contracted to service. The scope of which is defined by the Australian and New Zealand Standards for Industry Classification (ANZSIC) and these underpin the activities of this Council.

It is through this Workforce Development Plan that EUPA demonstrates how it will contribute to the strategic goals articulated by the Department in *Skilling WA – A workforce development plan for Western Australia*.

Our work also continues to inform the Department of Training and Workforce Development of matters that impact on the industry sectors EUPA represents and the proposed strategies and actions to be championed by the Training Council on their behalf.

EUPA aims to continue to provide leadership and forward-looking industry advice to government to support the state's development and in so doing is proposing strategies to ensure its continued engagement in workforce development and training initiatives for each of its industry sectors.



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# Overview

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## Issuing Authority

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This plan is issued under contract between the Department of Training and Workforce Development and the Training Council in accordance with the requirements of Schedule 2 of the Service Agreement and is maintained by the Training Council.

## Aim

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The aim of the plan is to outline industry workforce development trends, strategies and actions that provide high-level advice to the Department to inform future strategic directions and Skilling WA – A Workforce Development Plan for Western Australia.

## Objectives

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The objectives of this plan are to provide the Department with:

- a Profiles for industry portfolios for the Electrical Utilities and Public Administration Training Council as follows:
  - I. Electrical
  - II. Utilities
    - a. Electricity Supply
      - i. Generation
      - ii. Transmission and Distribution
    - b. Gas Supply
    - c. Waste
    - d. Water
  - III. Public Administration
    - a. State Government
    - b. Local Government
    - c. Corrective Services
    - d. Public Safety
- b High-level state and national industry data and forward projections in regards to:
  - I. Economic trends and impacts on workforce planning;
  - II. Current and future labour market modeling consistent with information provided for the development of the State Priority Occupation List (SPOL);
  - III. Regional variations that may affect workforce planning;
  - IV. Training and education including VETiS;
  - V. Industry critical aspects that may impact on future planning.
- c Identification of issues that impact on State Workforce Planning and that inform and are linked to Skilling WA strategies.

These objectives are established so that effective development of workforce planning in regions and at State level can occur.

## SECTION 1 EXECUTIVE SUMMARY

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This iteration of the Electrical, Utilities and Public Administration Training Council (EUPA) Workforce Development Plan identifies some of the major issues that have altered industry's outlook over 2013/2014 and those which have been found to be no longer as relevant as in previous years. For example competition between industry sectors for skilled labour is less of an issue; the demise of the proposed national licensing system for the electrical sector relieves training and mutual recognition requirements; the predicted significant impact of the National Broadband Network (NBN) has yet to eventuate; and local government reform in the regions is now not being contemplated.

Issues such as the under-employment of underrepresented groups; state population growth; the training and skilling of volunteers especially in the Public Safety sector; low industry profiles that affect the ability of some of the EUPA industry sectors to attract employees; and the impact of local government reform in the metropolitan area continue to be of concern.

However, new issues have also presented as a result of a change in Commonwealth Government and a tightening of both state and commonwealth budgets due to changes in economic conditions. Issues such as access to commonwealth funded training opportunities being reduced and the introduction of a new State funding model for training services have both resulted in fewer numbers of people in training.

The following provides a profile the EUPA industry sectors in accordance with the training council's service agreement in alignment with the Australian and New Zealand Standards for Industry Classification (ANZSIC). The major activities of stakeholders and the current workforce development drivers and barriers impacting on each sector have been explored and these have been presented to underpin the workforce development strategies EUPA has identified for implementation during the 2014/2015 period.

# Electrical

ANZSIC Division E Construction Services

Subdivision 32 Construction Services

Group 323 Building Installation Services

Classes 3232 Electrical Services, 3233 Air Conditioning and Heating Services, 3234 Fire and Security Alarm Installation Services

This industry installs

- electrical wiring or fittings in buildings or other construction projects;
- electrical work arising from the installation of appliances
- heating, air conditioning and duct work; and
- fire protection, detection and control systems.

ANZSCO

There are 8 occupations identified as the focus of this industry. Please refer to Attachment 1.

## Regulatory Arrangements

This industry is regulated by government at both commonwealth and state levels. The major regulatory agencies are the Australian Government Electrical Regulatory Authorities Council, the Department of Environment (Australian Refrigerant Council) and the WA Department of Commerce (EnergySafety Division and the Electrical Licensing Board). An appropriate license must be held by individual workers and entities (companies, partnerships and individuals) to perform varying types of electrical work.

## Features

The sector comprises a high number of micro/small businesses that serve projects through contractual arrangements in domestic, commercial or industrial settings. 14,831 workers identified themselves as working as an electrician in Western Australia<sup>1</sup>. By comparison, EnergySafety figures show the total number of electrician's licenses issued to be 33,206 as at 31 December 2013<sup>2</sup>. Taking into account the time lapse between the 2011 census and the statistics provided by EnergySafety (2013), EUPA determines that approximately 50% of those with a license do not identify themselves as electricians.

## Workforce Drivers

EUPA's engagement is dominated by issues affecting electricians and the associated training (pre-apprenticeship and apprenticeship). The new 'Future Skills' funding model, duplication between industry training packages and industrial relations issues concerning competency-based wage progression are key factors that influence this sector. The training sector also underwent a 'strategic audit'<sup>3</sup> by the Training Accreditation Council in 2012, which brought into focus on-the-job assessment activities.

Employment and apprentice-training rates<sup>4</sup> have been of concern as industry adjusts to changing economic circumstances, particularly due to the transition of the resources sector from construction to operation phases.

<sup>1</sup> Australian Bureau of Statistics, *Census 2011 Electrical Installation Sector TableBuilder data file*, generated 16 January 2014, <<http://abs.gov.au>>

<sup>2</sup> Department of Commerce, *Personal Communication* 17 January 2014

<sup>3</sup> Department of Education Services (2012) *Strategic Industry Audit of qualifications which lead to an electrician's licence in Western Australia*, Accessed 20 January 2014 <[http://www.tac.wa.gov.au/\\_Documents/Documents/SIA\\_qualifications\\_electrical\\_licence\\_WA%20.PDF](http://www.tac.wa.gov.au/_Documents/Documents/SIA_qualifications_electrical_licence_WA%20.PDF)>

<sup>4</sup> Construction Training Fund (2013) *Construction Industry Snapshot WA*, November 2013 <<http://bcitf.org>>

Industry must also consider and make appropriate plans for the increasing population, regional expansion and adoption of renewable energy. Energy Skills Australia Industry Skills Council (E-Oz) make specific reference to the changing skills needs in all electrical/electricity supply sectors as a result of new technology that creates cyclic networks of energy (rather than the traditional linear view from generation to consumption).<sup>5</sup>

## Focus

In 2014 EUPA is working to:

- embed the newly established apprenticeship pathway for electrical fitting to provide better career progression in the electrotechnology industry;
- improve the uptake of appliance servicing, electronic servicing and fire detection qualifications by engaging industry and RTOs to ensure training effort better reflects the employment/licensing requirements required by industry.
- identify the issues and opportunities that exist as a result of the number of qualified electricians that do not currently work in the industry.
- canvas and address school based work placement, pre-apprenticeship and apprenticeship issues with industry, particularly as a response to the implementation of Future Skills WA and potential impact of competency-based wage progression.
- Monitor the regulatory landscape as national licensing is no longer on the agenda.
- Work with E-Oz to revise training packages in light of technology changes and training package streamlining.

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<sup>5</sup> Energ Skills Australia (2014) Environmental Scan February 2014

# Utilities

## Electricity Supply

### Generation

ANZSIC Division Electricity, Gas, Water and Waste Services

Subdivision 26 Electricity Supply

Groups 261 Electricity Generation, 262 Electricity Transmission, 263 Electricity Distribution, 264 On Selling Electricity and Electricity Market Operation

Classes 2611 Fossil Fuel Electricity Generation, 2612 Hydro-Electricity Generation, 2619 Other Electricity Generation

The generation sectors generate electricity using:

- mineral or fossil fuels in internal combustion-turbine conventional steam processes;
- hydro-electric generation processes; and
- biomass, geothermal, solar, tidal and wind energy.

ANZSCO

There are 9 occupations identified as the focus of this industry. Please refer to Attachment 1.

### Regulatory Arrangements

The Economic Regulation Authority (ERA) oversees this sector by issuing a license to generate electricity to the company. Individual workers do not require a license unless they undertake specific occupations (such as electricians). The ERA also monitors and enforces license conditions.

The Independent Market Operator (IMO) plays an important role in the Wholesale Electricity Market in Western Australia (more specifically in the South West Interconnected System)

### Features

EUPA principally confines its engagement to power generation that supplies communities. That is, power generation for industrial purposes or micro scale generation on private land is generally out of scope.

Twenty-nine (29) licenses have been issued 'by the ERA to generate electricity. Generating licenses generally apply to any facility that provides power for the consumers who are not involved in the company and external to the location where power is generated (e.g. a resource company providing power for its own operations onsite).

The Department of Mines and Petroleum<sup>7</sup> provides advice that there are approximately 60 fossil fuel generation plants in the regions and 20 plants in the metropolitan area that are publicly and privately owned/operated. This does not include a large number of renewable energy generators including biomass, hydro, landfill gas, solar, wave and wind energy.

The sector is dominated by two government enterprises (Synergy and Horizon Power) but also encompasses a large number of privately owned facilities that are used to supply power to communities. This is particularly evident in WA's regions where energy/resources activity is high. In those instances, the resources company may also provide power to the local grid.

<sup>6</sup> Economic Regulatory Authority (2014) *Electricity Licensing – License Holders*, accessed 8 May 2014, <<http://www.erawa.com.au/licensing/electricity-licensing/licence-holders>>

<sup>7</sup> Department of Mines and Petroleum (2010) *Major Resource Projects December 2010*



The generation sector is reported to be comprised of approximately 1,450 workers and an additional 670 workers involved in retail<sup>8</sup>. However, the sector has reduced in size in the last year due to a significant redundancy program that will have affected WA's industry stakeholders.

Further, the growing renewable energy sector and expansion of gas as a primary fuel is bringing on board more generation plants.

## Transmission and Distribution

Subdivision 26 Electricity Supply

Groups 261 Electricity Generation, 262 Electricity Transmission, 263 Electricity Distribution, 264 On Selling Electricity and Electricity Market Operation

The transmission, distribution and on-selling sectors:

- operate high voltage electricity transmission systems including lines and transformer stations (from the generating source to the low voltage electricity distribution system);
- operate low voltage electricity distribution systems including lines, poles, meters and wiring that deliver electricity to the consumer; and
- on-sells electricity via power distribution systems operated by others.

ANZSCO

There are 9 occupations identified as the focus of this industry. Please refer to Attachment 1.

## Regulatory Arrangements

The Economic Regulation Authority (ERA) issues a license for transmission, distribution and retailing electricity. Individual workers may be subject to other licensing requirements depending on their occupation.

## Features

According to the 2011 census, the transmission and distribution sector employs 2,846 workers<sup>9</sup>. Again, this figure must be considered to be high given the redundancies that occurred within the major utilities providers in 2013/14.

The sector is comprised of two major government entities (Western Power and Horizon Power). As is the case with the generation sector, EUPA focuses on the providers that provide power to the public (communities) whilst recognizing that privately owned networks exist mainly in the Pilbara region to service mine sites.

This means that EUPA focuses on the South West Interconnected System (the SWIS with over 97,000km of overhead and underground cables<sup>10</sup>) and the North West Interconnected System (the NWIS). It is noted however that Horizon also operates the smaller Esperence network and 34 small networks<sup>11</sup> which total over 7,300km overhead and underground cables<sup>12</sup>.

Synergy and Horizon Power are also major stakeholders in the provision of retail (on-selling) services, although other stakeholders operate in the 'contestable' energy market which relates to commercial/industrial customers with higher energy demands.

<sup>8</sup> Australian Bureau of Statistics Census 2011 – Generation and Onselling Electricity Sector, TableBuilder data file, generated 16 January 2014, <<http://abs.gov.au>>

<sup>9</sup> Australian Bureau of Statistics Census 2011 – Transmission and Distribution Sector, TableBuilder data file, generated 16 January 2014, <<http://abs.gov.au>>

<sup>10</sup> Western Power (2013) 2013 Annual Report, Perth Western Australia Accessed 14 May 2014 <<http://www.westernpower.com.au/documents/reportspublications/annualReports/wp-annual-report-2013.pdf>>

<sup>11</sup> Department of Finance - Public Utilities Office, Horizon Power's Networks, accessed 8 May 2014, <[http://www.finance.wa.gov.au/cms/TwoColumns\\_Content.aspx?Pageid=17638&id=15086](http://www.finance.wa.gov.au/cms/TwoColumns_Content.aspx?Pageid=17638&id=15086)>

<sup>12</sup> Horizon Power (2013) 2013 Annual Report, Perth, Western Australia accessed 15 May 2014 <[http://www.horizonpower.com.au/documents/1815892\\_28b2q02\\_.PDF](http://www.horizonpower.com.au/documents/1815892_28b2q02_.PDF)>

## Workforce Drivers

E-Oz make specific reference to the changing skills needs in all electrical/electricity supply sectors as a result of new technology that creates cyclic networks of energy known as 'the internet of things' (rather than the traditional linear view from generation to consumption).

Whilst the electricity supply industry (generation, transmission and distribution) is a comparatively small industry many large-scale issues affect the workforce including:

- An increasing size and regional distribution of the population;
- The increase of consumer generated (distributed) power that affect total energy demand patterns (i.e. roof top solar);
- The wider adoption of gas as a fuel source;
- A focus on cost reduction in the government sector;
- Investment in infrastructure including possible privatization of assets and maintenance of ageing assets;
- Significant redundancies in major government utilities during 2013 and into 2014.
- The need to maintain ageing assets that employ old technologies when workers are skilled in new areas of technology; and
- Industry's own perception of a low industry profile affecting the attraction of youth.

## Focus

EUPA has undertaken to work with the sector (in conjunction with the remaining utilities sectors) to explore VET in Schools and youth engagement options during 2014. EUPA will also work with E-Oz to revise training packages in light of technology changes and training package streamlining.

## Gas Supply

Subdivision 27 Gas Supply

Group 270 Gas Supply

Class 2700 Gas Supply

This industry distributes natural, liquefied petroleum, and other gas through mains systems.

ANZSCO

There are 16 occupations identified as the focus of this industry. Please refer to Attachment 1.

### Regulatory Arrangements

The sector is overseen by the Economic Regulation Authority (ERA), which issues a license for distribution of gas to the organization. Regulation of assets is divided between EnergySafety and the Department of Mines and Petroleum. Transmission of gas is regulated by the Department of Mines and Petroleum through the licensing of the pipeline. Individual workers may be subject to other licensing requirements depending on their occupation.

The Independent Market Operator also operates the Gas Information Services Project that affects gas supply, transmission and storage in Western Australia.

### Features

The Department of Mines and Petroleum notes that there are 118 pipeline licences granted, covering a total pipeline length of more than 8680 km.<sup>13</sup>

Approximately 900 workers identified themselves as working in this sector in 2011<sup>14</sup>. There are a number of operators in this industry; however APA Group has a near monopoly on the ownership and operation of the transmission pipelines in WA. ATCO Gas, Kleenheat and Esperance Power are major operators of distribution networks.

Alinta, Kleenheat and Synergy are major retail service providers to the general public in WA<sup>15</sup>.

### Workforce Drivers

The sector is subject to pressures due to population growth, regional expansion, the growth in demand for gas from industry and the transition from coal to gas for electricity power generation in Western Australia. EUPA's engagement with this sector in 2013 has also identified issues surrounding its low profile with those seeking employment and available training pathways.

### Focus

In 2013 EUPA established a new apprenticeship for Gas Distribution Supply Technicians and will work closely with stakeholders to embed this pathway as well as unused traineeship options.

The Training Council focus on VET in Schools options for industry will also capture the needs of the gas industry. EUPA will also work with E-Oz to revise training packages in light of technology changes and training package streamlining.

<sup>13</sup> Department of Mines and Petroleum, *Production and Pipelines*, , accessed 15 May 2014 <<http://www.dmp.wa.gov.au/855.aspx>>

<sup>14</sup> Australian Bureau of Statistics *Census 2011 – Gas Supply Sector, TableBuilder data file*, generated 16 January 2014, <<http://abs.gov.au>>

<sup>15</sup> Economic Regulation Authority (2014) *Gas Licensing – Licence Holders*, Accessed 20 January 2014 <<http://www.erawa.com.au/licensing/gas-licensing/licence-holders>>

## Water

Subdivision 28 Water Supply, Sewerage and Drainage Services

Group 281 Water Supply, Sewerage and Drainage Services

Classes 2811 Water Supply, 2812 Sewerage and Drainage Services

The water industry:

- stores, treats, distributes water;
- collects and treats wastewater; and
- manages/operates water sources.

ANZSCO

There are 34 occupations identified as the focus for this industry. Please refer to Attachment 1.

## Regulatory Arrangements

The Economic Regulation Authority (ERA) licenses organisations to provide water related services (bulk water, drinking water and sewerage). Management, policy and associated planning of the allocation of water resources is the responsibility of the Department of Water. The Department of Health also monitors quality standards through its Office of Public Health whilst the Department of Environmental Regulation also oversees environmental conditions associated with this industry.

Individual workers are not licensed unless their specific occupation demands an additional license.

## Features

There are approximately 3,700 workers<sup>16</sup> and over 30 licensed service providers<sup>17</sup>. As is the case with other utilities sectors, government operations dominate the industry. The Water Corporation has the largest share and leads a number of public-private partnerships (alliances). Further, the Water Corporation provides all training to water industry stakeholders. Aqwest and Busselton Water also holding drinking water supply licenses.

Sewerage services are provided by the Water Corporation and a number of local governments. The remaining licensed providers are mainly involved in bulk non-potable (i.e. not drinking water) supply and irrigation<sup>18</sup>.

The industry has seen the introduction of new legislation which could create a larger playing field with more stakeholders. Dominated by government ownership, industry is also under pressure to manage human and physical resources as spending is reigned in. Ownership of assets and infrastructure is currently in the spotlight.

<sup>16</sup> Australian Bureau of Statistics *Census 2011 – Water Supply, Sewerage and Drainage Sector, TableBuilder data file*, generated 16 January 2014, <<http://abs.gov.au>>

<sup>17</sup> Economic Regulatory Authority (2014) *Licensing Details – Water* Accessed 20 January 2014 <<http://www.erawa.com.au/licensing/water-licensing/licence-holders>>

<sup>18</sup> Economic Regulation Authority (2014) *Water Licensing – Water Licence Holders*, Accessed 20 January 2014 <<http://www.erawa.com.au/licensing/water-licensing/licence-holders>>

## Workforce Drivers

In 2013 a project to progress a pilot of the national certification framework for water treatment operators commenced. This may affect the future training and ongoing professional development requirements in the sector.

2013 also saw the Water Industry Training Institute (WITI) explore training delivery with resources companies who have not previously been able to access nationally recognized training. WITI is a collaborative between Opus and the Australian Water Association.

Locally, wastewater re-use by injecting aquifers has grown acceptance and promises to be another major contributor to Perth's water supply in the future.

The growth in population, regional expansion, a drying climate and technology are all issues that greatly affect the processes and practices employed by the industry. The sector is also under considerable financial pressure.

## Focus

EUPA is assisting this sector to explore VET in Schools options with a particular focus on indigenous students and will ensure our work with other utilities providers will consider the needs of the water sector. The Training Council also maintains a strong relationship with the Australian Water Association to monitor progress of the National Certification Project.

EUPA will also work with Government Skills Australia to revise training packages in light of training package streamlining and their work to develop a water industry competency framework.

## Waste

Subdivision 29 Waste Collection, Treatment and Disposal Services

Groups 291 Waste Collection Services, 292 Waste Treatment, Disposal and Remediation Services

Classes 2911 Solid Waste Collection Services, 2919 Other Waste Collection Services, 2921 Waste Treatment and Disposal Services, 2922 Waste Remediation and Materials Recovery Services

The waste collection sector is primarily responsible for the collection and haulage of domestic, commercial or industrial solid and liquid waste (excluding sewers).

The remaining sectors are engaged in the treatment or disposal of solid and liquid waste and the remediation, reclamation or clean up of contaminated sites. This includes removal of hazardous materials and toxic material abatement.

ANZSCO

There are 22 occupations identified as the focus for this industry. Please refer to Attachment 1.

## Regulatory Arrangements

The Department of Environmental Regulation oversees environmental conditions associated with this industry.

## Features

The waste industry is categorized as municipal, construction/demolition and commercial/industrial. Local governments provide much of the municipal services and have established *Regional Councils* that manage waste facilities for member authorities. Other private firms provide services across all three categories.

The waste industry employs approximately 2,440 workers<sup>19</sup> across the state.

## Workforce Drivers

The industry suffers from a poor profile yet waste management is increasingly in the public spotlight due to population growth, environmental concerns and public policy intervention. The sector is challenged to move away from landfill as a waste disposal mechanism to recycling and energy production. Due to the nature of some tasks, the sector has also employed workers with low literacy and formal skills.

## Focus

EUPA has engaged a project officer to work specifically with the Waste Sector to raise its profile and assist to develop structured workforce planning and training. EUPA will also work with Construction and Property Skills Industry Skills Council to revise training packages in light of training package streamlining.

<sup>19</sup> Australian Bureau of Statistics *Census 2011 – Waste Collection, Treatment and Disposal Sectors, TableBuilder data file*, generated 16 January 2014, <<http://abs.gov.au>>

# Public Administration

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## State and Local Government

ANZSIC Division O Public Administration and Safety

Subdivision 75 Public Administration

Groups 752 State Government Administration, 753 Local Government Administration and 754 Justice

Classes 7520 State Government Administration, 7530 Local Government Administration, 7540 Justice

These sectors:

- set state and local government policy;
- oversee government programs;
- collect revenue;
- create laws (statute and/or by-laws);
- distribute funds; and
- operate or provide administration of judicial authorities.

ANZSCO

There are 56 occupations identified as the focus for this industry. Please refer to Attachment 1.

## Features

State and local government sectors have an incredibly diverse workforce in metropolitan and regional settings with approximately 180 departments and agencies and 139 local government authorities. The Public Sector employs approximately 140,000<sup>20</sup> and 14,968<sup>21</sup> are employed in Local Government.

## Workforce Drivers

The government sector continues to focus on women in leadership and employment of workers from all sectors of the community. It continues to be subject to policy that seeks to create a leaner, more efficient and smaller government sector. The sectors aim to raise their profile with youth who tend not to recognise government as an employer of choice. Ultimately, government is seen as a machine. The continued pressure to downsize does not invoke a public reaction that compares to other sectors that experience mass job losses.

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<sup>20</sup> Public Sector Commission WA *Public Sector Quarterly Workforce Report December 2013*, Perth Western Australia

<sup>21</sup> Australian Bureau of Statistics *Census 2011 – Local Government Sector, TableBuilder data file*, generated 16 January 2014, <<http://abs.gov.au>>

Statewide population growth, changing community expectations for government services and an ageing demographic all have significant impact upon government. Particular issues are noted as follows:

- Cost-reduction and efficiency strategies including new forced redundancy provisions and a freeze on public sector employment for the remainder of the 2013-2014 financial year.
- A large scale effort to reduce the size of the workforce through voluntary redundancy
- Local Government reform including significant restructure and amalgamations in the metropolitan area.
- Integrated Planning that was introduced in 2013 is requiring higher skills in the regions, including a focus on the skilling of elected members who are subject to increasing accountability.
- Attraction of youth and culturally diverse sectors and a perceived low industry profile.
- Alternative training/employment pathways are always in focus.

EUPA has also adopted the *Translators and Interpreters Industry* due to the inclusion of qualifications in the Public Sector Training Package. This industry is experiencing sustained difficulties at state and national levels in respect to the quality of services provided. In Western Australia, the industry is determined to re-introduce vocational education and training to assist addressing this issue.

## Focus

EUPA continues to work closely with the Public Sector Commission and peak local government associations to develop whole-of-industry solutions to workforce issues. In the short term, a pilot of newly established cadetships at higher qualifications levels will be a focal point.

Local Government will be supported where skilling needs are identified, particularly in respect to the reshaping of metropolitan authorities and the increasingly complex environment that local governments are finding themselves in.

Further, EUPA is to work with the Translating and Interpreting Industry through the formation of a working group that will address skilling needs and the relationship of VET and national accreditation.

EUPA will work with Government Skills Australia to revise training packages in light of training package streamlining.



## Public Safety & Corrective Services

Subdivision 77 Public Order

Groups 771 Public Order, Safety and Regulatory Services

Classes 7711 Police Services, 7713 Fire Protection and Other Emergency Services, 7714 Correctional and Detention Services, 7719 Other Public Order and Safety Services

This industry sector is responsible for:

- law enforcement;
- preservation of order;
- fire fighting;
- civil emergency services; and
- operating correctional institutions.

ANZSCO

There are 13 occupations identified as the focus for this industry. Please refer to Attachment 1.

### Features

As an industry, this amounts to approximately 19,100 employees<sup>22</sup> and an estimated 29,000 volunteers<sup>23</sup>. Its major stakeholders include the WA Police, Department of Fire and Emergency Services and the Department of Parks and Wildlife. A number of occupations also fall into the broad category of 'public safety' as workers from public and private sectors perform public safety roles that include risk mitigation and business continuity planning. These occupations include Environment, Health and Safety Officers, Work Safety and Health Officers, Emergency Preparedness Officers and Support Officers, Community Safety Facilitators, Business Continuity Managers and Security Managers.

The WA Police, Department of Fire and Emergency Services and Department of Parks and Wildlife are all enterprise RTOs.

The Corrective Services Industry is more likely to employ mature age workers in prison officer roles. The sector is comprised of the Department of Corrective Services and a private firm (Serco) that operates a prison and court security services. Both stakeholders are enterprise RTOs.

The major industry stakeholders typically provide limited opportunities for EUPA to engage as many workforce issues explored by EUPA are dealt with at a national level. Further, core training needs are met by enterprise RTOs that are embedded within the structure of each organization.

### Workforce Drivers

The WA Police is undertaking major structural and operational changes presently that may have workforce and training issues, however there will still be little room for the Department of Training and Workforce Development to engage in this space given its policies relating to intervention for funding purposes. The reform process in the WA Police is being conducted under the agency's new *Frontline 2020* policy.

<sup>22</sup> Australian Bureau of Statistics *Census 2011 – Public Order and Safety Sector, TableBuilder data file*, generated 16 January 2014, <<http://abs.gov.au>>

<sup>23</sup> Department of Fire and Emergency Services, *Volunteers* <http://dfes.wa.gov.au> accessed May 2014

Major drivers of workplace reform include:

- Population and regional growth
- community and government expectations for service delivery
- technology advancement in relation to policing practices and criminal activity
- issues surrounding drug and alcohol abuse and mental health remain in the broader community.

The Department of Fire and Emergency Services and the Department of Parks and Wildlife are two major stakeholders that share oversight of emergency events in bushland (along with local government authorities). DFES is particularly focused on its 'New Beginnings' strategy, the review of emergency management legislation and all aspects of volunteer participation, attraction and retention. The career firefighting workforce remains a highly competitive sector that does not struggle to attract applicants.

The fire and emergency services sector are subject to pressures arising from:

- longer, more intense fire seasons.
- population growth and in particular, the encroachment of dwellings in or near bushland.
- Public scrutiny and oversight through government appointed reviews on the causes of fire and fire fighting effort.
- Management of the volunteer workforce including the provision of training and ownership of resources.

The corrective services industry is pressured by:

- prisoner population growth.
- government/community expectations regarding the management of prisoners.
- At the time of writing this report, criticism of private contractual arrangements.
- Preparing for further impact of mandatory sentencing.

The Department of Corrective Services must also consider workforce needs to manage offenders in the community (e.g. parole or court-orders) which are additional responsibilities over and above the management of prison/detention facilities.

## Focus

Due to the structure of the public safety industry and the focus of the Department of Training and Workforce Development, EUPA is unable to offer significant services to a large component of this sector.

Volunteer training remains an issue that industry is seeking to address. EUPA continues to monitor this sector as population growth, environmental change and government/community expectations shape this sector. Access to state and national funding for the emergency management component of occupations has also been explored.

Further, EUPA has committed to supporting a group chaired by DFES that currently involves the WA Police and the WA Local Government Association (WALGA) as members. The group is focused on elearning strategies, quality assurance and initiatives that can support current training activities.

Engagement with the corrective services industry is necessary to fully explore the workforce implications and proposed strategies to cater for higher prison populations.

EUPA will also work with Government Skills Australia to revise training packages in light of training package streamlining.

## Regulatory Services

Subdivision 77 Public Order

Groups 772 Regulatory Services

Classes 7720 Regulatory Services

Regulatory service providers:

- enforce regulations; and
- license and conduct inspections

They are found in sectors such as consumer protection, licensing, motor vehicle testing and regulating roles.

ANZSCO

There are 13 occupations identified as the focus for this industry. Please refer to Attachment 1.

## Features

The ABS reports that this industry employs 705 workers.<sup>24</sup>

EUPA engages with regulatory offices and the relevant Industry Skills Council in line with its work with the state departments and local government authorities.

## Issues

The most common area for engagement has been in Local Government where regulatory services have received some attention in previous years. This resulted in the creation of two traineeships for those that are employed as Rangers.

Given the nature of regulatory oversight in Western Australia, departments and agencies with regulatory roles are captured within our engagement of the wider public service. The major issue presented for this sector is the review of training packages and associated competency standards.

## Focus

Liaison with Government Skills Australia has highlighted regulatory qualifications from both the PSP11 Public Sector Training Package and LGA04 Local Government Training Package as a priority. EUPA has commenced work with the Industry Skills Council to address the relevant qualifications through the streamlining and review process managed by the Industry Skills Council.

<sup>24</sup> Australian Bureau of Statistics *Census 2011 – Regulatory Services Sector, TableBuilder data file*, generated 16 January 2014, <<http://abs.gov.au>>

# Australian and New Zealand Standard Classification of Occupations (ANZSCO)

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Industry representatives have nominated occupations relevant to the work of the Training Council. Please refer to Appendix 1.

The scoped occupations should not be viewed as an exhaustive list of all occupations within the industry sector. The Board of the Training Council reserve the right to refocus efforts on additional or alternative occupations where the need arises.

## State Priority Occupations List (SPOL)

The list at Appendix 1 provided clarity for the Training Council with respect to our focus for the State Priority Occupations List. This list drives policy decisions made by the Department of Training and Workforce Development and aligns to priorities set in the State Training Board's State Training Plan.

At the time of writing this plan, the 2014 SPOL exists in draft form and is subject to further change. Using the draft as a guide and the occupations identified at Appendix 1:

- 4 occupations appear at Level 1
- 32 occupations appear at Level 2a
- 6 occupations appear at Level 2b
- 21 occupations appear at Level 3

These levels are defined by the Department of Training and Workforce Development and can be found on their website. Please note that EUPA was requested to provide advice relating only to occupations that were not already identified by the Department in accordance with these definitions. The process is maturing and EUPA's Board of Management look forward to further information regarding:

- clarification on the definition of a 'Critical Occupation' and its consistent application across industries and occupations.
- amended definitions that accurately describe the criteria that apply to each level of SPOL.
- the application of SPOL to wider workforce development decisions and actions of the Department of Training and Workforce Development or other government agencies.

EUPA is committed to providing the best quality advice to the Department of Training and Workforce Development and representing its stakeholders in 2014/15.

# Industry Sectors and Training Packages

EUPA provides specific advice and assistance to industry and government in relation to the training packages that have been developed by the relevant 'Industry Skills Council'. These are:

Industry Sector	Training Package
a) Electrotechnology	a) UEE11 Electrotechnology
b) Electricity Generation	b) UEP12 Electricity Generation
c) Electricity Transmission Distribution and Rail	c) UET12 Electricity Transmission, Distribution and Rail
d) Gas Transmission and Distribution	d) UEG11 Gas
e) Waste	e) CPP07 Property Services
f) Water	f) NWP07 Water
g) Corrective Services	h) CSC12 Correctional Services
h) Local Government	i) LGA04 Local Government
i) Public Administration	j) PSP12 Public Sector
j) Public Safety	k) PUA12 Public Safety

**Table 1** EUPA Training Council industry sectors and training packages



## Training Packages -v- Industry

EUPA maintains working relationships with each of the Industry Skills Councils responsible for the industry's primary training package. However some of these training packages contain qualifications that do not relate to the relevant ANZSIC definition for which EUPA is contracted to service. This workforce plan has identified the ANZSIC definition for each industry within EUPA's scope and highlights where current training council effort is outside of this agreed scope.

Training package qualifications do not apply to only one industry sector and the qualifications contained in each training package result in an occupational outcome, not an industry outcome, therefore other industry sectors that employ particular occupations relevant to EUPA's industries may also use the training packages listed above. An example is the electrician who finds a role in many industry sectors such as mining that is all electricians are not just employed in the industry sector – "building installation services".

Using apprenticeship/traineeship commencement data from the Department's COGNOS database, EUPA identifies that the following *additional* training packages are utilized for training services by the electrical, utilities and public administration industries:

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>• ACM – Animal care and management</li> <li>• AHC – Agriculture, horticulture and conservation land management</li> <li>• AUR – Automotive</li> <li>• BSB – Business services</li> <li>• CHC – Community services</li> <li>• CPC – Construction, plumbing and services</li> <li>• CUF – Screen and media training package</li> <li>• CUL – Library, information and cultural services</li> <li>• FNS – Financial Services</li> <li>• HLT – Health</li> </ul> | <ul style="list-style-type: none"> <li>• ICA – Information and communications technology</li> <li>• ICT – Integrated telecommunications</li> <li>• MEM – Metals and engineering</li> <li>• MSL – Laboratory operations</li> <li>• MSS – Sustainability</li> <li>• PMA – Chemical, hydrocarbons and oil refining</li> <li>• PMB – Plastics, rubber and cable making</li> <li>• RII – Resources and infrastructure</li> <li>• SIR – Retail services</li> <li>• SIT – Tourism, travel and hospitality</li> <li>• TLI- Transport and logistics</li> </ul> |
|---|---|

As demonstrated by the above the EUPA industry sectors use qualifications from 21 different training packages over above those for which it has direct responsibility. This training effort relates to qualifications for occupations where other Training Councils have primary responsibility for training package coverage.

In referring to Attachement 1 in can be seen that efforts have been made to identify occupations (not within EUPA Training Package responsibility) but seen as in demand by the respective industry sectors.

## Streamlining of Training Packages

The streamlining of training packages is predicted to place additional workload on EUPA and industry. This process has been imposed by government to simplify training packages and make it easier to interpret competency standards. Industry Skills Councils are using the process to review competency standards and the composition of qualifications. That process requires industry input through technical reference groups. EUPA seeks to ensure that the views of Western Australia's industry are heard and that the outcomes are suitable for implementation.

# Workforce Development Drivers – Changes since 2013

The following advice indicates the main drivers that have changed since the development of the 2013 Industry Workforce Development Plan.

Major Issues no longer relevant	
National Occupational Licensing <sup>25</sup>	The new coalition government has announced that national licensing will not be pursued. There will still be work conducted by the states and territories to ensure maximum portability of skills which may still bring about some changes.
National Broadband Network (NBN) <sup>26</sup>	The NBN rollout has been reviewed since the change in government in 2013. Even prior to the change in government, it was clear that the sectors which EUPA represents were unaffected due to policies (particularly in relation to training) and resulted in FutureNow Training Council taking a lead role in respect to this issue.
Crowding of Labour Market	The move from construction to operation phase of many resources sector projects has released some workers back to the labour market. Whilst employment is still highly competitive, some relaxation is expected across occupations that were in shortage during the construction phase.
Local Government Reform (Regional) <sup>27</sup>	The reform of Local Government in the regions has not progressed.

**Table 2:** Deleted issues from 2013

<sup>25</sup> Australian Government COAG Communique 13 November 2013, <http://www.coag.gov.au/node/516>

<sup>26</sup> Department of Communications *National Broadband Network*, Accessed 28 April 2014  
[http://www.communications.gov.au/broadband/national\\_broadband\\_network](http://www.communications.gov.au/broadband/national_broadband_network)

<sup>27</sup> Department of Local Government and Communities (2013) *Metropolitan Reform*, Accessed 28 April 2014,  
<http://metroreform.dlg.wa.gov.au/Page.aspx?PID=MetropolitanReform>

New Issues	
Increased Budget Pressures	<ul style="list-style-type: none"> <li>• Spending reduction in 2014/15 Commonwealth Budget</li> <li>• Spending reduction in 2014/15 WA State Budget</li> <li>• Increased (but continuing) pressure on the Public Sector to downsize</li> <li>• Service creep between levels of government</li> <li>• Planned or possible workforce restructures including sale of assets or modified work practices</li> </ul>
Future Skills WA	<ul style="list-style-type: none"> <li>• Increased fees for most qualifications (payable by employers or directly by the student)</li> <li>• Varying levels of subsidy dependent upon the category of the qualification</li> <li>• Institutions seeking to exit thin markets</li> </ul>
VET in Schools and WACE Reform	<ul style="list-style-type: none"> <li>• New requirements for WACE to be implemented 2015 require ATAR or minimum Certificate II</li> <li>• Low industry profile affecting attraction of youth</li> </ul>
Training Package Streamlining	<ul style="list-style-type: none"> <li>• Updated training packages will be presented for endorsement during 2014/15</li> </ul>
New technology	<ul style="list-style-type: none"> <li>• Utilities and Electrical sectors merging in an 'internet of things'</li> <li>• Distributed micro-scale electricity generation</li> </ul>
Local Government Reform	<ul style="list-style-type: none"> <li>• Focus shifted to massive restructure in metropolitan area</li> </ul>
Mandatory sentencing	<ul style="list-style-type: none"> <li>• Predicting larger prison populations</li> </ul>

**Table 3:** New issues for 2014



Carry-Over Issues	
Under-employment	<ul style="list-style-type: none"> <li>Electricians employed in roles that do not require an electrician licence</li> </ul>
Higher Education	<ul style="list-style-type: none"> <li>Articulation from VET qualifications to Higher Education is a growing area of importance for the State Training Board</li> </ul>
Large proportion of electricians hold licenses but do not work in industry	<ul style="list-style-type: none"> <li>Potential risks and benefits to industry to re-engage workers</li> </ul>
Lack of engagement in VET	<ul style="list-style-type: none"> <li>Translators and Interpreters cannot access nationally recognised training in Western Australia</li> <li>The waste industry has not reached a level of activity to sustain engagement in nationally recognised training</li> </ul>
Low industry profile	<ul style="list-style-type: none"> <li>Commonality of occupations across industries affects priority placed on training</li> </ul>
Increasing populations	<ul style="list-style-type: none"> <li>Affecting the utilities industry in relation to infrastructure and higher service levels</li> <li>Affecting public administration and safety organisations that provide governance and critical community safety services</li> <li>Affecting the corrective services industry who are planning for increasing prisoner populations</li> </ul>
Volunteers	<ul style="list-style-type: none"> <li>Training and management in the regions is a focus</li> <li>Consistency in training and operations supports effective emergency management across districts</li> </ul>

**Table 4:** Carry-over issues from 2013

## Summary of Issues Table

The following table identifies broad issues for action. For complete details, please see section 4 of this Industry Workforce Development Plan.

**Table 5:** Summary of recommended strategies

Category of Issue	Recommended Priority Action(s)
Apprenticeship and Traineeship Delivery	<p>Embed the newly established apprenticeship pathway for electrical fitting;</p> <p>Improve the uptake of appliance servicing, electronic servicing and fire detection qualifications by engaging industry and RTOs.</p> <p>Canvas and address pre-apprenticeship and apprenticeship issues with industry, particularly as a response to the implementation of Future Skills WA and potential impact of competency-based wage progression.</p> <p>Work with training providers and industry to embed the new Gas Supply Technician Apprenticeship.</p> <p>Provide support to the Public Sector Commission to pilot cadetships.</p>
Electrical Workforce Development	<p>Identify workforce development opportunities and barriers that affect the number of electrical license holders currently working as electricians.</p> <p>Canvas mobility of the workforce between jurisdictions with the state regulator as national licensing is no longer on the agenda.</p>
Future Skills WA & VET Policy	<p>Provide advice to industry to take best advantage of the new entitlement model.</p> <p>Provide advice to the Department of Training and Workforce Development and the State Training Board regarding industry issues relating to the new entitlement model.</p> <p>Review SPOL submissions and Department criteria to ensure best quality evidence is provided.</p>

VET in Schools and youth engagement	Facilitate interaction and preparation of industry for programs that engage school students.
State Waste Industry Strategy	Provide continuing resources to progress the State Waste Authority's workforce development project
Training Package Streamlining	Provide advice and ensure streamlining of training packages meets the needs of WA. Complete state endorsement reporting requirements to the Department of Training and Workforce Development.
Public Safety Industry engagement	Support the DFES E-Learning and Quality Assurance Collaborative Engage with corrective services stakeholders to address workforce pressures relating to higher prisoner populations.
Higher Education	Explore a sustainable approach to engagement with the higher education sector.
VET delivery for Translators and Interpreters	Structure a project to address skilling needs in Western Australia in line with national accreditation provisions.

## SECTION 2 METHODOLOGY

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This 2014 Industry Workforce Development Plan was produced by the Electrical, Utilities and Public Administration Training Council Inc. (EUPA) in accordance with its service agreement with the Department of Training and Workforce Development (the Department).

This plan is founded on EUPA's research and active participation in workforce planning and development initiatives.

EUPA Board members have been consulted to validate the plan and ensure that it reflects current industry requirements.

Intelligence has been gathered through:

- Board Member and industry leaders consultations
- Industry Working Groups facilitated by EUPA
- Regional consultations and regional industry consultation forums
- Engagement through [eupa.com.au](http://eupa.com.au)
- Face to Face meetings with industry stakeholders
- Desktop research including annual reports, presentations, conference materials and Regional Workforce Development Plans.
- National Industry Skills Councils' Environmental Scans from E-Oz Training Standards and Government Skills Australia
- Training data obtained from the Department of Training and Workforce Development's COGNOS database.
- Review of 2011 Census data\*

\* EUPA has provided census data through the acquisition of TableBuilder Pro. The ABS randomly adjusts reported numbers to protect privacy. It is also noted that the data is now three years old. The 'total state workforce' is calculated by using the figures stated for each age bracket to the right of each map. For this reason, ABS census data can only be used as a guide and should not be considered absolute.

# SECTION 3 INDUSTRY PROFILE

## Overview of the Electrical Industry Sector

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### Industry Analysis

The Australian and New Zealand Standard for Industry Classification defines the EUPA's coverage as follows<sup>28</sup>:

#### **Division E Construction, Sub Division 32 Construction Services, Group 323 Building Installation Services**

##### **Class 3232 Electrical Services**

Units mainly engaged in the installation of electrical wiring or fittings in buildings or other construction projects. Electrical work arising from the installation of appliances is included in this class.

##### Primary activities

- Electric light installation
- Electric wiring installation
- Electrical installation work (e.g. switchboards, circuit breakers, etc.)
- Installation of television antennae or cable
- Installation of television satellite dish
- Repair or maintenance of electrical wiring (except electricity transmission or distribution lines)
- Telecommunication cable or wire installation (except transmission lines)
- Traffic signal installation

The class does not apply to units mainly involved in repairing electrical appliances which are included in Class 9421 Domestic Appliance Repair and Maintenance.

##### **Class 3233 Airconditioning and Heating Services**

Units mainly engaged in the installation of heating equipment, refrigeration equipment, air conditioning equipment, or in the installation of air conditioning ductwork.

##### Primary activities

- Air conditioning duct work installation
- Air conditioning equipment installation (except motor vehicle air conditioning equipment)
- Cool room refrigerator installation
- Freezer room construction
- Heating equipment installation (except industrial furnaces)
- Oil heater installation
- Refrigeration equipment installation
- Ventilation equipment installation n.e.c.

This class excludes units mainly engaged in manufacturing air conditioning ductwork, the on-site assembly of industrial furnaces from prefabricated components and motor vehicle air conditioning.

##### **Class 3234 Fire and Security Alarm Installation Services**

Units mainly engaged in the installation of fire protection, detection and control systems, and in installing security systems.

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<sup>28</sup> Australian Bureau of Statistics, *Australian and New Zealand Standards for Industry Classification*, Accessed 15 May 2014

Primary activities:

- Closed circuit video surveillance system installation
- Fire alarm system installation
- Fire sprinkler installation
- Repair of installed fire or burglar security alarm systems
- Security system installation
- Smoke detector installation

## Electrical Industry in Context

Electrical tasks can be undertaken in domestic, commercial or industrial premises. EUPA notes that the ANZSIC definition does not extend to the full scope of the Electrotechnology Training Package (UEE) which also includes design and maintenance qualifications/competencies as well as the repair of appliances and electronics.

Industries where EUPA could be active as a result of an expectation to address the needs of the training package are as follows:

ANZSIC Code	Industry	Relevant Training Council
2439	Other Electrical Equipment Manufacturing (motor rewinding only)	Engineering and Automotive Training Council
9421	Domestic Appliance Repair and Maintenance	Retail and Personal Services Training Council
9422	Electronic and Precision Equipment Repair and Maintenance	Retail and Personal Services Training Council
9429	Other Machinery and Equipment Repair and Maintenance	Engineering and Automotive Training Council

**Table 6:** Additional Industry Coverage (Electrical)

The industry is characterised by micro-businesses, however there are many medium to large electrical contracting organisations that employ significant numbers of electrical engineers, technicians and electricians.

Electrotechnology skills are employed in the building and construction sector and the resource/mineral processing sector where specialisations such as “data and telecommunications”, “instrumentation” and “hazardous areas” are seen as necessary to gain employment.

## Stakeholders

The major industry stakeholders are:

### **Regulatory:**

- Electrical Regulatory Authorities Council (ERAC)
- Department of Commerce –EnergySafety Division
- Airconditioning and Refrigeration Council (ARC)
- Electrical Licensing Board (ELB)

### **Union:**

- Electrical Trades Union (ETU)

### **Associations:**

- National Electrical and Communication Association (NECA)
- Master Electricians
- Airconditioning and Mechanical Contractors Association (AMCA)
- Airconditioning and Refrigeration Equipment Manufacturers Association (AREMA)
- Refrigeration and Airconditioning Contractors' Association (RACCA)

### **Employers (Apprentice)**

- Electrical Group Training (EGT)
- Chamber of Commerce and Industry (CCI)

### **Major Training Stakeholders:**

- |  |  |
|--|--|
| • E-Oz Industry Skills Council           | • Industrial Training Institute (ITI)        |
| • Central Institute of Technology        | • Pilbara Institute                          |
| • College of Electrical Training         | • Polytechnic West                           |
| • CY O'Connor Institute                  | • South West Institute of Technology         |
| • Durack Institute of Technology         | • The Apprenticeship and Traineeship Company |
| • Goldfields Institute of Technology     | • West Coast Institute of Training           |
| • Great Southern Institute of Technology |  |

All tradespersons must obtain an electrical workers license to perform electrical tasks. The Department of Commerce through the EnergySafety Division maintains the state's electrical workers licensing system.

The Office of EnergySafety<sup>29</sup> indicates that as at 31 December 2013 there were:

- 4717 licensed Electrical Contractors currently registered in WA
- 33,206 Electrician's Licenses on issue
- 1342 electricians endorsed "Electrical Fitting Work Only" comprised of:
  - 2637 Refrigeration and Airconditioning
  - 305 Instrument Process Control Equipment
  - 195 Plumbing and Gasfitter Workers License
  - 650 Disconnect and Reconnect License
  - 26 Domestic Appliance License.
- 4510 electrical training licenses issued to indentured apprentices
- 198 electrical training licenses issued to pre-apprentices

The sector comprises a large number of micro businesses (contractors) where workforce planning generally does not occur beyond current project operational needs.

## Refrigeration and Airconditioning

EUPA has focused on the refrigeration and airconditioning sector in relation to training standards for the sector. It has been difficult to engage with stakeholders as the training that industry undertakes at entry level is sourced from the Metals and Engineering Training Package. For this reason, the Engineering and Automotive Training Council is currently viewed as the lead council.

Efforts by EUPA to explore entry-level training aligned to the UEE Electrotechnology Training Package have not resulted in any interest from the state's only provider – Polytechnic West. Despite this, E-Oz are seeking to hold workshops in Perth in the near future to outline training package changes that affect the refrigeration and airconditioning sector. EUPA will assist to undertake the industry consultation.

## Industry Trends

The trend for this industry is articulated in E-Oz's 2014 Environmental Scan<sup>30</sup>. Its focus is on ensuring new entrants to the industry are suitably qualified and ensuring the current workforce is able to adapt to environmental pressures, government policy and new developments in technology. The Industry Skills Councils predicts that demand for new qualifications and skills sets will evolve for employees in renewable and sustainable technologies and it is seeking to be very proactive to ensure competencies are ready for implementation at the appropriate time.

As discussed below at 'Major Challenges and Barriers' industry is also experiencing decreased competition for labour as the engineering sector contracts and is poised for a resurgence in activity in the domestic dwelling market.

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<sup>29</sup> Department of Commerce EnergySafety Division (2014) *Personal Communication*

<sup>30</sup> Energy Skills Australia (2014) *Environmental Scan February 2014*



## Major 2014 EUPA Electrical Blog Posts<sup>31</sup>

JAN	<ul style="list-style-type: none"> <li>• <i>Are you taking advantage of traineeships?</i> Highlighting to employers and RTOs the available electrotechnology traineeships</li> <li>• <i>Building a culturally diverse workforce</i></li> <li>• <i>Metro living – rise of apartments</i> From Urbis Thinktank</li> </ul>
FEB	<ul style="list-style-type: none"> <li>• <i>Message from the Chair, National Occupational Licensing Board</i> Announcing the closure of NOLA.</li> </ul>
MARCH	<ul style="list-style-type: none"> <li>• <i>EUPA's pre-apprentice snapshot</i> Results were that employers just want workers on-the-job and that they are not concerned about the qualification.</li> <li>• <i>EnergySafety concerned about apprentice supervision</i> The regulator communicates its concerns to industry</li> <li>• <i>Workplace gender equality – attracting women</i></li> </ul>
APRIL	<ul style="list-style-type: none"> <li>• <i>Construction Trade Quarterly Snapshot – Electrical Apprentices</i> Shows declining training rates.</li> <li>• <i>Let's talk about appliance service training / electronic servicing apprenticeship</i> Promoting alternative pathways</li> <li>• <i>Review of electrotechnology and electronic servicing pre-apprenticeships</i> WA's review kicks off.</li> <li>• <i>Electrical fitter apprenticeship established</i> UEE pathway aligns to electrotechnology careers.</li> <li>• <i>Fire protection control apprenticeship survey</i> Engaging employers.</li> <li>• <i>Critical information for training providers and schools – electrical licensing</i> Quelling confusion and misinformation.</li> <li>• <i>Review of the refrigeration and airconditioning trade qualification underway</i> But WA doesn't use the qualification!</li> <li>• <i>Strengthening VET in Schools Outcomes</i> WA Government focus on VETiS</li> <li>• <i>Improving cultural diversity and inclusion in the workplace</i> A Victorian report</li> <li>• <i>National report on the ageing population</i> From the National Seniors Productive Ageing Centre</li> </ul>

## Labour and Skill Demand

Labour force data<sup>32</sup> indicates that the number of electricians working in WA almost doubled in the past ten-year period. While the Office of EnergySafety data indicates that in the last 12 months the increase in electricians contractor and workers licenses issued remains at about 8 to 9%. Despite this increase, the electrician remains on the skills shortage list where it has been prominent for 11 of the past 13 years.

Office of Energy data also indicates that some 33,000 electrical workers licenses are on issue (31 December 2013) which is inclusive of approximately 1,300 electricians licensed to undertake "Electrical Fitting Work Only". ABS 2011 census data<sup>33</sup> indicates that that some 14,749 individuals identified themselves as electricians on census night 2011 which indicates a large proportion of electrician license holders do not work in the industry.

In 2012 and 2013 EUPA experienced an increase in enquiries relating to migration visas. EUPA provided one-to-one advice in relation to qualification recognition and migration processes. This

<sup>31</sup> Electrical Utilities and Public Administration Training Council (2014) <<http://www.eupa.com.au>>

<sup>32</sup> Australian Bureau of Statistics *Employment 4 digit ANZSCO*, Generated 31 March 2014

<sup>33</sup> Australian Bureau of Statistics *Census 2011 – Electrician, TableBuilder data file*, viewed 5 March 2013, [www.abs.gov.au](http://www.abs.gov.au)

issue has now been addressed and given the state of the labour market, EUPA does not expect to receive enquiries in future.

The Commonwealth Government announced in February 2014 that national licensing was not to progress and the National Occupational Licensing Authority was to be abolished<sup>34</sup>. Despite the change in direction, mobility of labour and recognition of licensing arrangements between the states and territories remains as a credible issue to address.

## Attraction and Entry to the sector

Attraction to the electrical occupations and in particular the trades is not considered to be an issue as entry into electrotechnology apprenticeships is the most competitive of all apprenticeships. It is normal for applications to far outstrip available places. This is also the case with those that seek a place on an electrical pre-apprenticeship program. The completion rates for these apprenticeships are also high, which is definitely assisted by the regulatory condition that workers must hold a license.

It has become the norm for employers to draw their new apprentices from those who have completed an electrical pre-apprenticeship where the individual's capabilities are assessed prior to employment. Whilst recognising that this is a valuable employment pathway, this preference limits opportunities for those that cannot commit to a period of little to no income to gain employment as an electrician.

Group Training Organisations (GTOs) have also proven to be an effective entry-level employer given the large number of small businesses that operate in the electrical sector. GTO services allow employers to free themselves of some employment related tasks and concerns by hosting apprentices through formal agreements with the GTO.

Despite the attractiveness of the electrical sector, EUPA is keen to ensure that its activities in the VET in Schools area are applied to electrical training.

## Regional Impact

Electrical tradespersons are distributed across all regions of the State. Regional Workforce Development Plans each indicate that electricians are among the identified critical occupations.<sup>35 36 37 38 39</sup>

However, it is expected that a number of electricians required in the regions with high resource sector activity will return to domestic and commercial work as more mining projects move to the production phase.

## Regulatory Requirements

Due to safety and environmental risks, occupations in the electrotechnology industry are highly regulated and need a license to operate.

The sector is directed nationally by the Electrical Regulatory Authorities Council (ERAC). Western Australia's regulatory body is the EnergySafety Division of the Department of Commerce. A key document governing workers in the sector is EnergySafety's WA Electrical Requirements (WAER) which was amended in January 2014 and will apply to new electrical installation designs from 1 July 2014.

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<sup>34</sup> EUPA Training Council (2014) *Message from the Chair, National Occupational Licensing Board*, <<http://www.eupa.com.au/2014/02/message-from-the-chair-national-occupational-licensing-board>>, accessed 26 May 2014

<sup>35</sup> Department of Training and Workforce Development (2012) *Goldfields-Esperance workforce development plan 2013-2016*, Perth Western Australia

<sup>36</sup> Department of Training and Workforce Development (2013) *South West workforce development plan 2013-2016*, Perth Western Australia

<sup>37</sup> Department of Training and Workforce Development (2013) *Great Southern workforce development plan 2013-2016*, Perth Western Australia

<sup>38</sup> Department of Training and Workforce Development (2013) *Pilbara workforce development plan 2013-2016*, Perth Western Australia

<sup>39</sup> Department of Training and Workforce Development (2013) *Kimberley workforce development plan 2013-2016*, Perth Western Australia

The Electrical Licensing Board is another key body, constituted under the provisions of the Electricity (Licensing) Regulations 1991 that makes decisions about the competence of applicants for electrical licenses and permits.<sup>40</sup>

The Australian Refrigeration Council (ARC) regulates the refrigeration and airconditioning industry in respect to refrigerant handling. EnergySafety regulates workers from the electrical point of view by requiring workers to hold restricted electrical licenses.

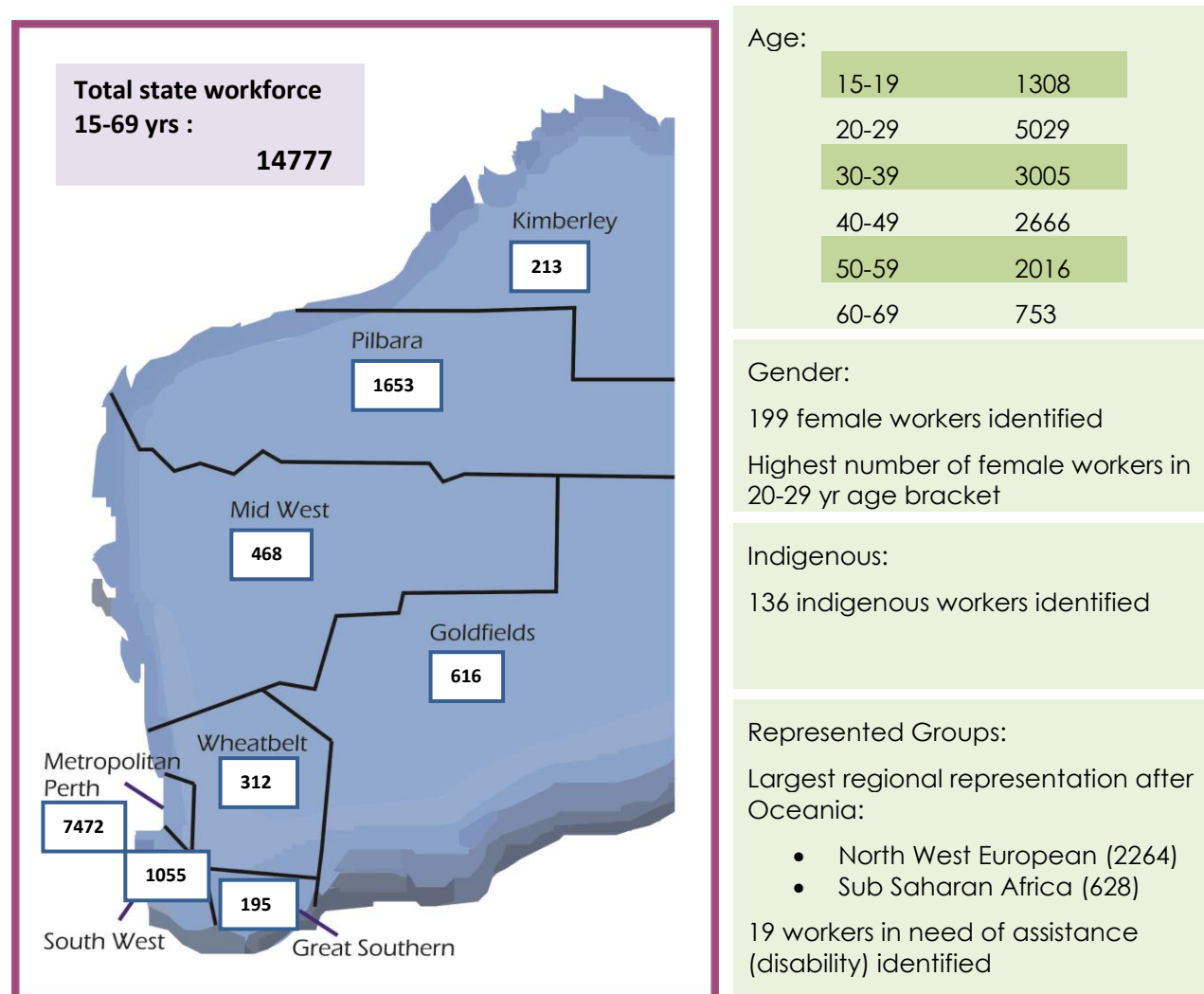
Appendix 2 contains a detailed summary of licensing arrangements including the electrotechnology sector.

## Participation

The electrotechnology workforce remains predominantly male – a common attribute of the traditional trades. There is a significant opportunity to grow female employment and increase participation in either full time or part time work.

The workforce is ageing and given the physical nature of work, some loss of skilled labour is expected. However it should be noted that more than half of all electricians fall within the 20yrs to 39 yrs age bracket indicating that this sector is not so concerned with the prospect of an ageing workforce.

**Figure 1** Census Data 2011 - for the 'Electrician' Occupation<sup>41</sup>



<sup>40</sup> Department of Commerce EnergySafety Division (2014) *Electrical Licensing Board*, Accessed 16 May 2014 <[http://www.commerce.wa.gov.au/energysafety/Content/About\\_us/Boards\\_and\\_committees/Electrical\\_Licensing\\_Board.html](http://www.commerce.wa.gov.au/energysafety/Content/About_us/Boards_and_committees/Electrical_Licensing_Board.html)>

<sup>41</sup> Australian Bureau of Statistics *Census 2011 – Electricians*, TableBuilder data file, viewed 5 March 2013, [www.abs.gov.au](http://www.abs.gov.au)

## Major Challenges and Barriers

### Competition

The electrical sector continues to experience stable employment demand. Activity and associated employment remains high but labour market pressure has reduced on trade level occupations due to the transition occurring in the resources sector from construction to operation<sup>42</sup>. Tradespersons with specialisations such as data communications, instrumentation and hazardous areas skills are particularly valued in the engineering fields of mining, oil and gas.

### Housing Market

Population growth throughout Western Australia is predicted to continue at high levels. Over the long term, current estimates for WA's population are between 5.4 and 7.7 million by 2061<sup>43</sup>.

The Housing Institute of Australia <sup>44</sup>provides a fairly lacklustre picture of housing approvals and 'starts' for the next two years. The analysis does not appear to point to a sector that will fill the gap created by the shifting resources sector at this point in time, but it forecasts stable activity in the coming years after a 30% increase in starts in 2013. It makes its predictions based on:

- Population Change & Structure
- Economic Growth
- Rental Market
- House Price Expectations
- Land Availability
- Interest Rates
- Confidence
- Employment & Unemployment Rate
- Availability of Finance

In addition the majority of new homes are now air-conditioned causing an increase in demand for individuals with the skills and the appropriate licenses to install new air conditioning units. Further, as the issue of energy efficiency becomes more prominent, ageing high energy consumption units in existing properties will progressively be renewed, adding to the demand for skilled labour.

### Technology and the Environment

Government climate and carbon reduction policy has changed since the 2013 election; however it is unclear whether key legislation will pass parliamentary processes to be enacted.

Despite the policy uncertainty, the shift to alternate energy sources is well under way. E-Oz has focused its 2014 Environmental Scan<sup>45</sup> on the new *connected network* that links generation, transmission, distribution, storage and consumption into one cyclical framework (the internet of things). This is driving E-Oz to review skills requirements across the entire industry to ensure workers are positioned to meet new skilling needs.<sup>46</sup>

Whilst some concepts have been discussed previously, skills development is expected to rapidly change focus due to technology developments associated with renewable energy and smart metering/appliances in alignment with the new model described by E-Oz.<sup>47</sup>

### New and Emerging Skills

Emerging skills requirement are linked to the new network of energy generation, distribution, storage and consumption.

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<sup>42</sup> Australian Workplace and Productivity Agency (2013) *Resources Sector Skills Needs : Skills for a transitioning resources sector*

<sup>43</sup> Australian Bureau of Statistics *Western Australia Population Size*, Accessed 15 May 2014  
<[http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/3222.0main+features112012%20\(base\)%20to%202101](http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/3222.0main+features112012%20(base)%20to%202101)>

<sup>44</sup> Housing Institute of Australia (2014) *The Outlook for the Residential Construction Industry*, Presentation Perth, March 2014  
<<http://hia.com.au/~media/HIA%20Website/Files/IndustryBusiness/Economic/presentations/WA%20IOL%20March%202014.ashx>>

<sup>45</sup> Energy Skills Australia (2014) *Environmental Scan February 2014*

<sup>46</sup> Energy Skills Australia (2014) *Environmental Scan February 2014*

<sup>47</sup> Energy Skills Australia (2014) *Environmental Scan February 2014*

Rapid advances and adoption by the community of new technologies requires the electrotechnology workforce to engage in continued development of technical expertise to meet expectations in areas such as:

- Design and installation of grid connected photovoltaic (solar) systems
- Domestic and commercial/industrial 'integrated energy management systems'
- Installation of smart metering systems
- Energy efficiency management and auditing
- Wind energy systems
- Co-generation and local distributed generation

Appliance servicing, electronic servicing, fire protection and electrical fitting have all been established as apprenticeships in Western Australia. EUPA does not suggest these occupations are 'emerging' in Western Australia, but the focus for skills development has shifted. Industry has requested the Training Council to promote the apprenticeship pathways as a means of embedding uniformed and structured entry-level training that aligns to electrotechnology career pathways. The establishment of the apprenticeships as preferred pathways also proposes to move the sectors away from employing fully qualified electricians where this is not necessary. The current use of electricians underutilises the skills of these workers and contributes to an over-investment by the state in training where the full qualification is not required.

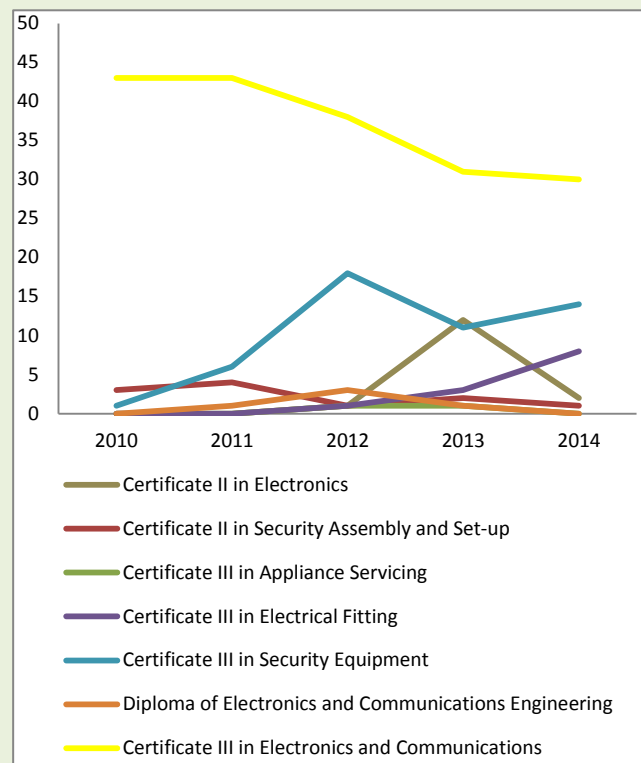
## Workforce Development Opportunities

- Census data indicates that there are a significant number of licensed electricians/contractors who are not employed in the electrotechnology field. Industry would benefit from identifying the causes for this fact and could build strategies to ensure the future workforce can take advantage (or is not negatively impacted) in future. This opportunity is carried over from the 2013 Industry Workforce Development Plan.
- Review the current pre-apprenticeship arrangements in light of the implementation of Future Skills and the direction set by E-Oz.
- Identify school based apprenticeship, pre-apprenticeship and workplace learning delivery options to customise the student's experience in accordance with their career aspirations.
- Ensure Western Australia participates in training package review to prepare the industry for changing skills development needs.
- Promote apprenticeships in appliance servicing, fire protection and electrical fitting as alternative entry pathways to employment in these sectors.

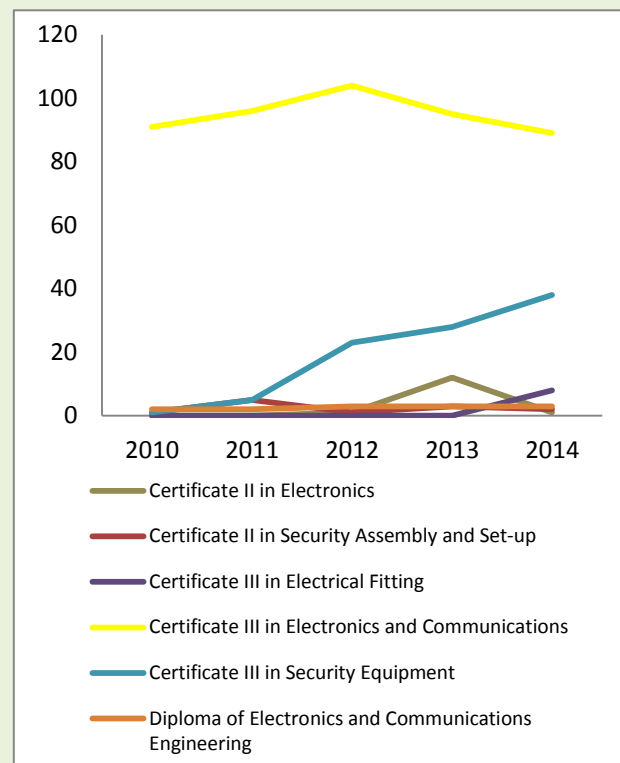
## VET Statistics

### UEE Training Package (except Certificate III in Electrotechnology Electrician)

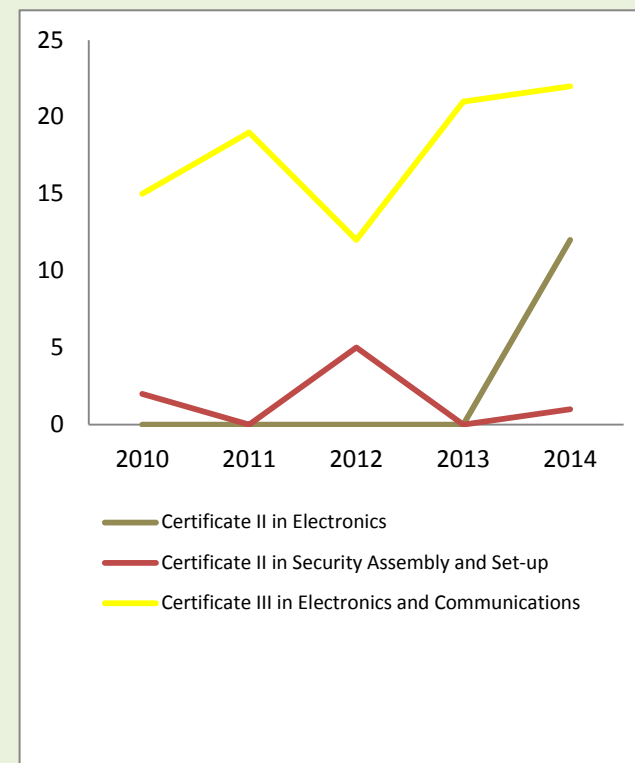
#### Commencements



#### In Training



#### Completions

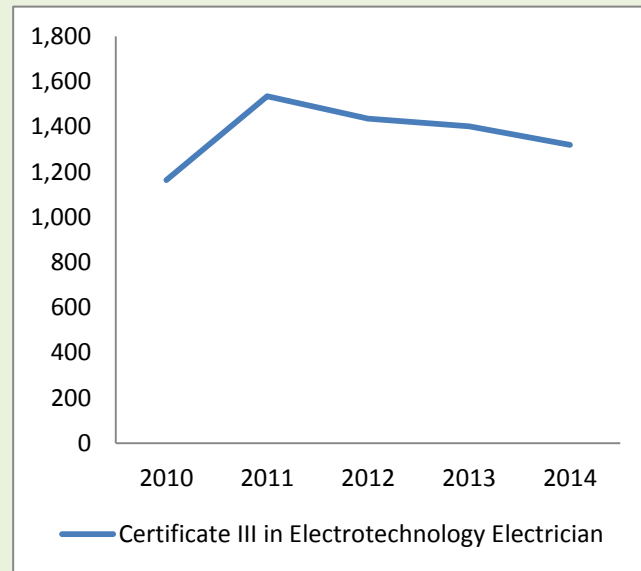


Graphs depict rolling comparative years (e.g. 2014 represents the period April 2013 to March 2014).

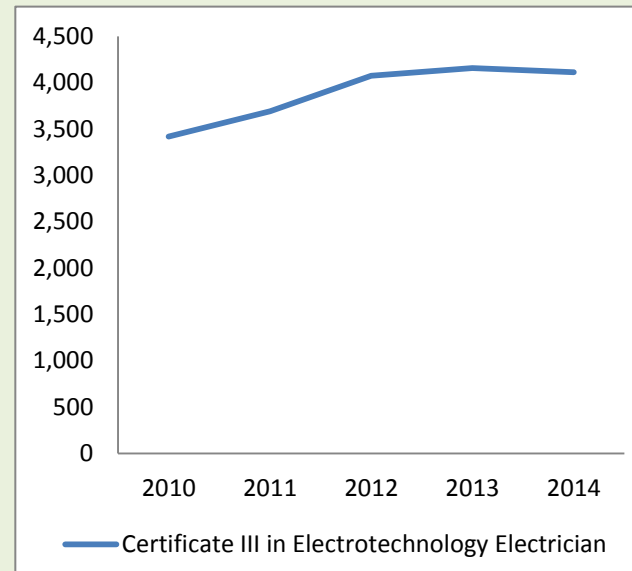
- The graphs demonstrate low numbers of commencements across all UEE qualifications.
- The scaling of the completions graph compared to the commencement graph indicates the poor completions rates experienced by many apprenticeships and traineeships.
- EUPA is seeking to increase the uptake of appliance servicing and electrical fitting qualifications to reduce the burden on the training system in relation to electrician training (to address under-employment).
- It is too early to advise if there is an effect on apprenticeships and traineeships due to the new Future Skills policy.

## UEE Electrician Qualification

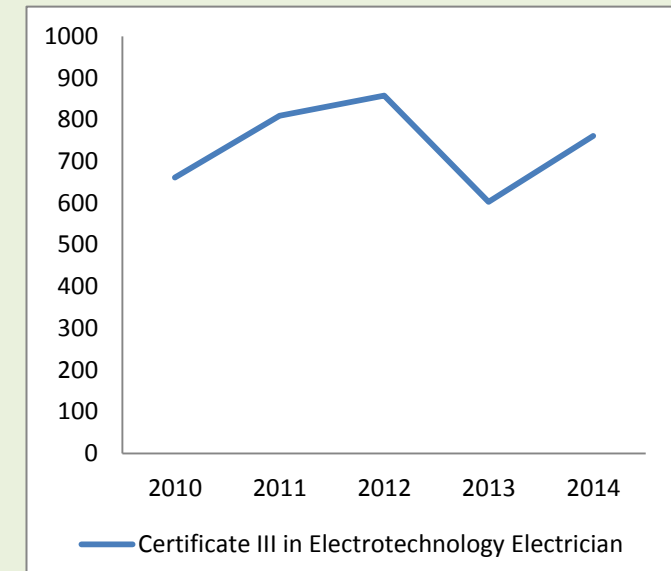
### Commencements



### In Training



### Completions

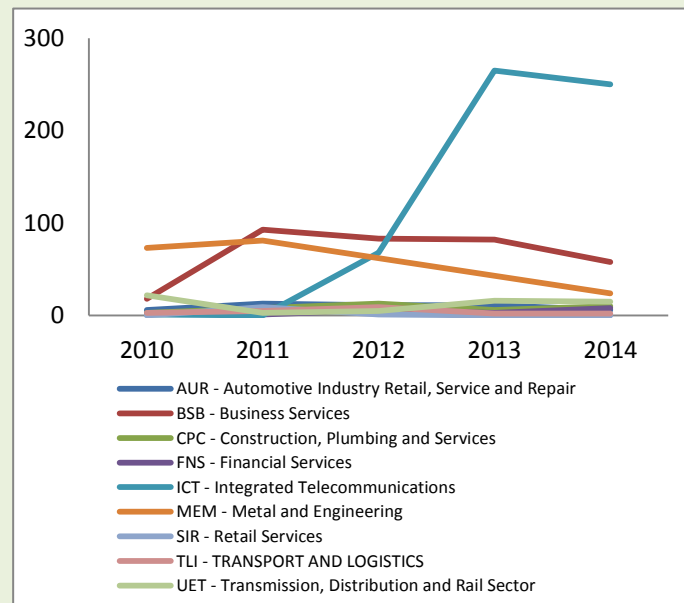


Graphs depict rolling comparative years (e.g. 2014 represents the period April 2013 to March 2014).

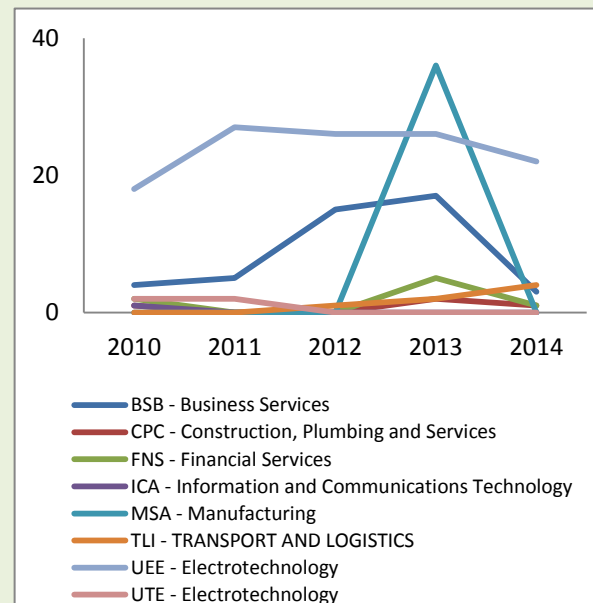
- The number of apprentices in training has grown steadily for an extended period of time. This can be expected to drop off as commencements have declined since 2011.
- It is expected that commencements will decline rapidly in the coming year unless the domestic housing market fills the void left by mine site construction.
- The lower completion numbers in 2012-2013 reflect the lower commencements in 2008/09 as a result of the global financial crisis.
- It is too early to advise if there is an effect on apprenticeships and traineeships due to the new Future Skills policy.

## Commencements in other Industry Training Packages

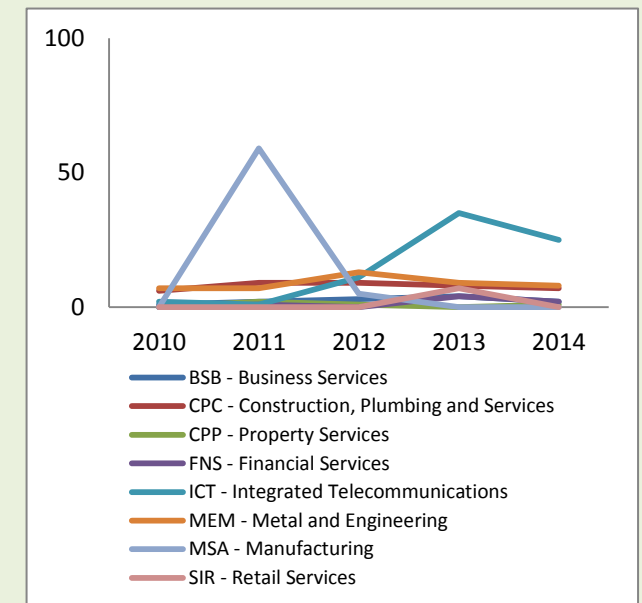
### Electrical



### Refrigeration and Airconditioning



### Fire Installation Services



Graphs depict rolling comparative years (e.g. 2014 is April 2013 to March 2014).

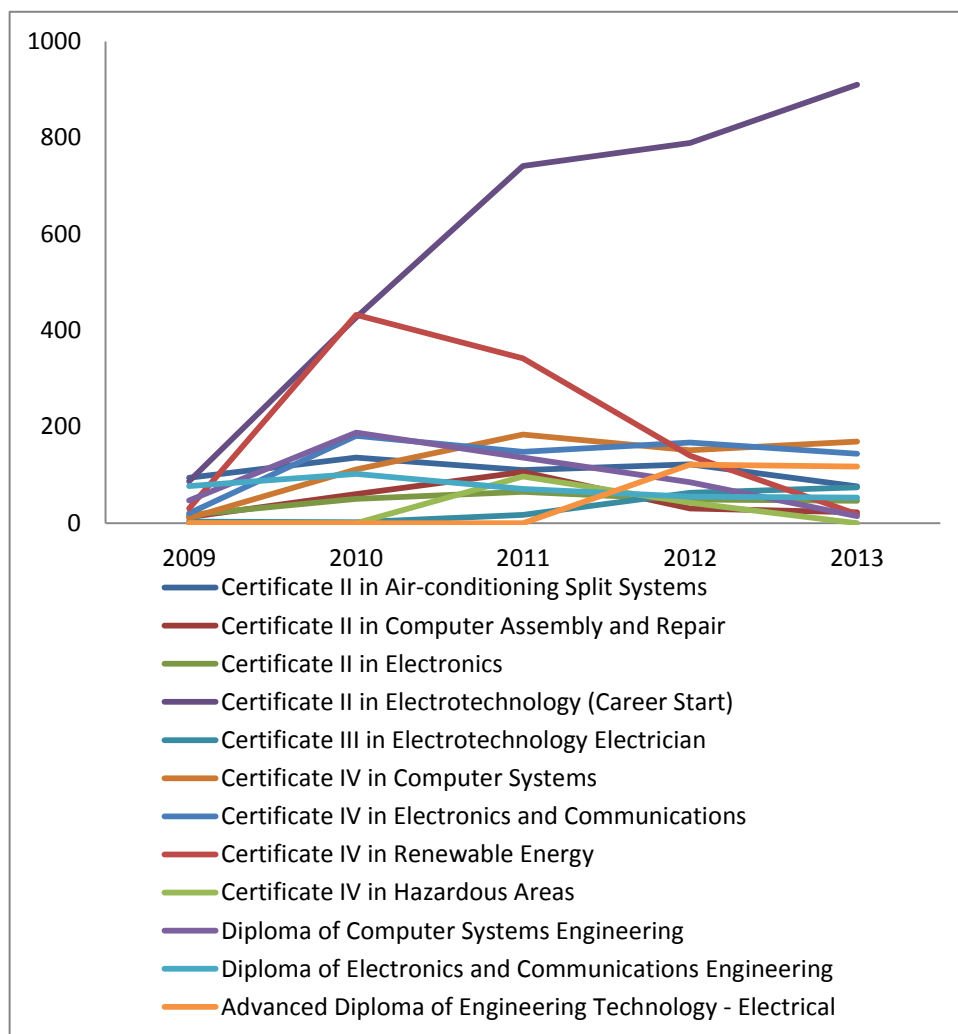
- Note that each graph above depicts commencements for each sector only. They do not relate to each other.
- Note the decline in commencements in MEM training package qualifications in the Electrical industry since 2011. This may be due to the preference of employers who require a full electrician license rather than an electrical fitter license.
- The spike in AUR qualifications for the electrical industry is an unknown issue. EUPA summarises that there could be issues related to electric power for vehicles.
- Those in the refrigeration and airconditioning industry are also using the UEE training package as a post-entry qualification.



## VET Trends and Issues

- The industry has a large enrolment base in Certificate II in Electrotechnology (Career Start) as a VET in Schools program. Enrolment can occur through pre-apprenticeship arrangements.
- DTWD have undertaken to review pre-apprenticeship arrangements due to the increased costs to students resulting from the Future Skills policy. E-Oz is also to review the Career Start qualification that is currently used for the pre-apprenticeship with a view to creating a new qualification that does not use units of competency that contribute to the Certificate III trade outcome.
- Workplace Experience for school students is a focus for EUPA as we work with industry to ensure students are provided with structured learning that inspires and promotes employers as an employer of choice.
- The electrical industry continues to focus on the quality of on-the-job assessment. This issue has received recent comment from the electrical regulator in Western Australia.
- Enabling of the electronic/appliance servicing apprenticeships and electrical fitting qualification as an alternative to a full electrician license.
- Training package review and streamlining will impose additional work on the industry sectors and the Training Council.

The following graph is included for the UEE Training Package showing institutional delivery (publicly funded). Only qualifications with significant enrolment numbers have been included:



The graph shows increasing activity for the Certificate II in Electrotechnology (Career Start) and a spike in activity for the Certificate II in Computer Assembly and Repair in 2010.

It is assumed that the reported figures for institutional delivery of the electrician qualification (an A class qualification) is associated with RPL for trade outcome processes.

Higher level qualification data will be particularly important to monitor given the implementation of Future Skills funding in 2014.

### Industry Issues Summary:

- The employment of electricians in roles such as appliance servicing or electrical fitting is an under-utilisation of skills (under-employment).
- Growth in domestic housing sector to meet increasing population will stabilise employment of electricians as industry transitions from engineering focus.
- Increasing use of renewable energy and new ways of thinking about energy production, storage and consumption (the internet of things) will require new skills for existing and new workers.
- VET sector policy and funding has potential to affect the traditional delivery of pre-apprenticeships and possibly apprenticeships/traineeships.
- There are a large number of electrical license holders who do not work in the industry.

# Overview of the Utilities Industry Sector

## Electricity Generation Industry Analysis

The Australian and New Zealand Standard for Industry Classification defines the EUPA's coverage as follows<sup>48</sup>:

### **Division D Electricity, Gas, Water and Waste Services, Sub Division 26 Electricity Supply, Group 261 Electricity Generation**

#### **Class 2611 Fossil Fuel Electricity Generation**

Units mainly engaged in the generation of electricity using mineral or fossil fuels in internal combustion or combustion-turbine conventional steam processes.

#### **Class 2612 Hydro-Electricity Generation**

Units mainly engaged in the generation of electricity using hydro-electric generation processes.

#### **Class 2619 Other Electricity Generation**

This class includes biomass, geothermal, solar, tidal and wind electricity generation.

## The Generation Industry in Context

EUPA extends services to organisations mainly engaged in generating electricity for public consumption. That is, EUPA is scoped for organisations that are known as 'utilities'. In line with legislative definitions<sup>49</sup>, utilities can be considered as organisations that provide power to customers that are external to their organization and site. They supply power to business and the community.

EUPA recognizes that other industry sectors operate power generators to provide for their own electricity needs which are out of scope. Examples where industries create power for their own consumption include large-scale manufacturing and resources sector companies.

Please refer to Appendix 3 for the list of licensed electricity generation providers.

Industries where EUPA is active as a result of an expectation to address the needs of the training package are as follows:

ANZSIC Code	Industry	Relevant Training Council
3109	Other Heavy and Civil Engineering Construction (Transformer Servicing)	Construction Training Council
9429	Other Machinery and Equipment Repair and Maintenance (Power transformer repair and servicing)	Engineering and Automotive Training Council

**Table 7: Additional Industry Coverage (Electricity Generation)**

In Western Australia, the electricity generation sector has both public and privately owned power stations (including renewable sources such as wind farms) that utilise fossil fuels (coal and gas) or renewable sources of power such as wind, solar, geo-thermal, hydroelectric and biomass combustion to produce the State's electricity needs.

<sup>48</sup> Australian Bureau of Statistics, *Australian and New Zealand Standards for Industry Classification*, Accessed 15 May 2014

<sup>49</sup> Economic Regulatory Authority (2012) Electricity Licensing, Licensing Information

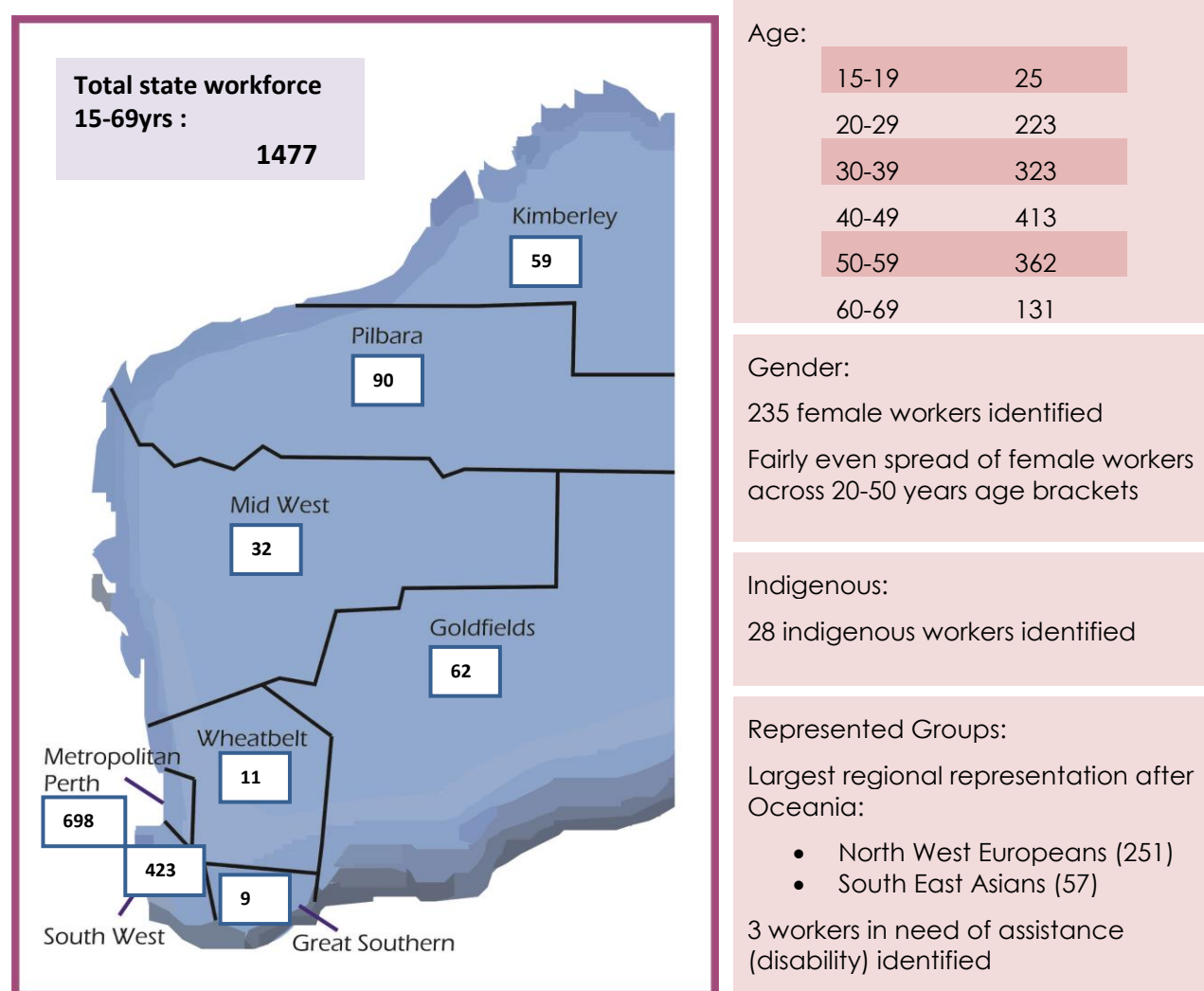
<<http://www.erawa.com.au/licensing/electricity-licensing/licensing-information>>, accessed 25 May 2014

The Department of Mines and Petroleum<sup>50</sup> provides advice that there are approximately 60 fossil fuel generation plants in the regions and 20 plants in the metropolitan area that are publicly and privately owned/operated. This does not include a large number of renewable energy generators including biomass, hydro, landfill gas, solar, wave and wind energy.

## Participation

The electricity generation workforce remains predominantly male. The generation workforce is ageing with well over 50% of the workforce in the over 40 year age bracket.

**Figure 2** Statistical Data for the 'Electricity Generation' <sup>51</sup>



<sup>50</sup> Department of Mines and Petroleum (2010) *Major Resources Projects December 2010 – Map of Western Australia*

<sup>51</sup> Australian Bureau of Statistics Census 2011 – *Electricity Generation, TableBuilder data file*, viewed 5 March 2013, [www.abs.gov.au](http://www.abs.gov.au)

# Electricity Supply - Transmission and Distribution Industry Analysis

The Australian and New Zealand Standard for Industry Classification defines the EUPA's coverage as follows<sup>52</sup>:

## **Division D Electricity, Gas, Water and Waste Services, Sub Division 26 Electricity Supply, Group 262 Electricity Transmission and Distribution**

### **Class 2620 Electricity Transmission**

Units mainly engaged in operating high voltage electricity transmission systems including lines and transformer stations. They transmit or facilitate transmission of electricity from the generating source to low voltage distribution systems.

### **Class 2630 Electricity Distribution**

Units mainly engaged in operating low voltage electricity distribution systems, including lines, poles, meters and wiring that deliver electricity to consumers.

### **Class 2640 On Selling Electricity and Electricity Market Operation**

Units mainly engaged in on selling electricity via power distribution systems operated by others. This includes providing services to the electricity market (matching supply and demand).

Note that EUPA's coverage does not extend to *construction* of electricity or other transmission lines, towers, pipelines or any other civil engineering projects (which are included as 3224 Structural Steel Erection Services).

## Power Transmission and Distribution in Context

Western Australia's has three major electricity transmission networks: the South West Interconnected System, North West Interconnected System, the smaller Esperance System. Electricity Supply Authorities also supply some regional towns which may be connected to transmission networks.

See Appendix 3 for a summary of Electricity Transmission and Distribution licenses.

Workers in this industry sector may be involved in a wide range of tasks, including, installation, maintenance, servicing, commissioning, network protection, network operation, management, planning and vegetation control.

EUPA has also engaged with the following industry due to UET training package coverage:



**Figure 3** SWIS and NWIS in Western Australia <sup>52</sup>

ANZSIC Code	Industry	Relevant Council	Training
3109	Other Heavy and Civil Engineering Construction (Electricity transmission/distribution lines/towers construction and repair of lines, wiring and towers (excluding special trade repair).	Construction Training Council	
4720	Rail Passenger Transport	Transport and Logistics Training Council	

**Table 8:** Additional Industry Coverage (Electricity Transmission/Distribution)

<sup>52</sup> Australian Bureau of Statistics, *Australian and New Zealand Standards for Industry Classification*, Accessed 15 May 2014

<sup>53</sup> Energy Action (2013) The West Australian Energy Market <<http://www.energyaction.com.au/wa-electricity.html>>, accessed 25 May 2014

## Electrified Rail

Our engagement has extended to the construction, maintenance and operation of the metropolitan electrified rail system.

Within the Public Transport Authority (PTA) the Network Infrastructure Division is responsible for managing and maintaining WA's metropolitan railway infrastructure, and for protecting the long-term viability of the State's freight rail corridor and infrastructure<sup>54</sup>. The division's works include:

- Signal and crossing maintenance;
- Resleepering and ballasting tracks;
- Upgrading and improving accessibility of station facilities;
- Planning and constructing expansion of the rail network; and
- Property management.

The PTA owns and operates a rail network of more than 173km and a fleet of 198 railcars. In addition, major expansion work is proposed together with the introduction of a light rail network.

The occupations of significance to the UET Training Package are the catenary lineworkers, signals technicians and rail communications technicians.

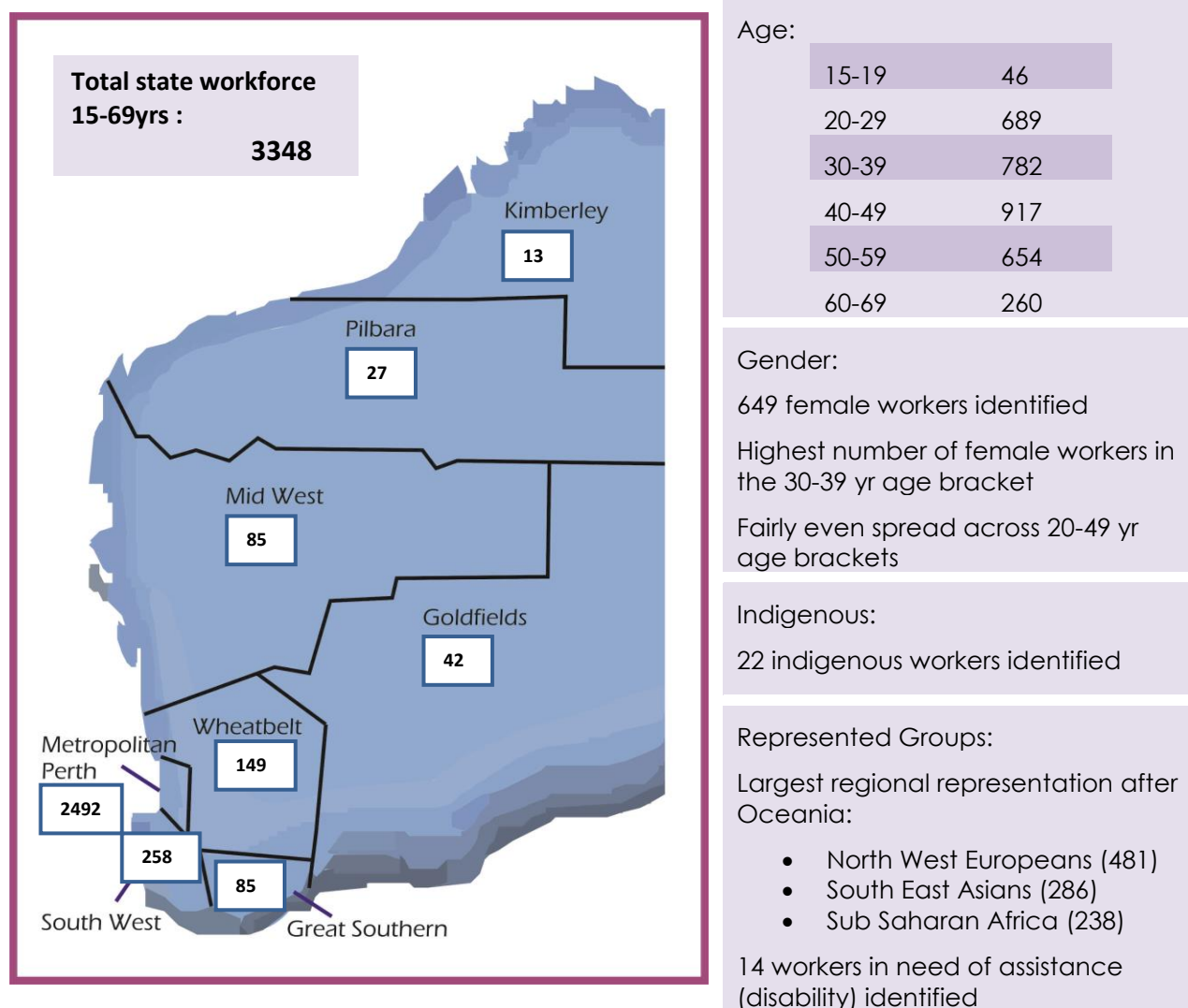
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<sup>54</sup> Public Transport Authority (2013) About us <<http://www.pta.wa.gov.au/AboutUs/tabid/38/Default.aspx>> , accessed May 2014

## Participation

The electricity supply workforce remains predominantly male. The generation workforce is ageing with over 50% of the workforce in the over 40 year age bracket.

**Figure 4** Statistical Data for the Electricity Transmission and Distribution <sup>55</sup>



<sup>55</sup> Australian Bureau of Statistics Census 2011 – Electricity Transmission and Distribution, TableBuilder data file, viewed 5 March 2013, [www.abs.gov.au](http://www.abs.gov.au)

## Electrical Supply Major Stakeholders

The major industry stakeholders for the generation, transmission and distributions sectors are:

### Regulatory and Government Oversight:

- Standing Council on Energy and Resources (COAG)
- Independent Market Operator (IMO)
- Economic Regulatory Authority (ERA)
- Public Utilities Office
- Department of Mines and Petroleum
- Department of Commerce, Energy Safety Division

### Union:

- Electrical Trades Union
- Australian Services Union
- Communications Union

### Associations:

- Energy Supply Association of Australia
- Sustainable Energy Association
- Australian Institute of Energy
- Clean Energy Council
- Energy Retailers Association
- Energy Supply Association
- Australian Wind Energy Association

### Employers

Generation	Transmission/Distribution	Retail
Synergy	Horizon Power	Synergy
Horizon	Western Power	Horizon Power
Alinta	Alinta	Perth Energy
Griffin Energy	Public Transport Authority*	Alinta Energy
ERM Business Energy	West Rail*	
Western Energy	BHP*	
ATCO Australia	Rio Tinto*	
APA Group		
Landfill Gas and Power	* Rail Industry engagement	

### Major Training Stakeholders

- E-Oz Industry Skills Council
- Power Training Services
- Energy Skills Solutions
- Oakley Training Services



## Gas Industry Analysis

The Australian and New Zealand Standard for Industry Classification defines the EUPA's coverage as follows<sup>56</sup>:

### Division D Electricity, Gas, Water and Waste Services, Sub Division 27 Gas Supply

#### Class 2700 Gas Supply

Units mainly engaged in distribution of gas such as natural gas or liquefied petroleum gas through mains systems. It does not include treating, refining or manufacturing gas; construction, maintenance or repair of gas mains; wholesaling/retailing of LPG (bottles or bulk); and operating pipelines.

## The Gas Industry in Context

Industry sectors that are outside of the ANZSIC scope where EUPA is active also include:

ANZSIC Code	Industry	Relevant Training Council
3321 (*Limited engagement)	Petroleum Product Wholesaling	Transport and Logistics Training Council
5021	Pipeline Transport	Transport and Logistics Training Council
9429	Other Machinery and Equipment Repair and Maintenance	Engineering and Automotive Training Council

**Table 9: Additional Industry Coverage (Gas)**

Accordingly, EUPA engages with industry covering of transmission, distribution, processing and/or storage systems; construction and maintenance of the systems; commissioning and decommissioning of the above systems; metering and billing of customers.

In West Australia, there are four major gas transmission pipelines and eight reticulated gas distribution networks<sup>57</sup> as follows:

#### Major Transmission Pipelines

- Dampier to Bunbury Natural Gas Pipeline –North West Shelf to Geraldton, Perth, Mandurah and Bunbury areas
- Goldfields Gas Pipeline –North West Shelf to the Pilbara and Eastern Goldfields regions
- Parmelia Pipeline –Perth Basin to South West
- West Pilbara Energy Pipeline –North West Shelf area to Port Hedland
- Others include Kambalda to Esperance Pipeline, the Mid West Pipeline and the Telfer Gas Pipeline.

#### Distribution Networks

- Kimberly
- Pilbara
- Gascoyne
- Wheatbelt
- Mid-West
- Goldfields-Esperance
- Great Southern
- Coastal

<sup>56</sup> Australian Bureau of Statistics, *Australian and New Zealand Standards for Industry Classification*, Accessed 15 May 2014

<sup>57</sup> Department of Finance, Public Utilities Office, *Gas in Western Australia*  
<<http://www.finance.wa.gov.au/cms/content.aspx?id=15097>> accessed 18 May 2014

The Mondarra gas storage facility is the only gas storage facility in Western Australia and is located near Dongara on the Parmelia Gas Pipeline<sup>58</sup>

Please refer to **Appendix 3** for a list of licensed gas supply organisations.

The gas reticulation networks owned by ATCO Gas serve Geraldton, Kalgoorlie, Albany, Bunbury, Busselton, Harvey, Pinjarra, Brunswick Junction, Capel and the Perth greater metropolitan area including Mandurah. These combined networks cover approximately 13,500km, connecting to about 683,000 end users<sup>59</sup>.

The Gas Industry is a major supplier of energy to Australian homes and factories, supplying around 30% of industry energy needs and 20% of domestic needs. Gas has the potential to be a transitional fuel to help meet Australia's growing energy needs until renewable energy and clean coal technologies become more widely available. Government policies are likely to accelerate the implementation of natural gas technologies, which have lower carbon emissions than other fossil fuels.

## Natural Gas

Western Australia is the most energy and gas-dependent economy in Australia and natural gas supplies more than half of WA's primary energy requirements as it fuels at least 60 percent of the State's electricity generation<sup>61</sup>. Gas has also been recognized as a much cleaner source of energy that can be used for quick response 'peaking' plants that are turned on to provide additional capacity during peak power demand cycles<sup>62</sup>.

The State's two largest individual users of gas are Alcoa which operates three alumina refineries in the south-west) and Burrup Fertilisers (which operates the world's largest ammonia plant on the Burrup Peninsula, near Dampier). Together they account for more than half of the natural gas consumed in WA.

## Liquefied Petroleum Gas (LPG)

Western Australia currently has two major domestic market production points for LPG. They are the BP Refinery located at Kwinana and Wesfarmers LPG also located at Kwinana. Western Australia also has the infrastructure to import LPG domestic supplies via ship and road tanker from other locations.

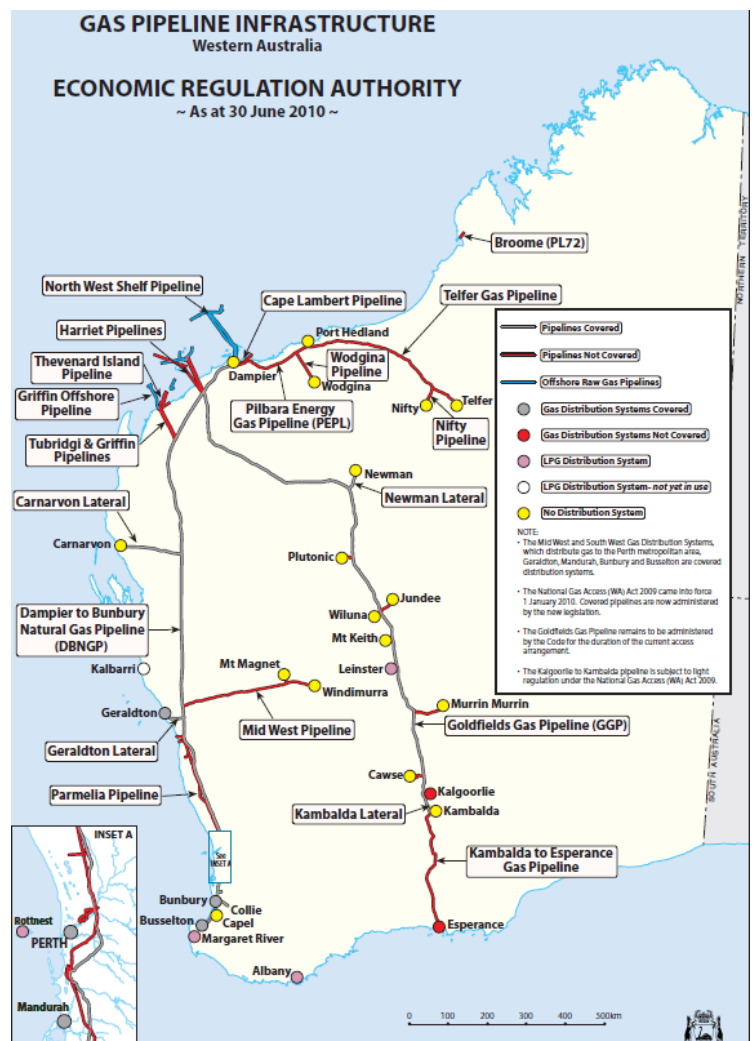


Figure 5: Major gas pipeline infrastructure <sup>50</sup>

<sup>58</sup> Department of Finance, Public Utilities Office, *Gas in Western Australia*

<sup>59</sup> ATCO Gas Australia, *Connecting WA to Natural Gas* < <http://www.atcogas.com.au/Our-Stories/Connecting-WA-to-Natural-Gas>>, accessed 18 May 2014

<sup>60</sup> Economic Regulatory Authority (2010) *Gas pipeline infrastructure*, 30 June 2010

<sup>61</sup> Office of Energy (2011) *Strategic Energy Initiative, Energy 2031 Directions Paper*

<sup>62</sup> Merredin Energy, *About Us* <<http://www.merredinenergy.com.au>>, accessed 20 May 2014

## Gas Supply Major Stakeholders

The major industry stakeholders are:

### Regulatory and Government Oversight:

- Standing Council on Energy and Resources (COAG)
- Economic Regulatory Authority (ERA)
- Gas Retail Energy Market Company (REMCo)
- Department of Finance, Public Utilities Office
- Department of Mines and Petroleum
- Department of Commerce, EnergySafety Division

### Union:

- Electrical Trade Union (ETU)

### Associations:

- Australian Gas Association
- Australian Institute of Energy
- Australian Pipeline Industry Association
- Energy Networks Australia
- Chamber of Minerals and Energy
- Energy Retailers Association Australia

### Major Employers

Transmission	Distribution	Retail
APA Group Dampier Bunbury Pipeline (DBP)	ATCO Gas Esperance Power Station Wesfarmers Kleenheat	Alinta Synergy Perth Energy Wesfarmers Kleenheat Esperance Gas Distribution Company

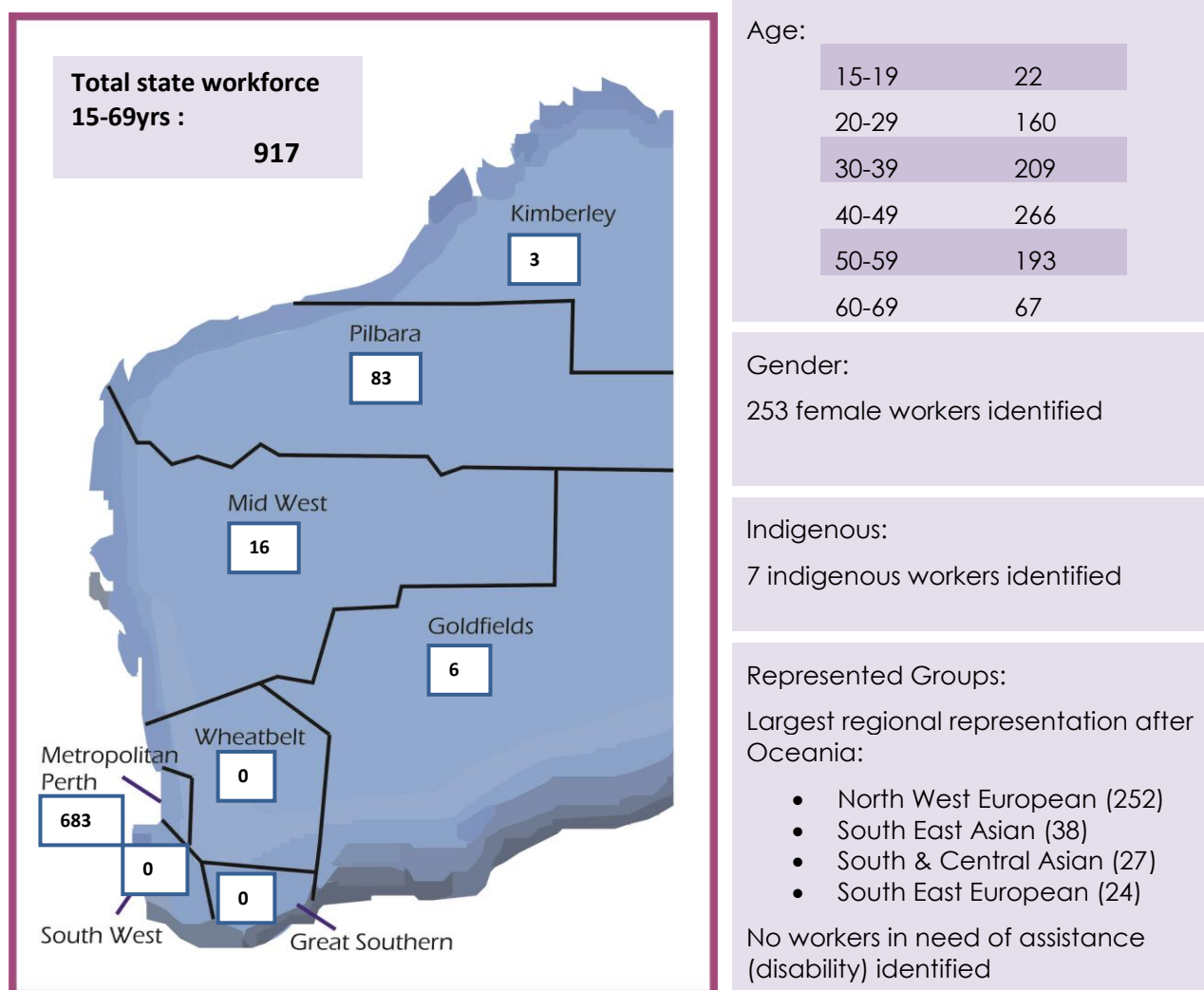
### Training Stakeholders

- E-Oz Industry Skills Council
- Site Skills International

## Participation

The gas industry has a higher proportion of male workers. Over 50% of the workforce is over the age of 40.

**Figure 6** Statistical Data for the Gas Supply Industry<sup>63</sup>



<sup>63</sup> Australian Bureau of Statistics Census 2011 – Gas supply, TableBuilder data file, viewed 5 March 2013, [www.abs.gov.au](http://www.abs.gov.au)

# Waste Industry Analysis

The Australian and New Zealand Standard for Industry Classification defines the EUPA's coverage as follows<sup>64</sup>:

## **Division D Electricity, Gas, Water and Waste Services, Sub Division 29 Waste Collection, Treatment and Disposal Services, Group 291 Waste Collection Services**

### **Class 2911 Solid Waste Collection Services and 2919 Other Waste Collection Services**

Units mainly engaged in the collection and (short) haulage of domestic, commercial or industrial waste. This includes portable toilets, bins and other receptacles (but not sewerage). Primary activities are:

- Bin hiring
- Garbage collection
- Hazardous waste collection
- Industrial waste
- Metal barrel/skip hiring
- Night soil collection
- Portable toilet hiring
- Rubbish collection
- Solid and liquid waste collection
- Haulage service (local)
- Oil Collection
- Septic tank waste collection

### **Group 292 Waste Treatment, Disposal and Remediation Services**

#### **Class 2921 Waste Treatment and Disposal Service**

Units mainly engaged in the treatment or disposal of solid, liquid and other waste types (including hazardous). Also, included are units mainly engaged in operating landfills, combustors, incinerators, compost dumps and other treatment facilities (except sewage treatment facilities), including waste transfer stations.

Primary activities

- Garbage disposal service
- Hazardous waste treatment or disposal service
- Operating landfills
- Operating other waste treatment facilities
- Rubbish dump or tip operation
- Sanitary disposal service
- Septic tank pumping or cleaning service (except repairs and maintenance)

#### **Class 2922 Waste Remediation and Materials Recovery Services**

Units mainly engaged in the remediation and cleanup of contaminated buildings and mine sites, mine reclamation activities, removal of hazardous material such as asbestos and lead paint and other toxic material abatement. This class also includes units mainly engaged in providing materials recovery and sorting services.

Primary activities

- Asbestos removal service
- Hazardous material removal
- Lead paint abatement service
- Materials recovery station operation
- Materials separating and sorting operation
- Mine reclamation
- Remediation service, environmental
- Toxic material abatement
- Waste remediation

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<sup>64</sup> Australian Bureau of Statistics, *Australian and New Zealand Standards for Industry Classification*, Accessed 15 May 2014

## The Waste Industry in Context

The waste industry is divided into three major sectors – municipal solid waste (MSW), commercial and industrial (C&I) and the construction and demolition (C&D).

In 2013, EUPA committed to working with the Waste Authority of Western Australia to further develop workforce development strategies in the industry. EUPA was awarded a grant from the Waste Authority to employ a dedicated Waste Industry Project Officer.

The Workforce Development Project<sup>65</sup> aims to provide a personalised service to waste organisations to identify and overcome challenges associated with:

- Competition for skilled labour
- Employee development
- Language, literacy and numeracy skill development
- Attraction and retention strategies
- Managing an ageing workforce
- Recruitment strategies

## Waste Industry Major Stakeholders

The major industry stakeholders are:

### Regulatory and Government Oversight:

- Waste Authority
- Department of Environmental Regulation

### Associations:

- Western Australian Local Government Association (WALGA)
- Waste Management Association of Australia (WMAA)

WA division sub groups:

- Carbon, C&I, C&D, Compost, Landfill, Resource Energy Recovery, Waste Educators, Young Professionals, Pilbara Sub-branch

### Union:

- Local Government, Racing and Cemeteries Employees Union (LGRCU)

### Major Employers:

Municipal	Construction and Demolition	Commercial and Industrial
Local Governments	Instate Waste Management	Perth Waste
Regional Councils	Capital Recycling	Toxfree
Veolia	All Earth	Transpacific
Transpacific (Cleanaway)		Warren Blackwood
Perth Waste		
Sita		
Warren Blackwood		

### Training Stakeholders:

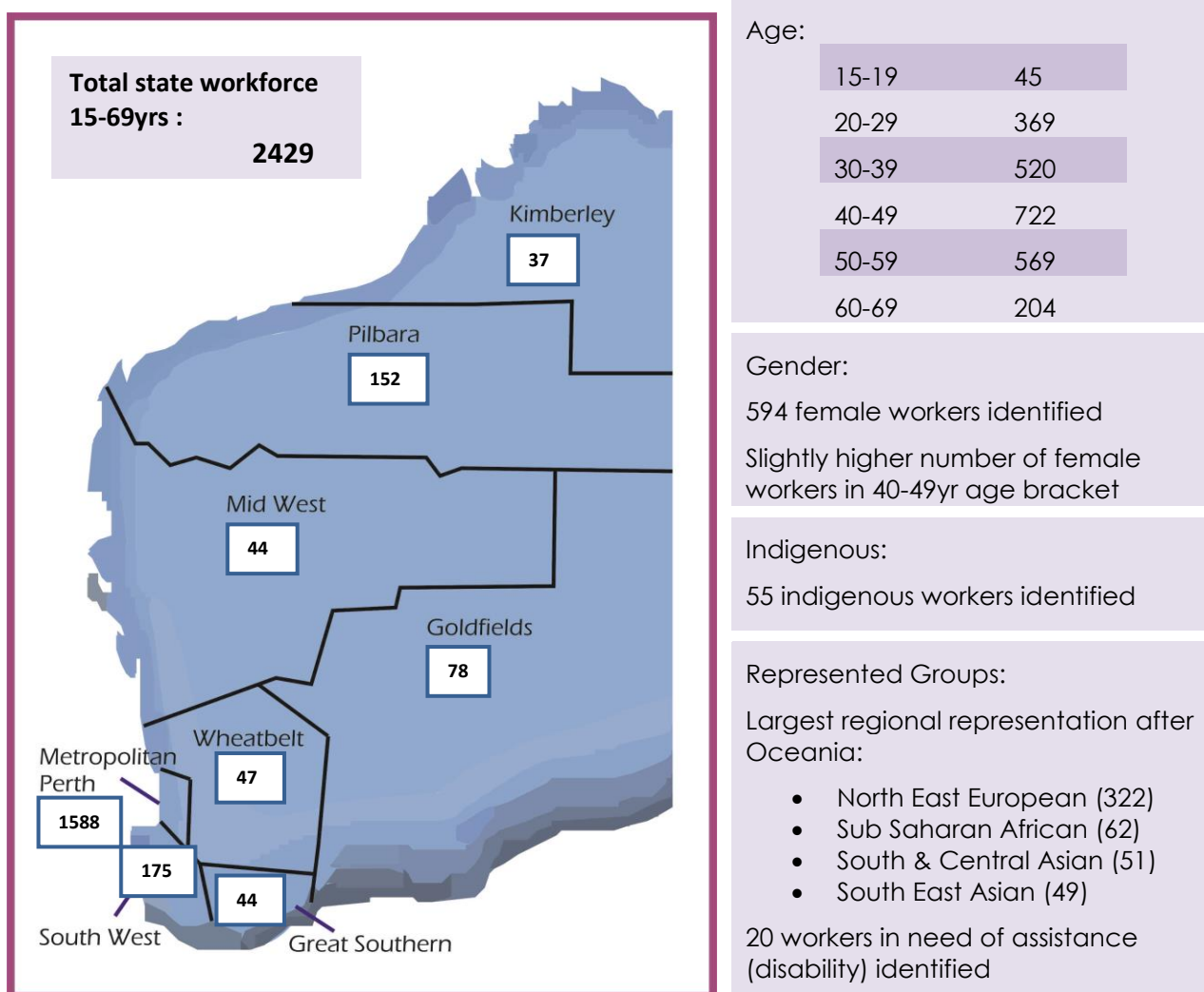
- Construction and Property Services Industry Skills Council
- Transport and Logistics Industry Skills Council
- Logistics Industry Training Council

<sup>65</sup> Electrical Utilities and Public Administration Training Council, *Waste Industry Project*, <<http://eupa.com.au/waste-industry-project>> accessed May 2014

## Participation

The majority of workers are male in the waste industry. Over 50% of the workforce identified during Census were over the age of 40.

**Figure 7** Statistical Data for the 'Waste' Industry<sup>66</sup>



<sup>66</sup> Australian Bureau of Statistics Census 2011 – Waste Industry, TableBuilder data file, viewed 5 March 2013, [www.abs.gov.au](http://www.abs.gov.au)

# Water Industry Analysis

The Australian and New Zealand Standard for Industry Classification defines the EUPA's coverage as follows<sup>67</sup>:

Division D Electricity, Gas, Water and Waste Services, Subdivision 28 Water Supply, Sewerage and Drainage Services

## **Class 2811 Water Supply**

Units mainly engaged in the bulk storage or distribution of water. Also included are units mainly engaged in the treatment of water prior to or during distribution in the water supply system. The water supply system may include pumping stations, aqueducts and/or distribution mains.

Primary activities

- Dam operation (water supply)
- Desalination plant operation
- Mineral water supply from the ground
- Water distribution by pipeline
- Water filtration plant operation
- Water reservoir operation
- Water supply for irrigation
- Water supply pumping station operation
- Water supply system operation

## **Class 2812 Sewerage and Drainage Services**

Units mainly engaged in operating sewerage or drainage systems or sewage treatment plants.

Primary activities

- Sewage pumping station operation
- Sewage treatment plant operation
- Sewerage system operation
- Stormwater drainage system operation
- Town drainage system operation

## The Water Industry in Context

EUPA provides services to organisations that operate water and wastewater treatment facilities and provide water through reticulated networks. It does not cover the construction or repair of facilities or equipment such as dams, pumping stations, sewers or drainage systems.

EUPA's engagement has primarily been with the Water Corporation who provide the majority of services to the population in Western Australia. In 2013 it noted that it treated water through 277 treatment plants, transported water through 33,600km of water mains to 1.1 million customers and then collected waste water through 15,600km of sewer mains, treated it through 106 wastewater treatment plants and disposed/recycled the water at 80 sites across WA<sup>68</sup>.

EUPA seeks to broaden its engagement considerably this year by including the partners who operate through alliance and 'public private partnerships' in our industry engagement strategy.

Other industry sectors, including the resources and agricultural industries also employ workers to perform similar roles, however issues affecting other industries are generally out of EUPA's scope. Where workers are employed in water-specific occupations in other industry sectors the needs of that sector are to be met by the appropriate training council.

<sup>67</sup> Australian Bureau of Statistics, *Australian and New Zealand Standards for Industry Classification*, Accessed 15 May 2014

<sup>68</sup> Water Corporation (2013) *Statement of Corporate Intent 2013/14*



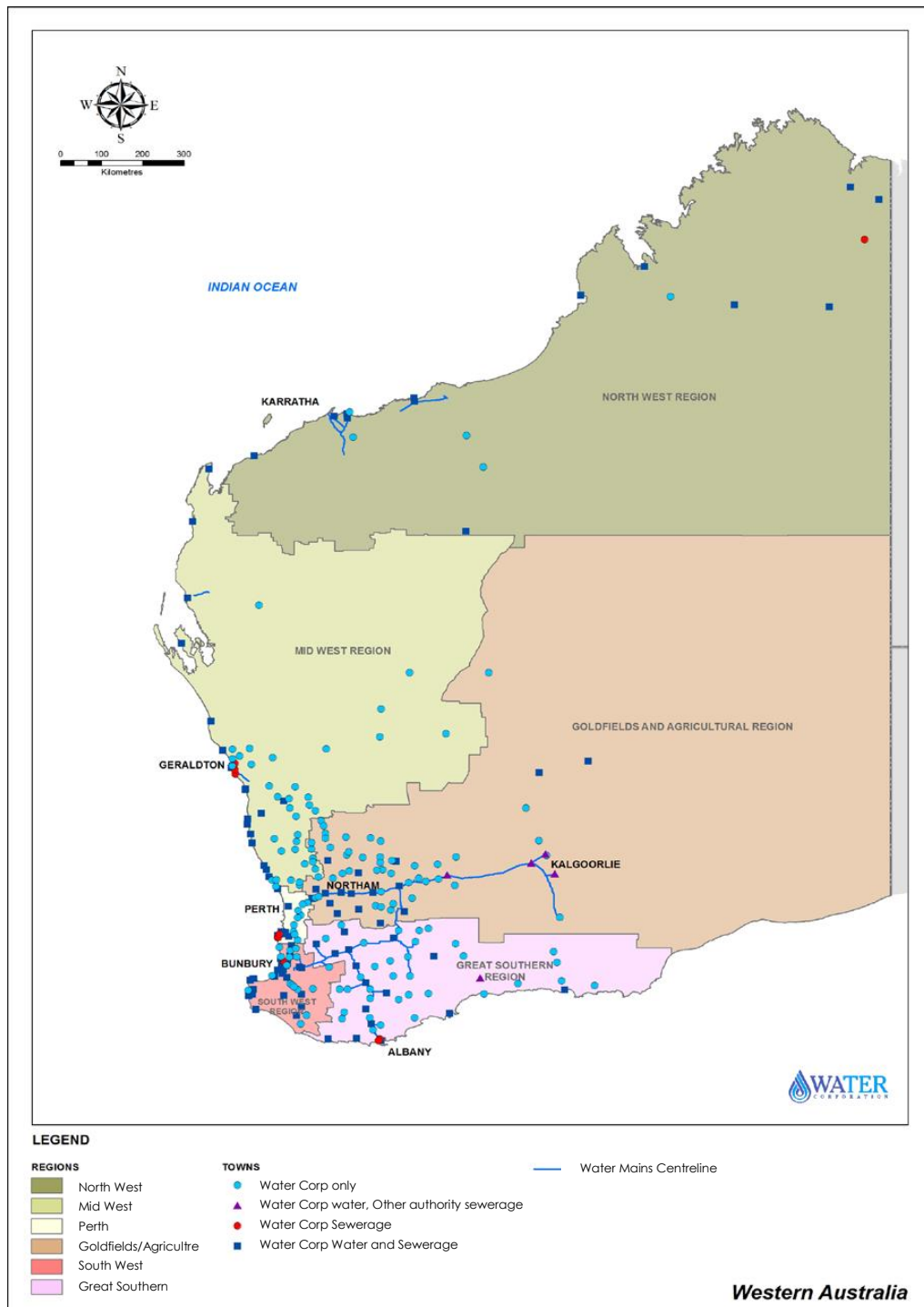


Figure 8 Water Corporation Infrastructure in Western Australia <sup>69</sup>

<sup>69</sup> Water Corporation (2013) *Statement of Corporate Intent 2013/14*

## Water Industry Major Stakeholders

The major industry stakeholders are:

### Regulatory and Government Oversight:

- National Health and Medical Research Centre
- Department of Water
- Department of Environmental Regulation
- Department of Mines and Petroleum
- Department of Health (Public Health Division)

### Union

- Australian Workers Union

### Associations:

- Australian Water Association
- Water Services Association Australia
- Water Industry Skills Taskforce (independent body)
- Water Industry Operators Association (WIOA)

### Major Employers

- |   |   |
|---|---|
| <ul style="list-style-type: none"><li>• Water Corporation</li><li>• Busselton Water</li><li>• Aqwest (Bunbury Water)</li><li>• Southern Seawater Alliance (Tecnica Reuindas and Valoriza)</li><li>• proAlliance (Degremont)</li><li>• Helena Water Consortium (ACCIONA Agua, TRILITY and Lloyds Bank Corporate Markets)</li></ul> | <ul style="list-style-type: none"><li>• Perth Region Alliance (Programmed)</li><li>• Aroona Alliance (Degremont &amp; Transfield)</li><li>• Pilbara Clearwater Alliance (Tenix)</li><li>• City of Kalgoorlie Boulder (Waste Water only)</li></ul> |
|---|---|

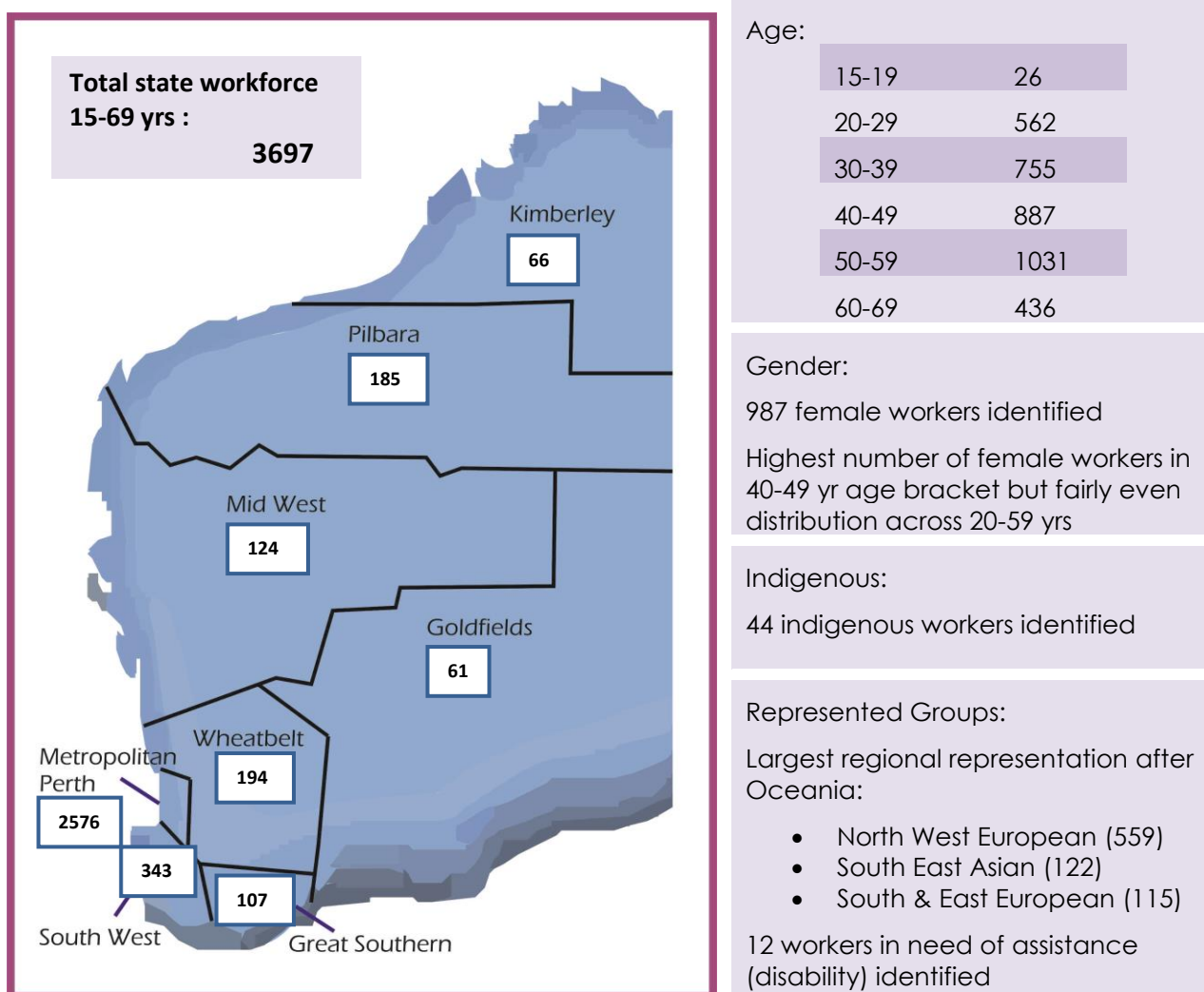
### Training

- Government Skills Industry Skills Council
- Central Institute of Technology
- Challenger Institute of Technology

## Participation

The water industry has a very high percentage of male workers. Again, the 2011 census informs us that the majority of workers are over the age of 40.

**Figure 9** Statistical Data for the 'Water' industry<sup>70</sup>



<sup>70</sup> Australian Bureau of Statistics Census 2011 – Water Industry, TableBuilder data file, viewed 5 March 2013, [www.abs.gov.au](http://www.abs.gov.au)

## Whole of Utilities Sector Industry Trends

### (Electricity Supply, Gas, Waste and Water)

The major trends within the utilities industry relate to pressure on expenditure within government enterprises and environmental, technological and population issues. Underpinned by population expansion and changing demand patterns, the industry must accommodate the community's need for safe, efficient and reliable services whilst operating in a tightening fiscal environment.

E-Oz<sup>71</sup> focuses its 2014 Environmental Scan on the changing nature of energy networks, noting the development of technology that now views the electricity system as a cyclic network that incorporates generation, transmission, distribution, storage and consumption. E-Oz refers to this as 'the internet of things'. Further, the Industry Skills Council notes the shift toward gas as a preferred energy source. Meanwhile, Government Skills Australia<sup>72</sup> notes the trend for the water industry is also related to environmental issues (climate variability including floods and droughts) and the development of technology in process management.

Given that the utilities sector is dominated by government entities, the sector is under the spotlight in relation to possible asset sales and increasing the use of partnerships and alliances with the private sector.

### Sector-Specific Strategic Plans

#### Electricity Demand and the Strategic Energy Initiative

The Office of Energy launched the state's Strategic Energy Initiative (SEI)<sup>73</sup> in August of 2012. The SEI suggested a framework to deliver secure, reliable, competitive and cleaner energy to ensure a high standard of living for all Western Australians and to support continued economic growth in the state. The SEI proposes an energy vision for 2030 to deliver certainty to investors, and to enhance future competitiveness and productivity through four goals relating to security, reliability, competitiveness and cleaner energy.

The SEI also aims to develop future energy demand and supply scenarios for Western Australia so that the nature and scale of the challenge in meeting future energy needs can be understood. It predicted demand for energy is to grow significantly affecting upon electricity generation, gas transmission/distribution and electricity transmission/distribution networks.

The original discussion paper provided a picture of 'lumpy growth' where periods of supply and demand will easily oscillate between periods of over and under-supply. It goes on to predict growth in demand for electricity generation due to high population growth and energy intensive industry.<sup>74</sup> It makes particular reference to predictions by the Chamber of Minerals and Energy (increase of 20,000GWH/annum for 10 years; the Independent Market Operator (increase of 2275MW of generation to be built for the SWIS by 2020-21); Synergy (additional 6000MW); and Wester Power (SWIS demand to increase 600MW for peak demand management).

Alternative predictions and recent evidence of energy usage support a declining rate of electricity consumption resulting in a generation sector that now has significant excess capacity. In Western Australia (more specifically the SWIS), the Public Utilities Office has identified the main driver for increases to the cost of power includes unrealized forecasts for demand growth. Greentech Media<sup>75</sup> provides a useful summary of the conditions affecting the sector (and contradicts the predictions made in the SIS). It notes in particular that electricity demand started falling from 2006 despite forecasts by the IMO during 2005-2010 for increasing consumption.<sup>76</sup>

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<sup>71</sup> Energy Skills Australia (2014) *Environmental Scan*, February 2014

<sup>72</sup> Government and Community Safety Industry Skills Council (2014) *Environmental Scan 2014*

<sup>73</sup> Department of Finance – Public Utilities Office (2012) *Strategic Energy Initiative: Energy 2031 Building the pathways for Western Australia's energy future*

<sup>74</sup> Office of Energy (2011) *Strategic Energy Initiative 2031 Directions Paper*

<sup>75</sup> Greentech Media (2014) *The Perils of Electricity Capacity Markets*  
<<http://www.greentechmedia.com/articles/read/The-Perils-of-Electricity-Capacity-Markets>> accessed 20 May 2014

<sup>76</sup> Greentech Media (2014) *The Perils of Electricity Capacity Markets*  
<<http://www.greentechmedia.com/articles/read/The-Perils-of-Electricity-Capacity-Markets>> accessed 20 May 2014

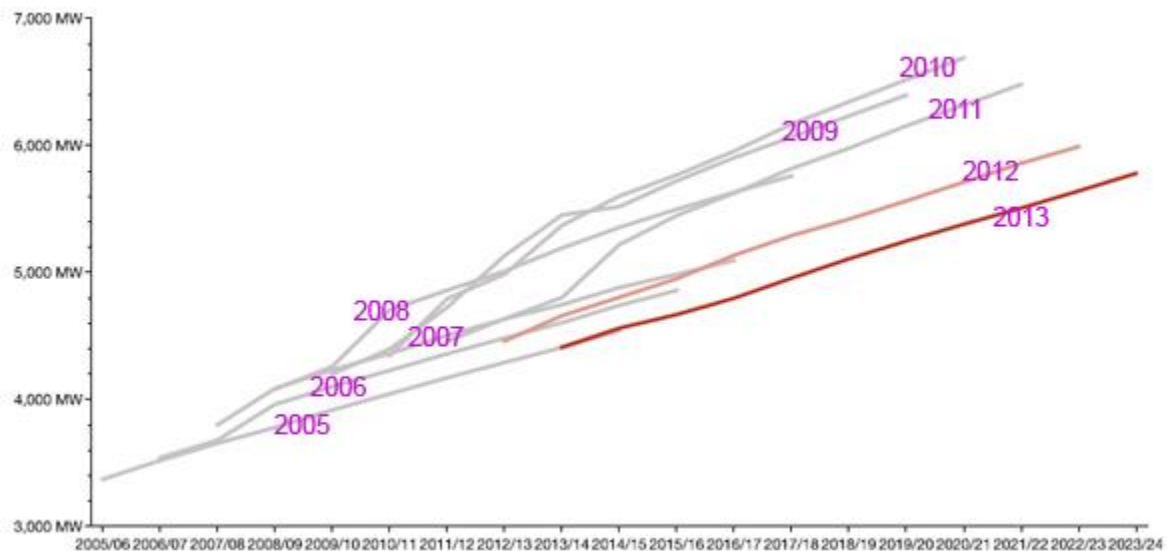


Figure 10 Predicted electricity generation capacity for the SWIS 2005-2013 <sup>72</sup>

### The State Waste Strategy

The stated aim of the State Waste Strategy<sup>77</sup> is to “move Western Australia to best practice in Waste Management by 2020 and to drive a decade of significant improvement in the management of waste.”

The Waste Strategy has specific strategies in the areas of Waste Avoidance, Resource Recovery, Waste Disposal and Data, Monitoring, Reporting and Review.

The Waste Strategy has the potential to significantly impact on the waste management industry, primarily by promoting the recycling and processing of an increasing amount of waste from the three waste streams.

The major drivers for change in the industry relate to the growth in quantities of waste generated and the methods used for collection, treatment and disposal.

Local governments provide bulk verge collection services and drop off facilities to recycle materials. They also separate out green waste and in more recent times electronic waste and mattresses from their bulk verge collection services. This has caused an increase in the amount of waste that is diverted from going to landfill.

Significant progress has been made for the diversion of MSW from landfill through the processing of this waste in resource recovery facilities. These are large facilities that process the waste into usable products such as compost, energy and recycled packaging material. All of the five metropolitan regional councils in the Perth region either have or are planning to establish a resource recovery facility to process at least part of their MSW.

### National Water Initiative and the National Water Industry Skills Strategy

The National Water Initiative was agreed to by Western Australia in 2006 and has shaped the sector in a number of ways.

Developed under the National Water Initiative, the National Water Skills Strategy identified strategies to ensure the water industry workforce takes full advantage of state and commonwealth government opportunities.

EUPA managed and developed a national Certification Framework for operators of potable water treatment facilities in 2011/12 as a component of this strategy. The proposed framework is currently being piloted by the Australian Water Association (AWA) along with the Victorian Public Health regulator, the NSW Office of Water and the Queensland Water Directorate.

The pilot has taken a different approach to that recommended to the National Water Commission, however if successful the program could be extended to other disciplines within the

<sup>77</sup> Waste Authority (2012) *Western Australian Waste Strategy, Creating the right Environment*

water sector if successful. This would include wastewater operators and reticulation (distribution) network operators.

## Major 2014 EUPA Utilities Blog Posts<sup>78</sup>

JAN	<ul style="list-style-type: none"> <li>• <i>Verve and Synergy complete merger</i></li> <li>• <i>Are you taking advantage of traineeships?</i> Highlighting to employers and RTOs the available electrotechnology traineeships</li> <li>• <i>Traineeship established – Vegetation near powerlines</i></li> <li>• <i>Power Down – Why is electricity consumption decreasing?</i> A report released by the Australia Institute</li> <li>• <i>Introduction of the water ombudsman</i> Resulting from legislative change</li> <li>• <i>New waste truck driving qualification</i> Qualification developed by national ISC</li> <li>• <i>Waste – red tape on the east coast</i> Highlighting legislative differences between states</li> <li>• <i>Building a culturally diverse workforce</i></li> <li>• <i>Metro living – rise of apartments</i> From Urbis Thinktank</li> </ul>
FEB	<ul style="list-style-type: none"> <li>• <i>Powerline vegetation control traineeship gets funded</i></li> <li>• <i>APIA 'Pipeline Engineer Standards'</i> Draft 'competency' standards for plastics and composite pipes released</li> </ul>
MARCH	<ul style="list-style-type: none"> <li>• <i>Europe's Electric Shock – Lessons for Australia</i> Another report highlighting excess generation capacity and skyrocketing costs</li> <li>• <i>Technology advancement in utilities</i> Geothermal power highlighted by the Water Minister</li> <li>• <i>APIA – We need more gas infrastructure</i> Calling for additional funding for the sector</li> <li>• <i>Groundwater replenishment on track as new drinking water source</i></li> <li>• <i>PPP model accesses global talent pool, drives down costs</i> Successful opening of the new Mundairing water treatment plant.</li> <li>• <i>WALGA waste to energy forum</i></li> <li>• <i>Workplace gender equality – attracting women</i></li> </ul>
APRIL	<ul style="list-style-type: none"> <li>• <i>Gas apprenticeship takes off – 80 places funded</i></li> <li>• <i>Waste to energy – update on the Hazelmere wood waste to energy plant</i> Proposal by the EMRC</li> <li>• <i>Strengthening VET in Schools Outcomes</i> WA Government focus on VETiS</li> <li>• <i>Improving cultural diversity and inclusion in the workplace</i> A Victorian report</li> <li>• <i>National report on the ageing population</i> From the National Seniors Productive Ageing Centre</li> </ul>
May	<ul style="list-style-type: none"> <li>• <i>NWC National Performance Report – Rural</i> Provides snapshot of rural bulk water suppliers</li> <li>• <i>NWC National Performance Report – Urban</i> Provides snapshot of urban drinking/waste water utilities' performance</li> <li>• <i>New water infrastructure in the Pilbara</i> Additional water source added</li> </ul>

<sup>78</sup> Electrical Utilities and Public Administration Training Council (2014) <<http://www.eupa.com.au>>

## Labour and Skill Demand

### Attraction and Entry to the sector

The utilities sector is comparatively small and suffers with a low public profile. Much of the training is also conducted internally by enterprise RTOs or through auspicing arrangements managed by internal training units. Training for most job roles specific to the sector, with the exception of waste, can only be completed after employment has been gained (through an apprenticeship) which further inhibits the ability for job seekers to prepare for entry into the utilities workforce.

There are also many occupations or skills that are shared with other industry sectors. These issues all combine to make attraction a difficult process for most stakeholders.

Labour demand has eased in line with conditions in Western Australia, however highly skilled workers are still in short supply.<sup>79</sup>

EUPA has focused on the utilities industry in particular to develop a strategy to engage with school students. The attraction of youth and raising of the industry's profile is high on the priorities for all utilities sectors.

Having noted these issues, EUPA highlights:

- Recent rounds of redundancies and organizational structural change in the electricity supply industry that resulted in a substantial reduction in workforce size.
- Structural change progressing in the major government owned utilities.
- The 2014/15 state and commonwealth budgets which are limiting growth of expenditure.

### National Advice

Government Skills Australia<sup>80</sup> determined that the Water Treatment Plant Operator is an *Occupation in Demand*.

The ISC continues to note that foundation, leadership and management, project management, customer service and digital literacy skills are areas of emerging skill needs.

### Regional Impact

All regional workforce development plans, with the exception of the Wheatbelt, report expectations of increasing population growth. Population growth in regional Western Australia requires an enormous investment in public utilities infrastructure involving construction, maintenance and operations of electricity, gas, water and waste infrastructure. The existing utilities infrastructure spans the entire state, often spanning remote areas between major regional centres (such as gas pipelines) or existing as distinct isolated networks (such as the 32 distribution networks operated by Horizon Power).

The demand for workers with skills in power generation, transmission and distribution will continue as many resources projects are energy-intensive and require a workforce of their own to be self-sufficient in relation to energy and water management needs. EUPA notes that regional workforce development plans do not pay particular attention to the utilities sector, with the exception of the Pilbara<sup>81</sup> which notes generic engineering and trade occupations as priority. Despite this, EUPA submits that competition for highly skilled labour is expected to remain tight<sup>82</sup> and that the utilities sector will be subject to pressure to compete with other sectors.

A new report resulting from an analysis by Curtin University details particular needs to ensure the long term sustainability of the Pilbara region. In that report, specific reference is made to the need for significant investment in utilities infrastructure – including electricity and water services – to ensure the region survives for the long term.<sup>83</sup>

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<sup>79</sup> Clarius Group (2014) *Clarius Skills Indicator, May 2014*

<sup>80</sup> Government and Community Safety Industry Skills Council (2014) *Environmental Scan 2014*

<sup>81</sup> Department of Training and Workforce Development (2013) *Pilbara Workforce Development Plan*

<sup>82</sup> Clarius Group (2014) *Clarius Skills Indicator, May 2014*

<sup>83</sup> Curtin University (2014) *Pilbara 2050: Ensuring the longterm viability of the Pilbara*

The Strategic Energy Initiative is also predicated on the changing settlement patterns being experienced in WA. This, combined with increasing affluence, is causing the state to consider new ways to manage peak demand on our electricity assets (due to the growth in domestic airconditioning and consumer goods).<sup>84</sup>

## Regulatory Requirements

### Relevant Legislation

The Minister for Energy is responsible for administering the following legislation in Western Australia. The Coordinator of Energy supports the Minister in this role.

- Dampier to Bunbury Pipeline Act 1997
- Electricity Corporations Act 2005
- Electricity Industry Act 2004 (all parts other than Part 9A)
- Energy Arbitration and Review Act 1998
- Energy Coordination Act 1994 (all parts other than Parts 2 & 3)
- Energy Corporations (Transitional and Consequential Provisions) Act 1994
- Energy Operators (Powers) Act 1979
- Electricity Transmission & Distribution Systems (Access) Act 1994\
- Fuel, Energy and Power Resources Act 1972
- Gas Corporation (Business Disposal) Act 1999
- Gas Supply (Gas Quality Specifications) Act 2009 (Act other than Part 5, Division 2)
- National Gas Access (WA) Act 2009
- State Energy Commission (Validation) Act 1978

The following Codes were established under the *Electricity Industry Act 2004*:

- Code of Conduct for the Supply of Electricity to Small Use Customers
- Electricity Industry Customer Transfer Code
- Electricity Industry Metering Code
- Electricity Industry (Network Reliability and Quality of Supply) Code
- Electricity Networks Access Code

WA's independent economic regulator, the Economic Regulation Authority, has established the following gas industry-related Codes under the *Energy Coordination Act 2004*:

- Compendium of Gas Customer License Obligations (also known as the Gas Customer Code)
- Gas Marketing Code of Conduct

Additional regulatory conditions also came into force that affect workers who manage vegetation near powerlines. EnergySafety released its Code of Practice in July 2012<sup>85</sup> which now requires new entrants to the workforce to hold specific competencies to perform their work. EUPA worked throughout 2013 to establish a traineeship to support employers provide this training and additional effort is now required to commit employers to the program.

In the water industry, the following legislation is applicable:

- Country Areas Water Supply Act 1947
- Dangerous Goods Safety Act 2004 and associated Dangerous Goods Safety Regulations 2007
- Environmental Protection Act 1986
- Health Act 1911
- Land Drainage Act 1925
- Land Drainage (Validation) Act 1996
- Metropolitan Water Supply, Sewerage, and Drainage Act 1909
- Metropolitan Water Authority Act 1982
- Rights in Water and Irrigation Act 1914
- Water Agencies (Powers) Act 1984
- Water Boards Act 1904
- Water Corporation Act 1995
- Water Efficiency Labelling and Standards Act 2006
- Water Services Act 2012
- Water Services Licensing Act 1995
- Waterways Conservation Act 1976

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<sup>84</sup> Office of Energy (2011) *Strategic Energy Initiative 2031 Directions Paper*

<sup>85</sup> Department of Commerce, EnergySafety Division (2012) *Code of Practice for Personnel Electrical Safety for Vegetation Control Work near Live Power Lines*



The water industry has experienced the introduction of new legislation that may create a levelling of the playing field. The effect of this is unknown at this stage, but could see more stakeholders enter the sector.

In the waste industry sector, the following legislation is of particular importance:

- Waste Avoidance and Resource Recovery Act 2007
- Waste Avoidance and Resource Recovery Levy Act 2007
- Environmental Protection Act 1986
- Environmental Protection (Landfill) Levy Act 1998

## Major Challenges and Barriers

### Competition

Labour market pressure has reduced on trade level occupations due to the transition occurring in the resources sector from construction to operation<sup>86</sup>. However, most of the reduction in competition is reported to be for lower skilled occupations and demand for higher skills is still reported to be strong across the nation<sup>87</sup>.

### Population Growth

Population growth throughout Western Australia is predicted to be sustained over the long term with estimates between 5.4 and 7.7 million by 2061<sup>88</sup>. This growth will continue to have a direct effect on state public utilities:

- Gas and electricity transmission/distribution networks continue to grow along with the ongoing project to sink electricity supply assets underground.<sup>89</sup>
- Water reticulation networks (drinking water and wastewater) are expanding due to new developments and must be upgraded for some housing 'infill' projects in the Perth metropolitan area due to increased capacity requirements.<sup>90</sup>
- The demand for treated water remains high, requiring advanced maintenance programs (e.g. relining waste water pipes<sup>91</sup>), education programs and new water sources<sup>92</sup>
- Programs and initiatives to divert waste from landfill such as the Waste Authority's Better Bins strategy<sup>93</sup>.

Further, the state's electricity generation capability is continuing to expand through the utilisation of various technologies that now see localised, small scale generation capabilities improving.

### Ageing

EUPA Training Council has also reported that the ageing workforce has been a significant issue for industry for a number of years, and this continues to be a position supported by the Industry Skills Council<sup>94</sup>.

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<sup>86</sup> Australian Workplace and Productivity Agency (2013) *Resources Sector Skills Needs : Skills for a transitioning resources sector*

<sup>87</sup> Clarius Group (2014) *Clarius Skills Indicator, March 2014*

<sup>88</sup> Australian Bureau of Statistics *Western Australia Population Size*, <[http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/3222.0main+features112012%20\(base\)%20to%202101](http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/3222.0main+features112012%20(base)%20to%202101)> Accessed 15 May 2014

<sup>89</sup> Department of Finance – Public Utilities Office, *State Underground Power Program (UPP)*, <<http://www.westernpower.com.au/networkprojects/undergroundPower/upp/UPP.html>> accessed 21 May 2014

<sup>90</sup> Department of Planning (2010) *Directions 2031 and beyond: metropolitan planning beyond the horizon*

<sup>91</sup> WA Government, *Media Statement 12/3/14*, <<https://www.watercorporation.com.au/about-us/media/media-releases/media-release?id={6DF05BE5-A8A6-4361-B65F-AAA44A987888}>> accessed 20 May 2014

<sup>92</sup> WA Government *Media Statement, 4/4/2014*, <<https://www.watercorporation.com.au/about-us/media/media-releases/media-release?id={385E9576-6131-4E9A-BC16-5709E1C23BA4}>> accessed 20 May 2014

<sup>93</sup> Waste Authority WA, *Better Bins Funding Guide* (2014)

<[http://www.wasteauthority.wa.gov.au/media/files/documents/Better\\_Bins\\_Funding\\_Guide.pdf](http://www.wasteauthority.wa.gov.au/media/files/documents/Better_Bins_Funding_Guide.pdf)> accessed 20 May 2014

<sup>94</sup> Energy Skills Australia (2014), *Environmental Scan, February 2014*

## Technology and the Environment

Government climate and carbon reduction policy has changed since the 2013 election; however it is unclear whether key legislation will pass parliamentary processes to be enacted.

Despite the policy uncertainty, the shift to alternate energy sources is well under way. E-Oz has focused its 2014 Environmental Scan<sup>95</sup> on the new *connected network* that links generation, transmission, distribution, storage and consumption into one cyclical framework (the internet of things). This is driving E-Oz to review skills requirements across the entire industry to ensure workers are prepared to meet new skilling needs.

Skills development is expected to change focus due to technology developments associated with renewable energy and smart metering/appliances in alignment with the new model described by E-Oz.

A particular and somewhat unexpected issue was raised by Western Power early in 2014 affecting Cable Jointers<sup>96</sup>. There is a need to maintain powerline assets that employ old technology, however workers are now skilled in newer technologies and do not have the skills to perform maintenance work. Western Power has relied on skilled migration to meet this specific need. This scenario highlights the difficulty in dealing with a workplace that is technologically moving forward at a fast pace but must work with older assets at the same time.

Major oil and gas projects are also expected to continue to place significant pressures on the gas supply sector in relation to the retention of skilled staff and its ability to attract skilled workers. Four major LNG projects are reported by APPEA as under construction at this time (Gorgon, Prelude, Wheatstone and Ichthys).<sup>97</sup>

In alignment with the State Waste Strategy, the Waste Industry also has several initiatives in the pipeline that move toward alternative waste disposal methods. This includes waste recovery and waste-to-energy facilities.

The Water sector provides services in a climate that is dryer and more variable in relation to weather patterns. Reliance on surface water is now minimal given the developments in desalination and advances in technologies related to wastewater recycling and reuse.

## Industry Leadership and Profile

The major utilities address their specific workforce development needs individually; however at a whole of industry level, awareness of the imperative and commitment to adopt a coordinated approach to workforce planning across all the utilities sectors is low.

EUPA determined in 2012 that there are very few peak organisations able to work with industry at the enterprise or agency levels to assist in the development of attraction and retention strategies. EUPA has sought to assist industry with specific projects and has successfully tendered to provide workforce development strategies to the Waste Industry.

Utilities sector stakeholders seek to improve the means by which industry occupations are promoted to the community with a particular focus on the attraction of youth to the sectors.<sup>98</sup>

The industry reports that difficulties exist in relation to occupations that are common to other industry sectors. That is, industry feels that representations made to VET policy makers are often lost due to the generic nature of some occupations. Efforts have been made to engage with Industry Skills Councils and peak associations to amend the Australian and New Zealand Standards for Classifying Occupations (ANZSCO) but little progress has been made. In the last revision of the standards, the water sector was successful in having one additional occupation added. EUPA Training Council recognizes that progress is unlikely for an extended period. Instead it seeks to strengthen its State Priority Occupation List (SPOL) submission to ensure industry has the best possible representation to VET policy makers.

The water industry has also sought to increase its profile and professionalism by implementing a trial of the National Water Operator's Certification Framework. The trial is being undertaken by

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<sup>95</sup> Energy Skills Australia (2014), *Environmental Scan*, February 2014

<sup>96</sup> Electrical Utilities and Public Administration Training Council (2014) *State Priority Occupations List Submission*

<sup>97</sup> Australian Petroleum Production & Exploration Association (2014) Australian LNG projects  
<<http://www.appea.com.au/oil-gas-explained/operation/australian-lng-projects/>>, accessed 28 May 2014

<sup>98</sup> Electrical Utilities and Public Administration Training Council *Industry Working Groups*

the Australian Water Association under the guidance of the Water Industry Skills Taskforce and in partnership with the Victorian Public Health Regulator, the Queensland Water Directorate and the New South Wales Office of Water. If successful, the pilot could see new professional development requirements and a renewed focus on competency development in Western Australia.

### Budget Pressures

Given that the major stakeholders in Western Australia are owned by government, it is of no surprise that the industry is under a spotlight in relation to expenditure. In particular, the recent state budget provided further impetus for the sale of assets to be explored.

The sector will also be expected to shift to more alliances and public-private partnerships to build, operate and maintain key utilities infrastructure.

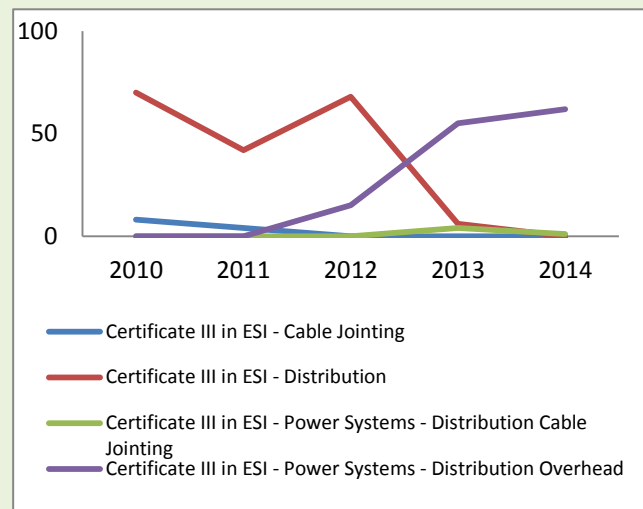
### Workforce Development Opportunities

- E-Oz Industry Skills Council has identified that industry is to shift the way it generates, transmits stores and consumes power. The review and streamlining of training packages is necessary to ensure training providers are able to meet future skills needs.
- The gas industry will benefit by implementing the apprenticeship established in 2014.
- EUPA must seek to provide the highest level of detail in SPOL submissions to ensure occupations are highlighted in the context of the utilities sector.
- The sectors are to develop a strategy and supporting resources/tools to engage with school students.
- All state and national industry strategies are supported, including the Strategic Energy Initiative, the State Waste Strategy and the National Water Initiative.

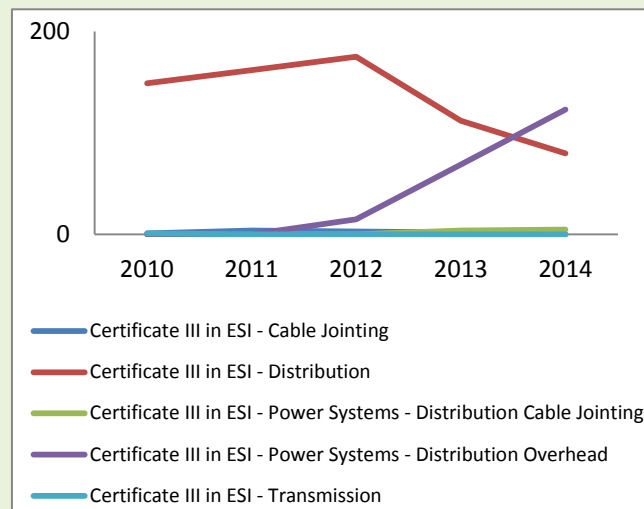
## VET Statistical Data

### Transmission and Distribution

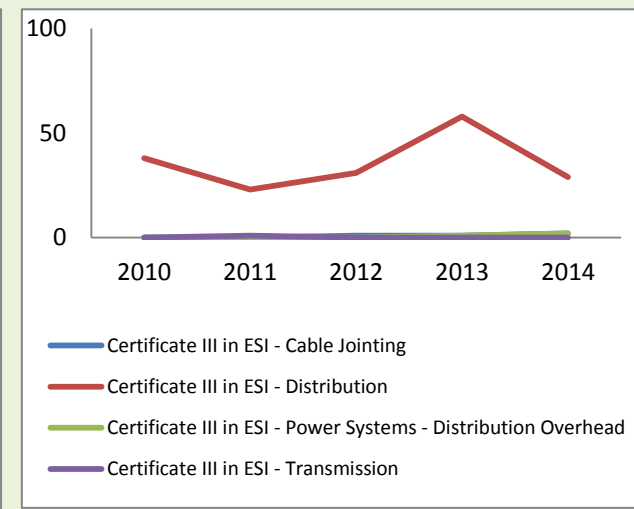
#### Commencements



#### In Training

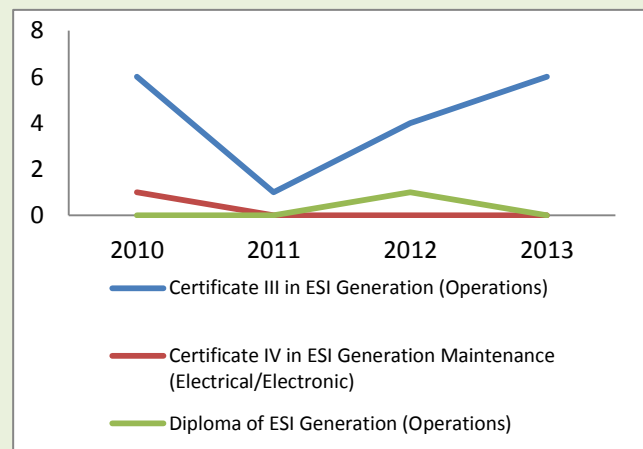


#### Completions

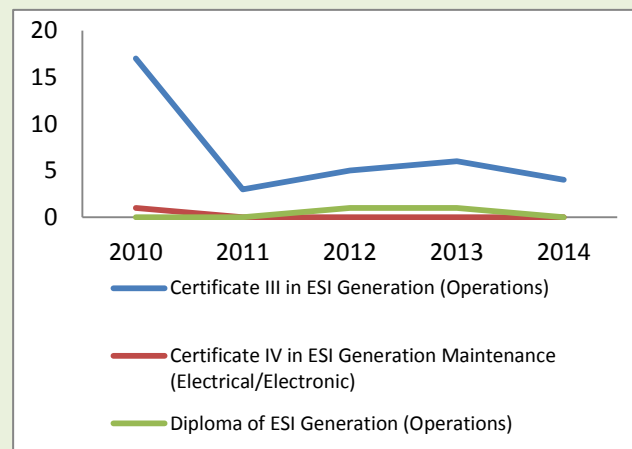


### Electricity Generation

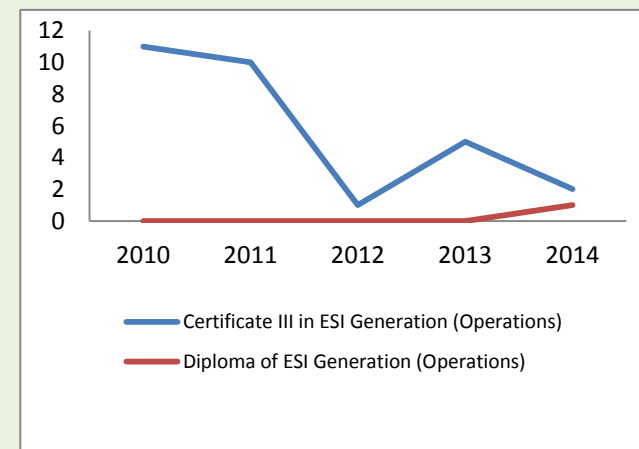
#### Commencements



#### In Training

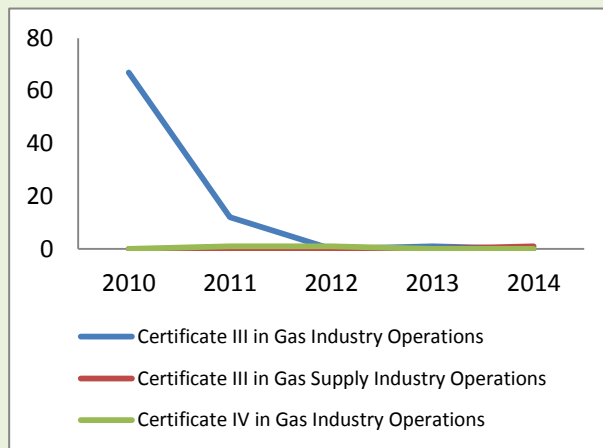


#### Completions

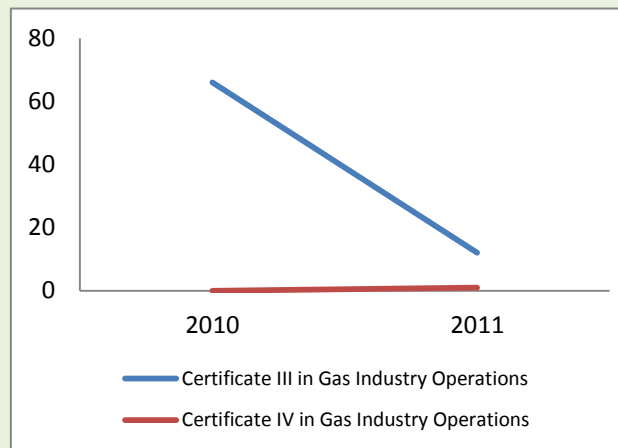


## Gas Supply

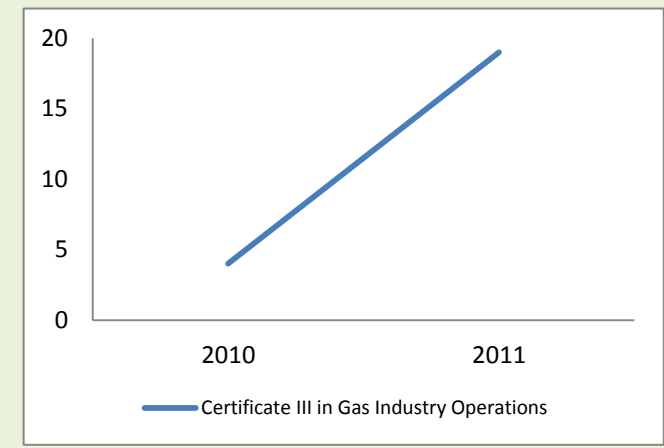
### Commencements



### In Training

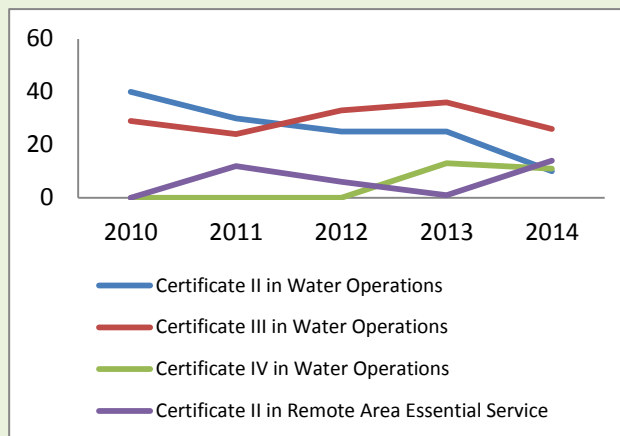


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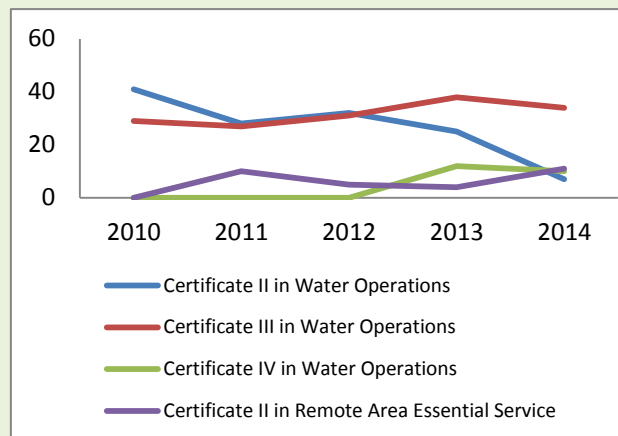


## Water

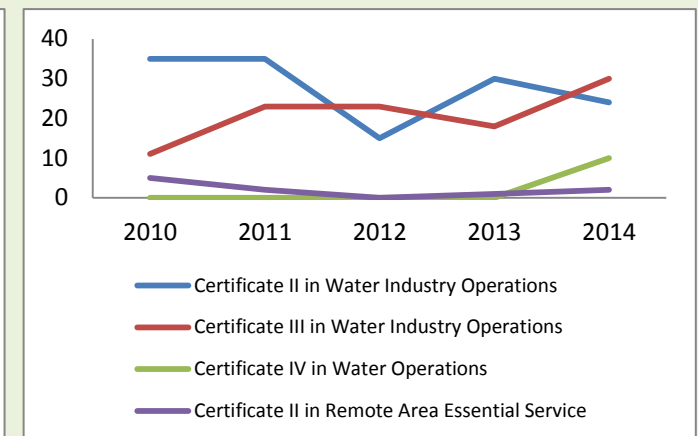
### Commencements



### In Training

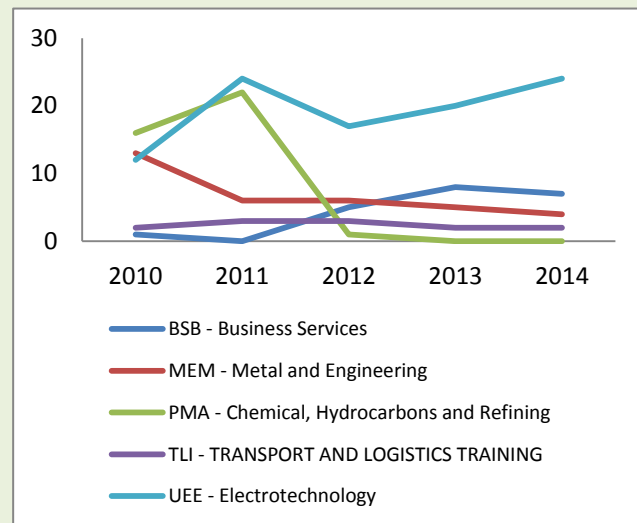


### Completions

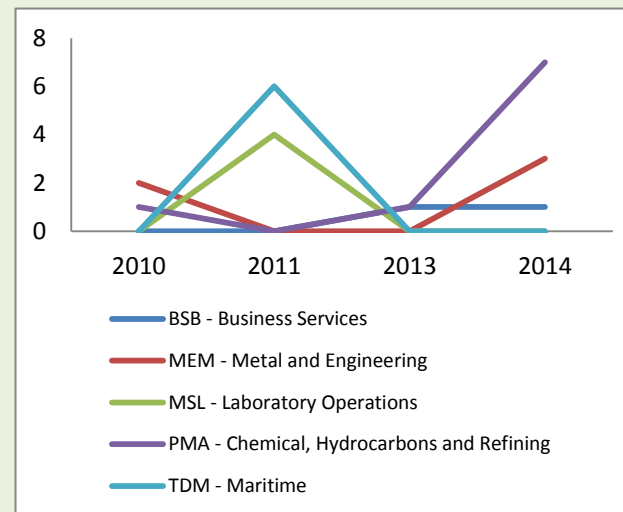


## Commencements in other Training Packages

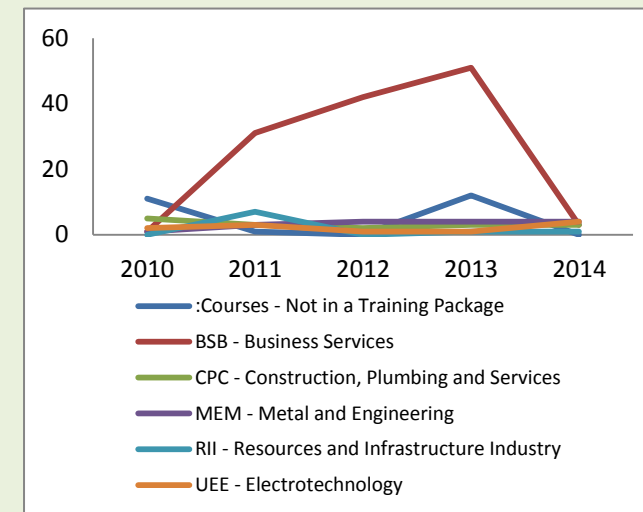
### Electricity Supply Employers



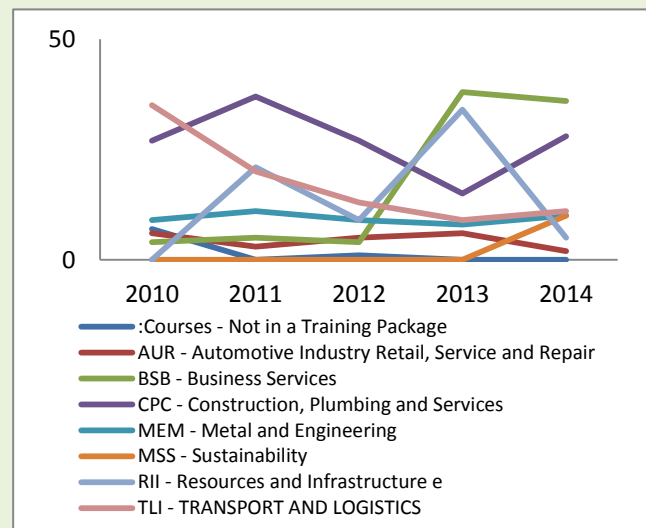
### Gas Supply Employers



### Water Industry Employers



### Waste Industry Employers



- The electricity supply industry is a relatively small workforce with the major training activity in overhead transmission lines.
- Approximate 50% completion rates reflect the usual poor rates suffered across apprenticeships.
- The gas industry is transitioning to a new apprenticeship in 2014. If successful, training data should show up to 80 places for 2014 in future plans.
- The water industry shows a reducing rate of commencements in the Cert II, whilst Cert III enrolments remain stable.
- There has been only two commencements in the waste industry qualifications in the last four years so graphs are not produced.

- The utilities sectors use a variety of skilled workers reflected in the uptake of various training packages.
- The water industry had a clear spike in activity for BSB training culminating in 2013.
- The gas industry uses the PMA training package relating to chemicals.
- The waste industry has clearly used enterprise-based training to meet its needs, despite not using its own training package. CPC, RII and BSB qualifications have been of value.

## VET Trends and Issues

- EUPA has commenced work with its Board of Management to increase the uptake of Work placement for school students in the utilities sector.
- EUPA is supporting the delivery of the new gas apprenticeship through continued liaison with training providers, the Department of Industry and the Department of Training and Workforce Development.
- EUPA continues to monitor the Water Industry Training Institute (a collaborative between an RTO and the Australian Water Association). Assistance to meet industry demands is provided where required.
- EUPA is establishing a waste industry traineeship for collection drivers (truck drivers)
- EUPA is seeking industry support for the establishment of an electronic engineering technician traineeship
- EUPA has established a traineeship in Powerline Vegetation Control traineeship in 2014 and is actively engaged with the peak association and energy regulator to facilitate the best outcome for industry.
- Training package review and streamlining will impact upon all sectors and the work of the Training Council.
- Alignment of technical and post trade qualifications to higher education pathways can be explored.

## Industry Issues Summary:

- The industry suffers a low profile affecting attraction to the sector, particularly affecting the attraction of youth.
- Commonality of occupations and skills requirements with other industry sectors can hide industry-specific issues from VET policy makers.
- Decreasing budgets, possible privatization of assets and increasing use of alliances/ public-private alliances are driving measures to increase efficiency and shaping the workforce.
- Population growth in metropolitan and regional areas demand more services across all utilities sectors.
- Adoption of renewable energy, changing consumption patterns, community/ government expectations and new ways of thinking about energy (the 'internet') continues to drive change
- Training requirements imposed on those that clear vegetation near powerlines due to regulatory reform has experienced a slow roll-out.
- The waste sector in WA is working toward sustainable engagement in nationally recognised training arrangements.
- VET sector policy, reviews and funding affect industry's capacity to skill its workforce.

# Overview of the Public Administration Industry

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## Government Industry Analysis

The Australian and New Zealand Standard for Industry Classification defines the EUPA's coverage as follows<sup>99</sup>:

### **Division O Public Administration and Safety, Subdivision 75 Public Administration**

#### **Class 7520 State Government Administration**

Units engaged in the setting of state government policy; the oversight of state government programs (except military defence); collecting revenue to fund state government programs; creating statute law and by-laws (excluding creating case law through the judicial processes of civil, criminal and other court operation); and distributing state government funds.

Primary activities

- Financial and economic management except banking (state government)
- Legislation enactment and enforcement (state government)
- Parliament operation (state government)
- Policy formulation and administration (state government)
- State government administration (except justice)
- State governor's unit operation

#### **Class 7530 Local Government Administration**

Units engaged in the setting of local government policy; the oversight of local government programs; collecting revenue to fund local government programs; creating by-laws (excluding creating case law through the judicial processes of civil, criminal and other court operations); and distributing local government funds.

Primary activities

- Financial and economic management except banking (local government)
- Local government administration (except justice)
- Policy formulation and administration (local government)
- Regulation enactment and enforcement (local government)

#### **Class 7540 Justice**

Units mainly engaged in the operation or administration of judicial authorities or commission including civil and criminal courts, royal commissions and similarly constituted inquiries, and in creating case law through the judicial processes of civil, criminal and other court operations.

## State and Local Government Administration in Context

Governments significantly contribute to the economic development of Western Australia through direct employment of local people and through the provision of necessary support services that enable communities and the economy to function and grow. They do this by providing largely intangible outcomes known as 'public goods' and enabling higher levels, higher quality and/or more equitable consumption of services.<sup>100</sup>

Government exists at three levels. In accordance with our obligations, EUPA engages with and reports on the following:

**State Government** – also known as the State Public Sector. This sector supports the elected government of the day in formulating and implementing policy; delivering services to the state; and regulating private sector activity where there are economic, social and environmental outcomes.

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<sup>99</sup> Australian Bureau of Statistics, *Australian and New Zealand Standards for Industry Classification*, Accessed 15 May 2014

<sup>100</sup> Productivity Commission, *Report on Government Services*, 2014



**Local Government** – This sector sits closest to the communities that they serve. It delivers an enormous breadth of services that differ between each authority but often include:

- The planning, construction and management of infrastructure, waste services, recreation and social infrastructure; and
- Planning, monitoring and enforcement of environmental, health, animal, building and land use/development.

The government sector provides useful reports on performance and workforce composition. One such report is the 2013 Annual Report Director of Equal Opportunity in Public Employment (DEOPE), which collates information from:

- 109 public sector entities (June 2013 data)
- 140 local government authorities (March 2013 data)
- four public universities (March 2013 data)
- 21 other public authorities (June 2013 data).

In 2012/13, there were 195 656 employees in these organisations, including 24,403 in local government and 138,863 in departments and agencies that comprise the public sector (30 June 2013).<sup>101</sup>

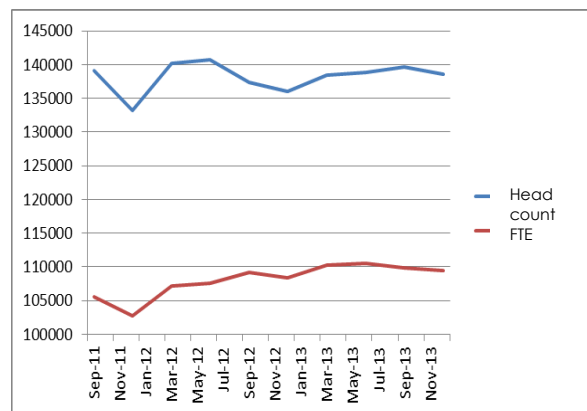


Figure 11: FTE and Headcount Public Sector Sept 2011 - Dec 2013<sup>88</sup>

In separate reports, the Public Sector Commission identifies a total headcount of 138,559 against a Full Time Equivalent (FTE) of 109,489<sup>102</sup> as at December 2013. These figures do not take into account some redundancies that have occurred in 2014 and the effect of the current freeze on employment that has effect until the end of the current financial year.<sup>103</sup>

Government agencies and authorities vary widely in relation to the size of individual entities. This is particularly important in Local Government when considering the focus on maximising efficiencies through shared resourcing and the development of a consistent planning methodology (Integrated Planning).

Please note that ABS census data has not been presented for government as the figures provided are clearly significantly different to those provided by government's own reports. This may suggest that many workers identify themselves at census time within the occupational role but not in the government sector.

<sup>101</sup> Public Sector Commission (2013), *Director of Equal Opportunity in Public Employment Annual Report 2013*

<sup>102</sup> Public Sector Commission, *Western Australian public sector quarterly workforce report: December 2013*

<sup>103</sup> EUPA Training Council, *Public Sector Job Freeze*, < <http://www.eupa.com.au/2014/04/public-sector-job-freeze/>>, accessed 22 May 2014

<sup>104</sup> Public Sector Commission, *Western Australian public sector quarterly workforce report, December 2013*

## Translators and Interpreters

EUPA is investing significant effort into this sector due to industry concerns and actions to address training needs. The sector does not fall within EUPA's ANZSIC industry scope.

ANZSIC Code	Industry	Relevant Training Council
6999	Other professional, scientific and technical services n.e.c.	Finance and Professional Services Training Council

**Table 10:** Additional Industry Coverage (Public Administration)

The Translators and interpreters sector is included within this plan as national qualifications are within the PSP12 Public Sector Training Package.

The sector assists to either:

- Translate written words from one language to another
- Interpret spoken or signed language from one language to another.

Workers are generally not employed directly by any level of government. Instead they are contracted as needed. It appears that public policy surrounding multi-cultural support services has influenced the position of this industry sector and its inclusion in the PSP Public Sector Training Package.

The sector is dominated by workers that are called upon/contracted on an 'as-needed' basis. This provides little stability and an inability to access most sources of funding as employment is not ongoing.

# Public Safety Industry Analysis

The Australian and New Zealand Standard for Industry Classification defines the EUPA's coverage as follows<sup>105</sup>:

## **Division O Public Administration and Safety, Subdivision 77 Public Administration, Group 771 Public Order and Safety Services**

### **Class 7711 Police Services**

Units mainly engaged in criminal and civil law enforcement and other activities related to the enforcement of law and the preservation of order.

Primary activities

- Intelligence service operation
- Police service operation
- Police station operation
- Traffic policing activity

### **Class 7713 Fire Protection and other Emergency Services**

Units mainly engaged in providing firefighting or related civil emergency services (except police and ambulance services).

Primary activities

- Airport fire service
- Emergency service (other than defence and police)
- Fire brigade service
- Firefighting service
- Fire prevention service
- Forest fire fighting service
- Rescue service

### **Class 7719 Other Public Order and Safety Services**

Units mainly engaged in providing public order and safety services not elsewhere classified such as border surveillance.

### **Class 7720 Regulatory Services**

Units both public and private mainly engaged in enforcing regulations, licensing and inspection activities (except regulation of financial and insurance markets, electricity markets *and regulatory units with a dual role of regulation and public administration with a significant amount of public administration*).

The regulations enforced in this class are established by Acts of Parliament and cover technical details that may be subject to frequent change. They are signed into law through the Cabinet Committee, Executive Council or some other body less than Parliament.

Primary activities

- Consumer protection service
- Licensing and permit issuance
- Motor vehicle testing
- Regulating casino and other gambling
- Regulating food and agricultural standards
- Regulating qualification standards
- Weights and measures regulations

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<sup>105</sup> Australian Bureau of Statistics, *Australian and New Zealand Standards for Industry Classification*, Accessed 15 May 2014

## Public Safety in Context

The public safety industry works to prevent and respond to natural and man-made threats and to provide the community with protection from those threats; seeking to ensure the security and safety of the state and its communities. The public safety industry requires a sustainable workforce of competent and capable career (paid) and volunteer personnel.<sup>106</sup>

Please note that Class 7719 services are provided by Commonwealth Agencies (e.g. Coastwatch, border security and surveillance). The Department of Training and Workforce Development has previously advised that Central (Commonwealth) government is not within the scope of work for EUPA Training Council.

The State Emergency Management Committee (SEMC) is Western Australia's peak emergency management body and is comprised of Police, DFES, Dept. of Health, Dept. of Child Protection, Dept. of Premier and Cabinet, Dept. of Parks and Wildlife and WALGA.<sup>107</sup>

In this plan, EUPA has highlighted specific agencies and organisations that operate in the public safety industry. It is important to recognise that other stakeholders also play significant roles in emergency management including local governments. The sector also relies heavily on a volunteer workforce. The Department of Fire and Emergency Services estimates the volunteer workforce to be in excess of 29,000 people.<sup>108</sup>

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<sup>106</sup> Government and Community Safety Skills Australia (2014) *2014 Environmental Scan*

<sup>107</sup> State Emergency Management Committee, *Member Profiles*

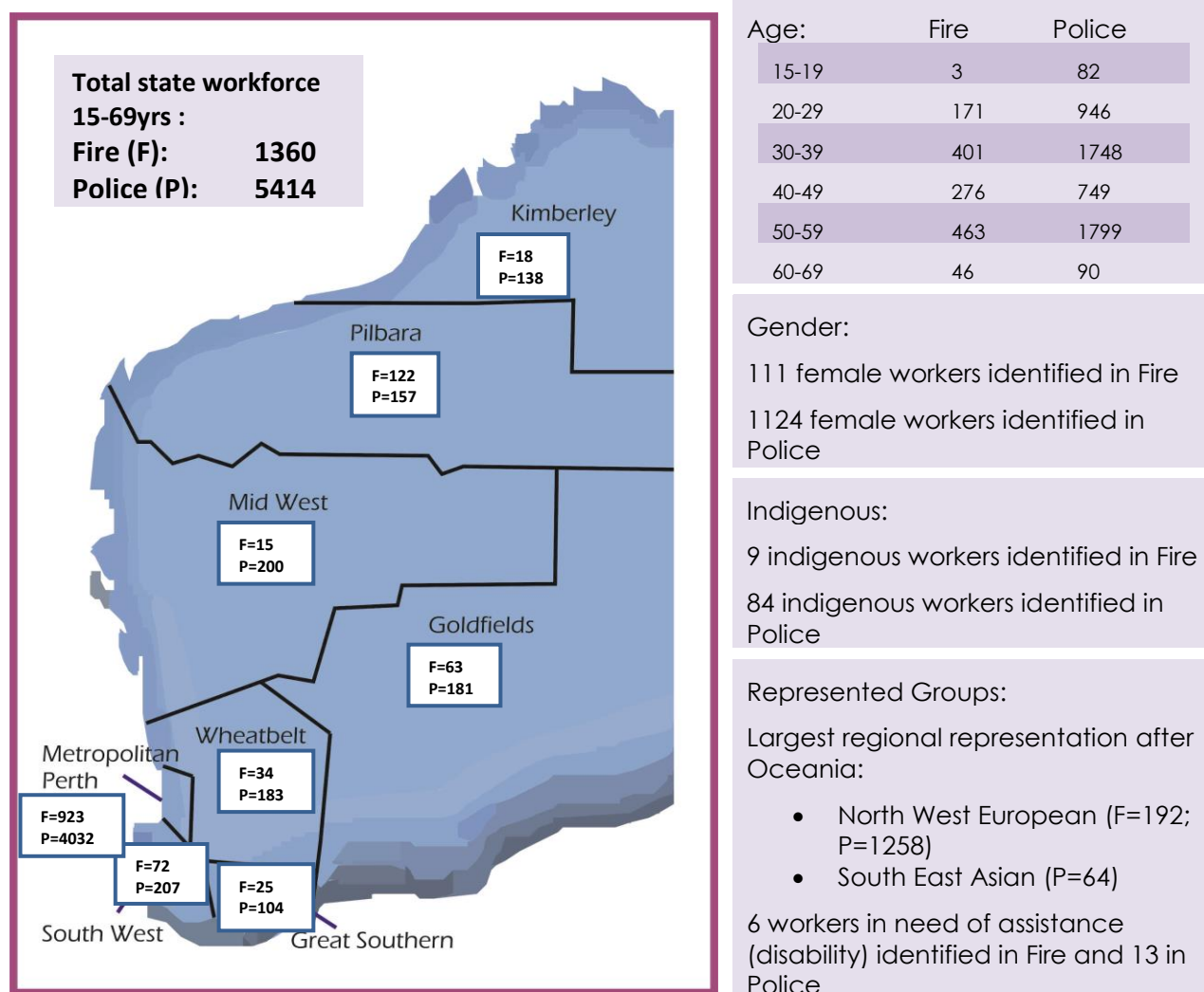
<<https://www.semc.wa.gov.au/about/committeestructure/memberprofiles/Pages/default.aspx>> accessed 22 May 2014

<sup>108</sup> Department of Fire and Emergency Services, *A Safer Community*,

<<http://www.dfes.wa.gov.au/aboutus/corporateinformation/Pages/default.aspx>> accessed 22 May 2014

## Participation

**Figure 12** Statistical Data for 'Fire Fighter' and 'Police Officer' Occupations<sup>109</sup>



For the first time, the Department of Fire and Emergency Services has provided some detailed information about the volunteer workforce. EUPA has sought this information to provide a basis for credible evidence to support training delivery.

Volunteers	No of Brigades, Groups, Units	Volunteer Numbers as at 30 June 2013		
		Operational	Support	Total
Volunteer Bush Fire Service	581	21,518	856	22,374
Volunteer Fire and Rescue Service	92	2,108	166	2,274
State Emergency Service	65	1,971	53	2,024
Volunteer Marine Rescue Services	39	1,367	36	1,403
Volunteer Emergency Service	19	533	8	541
Volunteer Fire Service	9	380	7	387
DFES Education and Heritage Centre	1	0	19	19
Other DFES Volunteers	2	0	15	15
<b>Total</b>	<b>806</b>	<b>27,877</b>	<b>1,160</b>	<b>29,037</b>

**Table 11:** DFES Volunteer Numbers<sup>110</sup>

A regional breakdown is provided at Appendix 4.

<sup>109</sup> Australian Bureau of Statistics Census 2011 – Fire fighter and Police, TableBuilder data file, viewed 5 March 2013, [www.abs.gov.au](http://www.abs.gov.au)

<sup>110</sup> Department of Fire and Emergency Services (2013) Inaugural Report 2012/13

# Corrective Services Industry Analysis

## Division O Public Administration and Safety, Subdivision 77 Public Administration, Group 771 Public Order and Safety Services

### Class 7714 Correctional and Detention Services

Units mainly engaged in managing and operating correctional institutions (including prisons and remand centres) and detention centres. The facility is generally designed for confinement, correction and rehabilitation of individuals.

#### Primary activities

- Correctional centre operation
- Detention centre operation
- Gaol operation
- Juvenile detention centre operation
- Operating correctional facility on a contract or fee basis
- Prison farm operation
- Prison operation
- Remand centre operation

## Corrective Services in Context

The Corrective Services Industry provides services that protect the community through offender management. The wider definition states that the sector implements the correctional sanctions determined by the courts and releasing authorities such as parole boards.<sup>111</sup> The CSC Training Package also includes roles that are wider than the ANZSIC definition. Job roles include direct prisoner supervision, facility management, offender rehabilitation and social services.

Organisations in this sector provide critical support services to offenders – diverting them from committing further crimes and assisting them to become more responsible citizens. This complex environment requires well-trained staff to ensure successful management of offenders in accordance with the regulatory requirements placed upon them.

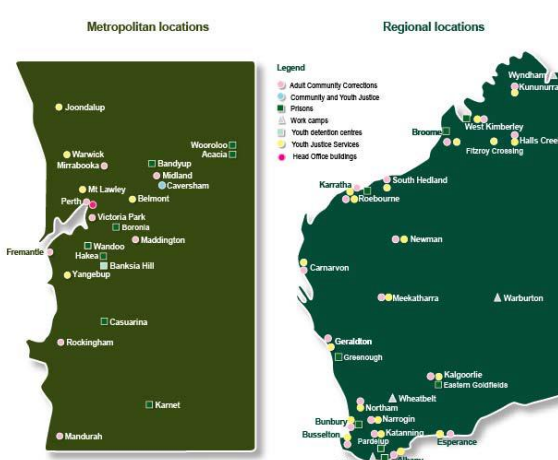
EUPA has previously engaged with stakeholders in relation to the following areas outside of its ANZSIC scope:

ANZSIC Code	Industry	Relevant Training Council
8790	Other Social Assistance Services (Parole and probationary service)	Community Services, Health and Education Training Council

**Table 12** Additional Industry Coverage (Corrective Services)

In Western Australia, the sector is comprised of the Department of Corrective Services and Serco which manages Acacia Prison and prisoner transportation.

The Department of Corrective Services report a headcount of 4594 against an FTE of 4265.<sup>112</sup> Serco employs a total of 438 personnel at Acacia Prison, of which 278 are custodial officers.<sup>113</sup>



**Figure 13** Correctional Facilities<sup>114</sup>

<sup>111</sup> Productivity Commission (2013), *Report on Government Services 2013*

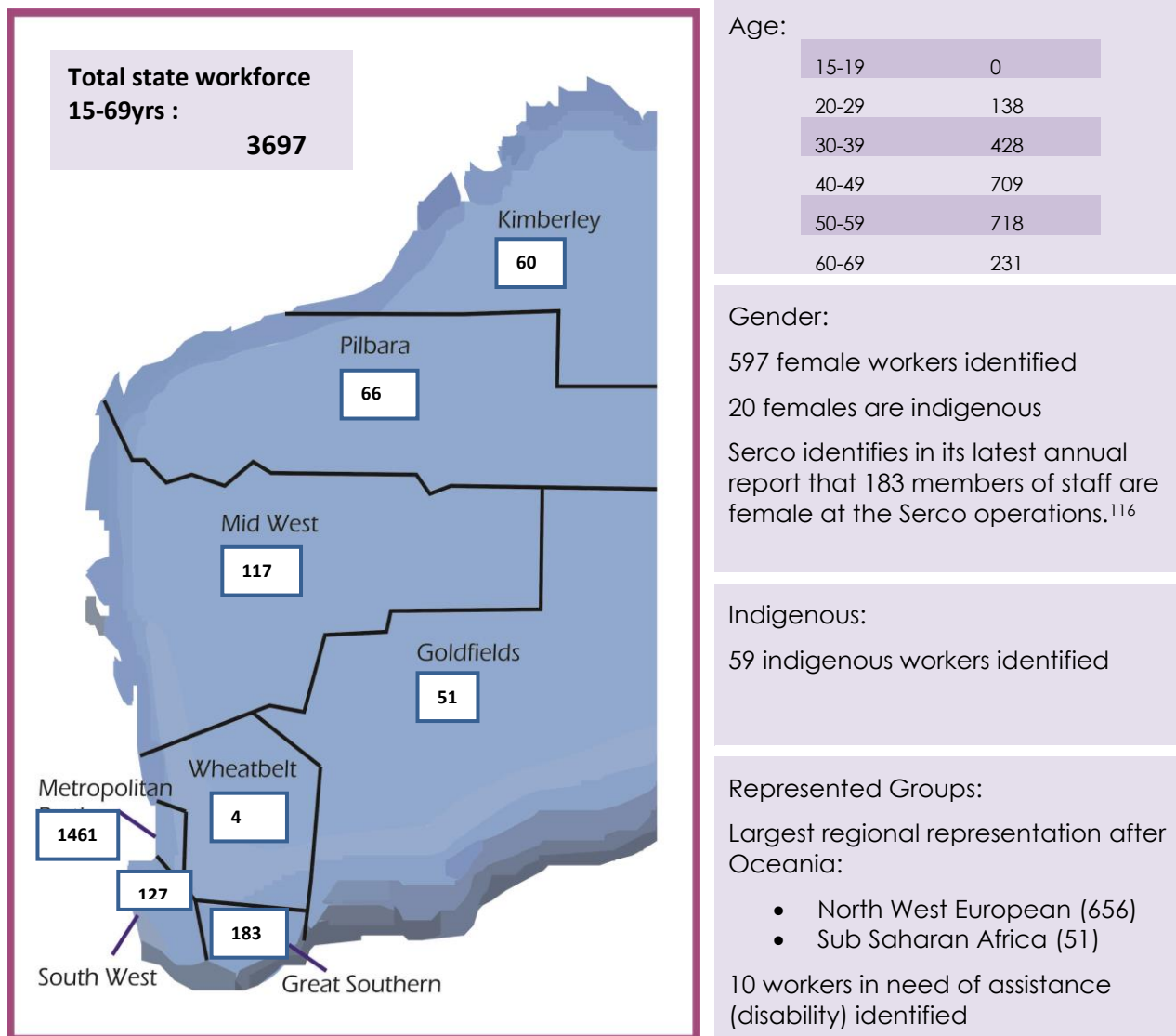
<sup>112</sup> Public Sector Commission (2013) *Western Australian Public Sector quarterly workforce report: December 2013*

<sup>113</sup> Serco Asia-Pacific, (2013) *Acacia Prison Annual Report 2012-2013*

<sup>114</sup> Department of Corrective Services (2013), *2012-2013 Annual Report*

## Participation

**Figure 14** Statistical Data for 'Prison Officer Occupation'<sup>115</sup>



<sup>115</sup> Australian Bureau of Statistics Census 2011 – Prison Officer, TableBuilder data file, viewed 5 March 2013, [www.abs.gov.au](http://www.abs.gov.au)

<sup>116</sup> Serco Asia-Pacific (2013) Acacia Prison Annual Report 2012-2013

## Major Stakeholders – Public Administration

Major stakeholders that influence the Public Administration portfolio include:

### Public Sector, Local Government and Public Safety Oversight Bodies:

- Public Sector Commission
- Office of the Auditor General
- Corruption and Crime Commission
- Office of the Western Australian Ombudsman
- Department of Immigration and Border Protection
- Office of the Information Commissioner.
- Office of Multicultural Interests
- Department of Local Government and Communities
- State Emergency Management Committee (SEMC)

### Union

- Community and Public Sector Union/Civil Service Association WA Police Union
- Australian Services Union (ASU)
- Local Government, Racing, Cemeteries Employees Union (LGRCEU)
- United Firefighters Union Western Australia
- WA Prison Officers Union
- Health Services Union

### Associations:

- Institute of Public Administration Australia (IPAA)
- Local Government Managers Association (LGMA)
- Western Australia Local Government Association (WALGA)
- Institute of Public Works Engineering Australia (IPWEA)
- Australian Centre of Excellence for Local Government (ACELG)
- Australian Local Government Association (Parent of WALGA)
  - Australian Local Government Women's Association (ALGWA)
- WA Rangers Association
- Emergency Management Australia
- Australia and New Zealand Police Advisory Agency (ANZPAA)
- Australasian Fire and Emergency Services Authorities Council (AFAC)
- Association of Volunteer Bush Fire Brigades Western Australia
- SES Volunteers Association of Western Australia (SESVA)
- WA Institute of Translators and Interpreters
- Professionals Australia (formerly APESMA)

### Major Employers

State Government	Local Government	Public Safety and Order	Translators/Interpreters
<ul style="list-style-type: none"> <li>Departments and Agencies</li> </ul>	<ul style="list-style-type: none"> <li>Local Government Authorities (Shires, Towns and Cities)</li> </ul>	<ul style="list-style-type: none"> <li>Dept of Fire and Emergency Services</li> <li>Dept. of Parks and Wildlife</li> <li>Western Australia Police</li> <li>Surf Life Saving WA</li> <li>Department of Corrective Services</li> <li>Serco-Asia Pacific</li> </ul>	<ul style="list-style-type: none"> <li>Kimberley Interpreting Services</li> <li>WA Interpreters</li> <li>WA Deaf Society</li> <li>(Please view CUA<sup>117</sup> for approved government providers)</li> </ul>

### Training (Government-specific providers listed only)

- Government Skills Industry Skills Council
- Department of Environmental Regulation
- Department of Parks and Wildlife
- Department of Fire and Emergency Services
- Department of Corrective Services
- Department for Child Protection
- Department of Transport
- Serco Australia Pty Ltd
- Public Transport Authority
- WA Police
- Western Australian Local Government Association (WALGA) (Elected member training mainly)

Note: Many public and private training organisations provide valuable services to meet training needs for the public administration sector. Only government departments and authorities have been listed here.

<sup>117</sup> Western Australia Government, Common Use Agreement, [http://infopage.gem.wa.gov.au/docs/Contractor\\_Profiles\\_-\\_CUAITS2012.pdf?](http://infopage.gem.wa.gov.au/docs/Contractor_Profiles_-_CUAITS2012.pdf?) Viewed May 2014



## Public Administration and Safety Industry Trends

### State Government, Local Government, Public Safety & Corrective Services

The trends affecting the public administration and safety industries are broadly summarised as follows:

- Focusing on efficiency and productivity. All sectors operate in an environment where expenditure is under particular pressure and expansion of partnership arrangements between government, the not-for-profit and private sectors are being explored.
- Refocusing on core functions. 'Service creep' between levels of government and changing expectations of communities for services must be balanced with available budgets.
- Ensuring cooperation and interoperability between stakeholders. In the emergency services sector the capacity to operate effectively under current legislative conditions is under examination. A review of associated legislation is under way and the management of volunteers is in focus.
- Using technology to provide better services. Each sector is using advances in technology to assist internal and external communication and business processes.
- Adapting new practices and workplace strategies to meet demand for services due to climate variability and extreme events.

The following key policy and strategic documents contribute to shaping the public administration industries:

#### State Government

The state government workforce is influenced by the following strategic groups and initiatives:

- Strategic Directions for the Public Sector Workforce 2009-2014. The document contains 38 initiatives that were implemented over 5 years to ensure the ongoing viability of the Western Australian public sector workforce. It will now be subject to review.
- The Aboriginal Employment Strategy 2011-2015. This strategy seeks to assist the public sector to attain indigenous workforce participation rates that reflect the population of Western Australia.
- Employment Based Training Strategy 2013-2015. This strategy seeks to encourage the use of formal employment based training (including apprenticeships and traineeships) as a critical workforce development strategy.
- Equal Opportunity Commission substantive equality program
- WA CALD across government network
- Disability Employment Strategy 2013-2015
- Public Sector Employment of People with Disability (PSEPD) Reference Group

A review of the Equal Opportunity Act is also noted by the DEOPE.<sup>118</sup>

#### Local Government

Metropolitan Reform aims to "build a stronger, more effective and financially secure local government sector".<sup>119</sup>

The reform is founded on the need to meet the needs of a rapidly growing population and the increasing pressure on local governments for services. It seeks to create economies of scale, attract and retain professional staff and allow greater partnership capacity for major projects.

Local governments have also moved to implement 'integrated planning' processes in the last twelve months. This requirement places additional pressures on workers to manage more project and contractual work. The plans have also introduced long-term financial forecasting to some local governments. The LGMA have stressed that financial planning and management is an emerging skill required in Western Australia's regions.

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<sup>118</sup> Public Sector Commission (2013) *2013 Annual Report Director Equal Opportunity in Public Employment*

<sup>119</sup> Department of Local Government and Communities, *Metro Reform: About the changes*  
<<http://metroreform.dlg.wa.gov.au>> accessed 23 May 2014

## Public Safety

### Frontline 2020<sup>120</sup>

This strategy builds on the Frontline First strategy. "It examines how to best deal with increasing demands in a climate of finite resources".

The underpinning principle is to adopt a new method of policing that redirects effort from administration to frontline services – effectively looking for more efficiency and effectiveness through larger local asset deployment. The program has been piloted in a single Perth region and is to be rolled out across the Metropolitan area now that some early evidence of success has been provided. The Peel region is to be transitioned next.

"Police are developing new operating model concepts... Response teams will be geared purely to deal with calls requiring more immediate assistance, leaving local policing teams free to operate at a grass-roots community level to solve local problems requiring a more consistent and sustained approach".

### Department of Fire and Emergency Services – New beginnings 2024<sup>121</sup>

This strategy is predicated on inquiries that have been conducted into major incidents across Australia including the Perth Hills Bushfire Review and the Special Inquiry into the Margaret River bushfire. In its New Beginnings 2024 publication, DFES states:

"In Western Australia response demands are predicted to increase. *Changing weather patterns* are likely to elevate the frequency and severity of natural hazard emergencies including bushfire, cyclones, floods and storms. Coupled with *population growth* and *greater urbanisation* this means there is increasing potential for threat to life and property in affected communities".

### Emergency Services Legislative Reform

The Department of Fire and Emergency Services is currently seeking comment on a paper it released describing a new legislative framework. The emergency management sector has operated with antiquated legislation and identified this as an area for reform.

### Corrective Services

The trend for the corrective services industry continues to focus on rising prison populations. The effect of mandatory sentencing has been raised recently in the media in relation to the expected increases in prison population and the current overcrowding already experienced in some facilities.<sup>122</sup>



Figure 15 Prisoner population: Thursday census 2009-13

<sup>120</sup> WA Police (2013) *Frontline 2020*, <<http://police.wa.gov.au/Aboutus/Frontline2020/>> accessed 23 May 2014

<sup>121</sup> Department of Fire and Emergency Services, *New Beginnings 2024*

<sup>122</sup> Government of Western Australia (2014) *Thirty-ninth Parliament First Session 2014 Legislative Assembly Estimates Committee A, Thursday 22 May 2014*

## Major 2014 EUPA Public Administration & Safety Blog Posts<sup>123</sup>

JAN	<ul style="list-style-type: none"> <li>• <i>Are you taking advantage of traineeships?</i> Highlighting to employers and RTOs the available electrotechnology traineeships</li> <li>• <i>Changing approach to government services</i> Technology in government services</li> <li>• <i>Building a culturally diverse workforce</i></li> <li>• <i>Metro living – rise of apartments</i> From Urbis Thinktank</li> </ul>
FEB	<ul style="list-style-type: none"> <li>• <i>Local Government reform toolkit</i> Joint effort to provide assistance to local government authorities</li> <li>• <i>LGMA breakfast – Legal aspects to reform</i> Hosted discussion about employment conditions</li> <li>• <i>Town planners at capacity</i> Business News WA article</li> <li>• <i>Managing emergency service volunteers report</i> Victorian Auditor General's report</li> <li>• <i>Heatwaves: Hotter, longer, more often</i></li> </ul>
MARCH	<ul style="list-style-type: none"> <li>• <i>ABS show high migrant populations</i></li> <li>• <i>Emergency management workforce issues come through in research</i> A co-operative research paper highlighting EM inadequacies</li> <li>• <i>Metropolitan Local Government Reform bulletin</i></li> <li>• <i>Workplace gender equality – attracting women</i></li> </ul>
APRIL	<ul style="list-style-type: none"> <li>• <i>Public sector job freeze</i> Government announces halt to recruitment</li> <li>• <i>DLGC: Local government workforce issues</i></li> <li>• <i>Canning Coalition hosts VET in Schools collaboration meeting</i> Included work with City of Kalamunda and WALGA resources</li> <li>• <i>DFES concept paper outlines preferred legislative reform</i></li> <li>• <i>WALGA comments on DFES legislative recommendations</i></li> <li>• <i>Work experience for students in police stations</i> Advice to schools</li> <li>• <i>Strengthening VET in Schools Outcomes</i> WA Government focus on VETiS</li> <li>• <i>Improving cultural diversity and inclusion in the workplace</i> A Victorian report</li> <li>• <i>National report on the ageing population</i> From the National Seniors Productive Ageing Centre</li> </ul>
May	<ul style="list-style-type: none"> <li>• <i>Productivity Commission to review natural disaster funding</i></li> </ul>

<sup>123</sup> Electrical Utilities and Public Administration Training Council (2014) <<http://www.eupa.com.au>>

## Labour and Skill Demand

### Government

The public administration and safety sectors have a strong training and professional development culture.

In the short term, the state government has a major impediment to attracting labour. At the time of writing this report, a complete freeze on public sector employment is in place as a cost-saving measure. This condition is in force for the remainder of the financial year.<sup>124</sup>

Despite the current political environment, the state government continues focus on the need for human resource management skills as a priority, which formed the basis for submissions in relation to the State Priority Occupation List.

Government sectors continue to work hard to increase its profile to youth. This cohort is still represented at low levels, which when combined with the ageing of the existing workforce provides impetus for change. The Public Sector Commission continues to offer valuable entry pathways which have been strengthened by the inclusion of new cadetships that were gazette in 2014. Entry pathways now include Aboriginal employment, employment based training, internships, traineeships, graduate programs and the entry-level employment program.<sup>125</sup>

Local Government suffers a low profile among school leavers who tend to focus on their desired occupation without recognizing the occupation exists within a government setting. In the regions, local governments can be a major employer for the local community. The inability for some towns to keep youth in the area also affects local government staffing.

In addition to the skill requirements of state government, local government have a need for workers with skills including building inspection, environmental health, planning, civil engineering and outdoor work including machinery operators and civil works.

Further, the shift for government toward management of service providers rather than being a service provider itself is shifting skills needs to financial, project and program administration. This is particularly evident for local governments in the regions who may be operating with integrated plans (including financial and long-term business plans) for the first time.<sup>126</sup> Recent budgets handed down by state and commonwealth governments have reinforced a need for governments to engage with the not for profit and private sector to ensure services are sustainably managed.<sup>127</sup><sup>128</sup>

The Translators and Interpreters sector also has specific skilling demands which were raised in the latest submission relating to the State Priority Occupations List. That submission centred upon the need for skilling of the existing workforce given documented issues relating to the quality of services provided and service providers being accredited without any previous formal training.<sup>129</sup> The Commonwealth Translator and Information Service (TIS) is also seeking a training provider for Western Australia.<sup>130</sup>

### National Advice

Government Skills Australia<sup>131</sup> draw on their surveying of industry nationally, drawing parallels with EUPA's conclusions that workers new to the sector need specific development to operate effectively in the public sector environment. This relates to issues such as compliance to the Public Sector Management Act, ethical, records management and communication protocols.

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<sup>124</sup> EUPA Training Council (2014) *Public Sector Job Freeze*, <<http://eupa.com.au>>, accessed 23 May 2014

<sup>125</sup> Public Sector Commission, *Employment* <<http://publicsector.wa.gov.au/workforce/employment>>, accessed 23 May 2014

<sup>126</sup> Local Government Managers Association (2014) *Personal Communication*, February 2014

<sup>127</sup> WA State Government, *2014-2015 Budget* <<http://ourstatebudget.wa.gov.au>>, accessed 21 May 2014

<sup>128</sup> Australian Government, *2014-2015 Budget* <<http://budget.gov.au>>, accessed 21 May 2014

<sup>129</sup> WA Institute of Translators and Interpreters (2014) *Personal Communications*

<sup>130</sup> Department of Immigration and Border Protection (2014) *Personal Communication*

<sup>131</sup> Government and Community Safety Industry Skills Council (2014) *Environmental Scan 2014*

Occupations in demand are:

- Contract, program and Project Manager/Administrator
- Construction and Road Maintenance Worker
- WHS/OHS Officer
- Environmental Health Officer
- Plant Operator
- Urban/town Planner

Emerging skills include finance, community engagement, ICT, leadership and management, project management, WHS/OSH. Volunteer training, particularly in WHS/OSH is also noted.

## Public Safety

The public safety industry largely enjoys a positive profile in the community. Stakeholders have historically managed labour needs by implementing overseas recruitment through employer-sponsored visas and the training of their core operational staff without intervention from the Department of Training and Workforce Development.

EUPA continues to expend effort to better understand and provide for the volunteer workforce, which is continually under pressure to attract and retain workers. The Department of Fire and Emergency Services has also sought to utilise alternative training methods such as e-learning to meet regional volunteer needs. The sector remains a priority for EUPA to assist.

The demand for prison officers and health professionals who support the operations of prisons and rehabilitation of offenders remains high. The Department of Corrective Services has been placed in the spotlight during budget estimates. The reason for notoriety is not related, but the underlying issue relating to increasing prison populations is inadvertently in the media at this point in time.<sup>132</sup>

The Department of Corrective Services specifically raised the need for additional prison officers to meet future demand at the May 2014 Public Administration Industry Working Group.

## National Advice

Government Skills Australia advises the following occupations are in demand:

- Volunteer and Auxiliary Firefighter
- Police Officer
- Correctional Officer

The ISC notes that emerging skills needs include ICT, leadership, management and WHS/OHS.

## Regional Impact

Public administration and safety workforce planning is heavily influenced by the future growth of regional populations. All regional plans, with the exception of the Wheatbelt identify an expectation for population growth.

The main issues are:

- Population expansion in regional areas is creating demand for higher levels of governance, public safety and correctional services.
- Governance in some regions of Western Australia is still maturing. Local Governments are only now operating with integrated strategic plans that unite community governance with financial and workforce planning.<sup>133</sup> A focus on elected member skilling has commenced.
- Larger populations and urbanisation in the regions is causing public safety stakeholders to put in place strategies and plans to manage natural disasters and extreme events.
- The public safety industry relies heavily on volunteers for operational responses to emergency events. Complex issues surround the availability of volunteers to react to emergency events. Some issues, such as the incidence of fly-in-fly-out workers are particular to the regions.

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<sup>132</sup> Western Australian Government (2014) *Thirty Ninth Parliament First Session 2014 Legislative Assembly Estimates Committee A, Thursday 22 May 2014*

<sup>133</sup> Local Government Managers Association WA (2014) *Personal Communication*

# Regulatory Requirements

## State Government

The following acts impact upon the public sector:

- Auditor General Act 2006
- Corruption and Crime Commission Act 2003
- Criminal Code Compilation Act 1913
- Disability Services Act 1993
- Equal Opportunity Act 1984
- Financial Management Act 2006
- Freedom of Information Act 2006
- Industrial Relations Act 1979
- Minimum Conditions of Employment Act 1993
- Occupational Health and Safety Act 1984
- Public Sector Management Act 1994
- Public Sector Management (General) Regulations 1994
- Public Sector Management (Redeployment and Redundancy) Regulations 1994
- Public Service Regulations 1988
- Public Interest Disclosure Act 2003
- Salaries and Allowances Act 1975
- State Records Act 2000
- Electoral Act 1907
- State Supply Commission Act 1991

In addition to the above legislation, the public sector is also required to act within the following regulatory framework:

- Premier's Circulars
- Commissioner's Circulars
- Labour Relations Circulars
- Treasurer's Instructions
- Approved Procedures and Administrative Instructions
- Public Sector Standards in HR Management
- Public Sector Code of Ethics

The WA Government is not only bound by legislation, but is often required to regulate other industries and activities on behalf of the State (e.g. electrical licensing, fisheries, environmental regulation, etc.).

## Local Government

Local Governments operate under a statutory framework and are also responsible for administering various legislation, policies and by-laws (totaling over 470 individual pieces of legislation).

As a government agency, the Department of Local Government is established under the Public Sector Management Act 1994.

Local Governments are enabled through the provisions of the Local Government Act 1995.

## WA Police

Enabling Legislation:

- Public Service Act 1904
- Police Act 1892

Police Officers are sworn into service using powers provided in the Police Act 1892.

The WA Police administers 22 acts and their associated regulations.

## Department of Fire and Emergency Services

The new department was established through the provisions of the Public Service Act 1904. It administers the following acts of parliament:

- Bush Fires Act 1954
- Emergency Management Act 2005
- Emergency Services Levy Act 2002
- Fire and Emergency Services Act 1998
- Fire Brigades Act 1942

It is further impacted by a further sixteen Acts. There were a number of changes to legislation that have allowed operational and structural changes to take effect. The Department recently released a discussion paper to progress the debate around new emergency services legislation.<sup>134</sup>

## Corrective Services:

The following acts are administered by the Department of Corrective Services:

- Court Security and Custodial Services Act 1999
- Dangerous Sexual Offenders Act 2006 (s 18, 21 and 32 and Pt 2 Div 3 and 5 and Pt 5)
- Prisoners (International Transfer) Act 2000
- Prisoners (Interstate Transfer) Act 1983
- Prisons Act 1981
- Sentence Administration Act 2003 (Pt 1, Pt 2 Div 2, Pt 5 Div 1-3, Pt 6, 7 and 8 and Pt 10 [other than section 114 and 115 A])
- Sentence Administration (Interstate Transfer of Community Based Sentences) Act 2009
- Young Offenders Act 1994

## Participation

The following information is sourced from the Director of Equal Opportunity in Public Employment 2012/13 Report. The report uses a measure known as the 'equity index' to measure the appropriateness of workforce participation. A value of 100 is considered to be ideal. Figures below 100 indicate a concentration at lower salary levels.<sup>135</sup>

## Gender

The public administration sectors (state and local government) do not have significant issues in relation to the representation of women in the workforce. In addressing gender equality, the DEOPE concentrates on the levels at which women are employed. Overall, the representation of women in the Senior Executive Service has steadily increased over a five year period from 25.1% to 29.2%.

In local government, there are mixed results between the Tier 1-3 levels for indoor and outdoor workers, however generally the representation of women has increased. The exception highlighted is at Tier 2 for outdoor workers where figures fluctuate significantly over the five year period (no comment is made within the report, however EUPA assumes that employed persons at this level must be very low).

The public safety industry also continues to seek strategies to ensure women are well represented at management and executive levels.

The equity index for women in public sector agencies and authorities has increased to 71. This is a 3 point improvement over 2012, but still remains uncomfortably low. The equity index for females in local government fairs slightly better, with a rating of 81 and 88 for indoor and outdoor workers respectively.

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<sup>134</sup> EUPA Training Council (2014) *DFES concept paper outlines preferred legislative reform*  
<<http://www.eupa.com.au/2014/04/dfes-concept-paper-outlines-preferred-legislative-reform/>> accessed May 2014

<sup>135</sup> Public Sector Commission (2013) *Director of Equal Opportunity in Public Employment Annual Report 2013*

## Age

The representation of youth (under 25 years of age) in public sector agencies and authorities has fallen to its lowest level in the five year reporting period. It now sits at just 5.1% of the workforce. Compare this to the representation of workers over mature workers (over 45 years of age) which sits steadily at 51.9%.

The story is slightly better for local government where youth representation sits at 14.2% (indoor) and 7.0% (outdoor) and mature age workers are represented at 37.5% (indoor) and 56.2% (outdoor) levels.

Mature workers are over-represented in public employment compared with the community overall. An increase of turnover in public authorities is likely to occur in the next decade as this large employment cohort approaches retirement. EUPA expects that recent redundancies will have had a marked effect on the retention of mature age workers also. These figures have not been reported to date.

## Under-represented Groups Participation

### Indigenous Australians

In the public sector, the representation of indigenous workers has remained fairly stable, peaking in 2012 at 3.3% before sliding back to 3.0% in 2013. The equity index indicates a fairly poor outcome with a rating of just 39, far below the figure that represents equity (100). The DEOPE notes however that low numbers of indigenous people in the workforce create large changes to the index over the five year period.

The indoor workforce for local government shows indigenous participation is just 1.7% of the workforce. It fairs slightly better for outdoor workers where indigenous workers represent 6.3% of the workforce. The equity index remains fairly stable across the five year period at 60 and 90 for indoor and outdoor workers respectively.

### People from Culturally and Linguistically Diverse (CaLD) Backgrounds

The representation of people from culturally diverse backgrounds in public sector agencies and authorities dropped slightly to 12.4% in 2013. The local government workforce performed better at 21.4% and 17.6% for indoor and outdoor workers respectively.

The equity index for people from culturally diverse backgrounds in public sector agencies is 96, indicating that the workforce is 'about balanced'. The same applies to local government who maintain a slightly more positive index rating of 112 and 109 for indoor and outdoor workers respectively.

### People with a Disability

The representation of people with a disability in public sector agencies is reported to be 2.6% in 2013. The previous reported figures for the period 2009-2012 are noted to be incorrect due to a reporting error.

For local government indoor workers, the representation of people with a disability remains steady at 1.7%. Local government outdoor workers with a disability is reported to be 2.9%.

These figures compare with the 'WA working age representation' of 1.9% in 2013.

The equity index for people with a disability in public sector agencies remains fairly steady with a rating of 71. The index for local government indoor workers with a disability is 78 and for outdoor workers the figure remains steady at 81.



## Major Challenges and Barriers

### Gender Balance:

When considering both levels of government (state and local) women have a lower salary profile than men. Government has worked hard in recent years to address barriers that stand in the way for women to access leadership positions. These gender equity issues continue to be addressed by government through coordinated efforts of the Public Sector Commission (state government) and associations in local government (e.g. WALGA, LGMA and ACELG).

For the public safety and corrections industries, male workers participate at higher levels in core operational roles.

### Ageing Workforce:

The Public Administration workforce has a high proportion of older workers and a low proportion of youth.<sup>136</sup>

For the public safety industry, the reasons for the loss of mature age workers align to those in the trade – i.e. that work is physically (and often mentally) demanding. However, for public administration roles in state and local governments, the same does not necessarily apply. The loss of corporate knowledge is likely to impact on provision of services if not managed in an effective manner.

### Indigenous Employment Opportunity:

The Public Sector Commission continues to roll out its Aboriginal Employment Strategy and specific reference is made to indigenous employment issues by the Director of Equal Opportunity in Public Employment.<sup>137</sup>

Public administration sectors are ideally placed to offer exceptional employment opportunities to indigenous persons. For example, local governments are geographically dispersed and offer an enormous variety of job roles that may attract a wide cohort of indigenous workers.

### Identity as an Industry:

Most occupations across the public sector fall generically under ANZSCO codes that describe corporate managerial and administrative roles (private sector). This does not reflect the specific difficulties experienced by the public sector to attract workers. As such occupations in these industries are lost in the wider application of the ANZSCO.

EUPA's engagement with the Department of Training and Workforce Development has identified that the public administration sectors are not considered 'industries' in their own right. Instead, they have been labeled 'sub-sectors' of the wider business/private sector. Coupled with broader policy directives relating to the ineligibility of state government to access public funding at state and commonwealth levels, the industry is forced to consider allocating more of its budget (appropriation through treasury) to staff development. In the current political and economic environment this leads to severe pressures on the staff development budget.

Government is also commonly thought of as a machine and workers often do not receive the same recognition as workers in other sectors. For example, the political actions at state and commonwealth levels that focus on smaller leaner government through non-renewal of contracts and not replacing members who leave does not receive any compassionate reporting in the media. Conversely, a reduction in workforce size in a comparable magnitude in other industry sectors receives much greater community sympathy.

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<sup>136</sup> Public Sector Commission (2013) *Director of Equal Opportunity in Public Employment 2013 Annual Report*

<sup>137</sup> Public Sector Commission (2013) *Director of Equal Opportunity in Public Employment 2013 Annual Report*

## Population Growth:

Population growth throughout Western Australia is predicted to be sustained over the long term with estimates between 5.4 and 7.7 million by 2061<sup>138</sup>. The public administration industry provides the essential governance and safety services that allow communities to grow. Pressure is expected within the metropolitan area to provide services to more people with less resources and in the regions where additional barriers may exist to attract workers to a particular location.

## Improving Industry Profile:

The Public Administration industry sectors seek to improve the means by which industry occupations are promoted to the community, school leavers and job seekers.

It is the industry's view that promotion of the Public Sector and Local Government across the community will need to continue to highlight the breadth of work, stability and the flexible employment conditions available as well as the wide range of employment opportunities in customer service, technical, para-professional and professional roles.

## Competition for skilled labour:

The labour market in Western Australia has relaxed in recent times. However, the Clarius Group notes that employers seeking lower skilled workers have benefited most. Highly skilled workers are considered to still be in relatively high demand.<sup>139</sup> Program and project management skills as well as human resource expertise will continue to be a focus for public administration.

## Training Provider Capacity:

The training sector still largely fails to react to the public administration industry's strategic direction to promote government qualifications over those that come from the generic business sector.

The sectors are also constrained by government policy in relation to the funding of training for core functions. That is:

- Public sector agencies cannot access funded training for professional development of their staff. Entry level training for government qualifications is limited to traineeships and a pilot for three Diploma level cadetships (no funded institutional delivery).
- Local Government – Due to the large number and geographic distribution of local governments the training sector has largely ignored the specific needs of this sector. The LGMA has provided direction to the sector by accessing commonwealth funds, however this program has now ceased.
- Public Safety and Corrections – Typically enterprise RTOs, these organisations also largely fund their own entry level and professional development training. Even where traineeship exist, the Department of Training and Workforce Development apply a policy position that excludes stakeholders from accessing funding.

Further, employers in the public administration sector have been unable to access commonwealth funding in the form of employer incentives, workplace English language and literacy and workforce development funding. EUPA notes that some programs have been identified to close in the latest Commonwealth Budget, but employer incentives remain out of reach for public administration stakeholders. In 2013, Government Skills Australia Industry Skills Council held approximately \$4 million in federal workforce development funding that could not be accessed by the majority of the industries it represents.

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<sup>138</sup> Australian Bureau of Statistics *Western Australia Population Size*

<[http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/3222.0main+features112012%20\(base\)%20to%202101](http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/3222.0main+features112012%20(base)%20to%202101)> Accessed 15 May 2014

<sup>139</sup> Clarius Group (2014) *Clarius Skills Indicator*, March 2014

## Training Demand:

There is a strong training culture in the public administration sector, however a large investment in training falls into short courses and unaccredited professional development activities.

Three new cadetships have been conditionally established as an entry pathway that fills the gap between current traineeship and internship programs.

Training providers label public administration delivery as 'thin market'.

## Climate Change and Environment:

Government climate change and carbon reduction policy is driving demand for additional workforce capabilities in environmental and sustainability policy, regulation and technology applications.

## Disaster response:

There is a continued trend of significant natural disasters and emergency events, although the Department of Fire and Emergency Services noted some relief in its 2013 annual report. Having said that, DFES still points out a number of large scale events that required multi-agency response. These events challenge the state's capacity to manage emergency response and the interoperability of agencies. Industry can expect continued pressure due to:

- Longer and more intense fire seasons
- Urbanisation at the fringes of metropolitan Perth and regional centres
- Public scrutiny of causes and management of emergency events
- Pressure on volunteer managers to maintain a sustainable workforce.

## Government Workforce Planning:

The Public Sector has made significant investment in workforce planning and development through the Public Sector Commission. In 2013 the Public Sector Commission established a Centre for Public Sector Excellence that aims to build the skill, behavior and expertise for a capable, future-focused and sustainable workforce.<sup>140</sup>

Workforce planning must take into account the restrictions placed upon organisations using public money. For both tiers of government, this means operating within FTE caps, Efficiency Dividends, major restructures and amalgamations.

## Translators/interpreters:

Issues for this sector include:

- The NAATI accreditation scheme has been scrutinized by industry for the quality of accredited workers and the restrictions in scope of application (i.e. accreditation is available for a limited number of languages).
- The state peak association has worked with government to elevate the status of formal qualifications for Western Australia through government policy.
- In a survey of interpreters working in the courts, 30% of respondents have no qualification at all.<sup>141</sup> Given the requirements of courts, this statistic represents a body of work to skill the existing workforce. A symposium (April 2014)<sup>142</sup> held by the Australian Institute of Judicial Administration (AIJA) specifically addressed the improvement of translator and interpreter standards in court settings. The Institute stresses the importance of properly trained workers where the outcomes can have an extremely high level of impact.

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<sup>140</sup> Public Sector Commission, *Centre for Public Sector Excellence* <<http://www.publicsector.wa.gov.au/centre-public-sector-excellence>>, accessed 24 May 2014

<sup>141</sup> Australian Institute of Judicial Administration, *Interpreter policies, practices and protocols in Australian Courts and Tribunals. A national survey*

<sup>142</sup> Australian Institute of Judicial Administration, *Interpreting and Translation Symposium*

- There is currently no VET delivery, which may be influenced by perceived conflicts of the accreditation and VET systems. The Commonwealth Translator and Interpreter Service (TIS) is actively seeking training providers in Western Australia.<sup>143</sup>
- There is clear evidence that the need for Translators and Interpreters will continue to grow due to a growing and diversifying population, particularly:
  - Ageing of existing migrant populations that are returning to their native language.
  - Introduction of new languages due to increased migration from non-traditional countries.
- OMI reports the following emerging cultural groups<sup>144</sup>:
  - 10 countries where there were no, or very few arrivals prior to 2001 are Burundi, Republic of Congo, Democratic Republic of Congo, Ivory Coast, Liberia, Rwanda, Senegal, Sierra Leone, Tanzania and Tongo.
  - 8 countries where there were arrivals were registered prior to 2001 (but considered emerging) are Afghanistan, Burma, Iran, Iraq, Eritrea, Ethiopia, Somalia and Sudan.
- Pockets of migrant populations are generally small in Western Australia's regions, however this does not negate the need for services from government. The highest numbers align with resource sector activity in the Pilbara although there is evidence of residences across all regions (Great Southern, Gascoyne and Southern Wheatbelt have lowest CaLD populations). The highest number of migrant populations are reported to be Iranian, Vietnamese, Thai, Italian, Indonesian, Malay, Philipino, Singaporese, Chinese, Indian and Afghani people (500+ living in the regions).<sup>145</sup>
- The Kimberley and Pilbara regions are highlighted in respect to the need for indigenous language services.<sup>146</sup>
- Industry is largely comprised of contractors that are called upon for short term/project based work (often casual), hence EUPA believes that employment statistics do not reflect the true size of the workforce.
- The Department of Finance Common Use Agreement notes that translator and interpreter training is a crucial component to the provision of quality services.<sup>147</sup>
- The industry stresses the critical nature of this type of work. Sectors such as health, justice and public safety/emergency management rely on effective interpretation of information in situations that can be life threatening/changing or highly stressful.

## New and Emerging Skills

- The Public Administration Industry is focused on the skills of its human resource officers/managers, finance and program/project administration managers. The sector requires additional skills to transition workforce structures, manage a reduced workforce size and adopt more partnerships with private industry.
- Local Government is focusing on regional elected members who are operating in environments of increasing complexity and accountability.
- Technology continues to enable new ways of working across the sector that requires workers to be develop new digital literacy.<sup>148</sup>
- Intelligence and investigative processes continue to evolve in light of new technological threats and opportunities.
- New and expanding migrant communities demand additional translating and interpreting services.

<sup>143</sup> Department of Immigration and Border Protection (2014) *Personal Communication*

<sup>144</sup> Department of Local Government and Communities, Office of Multicultural Interests (2013) *Cultural Diversity in Western Australia – A Demographic Profile* <[http://omi.wa.gov.au/omi\\_statistics\\_diversity.cfm/](http://omi.wa.gov.au/omi_statistics_diversity.cfm/)>, accessed 24 May 2014

<sup>145</sup> Australian Bureau of Statistics, *Census 2011 Usual Place of Residence*, Accessed February 2014

<sup>146</sup> Western Australian Institute for Translators and Interpreters (2014) *Personal communication*

<sup>147</sup> Department of Finance (2013) *Common Use Agreement for Translating and Interpreting Services*

<sup>148</sup> Government and Community Safety Skills Australia (2014) *2014 Environmental Scan*

- The ageing of 'traditional migrants' is causing a resurging need for translating and interpreting services in associated languages (e.g. Italian and Greek).

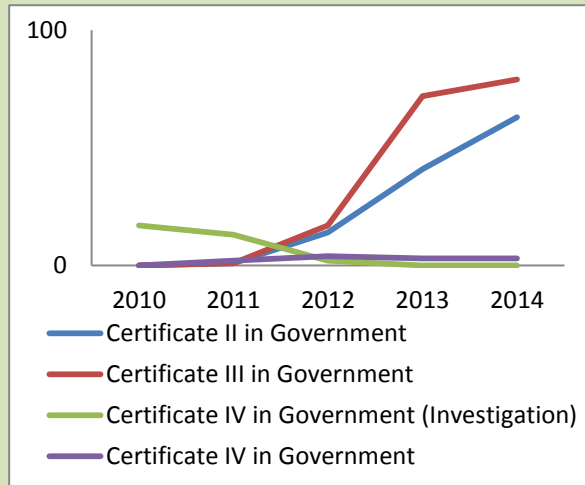
## Workforce Development Opportunities

- Promotion of State and Local Government careers across the community will need to highlight the breadth of work, stability and flexible employment conditions available relative to a wide range of employment opportunities.
- Retention, knowledge management and transitional arrangements for those considering retirement will assist in lessening the loss of corporate knowledge and providing additional mentoring support for new entrants.
- The expansion of the Public Sector Traineeship programs into the regions will assist agencies to manage the attraction and retention of youth.
- The Aboriginal Employment Strategy creates sustainable benefit to participating agencies in support of the COAG agreement.
- Increases to the levels of prison populations will require additional staffing levels.
- Higher numbers of migrants from CaLD backgrounds require continued focus on community representation within agencies, community engagement and will impact upon the workload of translators and interpreters.
- The Public Sector Commission launched its Employment Based Training Strategy in October 2012 – a pilot is to be implemented in 2014 to implement the Diploma of Government (Human Resources) as a priority.
- Greater recognition of volunteers as a workforce by VET policy makers may assist the sector address training issues.
- Allocation of Royalties for Regions funding (Country Local Government Fund) to the skilling of elected members will greatly improve strategic regional decision making.

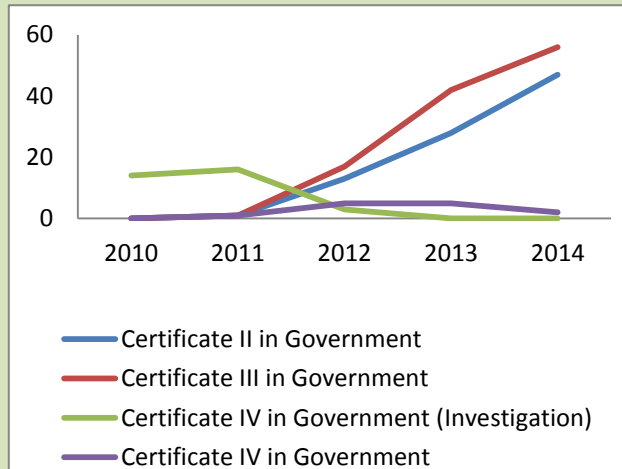
## VET Statistics

### State Government

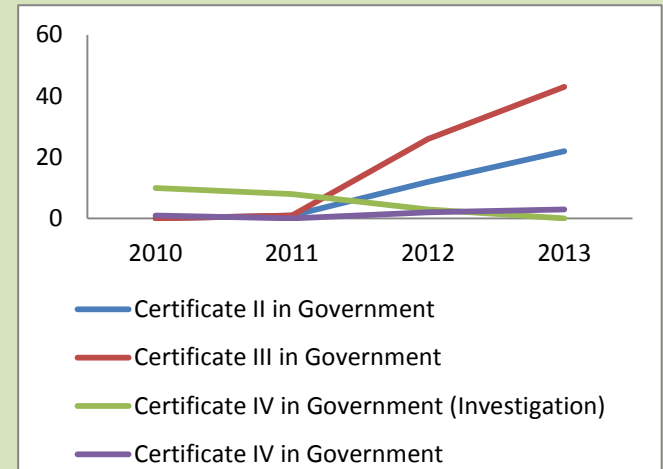
#### Commencements



#### In Training

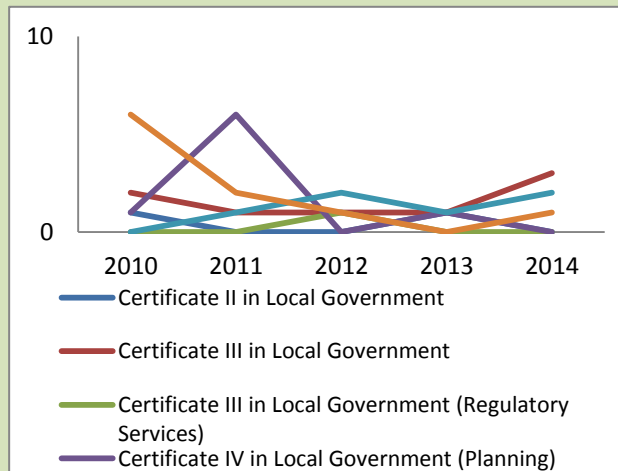


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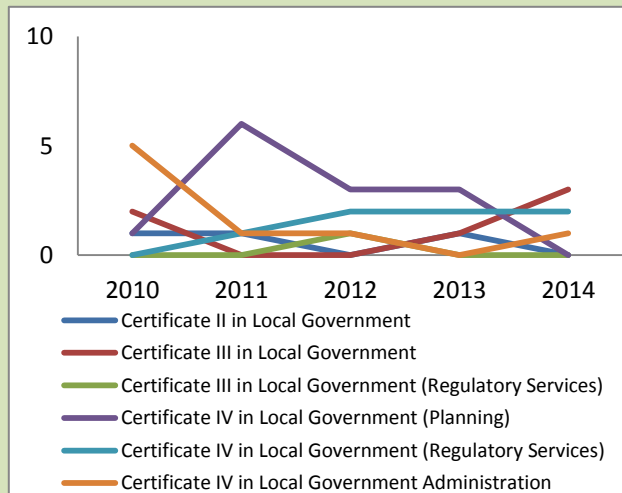


### Local Government

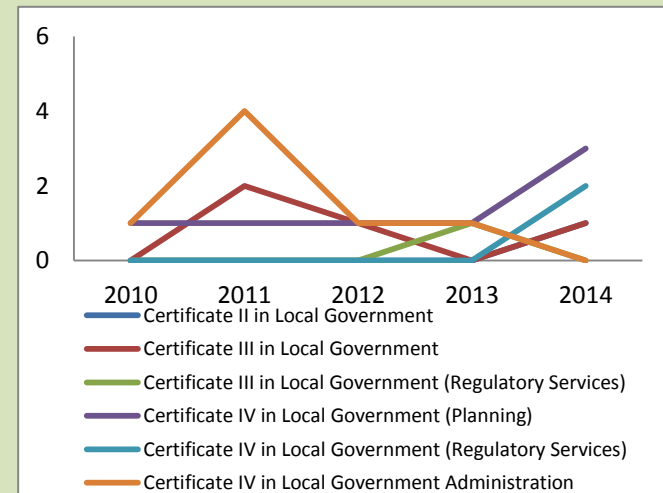
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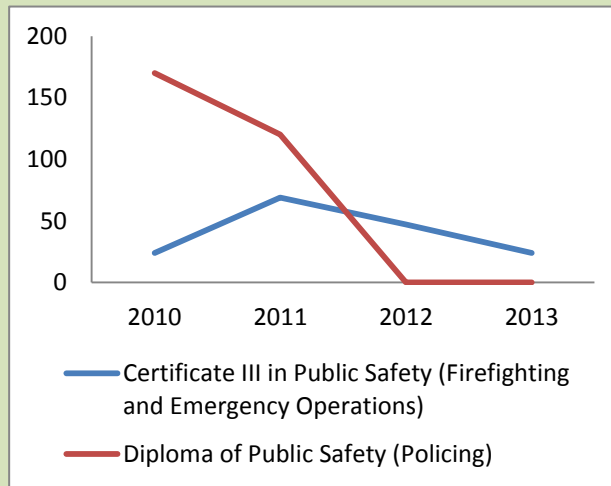


#### Completions

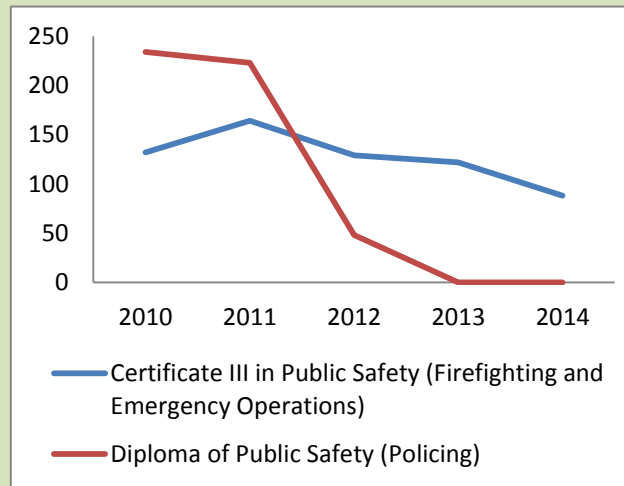


## Public Safety

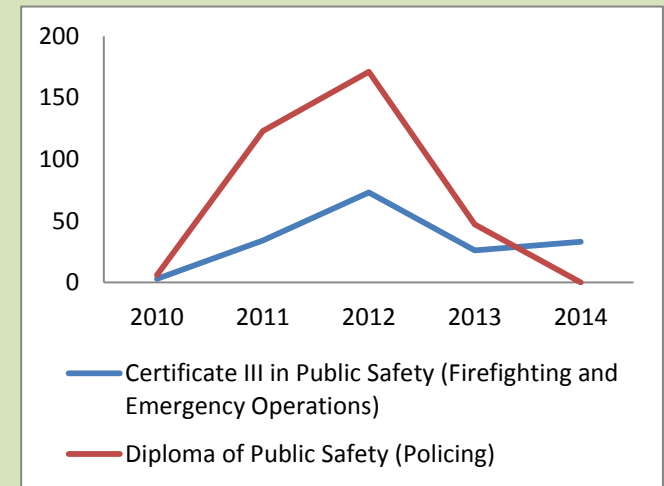
### Commencements



### In Training

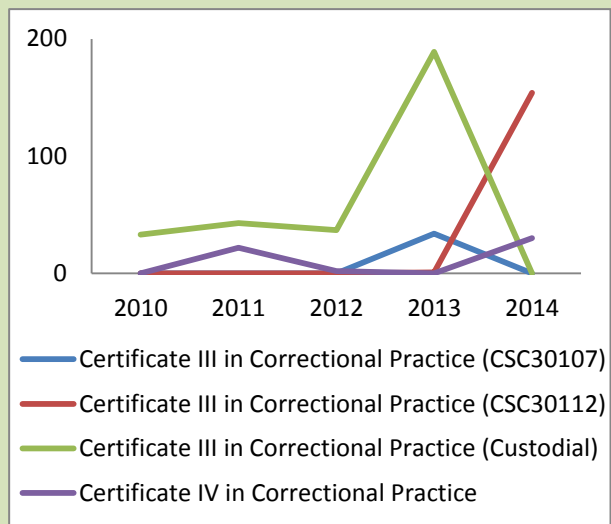


### Completions

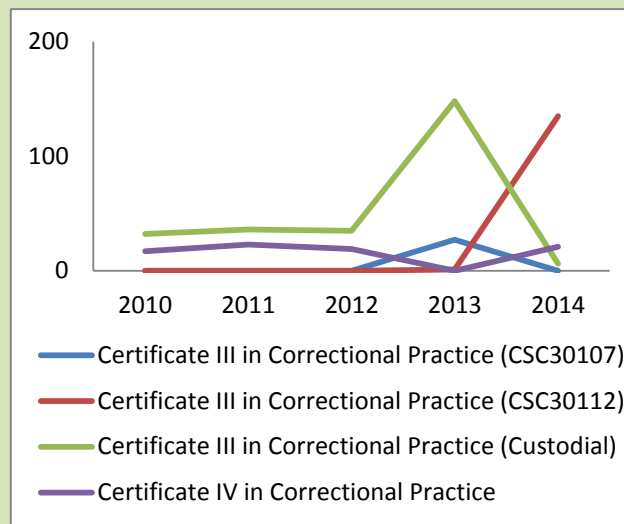


## Corrective Services

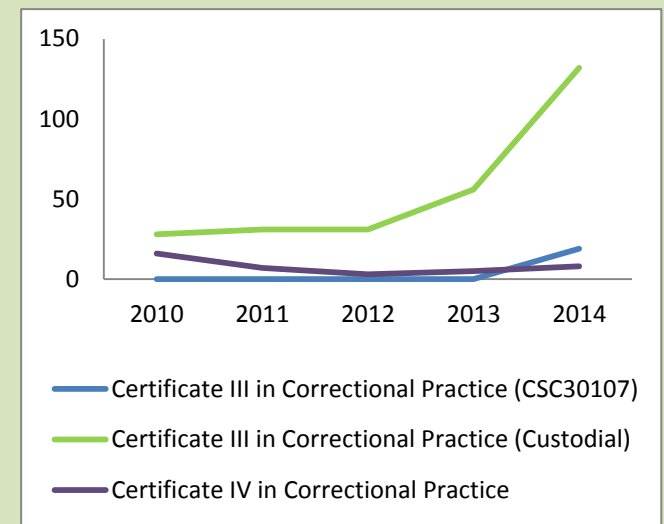
### Commencements



### In Training

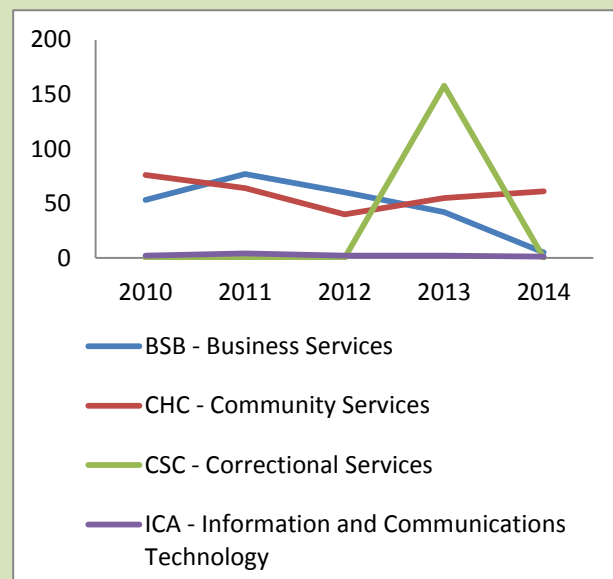


### Completions

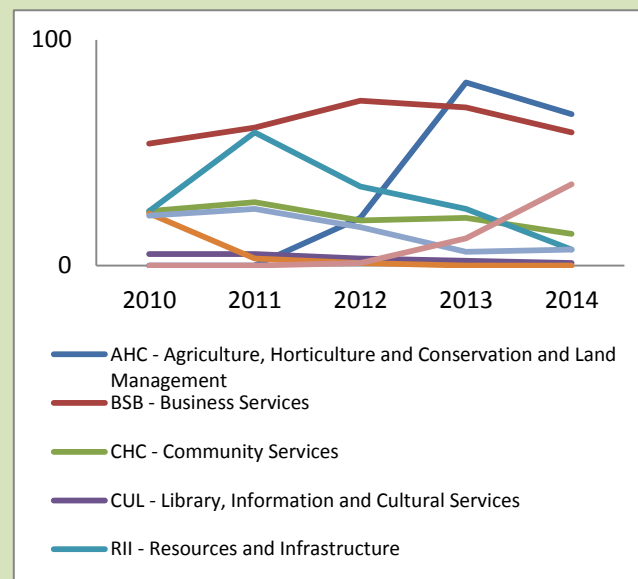


## Commencements in Other Training Packages

### State Government

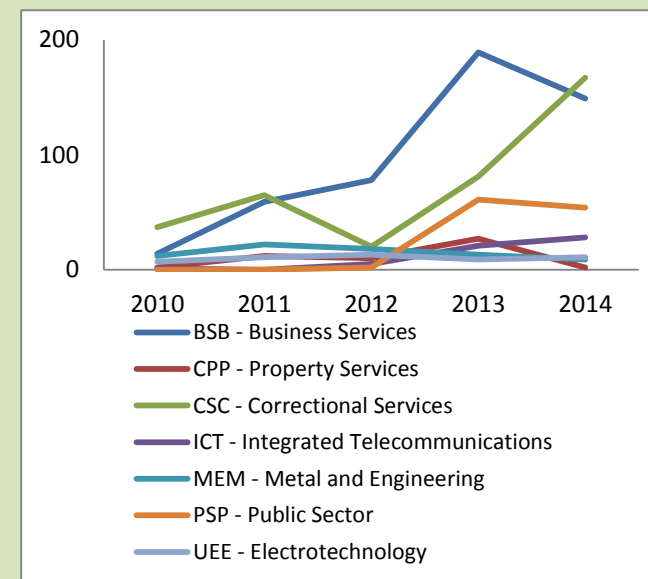


### Local Government



### Public Order and Safety

(including Corrective Services)



- The Certificate II and III in Government is now seeing increasing commencements due to the direction set by the Public Sector Commission.
- Local Government continues to offer few opportunities to undertake LGA employment based qualifications.
- The public safety industry now does not use traineeships for core training needs. FESA's transition to a department now means that no funding is available to the sector.
- The CSC training package was amended to remove the separate 'custodial' qualification in 2013. New commencements do not differentiate between custodial and non-custodial as the 'prison officer' is now a stream of electives within one qualification.
- The falling commencements for BSB qualifications in state government is an encouraging sign for the adoption of PSP qualifications.
- Local Governments continue to offer a broad range of qualifications from other training packages which reflects the scope of occupations available.
- Please note that the CSC and PSP training packages are reported in both State Government and Public Safety & Order sectors due to the existence of government authorities in these sectors. The duplication in reporting may be perceived as higher commencements due to double-counting.



## VET Trends and Issues

- Further engagement with school students can support current school based traineeship delivery.
- Government policy in relation to the funding of training for government agencies is a barrier to qualification pathways above entry level. Recent work to establish cadetships has sought to address this issue.
- Funding has been made available as a pilot to three Diploma level qualifications.
- The professionalisation of government across all levels is requiring higher skilled workers. Alignment of VET qualifications to higher education pathways can be explored.
- The public safety industry manages its own training requirements (including funding).
- The corrective services industry also has no access to funded training for its core functions due to the existence of government and enterprise training providers.
- The public sector has implemented Certificate II in Government as a VET in Schools program. Enrolments in this qualification have grown from just two in 2011 to twenty one in 2013.
- The availability of training for translators and interpreters is to be addressed through industry and RTO engagement.
- Training Package streamlining will impose additional work on industry and the Training Council.

## Industry Issues Bullet Points:

- The Public Administration industry workforce is ageing and representation of youth remains low.
- Government seeks highly skilled human resource managers and program/project managers to move toward smaller government.
- Cadetships have been established in the government sector to provide a new entry pathway between traineeships and internships.
- The translator and interpreter industry is seeking to embed formal training as the preferred pathway to gain employment in the sector. Quality issues surrounding national accreditation and perceived conflicts with VET need to be addressed.
- Local Government experiences demand for financial management skills in the regions
- Local Government Reform is creating a high level of uncertainty.
- Commonality of occupations and skills requirements with other industry sectors can hide industry-specific issues from VET policy makers.
- Public Safety industry strategies (Frontline 2020 and New Beginnings) are reshaping the workforce to meet government and community expectations.
- Women tend to be employed at lower salary levels in public administration. Males occupy a much larger proportion of positions in the public safety industry.
- Volunteer management and training is an issue that affects emergency management and interoperability state-wide.
- The corrective services industry is facing higher prisoner populations due to community population growth and mandatory sentencing laws.
- Adoption of technology in nearly all aspects of service delivery is requiring additional digital literacy skills.
- All sectors are operating with reducing budgets and significant pressure to operate with capped resources (human and physical).
- VET sector policy, reviews and funding affect industry's capacity to skill its workforce.

## SECTION 4 INDUSTRY ISSUES AND STRATEGIES

### Skilling WA: Strategic goal 1

Increase participation in the workforce particularly among the under-employed and disengaged, mature-aged workers, Aboriginal and Torres Strait Islander and other under-represented groups

Issue (from Section 3)	Strategy	Skilling WA Priority Action
<p>Cadetships have been established in the government sector to provide a new entry pathway between traineeships and internships. (Public Administration)</p> <p>The public administration industry workforce is ageing and representation of youth remains low. (Public Administration)</p> <p>Women tend to be employed at lower salary levels in public administration. Males occupy a much larger proportion of positions in the public safety industry. (Public Administration)</p>	<p>Assist the Public Sector Commission through its Centre for Public Sector Excellence to:</p> <ul style="list-style-type: none"> <li>• pilot new diploma level cadetships.</li> <li>• develop or implement strategies determined by the Public Administration Industry Working Group.</li> </ul>	1.1.2
<p>The public administration industry workforce is ageing and representation of youth remains low. (Public Administration)</p> <p>The industry suffers a low profile affecting attraction to the sector, particularly youth. (Utilities)</p>	<p>Facilitate interaction and preparation of industry for programs that engage school students.</p> <p>Provide continued resources to support the State Waste Strategy</p>	1.1.1

### Skilling WA: Strategic goal 3

Attract workers with the right skills to the Western Australian workforce and retain them by offering access to rewarding employment and a diverse and vibrant community and environment to live in.

Issue (from Section 3)	Strategy	Skilling WA Priority Action
There are a large number of electrical license holders who do not work in the industry. (Electrical)	<p>Establish a project to determine which industries and occupations utilise qualified electricians so that:</p> <ul style="list-style-type: none"><li>• Future career planning advice might be better targeted</li><li>• Programs can be offered to attract electricians back to the trade</li><li>• Alternate training arrangements can be suggested for occupations that are under-utilising electrician skills.</li></ul>	3.1.3
Volunteer management and training is an issue that affects emergency management and interoperability state-wide. (Public Administration)	Work collaboratively with the Department of Fire and Emergency Services through established/future working groups.	3.2.10 3.2.11

#### Skilling WA: Strategic goal 4

Provide flexible, responsive and innovative education and training which enables people to develop and utilise the skills necessary for them to realise their potential and contribute to Western Australia's prosperity.

Issue (from Section 3)	Strategy	Skilling WA Priority Action
Increasing use of renewable energy and new ways of thinking about energy production, storage and consumption will require new skills for existing and new workers (Electrical and Utilities) VET policy, reviews and funding affect industry's capacity to skill its workforce (All sectors)	Ensure the review of National Training Packages meets the needs of Western Australia. Participate in State Training Board and Department of Training and Workforce Development forums and working groups.	4.2.3
Cadetships have been established in the government sector to provide a new entry pathway between traineeships and internships (Public Administration). Government seeks highly skilled human resource managers and program/project manager to move toward smaller government. (Public Administration)	Assist the Public Sector Commission through its Centre for Public Sector Excellence to pilot and report on new diploma level cadetships.	4.1.1 4.1.3 4.1.6
There are a large number of electrical license holders who do not work in the industry. (Electrical)	Establish a project to determine which industries and occupations utilise qualified electricians so that: <ul style="list-style-type: none"><li>• Future career planning advice might be better targeted</li><li>• Programs can be offered to attract electricians back to the trade</li><li>• Alternate training arrangements can be suggested for occupations that are under-utilising electrician skills.</li></ul>	4.1.2 4.2.1 4.2.3
The employment of electricians in roles such as appliance servicing and electrical fitting is an under-utilisation of skills (Electrical) The gas industry seeks to skill its workforce through implementation of the established apprenticeship. (Utilities) Training requirements imposed on those that clear vegetation near powerlines due to regulatory reform has	Promote alternative existing apprenticeships to industry and facilitate RTO engagement for appliance servicing and electronic servicing occupations. Work with training providers and industry to embed the new Gas Supply Technician Apprenticeship	4.1.2 4.2.3

experienced a slow roll-out. (Utilities)		
<p>Local Government reform is creating a high level of uncertainty and specific workforce planning needs. (Public Administration)</p> <p>Local Government experiences demand for financial management skills in the regions. (Public Administration)</p> <p>Public safety industry strategies are reshaping the workforce to meet government and community expectations. (Public Administration)</p> <p>The corrective services industry is facing higher prisoner populations due to community population growth and mandatory sentencing laws. (Public Administration)</p> <p>All sectors are operating with reduced budgets and increasing demands due to population growth, etc. (All sectors)</p> <p>Commonality of occupations and skills requirements with other industry sectors can hide industry-specific issues from VET policy makers. (Public Admin and Utilities)</p>	<p>Continue to strengthen SPOL evidence in direct alignment with DTWD criteria to ensure state funding is appropriately directed.</p> <p>Clarify criteria and definitions with DTWD</p> <p>Obtain industry evidence throughout 2014/15</p>	4.1.3
The State Training Board is increasingly focusing on the articulation of VET qualifications to higher education.	Identify tertiary institutes delivering programs relevant to EUPA industry sectors	4.1.2
The waste sector in WA is working toward sustainable engagement in nationally recognised training arrangements. (Utilities)	Provide continued resources to support the State Waste Strategy	4.2.1 4.2.3
The translator and interpreter industry is seeking to embed formal training as the preferred pathway to gain employment in the sector. Quality issues surrounding national accreditation and perceived conflicts with VET need to be addressed. (Public Administration)	Provide leadership to the translator and interpreter industry to address quality and accessibility concerns	4.2.1 4.2.3

## Skilling WA: Strategic goal 5

Plan and coordinate a strategic State Government response to workforce development issues in Western Australia.

Issue (from Section 3)	Strategy	Skilling WA Priority Action
<p>Local Government reform is creating a high level of uncertainty and specific workforce planning needs. (Public Administration)</p> <p>Public safety industry strategies are reshaping the workforce to meet government and community expectations. (Public Administration)</p> <p>Commonality of occupations and skills requirements with other industry sectors can hide industry-specific issues from VET policy makers. (Public Administration and Utilities)</p> <p>The translator and interpreter industry is seeking to embed formal training as the preferred pathway to gain employment in the sector. Quality issues surrounding national accreditation and perceived conflicts with VET need to be addressed. (Public Administration)</p> <p>VET Sector policy, reviews and funding affect industry's capacity to skill its workforce. (All industries)</p>	<p>Continue to develop a strategy to provide SPOL evidence in direct alignment with Department of Training and Workforce Development criteria.</p> <p>Contribute to policy discussion, particularly relating to pre-apprenticeships, apprenticeships and traineeships, funding and accessibility.</p> <p>Provide advice to industry to take best advantage of the new entitlement model.</p> <p>Provide advice to the Department of Training and Workforce Development and the State Training Board regarding industry issues relating to the new entitlement model.</p>	5.1.4

## SECTION 5 RECOMMENDED PRIORITY ACTION PLAN

### Skilling WA Strategic Goal 1:

Recommended Priority Action(s)	Steps to Implement Actions	Priority	Date to be completed
<p>Assist the Public Sector Commission through its Centre for Public Sector Excellence to:</p> <ul style="list-style-type: none"> <li>pilot new diploma level cadetships.</li> <li>develop or implement strategies determined by the Public Administration Industry Working Group.</li> </ul> <p>NOTE: This action also aligns to Skilling WA Strategic Goal 4.</p>	<p>At scheduled Public Administration Industry Working Groups:</p> <ul style="list-style-type: none"> <li>Monitor and report commencements in established Cadetships</li> <li>Identify enablers and barriers to sustainable delivery</li> <li>Identify outcomes relating to youth and skilling of women for leadership/management roles.</li> <li>Identify alternative/supporting strategies where appropriate</li> </ul>	HIGH	
<b>Lead Agency: EUPA Training Council and the Public Sector Commission</b>			

Recommended Priority Action(s)	Steps to Implement Actions	Priority	Date to be completed
Facilitate interaction and preparation of industry for programs that engage school students.	<p>Complete research into VETiS and WACE 2016</p> <p>Identify and select strategies</p> <p>Seek support to develop tools/resources</p> <p>Implement strategy for 2015</p>	HIGH	February 2015

**Lead Agency: EUPA Training Council**

### Skilling WA Strategic Goal 3:

Recommended Priority Action(s)	Steps to Implement Actions	Priority	Date to be completed
<p>Establish a project to determine which industries and occupations utilise qualified electricians so that:</p> <ul style="list-style-type: none"><li>• Future career planning advice might be better targeted</li><li>• Programs can be offered to attract electricians back to the trade</li><li>• Alternate training arrangements can be suggested for occupations that are under-utilising electrician skills.</li></ul> <p>NOTE: This action also aligns to SkillingWA Strategic Goal 4</p>	<p>Collaborate with the Dept of Commerce (EnergySafety Division) to access required information in accordance with privacy laws</p> <p>Survey electrical license holders to solicit information</p> <p>Analyse and report findings</p> <p>Engage Industry Working Group and RTO networks to explore training arrangements</p>	Moderate	June 2015

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#### Lead Agency: EUPA Training Council

Recommended Priority Action(s)	Steps to Implement Actions	Priority	Date to be completed
<p>Work collaboratively with the Department of Fire and Emergency Services through established/future working groups.</p>	<p>Participate in scheduled meetings</p> <p>Identify issues regarding VET, e-learning and regional delivery</p> <p>Report relevant issues to the Department of Training and Workforce Development, the State Training Board and ISC through established channels</p>	Moderate	Ongoing

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#### Lead Agency: EUPA Training Council



#### Skilling WA Strategic Goal 4:

Recommended Priority Action(s)	Steps to Implement Actions	Priority	Date to be completed
Ensure the review of National Training Packages meets the needs of Western Australia.  Participate in State Training Board and Department of Training and Workforce Development forums and working groups.	Liaise with ISCs regarding process and assist where appropriate  Provide oversight of WA feedback  Complete state endorsement processes required by the Department of Training and Workforce Development		Ongoing

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#### Lead Agency: EUPA Training Council

Recommended Priority Action(s)	Steps to Implement Actions	Priority	Date to be completed
Promote alternative existing apprenticeships to industry and facilitate RTO engagement for appliance servicing, electronic servicing and electrical fitting occupations.  Promote the powerline vegetation control traineeship to assist regulatory change	Gauge industry appetite for the appliance servicing apprenticeship  Gauge industry appetite for of the electronic servicing apprenticeship  Gauge industry appetite for of the electrical fitting apprenticeship  Provide advice and assistance to industry and RTOs servicing the powerline vegetation control sector.	Moderate	December 2014

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#### Lead Agency: EUPA Training Council

Recommended Priority Action(s)	Steps to Implement Actions	Priority	Date to be completed
Work with training providers and industry to embed the new Gas Supply Technician Apprenticeship	<a href="#">Provide assistance to RTO to secure funding</a> <a href="#">Provide advice to RTO and industry</a> <a href="#">Monitor uptake for barriers and problems</a>	HIGH	<a href="#">June 2014</a>
<b>Lead Agency: EUPA Training Council</b>			
Recommended Priority Action(s)	Steps to Implement Actions	Priority	Date to be completed
Continue to strengthen SPOL evidence in direct alignment with DTWD criteria.  NOTE: Also aligns to SkillingWA Strategic Goal 5	<a href="#">Review 2014 submission strengths and weaknesses</a>  <a href="#">Liaise with the Department of Training and Workforce Development regarding future process and criteria</a>  <a href="#">Develop strategy to focus effort during 2014/15</a> <a href="#">Report issues in 2015 SPOL reporting process</a>	HIGH	<a href="#">March 2015</a>
<b>Lead Agency: EUPA Training Council</b>			

Recommended Priority Action(s)	Steps to Implement Actions	Priority	Date to be completed
Identify tertiary institutes delivering programs relevant to EUPA industry sectors	Develop appreciation of higher education pathways to occupations within EUPA's industry coverage.  Align Training Package qualifications where applicable.	Medium	June 2015

Recommended Priority Action(s)	Steps to Implement Actions	Priority	Date to be completed
Provide continued resources to support the State Waste Strategy	Undertake project in accordance with agreed KPIs  Report to the State Waste Authority as agreed	HIGH	June 2015

**Lead Agency: EUPA Training Council**

Recommended Priority Action(s)	Steps to Implement Actions	Priority	Date to be completed
Provide leadership to the translator and interpreter industry to address quality and accessibility concerns	Align activities the State Training Board Establish industry working group Agree core issues to address Report to EUPA Board of Management and the Department of Training and Workforce Development	HIGH	June 2015

**Lead Agency: EUPA Training Council**



## Skilling WA Strategic Goal 5:

Recommended Priority Action(s)	Steps to Implement Actions	Priority	Date to be completed
Contribute to policy discussion, particularly relating to pre-apprenticeships, apprenticeships and traineeships, funding and accessibility.	Seek feedback through Industry Working Groups, Board of Management and wider industry networks	HIGH	Ongoing
Provide advice to industry to take best advantage of the new entitlement model.	Prioritise engagement to known industry issues (e.g. corrective services)		
Provide advice to the Department of Training and Workforce Development and the State Training Board regarding industry issues relating to the new entitlement model.	Participate in working groups, workshops and meetings hosted by the Department of Training and Workforce Development and the State Training Board.		
	Report industry issues to the Department of Training and Workforce Development		

**Lead Agency: EUPA Training Council**

## SECTION 6 PLAN ADMINISTRATION

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### Plan Contact

This plan is maintained by the <Insert Name of Responsible Officer> for the <Insert Training Council>. Feedback regarding this plan should be made in writing to:

- a. Email: admin@eupa.com.au
- b. Mail: PO Box 597 Balcatta, 6921
- c. Office phone number: (Optional )(08) 9240 2688

### Review Requirements and Issue History

Schedule 2 of the **Service Agreement** requires that this plan is reviewed and updated annually.

This issue entirely supersedes the previous issue of the plan. Superseded issues should be destroyed, or clearly marked as superseded and removed from general circulation and the Training Council website.

Issue No.	Year Approved	Comments/Summary of Main Changes
1	2013	Major review and production utilizing DTWD approved template 2012.
2	2014	Major annual review of industry intelligence

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### Distribution List

This plan is issued electronically on the Training Council website after it is approved. Print/paper copies are provided as follows (if applicable).

Organisation	Position
N/A	N/A

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### Consultation for this Issue

The review of this issue of this plan was coordinated by the Chief Executive Officer for the Electrical, Utilities and Public Administration Training Council Incorporated. This issue was updated and re-written as part of the annual review process and the main round of consultation with industry representatives and the EUPA Training Council Board of Management occurred in July 2014.

## Communications Plan Summary

Once the plan is approved, its update will be:

- a. endorsed by the EUPA Training Council Board of Management
- b. noted by the Department of Training and Workforce Development
- c. sent to all persons listed on the Distribution List (paper copies)
- d. posted on the EUPA Training Council website

## Validation of this Plan

Arrangements in this plan will be validated within the annual review cycle by conducting a desktop review in June 2014. Endorsement of the Plan shall occur at the first available sitting of the Board of Management

## SECTION 7 APPENDICES

### Appendix 1: ANZSCO Occupations within EUPA Industries

Skill Level	Definition
1	Commensurate to <b>Bachelor Degree or higher</b> . At least five years of relevant experience may substitute for the formal qualification. In some instances, relevant experience and/or on-the-job training may be required in addition to the formal qualification.
2	<p>Occupations at Skill Level 2 have a level of skill commensurate with one of the following:</p> <ul style="list-style-type: none"> <li>NZ Register Diploma or</li> <li>AQF <b>Associate Degree, Advanced Diploma or Diploma</b>.</li> </ul> <p>At least three years of relevant experience may substitute for the formal qualifications listed above. In some instances relevant experience and/or on-the-job training may be required in addition to the formal qualification.</p>
3	<p>Occupations at Skill Level 3 have a level of skill commensurate with one of the following:</p> <ul style="list-style-type: none"> <li>NZ Register Level 4 qualification</li> <li><b>AQF Certificate IV or</b></li> <li><b>AQF Certificate III including at least two years of on-the-job training.</b></li> </ul> <p>At least three years of relevant experience may substitute for the formal qualifications listed above. In some instances relevant experience and/or on-the-job training may be required in addition to the formal qualification.</p>
4	<p>Occupations at Skill Level 4 have a level of skill commensurate with one of the following:</p> <ul style="list-style-type: none"> <li>NZ Register Level 2 or 3 qualification or</li> <li><b>AQF Certificate II or III.</b></li> </ul> <p>At least one year of relevant experience may substitute for the formal qualifications listed above. In some instances relevant experience may be required in addition to the formal qualification.</p>
5	<p>Occupations at Skill Level 5 have a level of skill commensurate with one of the following:</p> <ul style="list-style-type: none"> <li>NZ Register Level 1 qualification</li> <li><b>AQF Certificate I or</b></li> <li><b>compulsory secondary education.</b></li> </ul> <p>For some occupations a short period of on-the-job training may be required in addition to or instead of the formal qualification.</p> <p>In some instances, no formal qualification or on-the-job training may be required.</p>



ANZSCO Code	Title	Skill Level	ANZSCO Code	Title	Skill Level
ANZSIC 3232 Electrical Services					
341111	Electrician (General)	3	341113	Lift Mechanic	3
341112	Electrician (Special Class)		899914	Electrical or Telecommunication Trades Assistant	5
ANZSIC 3233 Air conditioning and Heating Services					
342111	Airconditioning and Refrigeration Mechanic	3			
ANZSIC 3234 Fire and Security Alarm Installation Service					
341411	Cabler (Data and Communications)	3	399918	Fire Protection Equipment Technician	3
342313	Electronic Equipment Trades Worker (includes security technician)	3			
ANZSIC 2611 Fossil Fuel Electricity Generation					
233311	Electrical Engineer	1	312911	Maintenance Planner	2
233512	Mechanical Engineer	1	323211	Fitter – General (plant, fitter machinist, fitter mechanic)	3
233513	Production Engineer (specialisations include automation and control)	1	341111	Electrician	3
312312	Electrical Engineering Technician	2	399213	Power Generation Plant Operator	3
312412	Electronic Engineering Technician	2			
ANZSIC 2612 Hydro-Electricity Generation					
233311	Electrical Engineer	1	312911	Maintenance Planner	2
233512	Mechanical Engineer	1	323211	Fitter – General (plant, fitter machinist, fitter mechanic)	3
233513	Production Engineer (specialisations include automation and control)	1	341111	Electrician	3
312312	Electrical Engineering Technician	2	399213	Power Generation Plant Operator	3
312412	Electronic Engineering Technician	2			
ANZSIC 2619 Other Electricity Generation					
233311	Electrical Engineer	1	312911	Maintenance Planner	2
233512	Mechanical Engineer	1	323211	Fitter – General (plant, fitter machinist, fitter mechanic)	3
233513	Production Engineer (specialisations include automation and control)	1	341111	Electrician	3
312312	Electrical Engineering Technician	2	399213	Power Generation Plant Operator	3
312412	Electronic Engineering Technician	2			
ANZSIC 2620 Electricity Transmission					
233311	Electrical Engineer	1	312911	Maintenance Planner	2
312311	Electrical Engineering Draftsperson	2	341111	Electrician	3
312312	Electrical Engineering Technician	2	342211	Electrical Linesworker (includes Switcher)	3
312412	Electronic Engineering Technician	2	342212	Technical Cable Jointer	3

ANSZIC 2630 Electricity Distribution					
233311	Electrical Engineer	1	312911	Maintenance Planner	2
312311	Electrical Engineering Draftsperson	2	341111	Electrician	3
312312	Electrical Engineering Technician	2	342211	Electrical Linesworker (includes Switcher)	3
312412	Electronic Engineering Technician	2	342212	Technical Cable Jointer	3
ANSZIC 2640 On Selling Electricity and Electricity Market Operation					
561912	Meter Reader	5			
ANSZIC 2700 Gas Supply					
133211	Engineering Manager	1	234312	Environmental Consultant (Alt title: Environmental Officer)	1
133512	Production Manager	1	312211	Civil Engineering Draftsperson	2
233111	Chemical Engineer		312412	Electronic Engineering Technician	2
233211	Civil Engineer (includes planning/design of pipelines and gas supply)	1	312512	Mechanical Engineer Technician	2
233311	Electrical Engineer	1	312911	Maintenance Planner	3
233512	Mechanical Engineer	1	322313	Welder (First Class)	3
233513	Production/Plant Engineer	1	334114	Gasfitter (Only included as it is used in TP)	3
233612	Petroleum Engineer	1	341111	Electrician	2
ANSZIC 2811 / 2812 Water Supply & Sewerage and Drainage Services					
133211	Engineering Manager	1	311415	Hydrographer	2
133512	Production Manager (Includes operations manager)	1	311419	Science Technical Officer NEC	2
232212	Surveyor (Specialisation: Hydrographic / Engineering Surveyor)	1	312116	Surveying or Spatial Science Technician	2
233111	Chemical Engineer	1	312211	Civil Engineering Draftsperson	2
233211	Civil Engineer (Specialisation: Hydraulics Engineer)	1	312212	Civil Engineering Technician	2
233213	Quantity Surveyor	1	312311	Electrical engineering Draftsperson	2
233311	Electrical Engineer	1	312312	Electrical Engineering Technician	2
233411	Electronics Engineer	1	312511	Mechanic Engineering Draftsperson	2
233511	Industrial Engineer	1	312512	Mechanical Engineer Technician	2
233512	Mechanical Engineer	1	312611	Safety Inspector	2
233915	Environmental Engineer	1	312911	Maintenance Planner	2
233999	Engineering Professionals NEC	1	322311	Metal Fabricator (Boiler maker/ Welder)	3
234211	Chemist	1	323211	Fitter - General	3
234313	Environmental Research Scientist (Water Quality Analyst)	1	342315	Electronic Instrument Technician (Special Class)	3

234411	Geologist	1	344111	Electrician	3
234413	Hydrogeologist	1	712921	Waste water or water plant operator	4
311412	Earth Science Technician	2	821112	Drainage, Sewerage and Stormwater Labourer	1
ANSZIC 2911 Solid Waste Collection Services					
733111	Truck Driver (Specialisation - compactor driver (rubbish collector))	4	899611	Recycling and rubbish collector	5
891112	Truck Driver Offsider	5			
ANSZIC 2919 Other Waste Collection Services					
733111	Truck Driver (Specialisation - compactor driver (rubbish collector))	4	899611	Recycling and rubbish collector	5
891112	Truck Driver Offsider	5			
ANSZIC 2921 Waste Treatment and Disposal Services					
233111	Chemical Engineer	1	721213	Bulldozer Operator	4
139912	Environmental Manager	1	721214	Excavator Operator	4
233915	Environmental Engineer	1	721215	Grader Operator	4
234312	Environmental Consultant	1	721216	Loader Operator	4
234313	Environmental Research Scientist	1	712922	Weighbridge Operator	4
721999	Mobile Plant Operator (Mulcher Operator)	4	323211	Fitter - General	3
721211	Earthmoving Plant Operator	4	341111	Electrician (Electrical Fitter)	3
721212	Backhoe Operator	4			
ANSZIC 2922 Waste Remediation and Materials Recovery Services					
233111	Chemical Engineer	1	711999	Machine Operators NEC (Asbestos Remover)	4
233915	Environmental Engineer	1	323211	Fitter - General	3
234312	Environmental Consultant	1	341111	Electrician (Electrical Fitter)	3
234313	Environmental Research Scientist	1	712999	Stationary Plant Operators	4
621911	Materials Recycler (Under sales but includes Waste Recycler)	5	899999	Labourers NEC	5
ANSZIC 7520 State Government Administration					
111111	Chief Executives and Managing Directors (Director General, Executive Director, Secretary)	1	232213	Cartographer	1
111211	Corporate GM Chief Operating Officer	1	261111	ICT Business Analyst	1
132111	Corporate Services Manager Administration Manager, Business Services Manager	1	261112	Systems Analyst	1
132211	Finance Manager Chief Financial Officer, Finance Director	1	511111	Contract, Administrator Contract officer	2
132311	Human Resource Manager Includes OSH, Training and Development and Workplace Relations Manager specialisations	1	511112	Program or project administrator Project Coordinator	2
132411	Policy and Planning Manager Public Policy Manager	1	512111	Office Manager	2

132511	Research and Development Manager	1	521111	Personal Assistant	3
135111	Chief Information Officer Chief Technology Officer	1	521211	Secretary (General)	3
221111	Accountant	1	531111	General Clerk	4
221211	Company Secretary	1	532111	Data Entry Operator	4
221212	Corporate Treasurer	1	541111	Call or Contact Centre Team Leader Call or contact centre workforce planner	3
221213	External Auditor	1	541112	Call or contact centre operator	4
221214	Internal Auditor	1	541211	Information Officer	4
223111	Human Resource Advisor Personnel Officer, Workforce Planning Analyst	1	542111	Receptionist	4
223113	Workplace Relations Adviser Industrial Relations Officer	1	551111	Accounts Clerk Accounts payable/receivable	4
223311	Training and Development Professional Training Officer	1	551211	Bookkeeper Financial Administration Officer	4
224214	Records Manager FOI Officer	1	551311	Payroll Clerk Payroll Officer	4
224311	Economist Economic Analyst	1	561311	Filing or registry clerk Records Clerk	5
224412	Policy Analyst Policy Advisor	1	561611	Switchboard Operator Telephone Operator	5
224511	Land Economist Property Economist	1	561999	Other Clerk	5
224912	Liaison Officer Aboriginal, community, disability liaison	1	591113	Purchasing Officer	4
225311	Public relations professional Media Liaison Officer, PR Consultant/Officer	1	599411	Human Resources Clerk Employment Office, HR Records, Personnel Records Clerk	4
ANSZIC 7530 Local Government Administration					
111311	Local Government Legislator Councillor including Mayor	1	251311	Environmental Health Officer	1
134111	Child Care Centre Manager	1	362211	Gardener (General)	3
149113	Sports Centre Manager	2	399312	Library Technician	2
224611	Librarian		421111	Child Care Worker	4
232611	Urban and Regional Planner Land/Town Planner	1	423111	Aged or Disabled Carer	4
Local Government also includes all management/administrative roles from the State Government sector.					
ANSZIC 7540 Justice					
442217	Security Officer (Court Security)	5	599214	Law Clerk	3
ANSZIC 7711 Police Services					
139113	Commissioned Officer Police	1	441312	Police Officer	2
111211	Corporate General Manager Specialisation - Assistant Commissioner	1	441311	Detective	2
223311	Training and Development Professional Training Officer	1	342312	Communications Operator	3
224411	Intelligence Officer Specialisation - criminal intel	1			

ANSZIC 7713 Fire protection and other emergency services				
139112	Commissioned Officer Fire	1	441212	Fire Fighter
441211	Emergency Service Worker Industry specialisation Oil Spill	1	223311	Training and Development Professional Training Officer
ANSZIC 7714 Correctional and Detention Services				
223311	Training and Development Professional Training Officer	1	442111	Prison Officer
242211	Vocational Education Teacher Lecturer	1		4
ANSZIC 7719 Other public order and Safety Services				
251312	Occupational Safety and Health Advisor Various roles in WHS, EHS, Community Safety			
ANSZIC 7720 Regulatory Services				
311311	Fisheries Officer	2	599514	Noxious Weeds and Pest Inspector
311312	Meat Inspector	2	599517	Train Examiner
311313	Quarantine Officer	2	599518	Transport Operations Inspector
311399	Primary Products Inspectors fruit and veg inspector, Dairy QA.	2	599521	Water Inspector
312115	Plumbing Inspector Drainage, gas, sanitary/water supply inspector	2	599599	Inspectors and Regulatory Officers NEC Includes LG rangers
312611	Safety Inspector Gas Examiner; Lifts/Cranes, OSH, Mines Inspector	2	599611	Insurance Investigators
599513	Motor Vehicle License Examiner	4		3

## Appendix 2: Summary of Licensing/Regulatory Arrangements

Name of Occupation	Name of License/ Registration/ Permit	Name of Licensing/Regulatory Authority	Title of Act	What does this license enable the holder to do?
Electrician	Electrical Worker License Types of License: <ul style="list-style-type: none"> <li>• Electrician</li> <li>• Electrical Contracting,</li> <li>• Electrical Installing</li> <li>• Electrical Training,</li> <li>• Restricted Electrical</li> </ul>	Electrical Licensing Board  EnergySafety carries out technical and safety regulation of electrical and most gas activities throughout Western <a href="#">Australia</a> , including the activities of electricity supply network operators and gas distribution license holders	Electricity Act 1945 Electrical (Licensing) Regulations 1991 <i>Energy Co-ordination Act 1994</i> Energy Co-ordination (Designation of Inspectors) Regulations 1995	Electricians are licensed for up to 5 years and must carry their license card with them and produce it when required.
Electrical Fitter	Electrical Worker (restricted to fitting)	EnergySafety/ Electrical Licensing Board	As above	Electrical Fitters make and repair electrical equipment, motors, instruments and appliances. Fitters differ from electricians in that they can also perform machining and overhauling of equipment.
Electrical Contractor	Electrical Contractors License	EnergySafety/ Electrical Licensing Board	Electricity Act 1945 Electrical (Licensing) Regulations 1991	
Electrician - for the installation of solar panels	Clean Energy Council Accreditation	Clean Energy Council	Clean Energy Council	Must have completed the relevant units of competency from the trade related training package.  Must have been an electrician initially with further training for installation of solar panels.
Apprentice Electrician	Electrical Training License	EnergySafety/ Electrical Licensing Board (see1 above)	Electricity Act 1945 Electrical (Licensing) Regulations 1991	Training License

Name of Occupation	Name of License/ Registration/ Permit	Name of Licensing/Regulatory Authority	Title of Act	What does this license enable the holder to do?
Apprentice Electrical Fitter	Electrical Worker (restricted to fitting)	EnergySafety/ Electrical Licensing Board	Electricity Act 1945 Electrical (Licensing) Regulations 1991	Training license
Instrumentation Technicians  Air-conditioning and Refrigeration Mechanics	Restricted Electrical License/s (various)	EnergySafety/ Electrical Licensing Board	Electricity Act 1945 Electrical (Licensing) Regulations 1991	To carry out electrical work related to the Air-conditioning or refrigeration equipment – restricted by license type  For an individual who carries out work in relation to RAC equipment (this includes installing, commissioning, servicing and maintaining RAC equipment)
Air-conditioning and Refrigeration Mechanics	Refrigerant handlers license / registration	Australian Refrigeration Council EnergySafety (See 1 above)	Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* Regulations 1995	To handle a refrigerant for any work in the refrigeration and air conditioning industry, other than the automotive industry.
Apprentice Air conditioning and Refrigeration Mechanics	Refrigerant handlers license and registration training license	Australian Refrigeration Council (ARC)	Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* Regulations 1995	To handle a refrigerant while undertaking training and/or assessment in a classroom setting and at your work place under supervision. The supervisor must be the holder of a license that entitles them to engage in work for which the licensee is being trained. This license is valid for the period of training, which can be up to one year.
Domestic Refrigeration and Air Conditioning Appliance	Domestic Refrigeration and Air Conditioning Appliance License (2 years)	Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* Regulations 1995	Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* Regulations 1995	To handle a refrigerant for either or both of the following: <ul style="list-style-type: none"> <li>any work on domestic refrigeration or air conditioning equipment</li> <li>any work on commercial stand alone refrigeration equipment</li> </ul>

Name of Occupation	Name of License/ Registration/ Permit	Name of Licensing/Regulatory Authority	Title of Act	What does this license enable the holder to do?
Data and Telecommunication Technicians (Cabler)	ACMA Open Registration Cabling License  Requires authorisation by asset owner if connected to electricity distribution network  (i.e. Horizon, Western Power)	EnergySafety/ Electrical Licensing Board  Australian Communications and Media Authority	Electricity Act 1945  Electrical (Licensing) Regulations 1991	Install, maintain and repair data transmission, aerial lines, conduits, cable, radio antennae and telecommunications equipment and appliances.
Electricity Power Plant operators	HRW License to operate A STEAM TURBINE	WorkSafe	Occupational Safety and Health Act 1984	<b>Pressure equipment operation</b> - basic, intermediate and advanced boiler operation; turbine operation; reciprocating steam engine operation.
Electricity Power Plant operators	STEAM BOILER High Risk License	WorkSafe	Occupational Safety and Health Act 1984	<b>Pressure equipment operation</b> - basic, intermediate and advanced boiler operation; turbine operation; reciprocating steam engine operation.
Lineworker	Requires authorisation by asset owner  (i.e. Horizon, Western Power)	Network operator	Electricity Act 1945  Electricity (Supply Standards and System Safety) Regulations 2001  Electricity Regulations 1947 - Network operator service standards, line-worker and electrical worker safety, appliance energy efficiency	Electricity Supply Transmission / Distribution: Cable Joints. EWP; Pole top rescue; Confined space



Name of Occupation	Name of License/ Registration/ Permit	Name of Licensing/Regulatory Authority	Title of Act	What does this license enable the holder to do?
Powerline Vegetation Controller	Compliance with Code of Practice	EnergySafety	Electricity Regulations 1947	Perform various roles (dependent on competencies held) to manage vegetation near live powerlines.
Waste Operators	Asbestos Control License <ul style="list-style-type: none"> <li>Restricted</li> <li>Unrestricted</li> </ul> Over 10 sqm asbestos must be removed by a licensed and trained individual /business	WorkSafe (Asbestos Removal)	Code of Practice for Management and Control of Asbestos in Workplaces (NOHSC:2018(2005)	Unrestricted – allows removal of all types of asbestos.  Restricted – Commenced June 2010 allows removal of amounts exceeding 10square metres of bonded (non-friable) asbestos.
Waste Operators	Demolition License	WorkSafe (Demolition license)	Occupational Safety and Health Regulations 1996	The following are general conditions applicable to all demolition licences: <ul style="list-style-type: none"> <li>every employee engaged to do demolition work has, or will be trained before the demolition work commences, in safe methods of demolition work by a registered training organisation</li> <li>all demolition work will be directly supervised by a competent person.</li> </ul>
Restricted heat pump (split system) installation and decommission	Restricted heat pump (split system) installation and decommissioning License (2 years)	Australian Refrigeration Council (ARC)	Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* Regulations 1995	To handle a refrigerant for the installation and decommissioning of any of the following: <ul style="list-style-type: none"> <li>a single-head split system air conditioner of less than 18kW;</li> <li>a 2-part hot water heat pump of less than 18kW;</li> <li>a 2-part swimming pool heat pump of less than 18kW.</li> </ul>

## Appendix 3: Organisations licensed by the Economic Regulatory Authority (ERA)

### Electricity generation licenses

Alcoa of Australia	Merredin Energy
Alinta Cogeneration Pinjara	Mubida Wind Farm
Alinta Cogeneration Wagerup	New Gen Neerabup Partnership
Alinta Energy Transmission (Roy Hill)	New Gen Power Kwinana
ATCO Power Australia (Karratha)	Ord Hydro
BHP Billiton Worsley Alumina	Perth Power Partnership
Bluewaters Power 1	RATCH Australia Kemerton
Bluewaters Power 2	Rottnest Island Authority
Collgar Wind Farm	South West Cogeneration Joint Venture
CSBP Limited	Southern Cross Energy Partnership
EDL NGD (WA)	Synergy
Emu Downs Wind Farm Joint Venture	Tronox Management
Eneabba Energy	Walkaway Wind Power
Goldfields Power	Western Energy
Horizon Power	WR Carpenter No. 1

### Electricity transmission and distribution licenses

Alinta Energy Transmission (Roy Hill)	Ord Hydro
BHP Billiton Nickel West	Rottnest Island Authority
Horizon Power	Southern Cross Energy Partnership
Karara Power	Western Power (Electricity Networks Corporation)
Newmont Power	

### Electricity Retail License

AER Retail Pty Ltd	ERM Power Retail
Alinta Sales	Goldfields Power
Amanda Energy	Landfill Gas and Power
BHP Billiton Nickel West	Newmont AP Power
Blair Fox Energy	Newmont Power
Blue Star Energy	Perth Energy
BlueWaters Power 1	Premier Power Sales
Clear Energy	Southern Cross Energy Partnership
Community Electricity	Synergy
EDL Pilbara	

#### Gas Distribution licenses

ATCO Gas Australia

Wesfarmers Kleenheat Gas

Esperence Power Station

#### Gas Trading Licenses

Alinta Sales

Synergy

Esperance Gas Distribution Company

Wesfarmers Kleenheat Gas

Perth Energy

#### Drinking water licenses

Aqwest – Bunbury Water Corporation

Peel Water

Busselton Water

Rottnest Island Authority

Hamersley Iron

Water Corporation

#### Sewerage Licenses

City of Kalgoorlie

Shire of Jerramungup

Hamersley Iron

Shire of Kent

Moama Lifestyle Villages

Shire of Lake Grace

Rottnest Island Authority

Shire of Moora

Shire of Brookton

Shire of Ravensthorpe

Shire of Coolgardie

Shire of Victoria Plains

Shire of Dalwallinu, Dowerin & Dumbleyung

Shire of Wickepin

Shire of East Pilbara

Shire of Yilgarn

Shires of Gnowangerup & Goomalling

Water Corporation

#### Bulk Water and Irrigation Licenses

City of Kalgoorlie

Shires of Gnowangerup & Goomalling

Gascoyne Water Co-operative

Shire of Jerramungup

Harvey Water (South West Irrigation Management Co-operative)

Shires of Kent & Koorda

Moama Lifestyle Villages

Shire of Lake Grace

Ord Irrigation Co-operative

Shires of Moora & Morawa

Peel Water

Shire of Ravensthorpe

Preston Valley Irrigation Co-operative

Shire of Victoria Plains

Shire of Brookton

Shire of Wickepin

Shire of Coolgardie

Shire of Yilgarn

Shires of Dalwallinu, Denmark, Dowerin & Dumbleyung

Water Corporation

Shire of East Pilbara

#### Drainage

Rottnest Island Authority

Water Corporation

## Appendix 4: Emergency services volunteer workforce by region

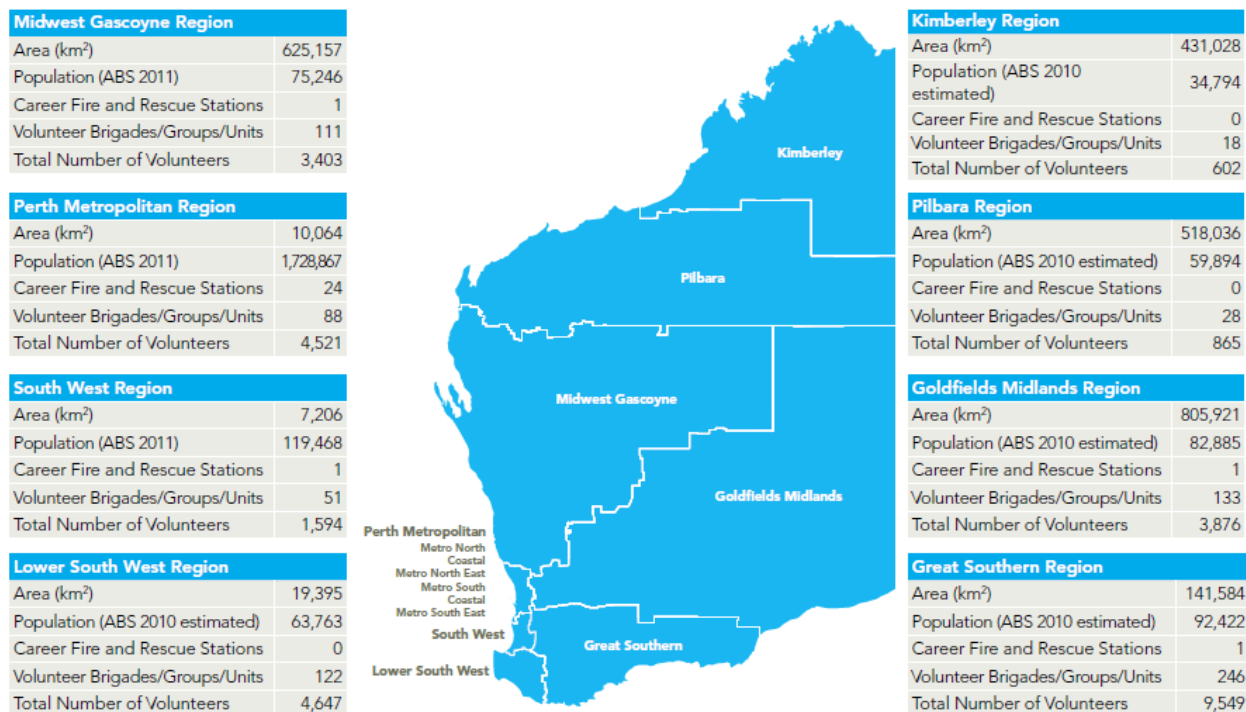


Figure 16: DFES Regional Volunteers<sup>149</sup>

<sup>149</sup> Department of Fire and Emergency Services, 2013 Inaugural Report,

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## SECTION 9 GLOSSARY

### Acronyms

Table 13 Acronyms

Acronym	Full Title
ABS	Australian Bureau of Statistics
ACELG	Australian Centre of Excellence for Local Government
ALGA	Australian Local Government Association
ANZSCO	Australia and New Zealand Standard Classification of Occupations
ANZSIC	Australia and New Zealand Standard Industry Classification
ASU	Australian Services Union
C&D	Construction and Demolition Waste
C&I	Commercial and Industrial Waste
CaLD	Culturally and Linguistically Diverse
CEPU	Communications, Electrical and Plumbing Union
COAG	Council of Australian Governments
CSA	Civil Services Association
DBP	Dampier Bunbury Pipeline
DEOPE	Director of Equal Opportunity in Public Employment
DFES	Department of Fire and Emergency Services
DTWD	Department of Training and Workforce Development
EATC	Engineering and Automotive Training Council
ELB	Electrical Licensing Board
E-Oz	Energy Skills Australia Industry Skills Council
ERA	Economic Regulation Authority
ETU	Electrical Tradeworkers Union
EUPA	Electrical Utilities and Public Administration Training Council
EVAC	Establishment and Variation of Apprenticeships Committee
FTE	Full Time Equivalent
GSA	Government and Community Safety Industry Skills Council trading as Government Skills Australia
ISC	Industry Skills Council
LGMA	Local Government Managers Association
LGRCEU	Local Government, Racing, Cemeteries Employees Union
LPG	Liquid Petroleum Gas
MSW	Municipal Solid Waste
NBN	National Broadband Network

Acronym	Full Title
NECA	National Electrical Communications Associations
NOLA	National Occupational Licensing Authority
PSC	Public Sector Commission
RTO	Registered Training Organisation
SEI	Strategic Energy Initiative
SES	Sate Emergency Service
SPOL	State Priority Occupation List
STB	State Training Board
TAC	Training Accreditation Council
WALGA	WA Local Government Association
WAPOL	Western Australian Police