



Government Resource Efficiency Policy

Agency Report

TAFE NSW - New England Institute

2014 - 2015

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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 - New England Institute. A list of entities included in this report is available in [Appendix A](#).

TAFE NSW - New England 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

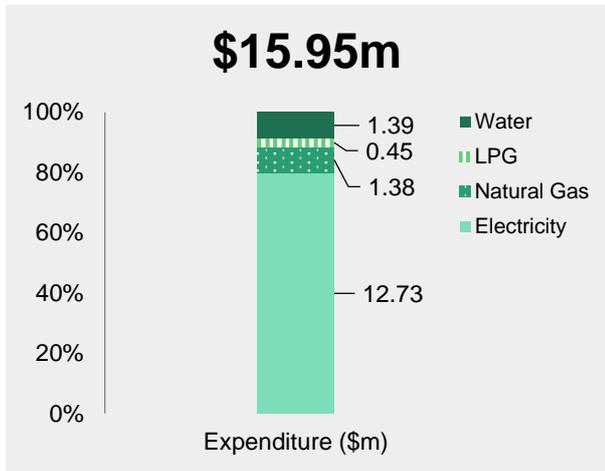
The Office of Environment and Heritage (OEH) has compiled this report in good faith, exercising all due care and attention. No representation is made about the accuracy, completeness or suitability of the information in this publication for any particular purpose. OEH shall not be liable for any damage 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*

\$5.77m

This target uses baseline data from FY14

* billed energy use for electricity and gas.

Electricity accounted for 80 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

18

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*

48

*sites are defined as unique addresses

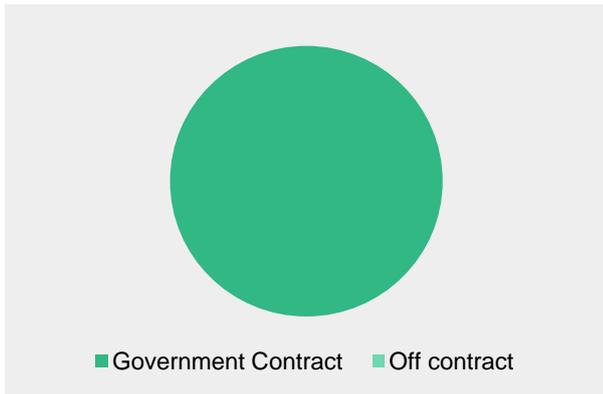
FY15 total expenditure (resources)

\$604k

4% increase from FY14

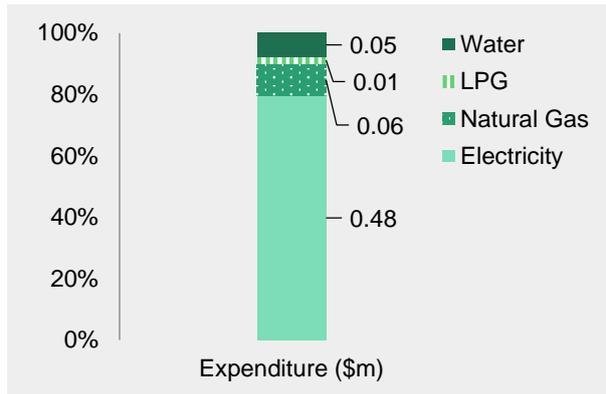
Note: This figure includes electricity, gas and water. **Waste is not included in this figure.**

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 – New England Institute

40% of total billed energy use*

\$204k

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 - New England Institute, in addition to waste data. TAFE NSW - New England Institute has not reported implementing any energy efficiency projects.

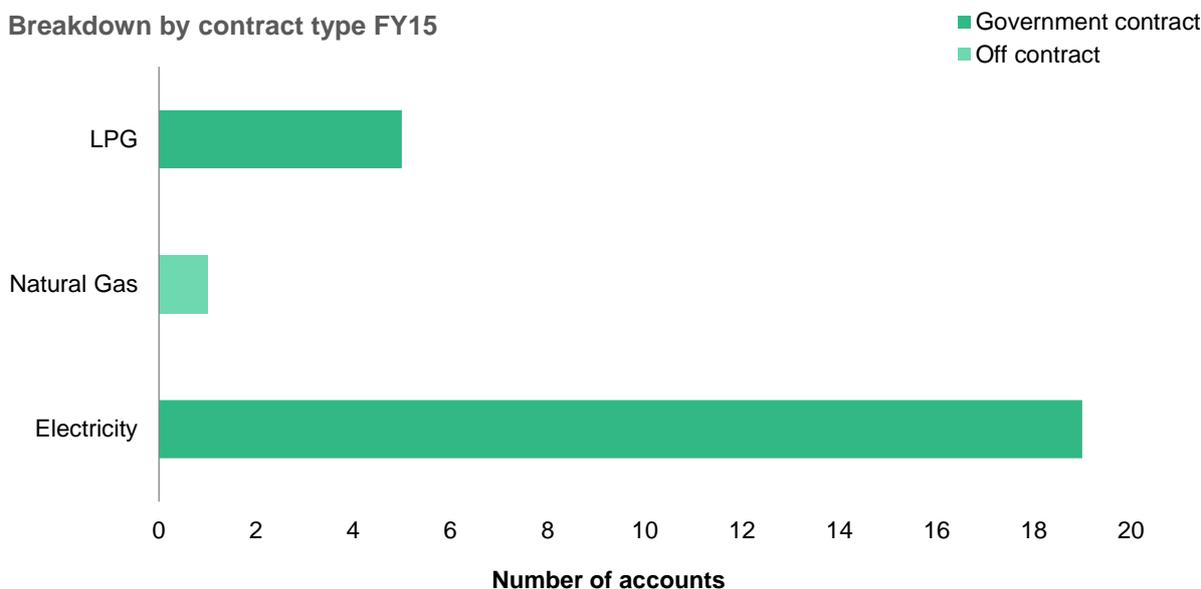
Total usage by resource type

FY	Electricity		Natural Gas		LPG		Water		Waste ¹	
	kWh	\$	MJ	\$	L	\$	kL	\$	t	\$
2012	1,722,512	455,865	246,870	5,600	132,119	75,472	15,905	33,846	0	0
2013	1,946,858	643,025	1,256,329	43,338	41,134	26,241	25,600	54,044	0	0
2014	1,514,593	471,534	1,580,596	38,312	23,339	20,849	23,409	52,514	0	0
2015	1,681,167	479,904	1,990,176	63,835	21,780	13,417	23,460	46,952	226	14,039

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 FY15



All of your natural gas accounts are off contract.

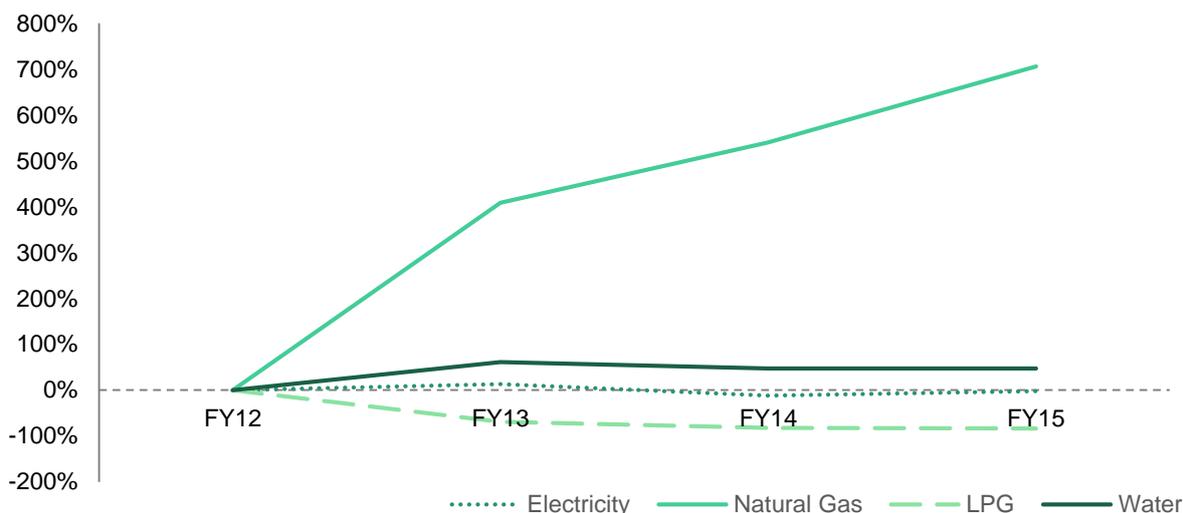
¹ For breakdown of individual waste streams, please see the [Waste](#) section.

Energy and water

TAFE NSW - New England 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 - New England Institute's energy and water usage over the past four years, compared to FY12.

Resource use per cent change from FY12



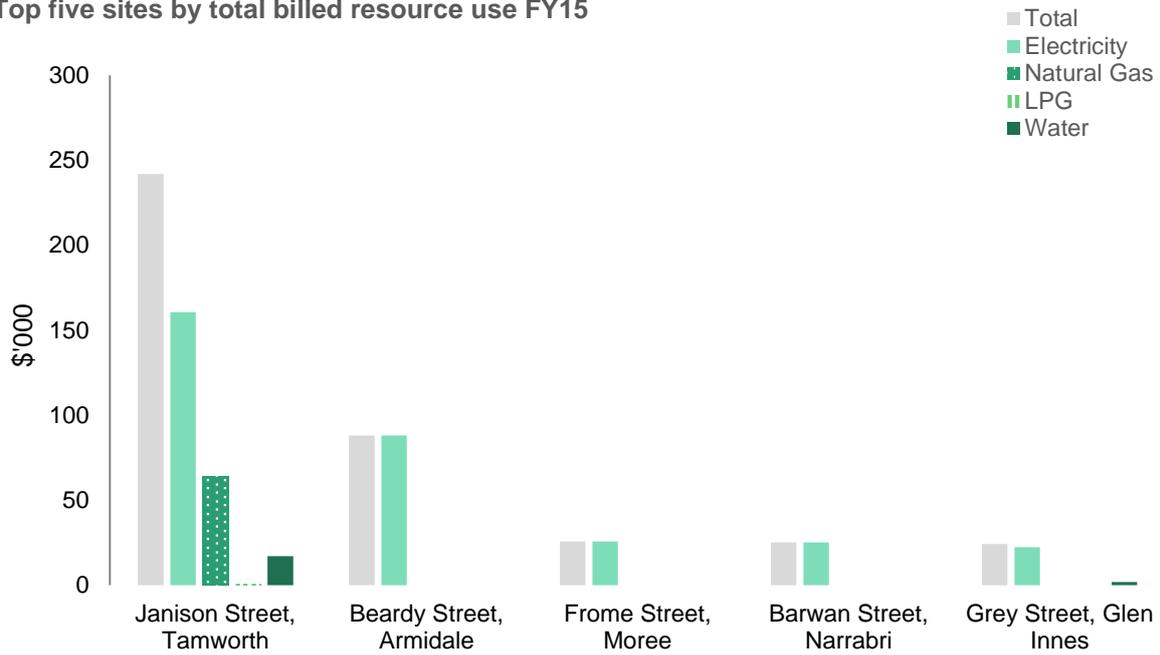
Top 10 sites by total billed resource use

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						
Janison Street, Tamworth	241,884	40%	[Stacked bar chart showing 40% total resource use]					
Beardy Street, Armidale	88,128	15%	[Stacked bar chart showing 15% total resource use]					
Frome Street, Moree	25,729	4%	[Stacked bar chart showing 4% total resource use]					
Barwan Street, Narrabri	25,148	4%	[Stacked bar chart showing 4% total resource use]					
Grey Street, Glen Innes	24,191	4%	[Stacked bar chart showing 4% total resource use]					
Evans Street, Inverell	22,611	4%	[Stacked bar chart showing 4% total resource use]					
Hunter Street, Gunnedah	21,838	4%	[Stacked bar chart showing 4% total resource use]					
South Street, Boggabilla	17,961	3%	[Stacked bar chart showing 3% total resource use]					
Boggabilla Road, Moree	15,866	3%	[Stacked bar chart showing 3% total resource use]					
Robertson Street, Coonabarabran	15,461	3%	[Stacked bar chart showing 3% total resource use]					
Total	498,819	83%	[Legend: Electricity (light green), Natural Gas (dark green), LPG (vertical lines), Water (dark blue)]					

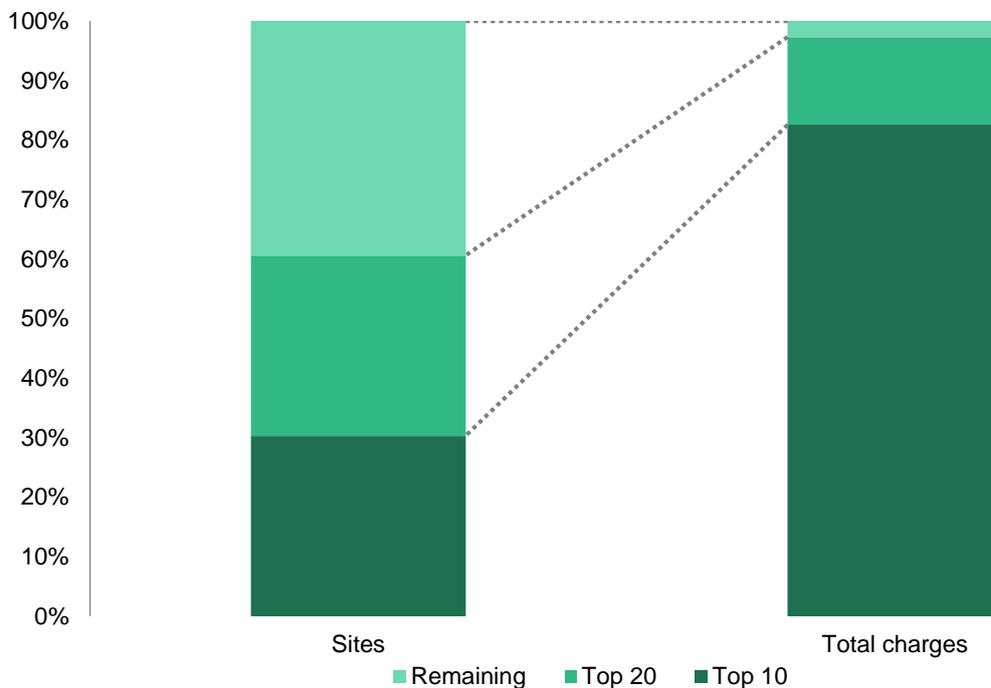
Top five sites by total billed resource use

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 20 sites account for 97 per cent of your total resource use charges.

Energy efficiency projects

TAFE NSW - New England 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 - New England 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

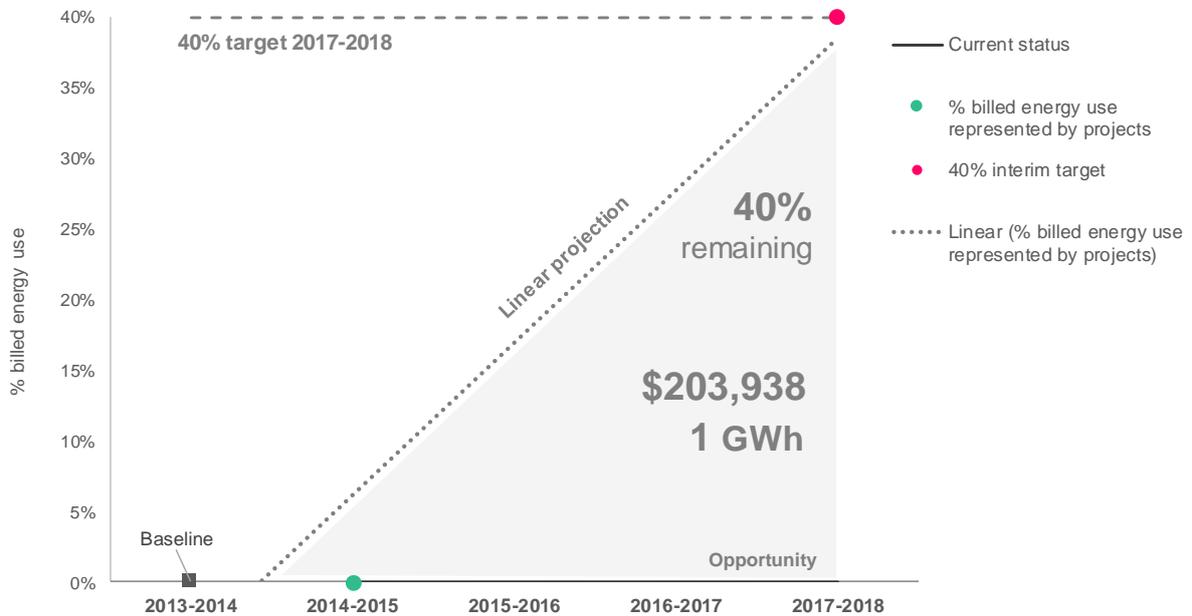
² This is the total billed energy use for the site as a percentage of the total billed energy use within TAFE NSW - New England Institute.

Progress towards 40 per cent target

TAFE NSW - New England 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: \$204k

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

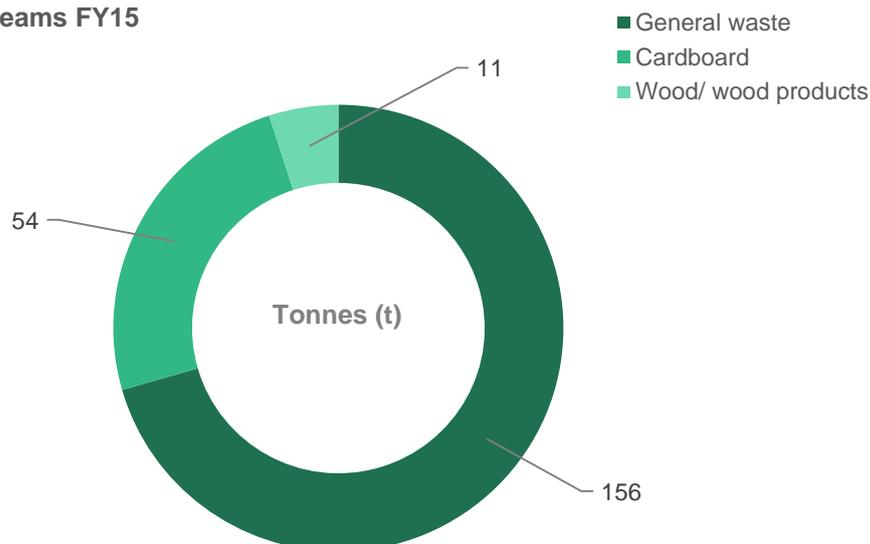


Waste

TAFE NSW - New England Institute chose the following top three waste stream for FY15; **general waste, cardboard** and **wood/wood products**. Expenditure for each waste stream was not reported.

General waste was identified as the largest waste stream, by mass.

Top three waste streams FY15



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

TNE will establish an initial project to determine buildings that are >2000m². TNE will assess current NABERS Energy ratings of those buildings and compare with peers by end June 2016. TNE will develop Energy and Water Management Strategies for relevant buildings by end October 2016, and regularly monitor and report energy and water usage. TNE will develop a comprehensive Procurement Strategy and a TNE Waste Management Strategy for relevant buildings by end October 2016, and regularly monitor and report waste. TNE will implement strategies by March 2017 and review strategies annually.

TAFE New England is committed to reducing the carbon footprint of our data centres. This is being achieved through direct action across a number of fronts:

1. Reduction in the numbers of physical devices. TNE has continued reducing the number of physical servers in our data centres. Through the use of server hosting technology we have reduced the number of physical devices in our main data centre drastically. Our regional campuses have also seen a reduction in physical server numbers from 3 to 1 over the last 5 years.
2. TNE are investigating the centralisation of data services to either our main data centre or to cloud based service providers. This will drive down the numbers of physical servers in our remote campuses with a corresponding reduction in the requirement for environmental control (air conditioning etc.) at those sites.

E3: Minimum standards for new electrical appliances and equipment

All appliances and equipment purchased meet the minimum standards for the year of manufacture for applicable equipment.

E4: Minimum standards for new buildings

New buildings are designed to achieve environmental sustainability design principles and compliance with local government council regulations which state the requirement for ESD principles including water tanks, insulation, water saving taps etc. No new buildings are planned in the next 12 months.

E5: Identify and enable solar leasing opportunities

TNE has actively pursued installation of solar across the institute over the past 5 years through capital works. New opportunities are being identified as funding becomes available.

E6: Minimum fuel efficiency standards for new light vehicles

All light vehicles are purchased through State Fleet and therefore comply with the minimum fuel efficiency standards.

E7: Purchase 6% GreenPower

TNE purchases 6% GreenPower.

W2: Minimum NABERS Water ratings for office buildings

Modern education facilities are constructed to minimise water consumption while achieving a functional healthy environment. Appliances and fixtures, such as flow reduced shower heads and taps, dual flush cisterns and vandal proof external taps, are used to minimise water consumption. If any upgrading of facilities is carried out, the same standards are applied to ensure similar fixtures and fittings are used. Maintenance of facilities is also vital to ensure consumption is minimised. Leaking or faulty taps, drinking fountains, toilet and cisterns are repaired to working order within 24 hours of receiving notice.

W3: Minimum standards for new water-using appliances

All new water-using appliances meet the average WELS star rating as specified in the NSW Government Resource Efficiency Policy for the type of product for the year of manufacture for applicable equipment.

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

All mobile non-road diesel plant equipment meets the emission standards for the year of manufacture for applicable equipment. Any new mobile non-road diesel plant or equipment purchased between January 2015 and 31 December 2017 will adhere to the minimum performance standards as outlined in the NSW Government Resource Efficiency Policy.

A2: Low-VOC surface coatings

TNE will update standard contract specifications to include performance specifications prepared by APAS for sub-contractors undertaking work that requires the use of general purpose surface coating.

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 - New England 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