



Government Resource Efficiency Policy

Agency Report

TAFE NSW - Illawarra Institute

2014 - 2015

Contents

What matters to you?	3
About this report	3
Disclaimer	3
Key contact	3
Cluster summary	4
Agency summary	5
Key findings	6
Total usage by resource type	6
Contract types	6
Energy and water	7
Top 10 sites by total billed resource use.....	7
Top five sites by total billed resource use	8
Distribution of billed resource use across all sites.....	8
Energy efficiency projects	9
Projects with OEH support	9
Internal energy efficiency projects	9
Progress towards 40 per cent target.....	10
Waste	11
Annual Statement of Compliance	12
Beyond compliance	13
Act now for the future.	14
Appendix A	15
List of entities included in the report	15
List of entities included in the cluster	15
Appendix B	16
Methodology.....	16
Access to raw data	16

What matters to you?

This report is a tool that helps you make informed decisions about your agency's resource use. The data presented will establish your current position in relation to the Government Resource Efficiency Policy (GREP) targets and help you to identify opportunities for energy efficiency projects and initiatives.

Use the results to take actions that will lock in future savings.

action matters: save money, resources and time.

About this report

Launched in July 2014, GREP improves performance in three main areas — energy, water and waste — and also reduces harmful air emissions from government operations. All general government sector agencies are required to report annually on the policy targets, actions and minimum standards using financial-year data.

This report details the resource usage for the current reporting year, 2015, and three previous years for TAFE NSW - Illawarra Institute. A list of entities included in this report is available in [Appendix A](#).

TAFE NSW - Illawarra Institute is located under the Industry, Skills and Regional Development cluster, as of 1 July 2015.

This report has been compiled by the Office of Environment and Heritage.

Disclaimer

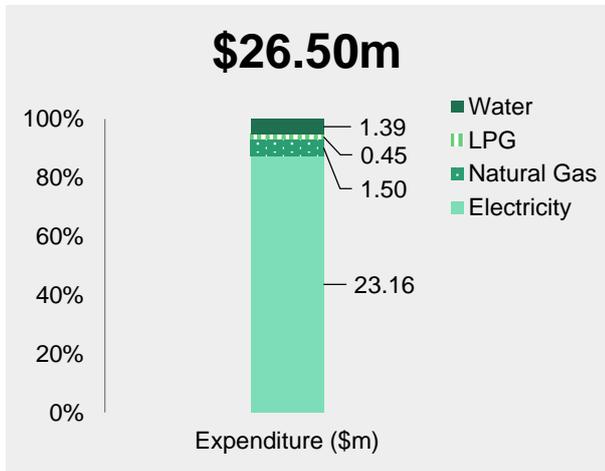
The Office of Environment and Heritage (OEH) has compiled this report in good faith, exercising all due care and attention. No representation is made about the accuracy, completeness or suitability of the information in this publication for any particular purpose. OEH shall not be liable for any damage which may occur to any person or organisation taking action or not taking action on the basis of this publication. Readers should seek appropriate advice when applying the information to their specific needs.

Key contact

Office of Environment and Heritage
Sustainable Government Team
E: government@environment.nsw.gov.au

Cluster summary

FY15 total expenditure distribution



Note: This figure includes electricity, gas and water. **Waste is not included in this figure.**

E1 interim target for clusters

Industry, Skills and Regional Development

40 per cent of total billed energy use*

\$10.76m

This target uses baseline data from FY14

* billed energy use for electricity and gas.

Electricity accounted for 87 per cent of Industry, Skills and Regional Development's total billed resource use for FY15.

Number of entities in cluster*

43

entities included in cluster 40 per cent target

*A list of entities is provided in [Appendix A](#).

Cluster energy efficiency projects

27

projects undertaken across the cluster since July, 2012

Note: This figure includes OEH supported projects that have been implemented, approved or are in the pipeline, in addition to those reported by entities.

Agency summary

Number of sites reported*

33

*sites are defined as unique addresses

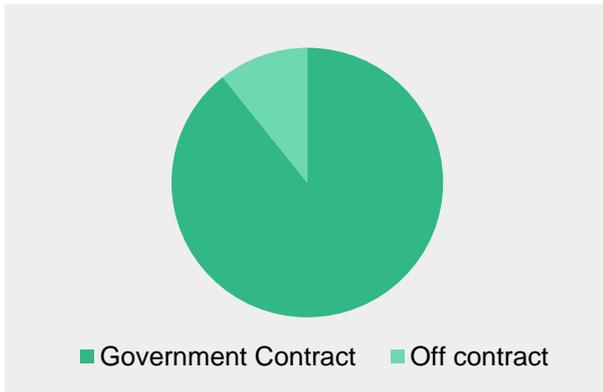
FY15 total expenditure (resources)

\$1.63m

8% decrease from FY14

Note: This figure includes electricity, gas and water. **Waste is not included in this figure.**

Government contract vs. off contract



Note: This figure is based on the number of sites.

FY15 total expenditure distribution



Individual E1 target for agency

TAFE NSW - Illawarra Institute

40% of total billed energy use*

\$687k

This target uses baseline data from FY14

* billed energy use for electricity and gas.

Energy efficiency projects

0

projects undertaken since July, 2012

Note: This figure includes OEH supported projects that have been implemented, approved or are in the pipeline, in addition to those reported by your agency.

Key findings

The findings in this report are based on analysis of electricity, natural gas, LPG and water usage data for TAFE NSW - Illawarra Institute, in addition to waste data. TAFE NSW - Illawarra Institute has not reported implementing any energy efficiency projects.

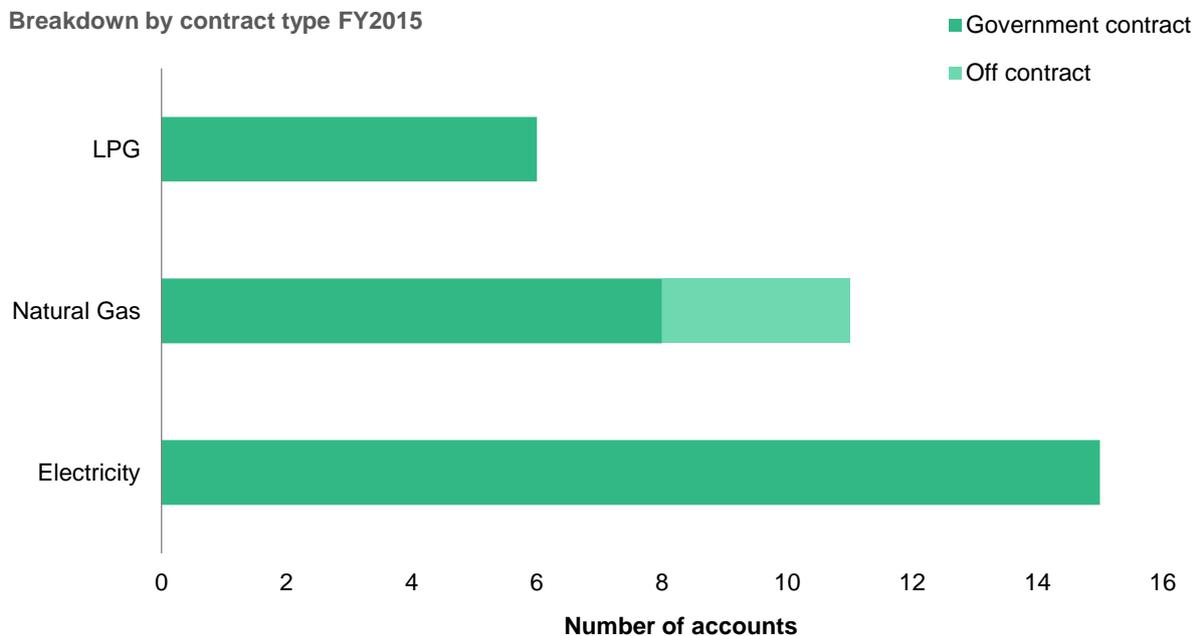
Total usage by resource type

FY	Electricity		Natural Gas		LPG		Water		Waste ¹	
	kWh	\$	MJ	\$	L	\$	kL	\$	-	\$
2012	7,987,032	1,501,923	0	0	55,339	31,942	0	0	0	0
2013	7,737,556	1,722,494	5,130,833	92,690	42,191	28,090	0	0	0	0
2014	7,363,782	1,606,763	5,786,037	111,162	46,417	40,295	3,390	21,577	0	0
2015	7,074,461	1,354,195	7,560,663	158,624	39,079	23,198	12,962	97,332	See Waste	0

Contract types

Depending on total consumption, agencies have the option to enter into government-held contracts for electricity, natural gas and LPG. The chart below shows the breakdown of energy resources by contract type.

Breakdown by contract type FY2015



27 per cent of your natural gas accounts are off contract.

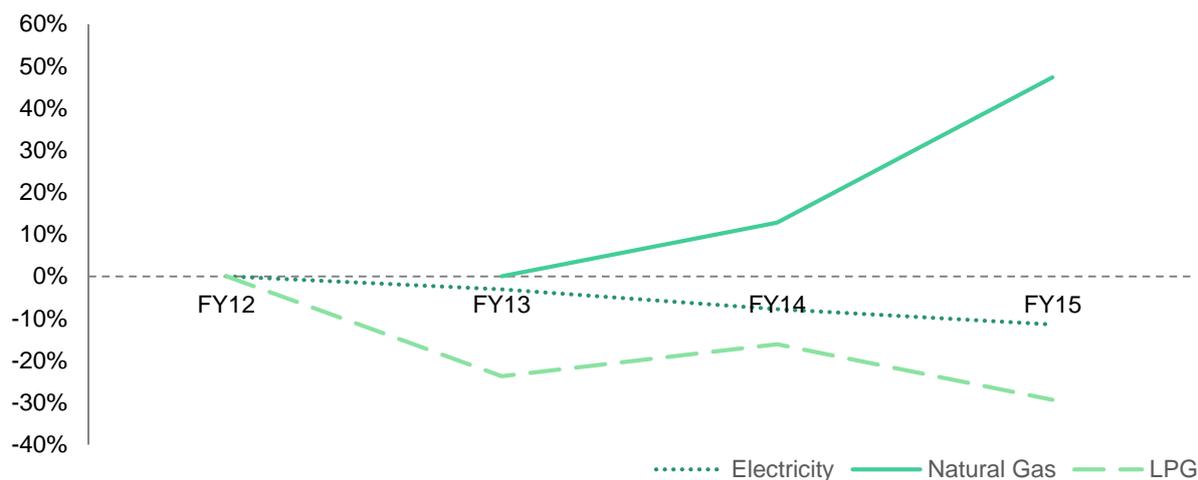
¹ For breakdown of individual waste streams, please see the [Waste](#) section.

Energy and water

TAFE NSW - Illawarra Institute consumes **electricity, natural gas, LPG** and **water**. During FY15, **six per cent GreenPower** was purchased across all sites.

The graph below shows the variance of TAFE NSW - Illawarra Institute’s electricity and LPG usage over the past four years, compared to FY12; and natural gas usage over the past three years, compared to FY13. Insufficient data was available for water.

Resource use per cent change from FY12



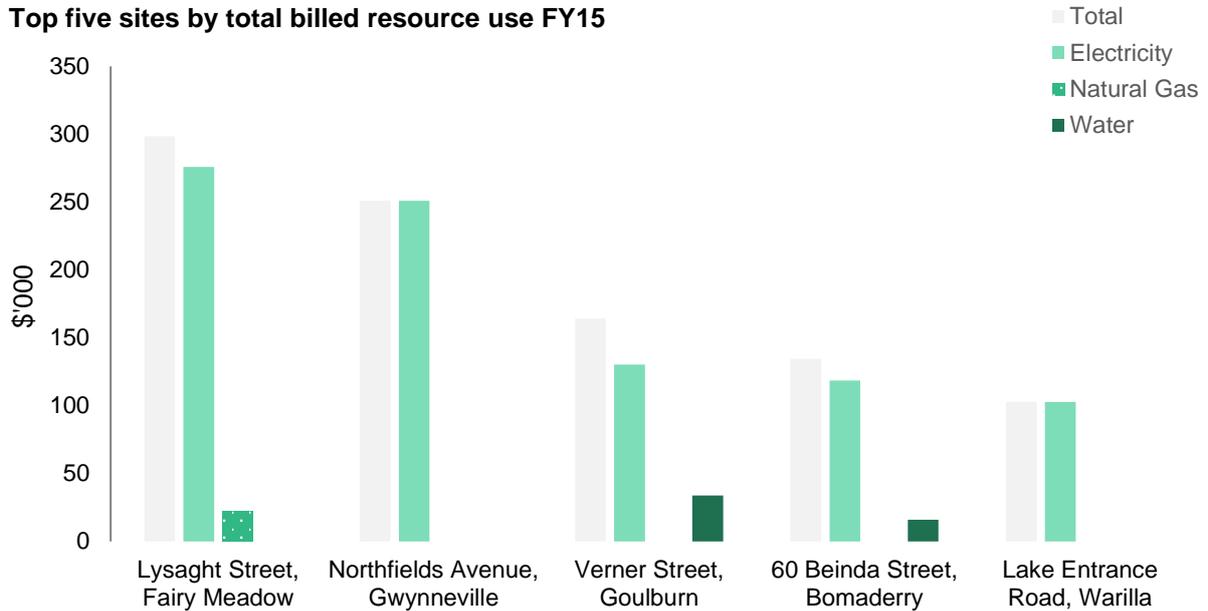
Top 10 sites by total billed resource use

The table below presents the total billed resource use, including charges from energy and water consumption, for FY15. The chart shows the per cent of energy and water billed at each site.

Site address	Total billed resource use (FY15)		0%	20%	40%	60%	80%	100%
	\$	% of agency total						
Lysaght Street, Fairy Meadow	298,630	18%						
Northfields Avenue, Gwynneville	251,102	15%						
Verner Street, Goulburn	164,147	10%						
60 Beinda Street, Bomaderry	134,468	8%						
Lake Entrance Road, Warilla	102,773	6%						
36 Gladstone Avenue, Wollongong	89,707	5%						
Princes Highway, Moruya	76,623	5%						
66 Commissioner Street, Cooma	75,444	5%						
Kirkham Street, Moss Vale	66,373	4%						
Barrack Street, Bega	65,860	4%						
Total	1,325,126	81%						

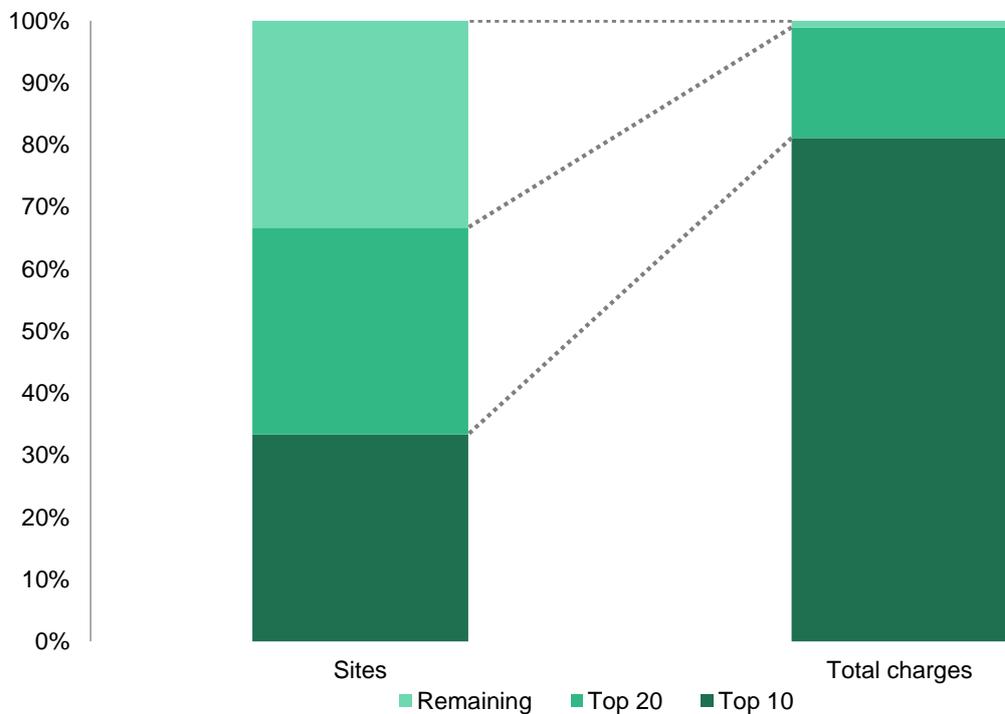
Top five sites by total billed resource use

Top five sites by total billed resource use FY15



Distribution of billed resource use across all sites

Distribution of billed resource use across all sites FY15



Your top 10 sites account for 81 per cent of your total resource use charges.

Energy efficiency projects

TAFE NSW - Illawarra Institute has not reported implementing any energy efficiency projects.

Projects with OEH support

Site name	% billed energy use ²	Financial Year	Project type
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None

Internal energy efficiency projects

These are projects implemented by TAFE NSW - Illawarra Institute which have not been funded or supported by OEH.

Site name	% billed energy use ²	Financial Year	Project type
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None

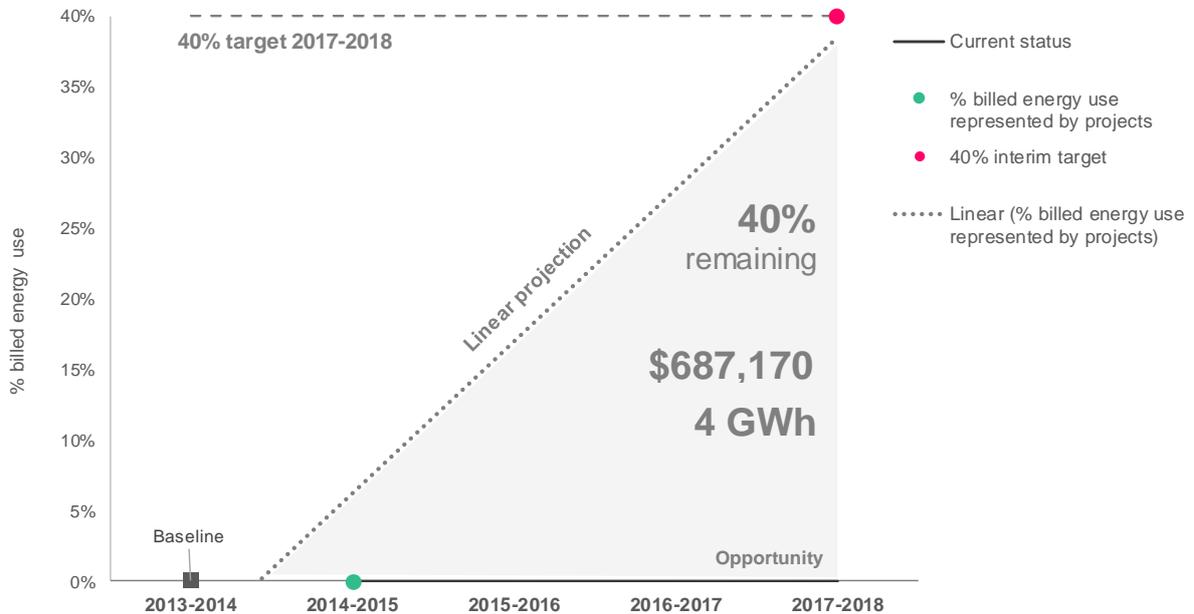
² This is the total billed energy use for the site as a percentage of the total billed energy use within TAFE NSW - Illawarra Institute.

Progress towards 40 per cent target

TAFE NSW - Illawarra Institute should aim to implement energy efficiency projects at sites representing 40 per cent of its 2013-2014 baseline billed energy use for electricity and gas by June 2018. This target aligns with the GREP measure E1 40 per cent interim cluster target.

40 per cent agency target: \$687k

TAFE NSW - Illawarra Institute has **40 per cent** remaining in order to reach the suggested 40 per cent target. This opportunity is identified in the chart below.



Waste

TAFE NSW - Illawarra Institute chose the following waste stream for FY15; **general waste**. Expenditure for general waste was not reported.

Top waste streams FY15

Waste Stream	Quantity	Unit
General waste	309	Tonnes
General waste	2,122	Litres
General waste	1,029,600	Cubic metres

take action today

Reduce your waste by taking the following three simple actions:

- 1 Initiatives to reduce general waste**
Move to a centralised garbage bin system, reduce the size of waste bins and increase the size of recycling bins, offer recycling services, or run programs that educate and motivate staff around reducing waste.
- 2 Determine what materials are in your general waste**
Carry out a waste audit or visual inspection to determine what materials are in your general waste. Use the information from the audit to target recycling or avoidance campaigns.
- 3 Address waste at the source**
Waste begins at the source, not in the bin. If you reduce what you use, this also reduces what ends up in the bin. For example, review your stationery requirements, the use of security paper bins or adopt a low waste purchasing policy that takes packaging into consideration.

Annual Statement of Compliance

E2: Minimum NABERS Energy ratings for offices and data centres

Not applicable.

E3: Minimum standards for new electrical appliances and equipment

Unknown.

E4: Minimum standards for new buildings

The only new building in 2014/15 was at Cooma Campus, which was designed and built to include sustainability features.

E5: Identify and enable solar leasing opportunities

Site suitability for solar PV has been conducted with OEH for the Queanbeyan TAFE Campus in early 2015. We are waiting for OEH to advise the Institute of the next step towards potentially installing solar PV on this campus under a solar leasing arrangement.

E6: Minimum fuel efficiency standards for new light vehicles

Unknown.

E7: Purchase 6% Green Power

The Institute comprises 14 campuses, of which 12 purchase electricity from the 777 Contract and two purchase electricity from the 776 Contract. These contracts include the purchase of 6% GreenPower; therefore, the Institute is currently buying 6% GreenPower.

W2: Minimum NABERS Water ratings for office buildings

Not applicable.

W3: Minimum standards for new water-using appliances

The only new building in 2014/15 was at Cooma which was fitted with water efficient tapware and toilets.

A1: Air emissions standards for mobile non-road diesel plant and equipment

Not applicable.

A2: Low-VOC surface coatings

Unknown.

Beyond compliance

Energy

TAFE NSW - Illawarra Institute conducted Section Sustainability Audits to evaluate sustainable work practices including energy savings.

Water

A large underground water leak at Wollongong TAFE Campus was repaired in 2014/15, resulting in a reduction of water use.

Waste

TAFE NSW - Illawarra Institute conducted a Waste Analysis for the Northern District to identify opportunities for bin consolidation and costs savings to invest in extra recycling infrastructure.

Other

TAFE NSW - Illawarra Institute is a member of Sustainability Advantage. In early 2015, the institute achieved Gold Recognition for the work done in sustainability.

Act now for the future.

The Office of Environment and Heritage's Sustainable Government team can help your agency implement resource efficiency projects to save you money and resources.

The team works with you to help you achieve the E1 target. With our energy efficiency specialists, you can identify, plan and deliver projects that meet your needs and goals. We can provide access to:

- treasury finance as a repayable advance
- a panel of approved energy service companies to simplify procurement
- energy performance contracting that guarantees savings and low project risk.

We can also provide support and advice on resource efficiency in energy, water, waste and clean air. This could include helping you undertake pilot projects, facilitating action at a cluster level, helping you to negotiate contracts to embed resource efficiency considerations or profiling your successful projects.

Save money, resources and time.

We worked with a hospital to install sub-metering to monitor resource usage and identify opportunities to improve productivity. An energy performance contract was negotiated that guaranteed savings at least equal to the total projected cost of the project. The current projected savings over the five-year contract will total over \$800,000, *more than double the total cost of the project*. The savings will go to funding more core services at the hospital.

Small actions. Big impact.

A TAFE campus used a desktop audit from data supplied by its contractor and undertook visual inspections of bins to evaluate waste costs. As a result, the TAFE saved approximately 40 per cent on its waste costs by resizing bins and adjusting collection frequency.

Government contracts

To learn more about moving your sites onto a government-held energy or gas contract visit ProcurePoint.

W: www.procurepoint.nsw.gov.au

We're here to help

If you are interested in how we can assist you, please get in touch.

E: government@environment.nsw.gov.au

Appendix A

List of entities included in the report

TAFE NSW - Illawarra Institute

List of entities included in the cluster

Department of Industry, Skills and Regional Development

Office of Coal Seam Gas

Department of Primary Industries

Resources and Energy

Local Land Services

Agriculture NSW

Office of Sustainable Agriculture and Food Security

Biosecurity NSW

Fisheries NSW

Food Authority, NSW

Land and Natural Resources

Water, NSW Office of

Energy

Mine Safety Performance

Mineral Resources

Border Rivers-Gwydir CMA

Northern Rivers CMA

Central West CMA

Namoi CMA

Hunter-Central Rivers CMA

Hawkesbury-Nepean CMA

Sydney Metro CMA

Lachlan CMA

Murrumbidgee CMA

Lower Murray-Darling CMA

Murray CMA

Western CMA

Southern Rivers CMA

Screen NSW

Rural Assistance Authority, NSW

NSW Crown Lands

Dams Safety Committee, NSW

TAFE and Community Education

TAFE NSW - Hunter Institute

TAFE NSW - Illawarra Institute

TAFE NSW - New England Institute

TAFE NSW - North Coast Institute

TAFE NSW - Northern Sydney Institute

TAFE NSW - Riverina Institute

TAFE NSW - South Western Sydney Institute

TAFE NSW - Sydney Institute

TAFE NSW - Western Institute

TAFE NSW - Western Sydney Institute

Appendix B

Methodology

This report presents data from government-held contracts combined with internally sourced data, where provided by agencies.

All data has been annualised to cover 12 months for monthly billing cycles, and 365 days for quarterly billing cycles.

All expenditure figures include both usage and service charges and exclude GST.

Cluster 40 per cent target

The cluster 40 per cent target is based on the total billed energy use (\$) for electricity and natural gas data from FY14 (1 July 2013 – 30 June 2014).

Data for all sites belonging to agencies classified as General Government Sector within a cluster are included in the target.

The cluster classification used in this report is for FY16, effective 1 July 2015.

Access to raw data

If you would like to obtain the raw resource use data for your agency, please contact:

Office of Environment and Heritage

Sustainable Government Team

E: government@environment.nsw.gov.au