

Education Services Australia Limited

ENVIRONMENT REPORT

2015-16



Education
Services
Australia

Education Services Australia Limited
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As used in this Environment Report, 'Education Services Australia' means Education Services Australia Limited.

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BACKGROUND

Education Services Australia is committed to implementing policies and practices to support environmental sustainability. This is a responsible and ethical course for a modern organisation.

In taking action on environment issues, Education Services Australia:

- contributes to Australia's efforts to reduce environmental impact
- meets expectations of stakeholders, clients and staff
- maximises efficiency and reduces costs
- improves its ability to attract and retain the best talent
- adds credibility to its activities within sustainability education
- strengthens its reputation as a socially responsible supplier of education services.

Education Services Australia's policy is to publish an annual Environment Report that provides a summary of activities undertaken in the previous financial year and of commitments for the current financial year. This is the sixth Environment Report.

Environment policy

Education Services Australia's Environment Policy provides direction for the company's environment program and public reporting, which should include:

- an emissions inventory
- achievements to date
- details on purchased offsets
- information on external assurance
- identification of future opportunities
- targets for the next financial year.

The policy is provided at Appendix 1.

National Carbon Offset Standard (NCOS) Accreditation

In March 2012, Education Services Australia was accredited as a carbon-neutral company under the Australian Government's National Carbon Offset Standard (NCOS) scheme. This accreditation is being maintained on an ongoing basis. Details of the company's accreditation can be found in the National Carbon Offset Standard section of the Department of Environment and Energy NCOS webpage.

Education Services Australia is one of 28 companies to have achieved NCOS accreditation in Australia.



Environment Targets 2015-16

Education Services Australia's environment targets for the 2015-16 year was to maintain emissions per FTE at 2014-15 levels.

The company was not successful in achieving its 2015-16 target. The result was an increase in emission per FTE of 1.06 CO₂-e (tonnes). The increase was mostly due to a decrease in FTE, which consequently increases the overhead emission per FTE from fixed emissions sources such as electricity, combined with an increase in actual travel emissions from the prior year.

EMISSIONS INVENTORY

The Education Services Australia emissions inventory has been based on the Greenhouse Gas Protocol, a Corporate Accounting and Reporting Standard revised edition March 2004 (GHG Protocol). This protocol is the most accepted international standard for the preparation of carbon inventories and is an initiative of the World Resources Institute and the World Business Council for Sustainable Development.

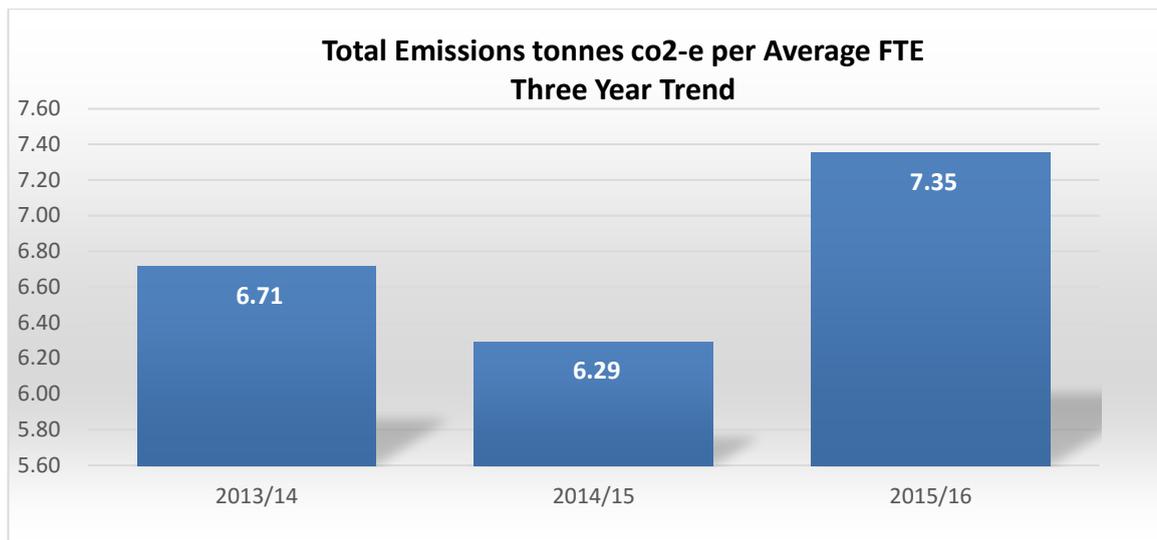
Table 1 provides a detailed emissions inventory that provides emission sources, consumption amounts CO2-e (tonnes) and proportion % of total inventory.

Table 1: Detailed emission inventory 2015-16

Emission Source	Consumption Units	Consumption	CO2-e (tonnes)	Proportion of total inventory
Direct Emissions - Scope 1				
Refrigerant Leakage	NA	NA	1	0.1742%
Subtotal - Direct emissions Scope1:			1	0.174%
Indirect Emissions - Scope 2				
Purchased Electricity - tenant's share of base building use	kWh	241,497	270	31.50%
Purchased Electricity excluding base building	kWh	202,301	227	26.38%
Staff Taxi Travel (indirect)	kL of LPG	3	5	0.59%
Subtotal - Indirect emissions Scope 2:			502	58.47%
Indirect Emissions - Scope 3				
Staff Air Travel	km	636,711	196	22.81%
Emissions from fuel extraction & T&D line losses for purchased electricity	kWh	202,301	26	3.06%
Emissions from fuel extraction & T&D line losses for tenant's share of base building electricity	kWh	241,497	31	3.66%
Publications Paper	kg	-	-	0.00%
Natural Gas used on site by landlord as part of base building services	GJ	590	30	3.53%
Freight	tonnes x km	-	-	0.00%
General commercial and industrial solid waste	tonnes	28	40	4.64%
Staff Taxi Travel (direct)	kL of LPG	3	0	0.05%
Landlord supplied reticulated water use	kL	1,748	2	0.28%
Emissions from fuel extraction for natural gas used on site by landlord	GJ	590	2	0.27%
Office Paper	reams	614	2	0.23%
Commingled Recyclable Waste	tonnes	10	13	1.57%
Recycled Paper Waste	tonnes	8	11	1.26%
Subtotal - Indirect emissions Scope 3:			355	41.36%
Total Emissions			859	100%
Reduction Measures				
Offsets Purchases			(1,000)	
Total Net Emissions			(141)	

Figure 1 provides a summary of the company's emissions per FTE measured in tonnes of carbon dioxide equivalents (t CO2-e) over a three year period.

Figure 1. Emission tonnes per average FTE three year trend



Education Services Australia is demand driven, responding to the needs of the Australian Ministers with responsibility for education. As such, its business activities may fluctuate significantly from year to year. To enable longitudinal comparisons, emission inventory results are reported as both absolute and intensity measures. Methodologies are outlined in Appendices 2 and 3.

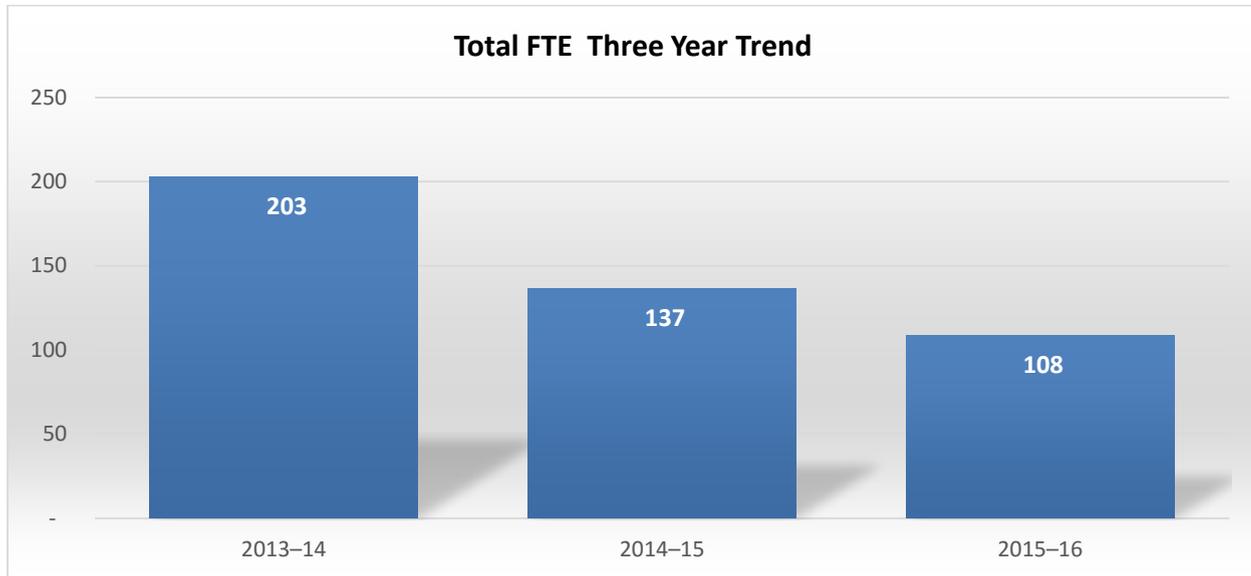
The summary of the inventory results from 2013-14 to current year 2015-16 based on absolute measures is provided in Table 2.

Table 2: Emissions inventory three year summary 2014-2016

	2013/14	2014/15	2015/16
Emission Source	CO2-e (tonnes)		
Electricity	833	631	555
Staff Air Travel	361	163	196
Waste	22	55	64
Publications/Paper	28	13	-
Natural Gas	42	31	33
Staff Taxi Travel	11	6	5
Freight	29	7	-
Water use	6	4	2
Office Paper	2	2	2
Refrigerant Leakage	1	1	1
Total Emissions	1,336	913	859
Offsets Measures			
Offsets Purchased	(1,336)	(1,000)	(1,000)
Total NET Emissions	-	(87)	(228)

A single intensity measure using full-time equivalent (FTE) staffing is based on the staffing levels at Figure 2, which shows that Education Services Australia's average FTE decreased during 2015-16 by 21%.

Figure 2: FTE staffing 2013-2016



Care needs to be exercised when reviewing an intensity measure using FTE. Electricity consumption and emissions do not increase or decrease in a direct linear fashion to changes in FTE, and changes in results can occur through movements in FTE alone.

Table 3: Emissions inventory summary 2013-15 by staffing (FTE)

	2013/14	2014/15	2015/16
Emissions Source	CO₂-e (tonnes) per FTE		
Electricity	4.11	4.61	5.12
Staff Air Travel	1.90	1.19	1.81
Publications Paper	0.14	0.10	-
Natural Gas	0.21	0.23	0.30
Freight	0.15	0.05	-
Waste	0.11	0.03	0.02
Staff Taxi Travel	0.06	0.04	0.05
Water use	0.03	0.03	0.02
Office Paper	0.01	0.02	0.02
Refrigerant Leakage	0.00	0.01	0.01
Total NET Emissions	6.71	6.29	7.35

OFFSETS

Education Services Australia purchases carbon offsets through the Carbon Trade Exchange that are issued in accordance with Verified Carbon Standard (VCS) protocols, which prescribe a rigorous carbon offset project registration and verification process used to ensure the originating offset project contributes to real and additional emission reductions. The issuance and ownership of these Verified Carbon Units (VCUs) has been tracked in VCS Registries using unique serial numbers to prevent double counting or double selling.

	Emission consumption	Offsets purchased	Project Name	Serial number
Opening balance	535	0	Mongolia Chifeng Gaofeng Wind Power Project	2188-89507614-89511113-VCU-008-APX- CN-1-813-01012009-31122009-0.
Year 2013-14	-1336	801	Guohua Wulate Zhongqi Chuanjing Phase II Wind Farm Project	3310-148791211-148792011-VCU-003-APX-CN-1-1200-01012010-31122010-0
Year 2014-15	-913	1000	Hebei Chongli Qingsanying 49.3MW Wind Farm Project	738-32915440-32916439-VCU-008-APX-CN-1-394-14082008-22022009-0
Year 2015-16	-859	1000	Wind Poer project at Jaibhim by SILL	4549-189376272-189377271-VCU-048-MER-IN-1-1525-11032011-31122011-0
Closing balance	228			

EXTERNAL ASSURANCE

NCOS accreditation requires third-party verification of the emissions inventory on a biennial basis. The 2010–11, 2012-13 emissions inventory and the 2014-15 inventory were externally audited as part of the NCOS process.

The 2011–12, 2013-14 & 2015-16 submission did not require verification under the NCOS standard.

ACHIEVEMENTS

Achievements since 2011 are as follows.

Retrofit of Office Lighting

All office lighting was upgraded to modern T5 fittings during 2011-12. Twelve percent of our light fittings were removed in over lit areas. In addition, all halogen down lights were replaced with more efficient lamps.

Automated Timer Switches

Automated timer switches were installed on the two main floors of the building. Based on previous physical audits of how often lighting is left on overnight and at weekends, it was estimated that this implementation would save seven tonnes co₂-e per annum.

Staff keep cups

To mark NCOS accreditation, staff was provided with Education Services Australia branded keep cups, the most popular re-useable plastic coffee cup in Australia. This initiative saves on wasted paper cups and promotes the company's environmental successes in the community and among staff.

Replacement of ageing equipment

Ninety desktop computers, 20 laptops, 50 monitors and four multifunction printers/photocopiers were replaced with energy-efficient models that consume less electricity. Actual measurements of performance for the new equipment show the following average reductions in energy consumption: desktop computers 55 per cent, laptops 28 per cent, monitors 73 per cent and multifunction printers/photocopiers 32 per cent.

Redundant computer equipment were passed to a company that reconditions them and either passes the equipment to community groups or recycles them.

Follow-me printing facilities

The new multifunction printers include a 'follow-me' user function, which only releases print jobs when the user swipes their office security pass across the printer recognition pad.

Paper recycling

All waste office paper is recycled.

Printer cartridge recycling

All print cartridges are recycled.

Video-conferencing facilities

Video-conferencing equipment was introduced into meeting rooms in the Melbourne office.

This provides staff with the opportunity to reduce the number of flights they undertake to meet with stakeholders both nationally and internationally.

Office-based co-mingled recycling

The offices in Collins St Melbourne were first occupied in May 2008. At that time there was no mechanism to recycle co-mingled waste in the building. The company created a tenant's cooperative and negotiated with the landlord to introduce co-mingled recycling, which has been in operation since July 2009.

Email distribution of Customer Statements

Customer Statements and collection notices with copy invoices are now emailed to customers. This reduces emissions from paper usage and printing.

Opportunities 2016-17

The introduction of a new Schools Cataloguing Information Service (SCIS) website whereby customers can access their invoices via an online portal will reduce emissions from paper usage

Environment targets 2016–17

Maintain absolute emissions at 2015-16 levels.

A glass ceiling of future opportunities can very easily be reached in an office-based environment. Education Services Australia is now facing this issue and will endeavor to maintain emissions at 2015-16 levels and identify new emissions reduction strategies if possible.

Further information

Requests for further information can be directed by email to Kelly Willis at kelly.willis@esa.edu.au.

APPENDICES

Appendix 1: Education Services Australia Environment Policy

Background

Education Services Australia is committed to implementing policies and practices to minimise its environmental impact and to support environmental sustainability. The company believes this is a responsible and ethical course for a modern organisation. In taking action on environment issues the company will:

- contribute to Australia's efforts to reduce environmental impact
- meet expectations of stakeholders, clients and staff
- maximise efficiency and reduces costs
- improve its ability to attract and retain the best talent
- strengthen its reputation as a socially responsible supplier of education services
- add credibility to its activities within sustainability education.

Scope

This policy applies to all Education Services Australia operations with the exception of the Education Council (formally SCSEEC), which is outside its operational control.

Commitment

This policy commits Education Services Australia to:

- minimise its impact on the environment through reduced greenhouse gas emissions and reduced resource usage
- be carbon neutral
- implement best-practice carbon-management principles
- report a summary of progress in the company's Annual Report
- report in detail in the annual Environment Report
- include environmental education material where possible in its services, recognising that the capacity to do so is dictated by clients' requirements.

Implementation

Implementation to be reported through the Environment Report will include:

- annual greenhouse gas reduction targets
- annual waste, energy and water reduction targets
- an emissions inventory
- progress reports against targets, which should show trends as well as details of methodologies used in measurement
- details of purchased offsets
- details of future opportunities that will give rise to reductions
- progress reports against identified opportunities
- independent external assurance confirmation.

All targets will be time bound and quantified in absolute terms (total emissions and usage) and in intensity terms (reported by a unit of volume, eg per full-time equivalent employee) and will be reported against a baseline-year emissions measurement.

Responsibility

This policy is the responsibility of the Chief Executive Officer. It will be reviewed annually to ensure ongoing relevance.

Appendix 2: Emissions inventory scope

Education Services Australia is a not-for-profit company limited by guarantee. The company has no share capital in issuance and no subsidiaries. It has elected to use the Control method to set Organisational Boundaries. All scope 1 and scope 2 emissions, and the scope 3 emissions required by the National Carbon Offset Standard (NCOS) have been included for company operations. Additional Scope 3 emissions not included in the NCOS that are both material and measureable, such as publications paper and water usage, have been reported.

All Education Services Australia operations are included with the exception of the Education Council (formally SCSEEC). Education Council is part of Education Services Australia's legal structure but is outside the company's operational control.

Appendix 3 : Calculation methodologies and emission factors

Scope	Emission source	Source of activity data	Methodology reference	Energy content factor	Emission factor	Activity data	Unit	t CO ₂ -e
1	Air Conditioning and kitchen fridges (Fridge)	Labels on refrigerators, manuals and supplier information	DEFRA Environmental Reporting Guidelines Option2 GHG reporting update Feb 2014 - pg 87	0.0003	Leakage rate	1,492.79	kg	0.003
1	Air Conditioning and kitchen fridges (AirCon)	Labels on refrigerators, manuals and supplier information	DEFRA Environmental Reporting Guidelines Option2 GHG reporting update Feb 2014 - pg 87	0.0006	Leakage rate	3.52	kg	1.49
2	Purchased Electricity excluding base building use - Victoria	Supplier invoices	EF for purchased electricity per Table 41, pg 67 2015 NGA factors	1.18	kg CO ₂ -e/KWH	202,301.02	KWH	226.58
2	Purchased Electricity tenants share of base buildings use- Victoria	Landlords supplier invoices	EF for purchased electricity per Table 41, pg 67 2015 NGA factors	1.18	kg CO ₂ -e/KWH	1,586,184.51	kWh	270.48
2	Staff Taxi Travel (Indirect)	Supplier invoices	Emissions factor for LPG per NGA factors 2014 Table 40	5	kg CO ₂ -e/GJ	46,910.70	GJ	0.42
3	Staff Taxi Travel (Direct)	Supplier invoices	Emissions factor for LPG per NGA factors 2015 for post-2004 vehicles p 16, Table 4	60.2	kg CO ₂ -e/GJ	46,910.70	GJ	5.06
3	Emissions from fuel extraction & T&D line losses for purchased electricity - Victoria	Supplier invoices	NGA factors 2015, p 65, Table 37	0.15	kg CO ₂ -e/KWH	202,301.02	kWh	26.30
3	Emissions from fuel extraction & T&D line losses for tenants share of base building electricity - Victoria tenants share	Landlords supplier invoices	NGA factors 2015, p 65, Table 37	0.15	kg CO ₂ -e/KWH	1,586,184.51	kWh	31.39
3	Natural Gas used on site by landlord as part of base building services	Landlords supplier invoices	NGA factors for natural gas 2015, p 13, Table 2	51.6	kg CO ₂ -e/GJ	3,878,478.98	GJ	30.35
3	Emissions from fuel extraction of natural gas - Victoria	Landlords supplier invoices	NGA factors 2015, p 65, Table 37	3.9	kg CO ₂ -e/GJ	3,878,478.98	GJ	2.30
3	Reticulated Water Supplied by Landlord as part of base building services	Landlords supplier invoices	EPA Victoria's Greenhouse Inventory Management Plan: 2012/2013	1.36	kg CO ₂ -e/m ³ water	11,484.05	m ³ Water	2.38
3	Staff Air Travel - Domestic <1,000 km	Agent invoices	Emissions provided by Corporate Traveller		kg CO ₂ -e/passenger KM	-	KM	103.66

3	Staff Air Travel - Short Haul Intl 1,000-3,700km economy	Agent invoices	Emissions provided by Corporate Traveller		kg CO2-e/passenger KM	-	KM	74.34
3	Staff Air Travel - Long Haul Int econ >3,700km	Agent invoices	Emissions provided by Corporate Traveller		kg CO2-e/passenger KM	-	KM	17.90
3	General municipal solid waste	Bin volumes	Municipal solid waste from NGA factors 2015, p 73, Table 43	1.2	t CO2-e/tonne waste	39.82	tonne	39.82
3	Recycled paper waste	Bin volumes	Municipal solid waste from NGA factors 2015, p 73, Table 43	1.2	t CO2-e/tonne of recycled paper	10.83	tonne	10.83
3	Recycled waste	Bin volumes	Municipal solid waste from NGA factors 2015, p 73, Table 43	1.2	t CO2-e/tonne of recycled paper	13.49	tonne	13.49
3	Office Paper	Supplier records	EPA Victoria Greenhouse Gas Emissions Factors for Office Copy paper, 2012-2013	1.3	kg CO2-e/kg of paper	1,535.00	kg of paper	2.00
Total gross emissions								858.8