

Education Services Australia Limited

# ENVIRONMENT REPORT

2016-17



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 seventh 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 33 companies to have achieved NCOS accreditation in Australia.



## Environment Targets 2016-17

Education Services Australia's environment targets for the 2016-17 year was to maintain absolute emissions at 2015-16 levels.

The company exceeded its 2016-17 target of maintaining its absolute emissions at 2015-16 levels and achieved a reduction in both its total emissions, as well as its emissions per FTE from the previous year\*.

The result was a decrease in total emissions of 72 CO<sub>2</sub>-e (tonnes) and a decrease in emissions per FTE of 0.38 CO<sub>2</sub>-e (tonnes). The decrease was mostly due to a reduction in ESA's office floor space by 475.8m<sup>2</sup>, reflected mostly in lower emissions from electricity usage.

Decreases in emissions were also achieved in relation to air travel, waste and office paper usage.

\* Following submission of the 2015-16, ESA was required by NCOS to re-calculate its baseline for that year. This was due to it being the first year after the publications unit of the company was closed down resulting in a large reduction in freight costs as well as publications paper and their associated emissions. All figures in this report use the 2015-16 re-calculated baseline.

# 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 CO<sub>2</sub>-e (tonnes) and proportion % of total inventory.

**Table 1: Detailed emission inventory 2016-17**

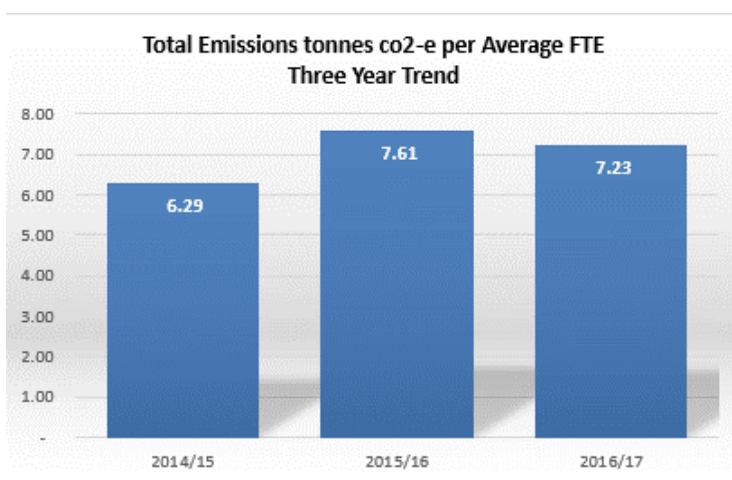
**1 July 2016 - 30 June 2017**

Based on Greenhouse Gas Protocol "A Corporate Accounting and Reporting Standard"

Emission Source	Consumption Units	Consumption	CO <sub>2</sub> -e (tonnes)	Proportion of total inventory
<b>Direct Emissions - Scope 1</b>				
Refrigerant Leakage	NA	NA	1	0.20%
Natural Gas used on site by landlord as part of base building services	GJ	4,256	28	3.74%
<b>Subtotal - Direct emissions Scope 1:</b>			<b>30</b>	<b>3.94%</b>
<b>Indirect Emissions - Scope 2</b>				
Purchased Electricity - excluding base building	kWh	192,294	208	27.57%
Purchased Electricity - tenant's share of base building use	kWh	210,675	228	30.21%
<b>Subtotal - Indirect emissions Scope 2:</b>			<b>435</b>	<b>57.78%</b>
<b>Indirect Emissions - Scope 3</b>				
Emissions from fuel extraction & T&D line losses for purchased electricity	kWh	192,294	19	2.55%
Emissions from fuel extraction & T&D line losses - tenant's share of base building electricity	kWh	210,675	21	2.80%
Staff Taxi Travel	kL of LPG	4	6	0.81%
Emissions from fuel extraction of natural gas	GJ	4,256	2	0.28%
Reticulated Water Supplied by Landlord as part of base building services		2,019	3	0.36%
Staff Air Travel - Domestic <1000 km	km	110,069	23	3.09%
Staff Air Travel - Short haul 1000 - 3,700 km	km	360,964	69	9.17%
Staff Air Travel - Long haul > 3,700 km	km	409,126	87	11.55%
General municipal solid waste	tonne	23	32	4.29%
Recycled paper waste	tonne	8	11	1.44%
Commingled Recyclable Waste	tonne	9	13	1.76%
Office Paper	kg	1,000	1	0.17%
<b>Subtotal - Indirect emissions Scope 3:</b>			<b>288</b>	<b>38.28%</b>
<b>Total Emissions</b>			<b>753</b>	<b>100.00%</b>
<b>Reduction Measures</b>				
Offsets Purchases			(1,000)	
<b>Total Net Emissions</b>			<b>(141)</b>	

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.

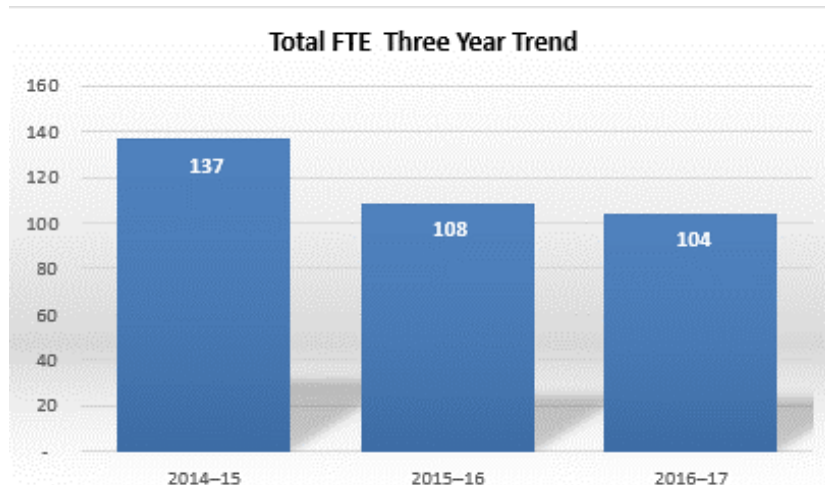
The summary of the inventory results from 2014-15 to current year 2016-17 based on absolute measures is provided in Table 2.

**Table 2: Emissions inventory three year summary 2014-2017**

	2014/15	2015/16	2016/17
Emission Source	CO2-e (tonnes)	CO2-e (tonnes)	CO2-e (tonnes)
Electricity	631	528	476
Staff Air Travel	163	196	179
Waste	55	57	56
Publications/Paper	13	-	-
Natural Gas	31	33	30
Staff Taxi Travel	6	5	6
Freight	7	-	-
Water use	4	2	3
Office Paper	2	2	1
Refrigerant Leakage	1	1	1
<b>Total Emissions</b>	<b>913</b>	<b>825</b>	<b>753</b>
Offsets Measures			
Offsets Purchased	(1,000)	(1,000)	(491)
<b>Total NET Emissions</b>	<b>(87)</b>	<b>(262)</b>	<b>0</b>

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 4%.

**Figure 2: FTE staffing 2014-2017**



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 2014-17 by staffing (FTE)**

	2014/15	2015/16	2016/17
Emissions Source	CO2-e (tonnes) per FTE	CO2-e (tonnes) per FTE	CO2-e (tonnes) per FTE
Electricity	4.61	4.87	4.56
Staff Air Travel	1.19	1.81	1.72
Publications Paper	0.10	-	-
Natural Gas	0.23	0.30	0.29
Freight	0.05	-	-
Waste	0.03	0.53	0.54
Staff Taxi Travel	0.04	0.04	0.06
Water use	0.03	0.02	0.03
Office Paper	0.02	0.02	0.01
Refrigerant Leakage	0.01	0.01	0.01
<b>Total Emissions</b>	<b>6.29</b>	<b>7.61</b>	<b>7.23</b>

## 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	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	851	-1000	Wind Power project at Jaibhim by SILL, India	4549-189376272-189377271-VCU-048-MER-IN-1-1525-11032011-31122011-0
Year 2016-17	729	-600	Protection of a Tasmanian Native Forest project (Project 3: Peter Downie)	2657-116686188-116686787-VCU-016-MER-AU-14-587-01032011-29022012-0
Closing balance		-107		

## EXTERNAL ASSURANCE

To maintain NCOS accreditation, ESA is required to obtain third-party verification of the emissions inventory on a biennial basis. ESA was last re-accredited in 2014-15 and therefore the 2016-17 inventory will be independently audited before submitting to NCOS.



## 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 co<sub>2</sub>-e per annum.

### Energy efficient equipment

Wherever possible, ESA purchases replacement office equipment and kitchen appliances that are energy-efficient.

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

### Follow-me printing facilities

Desktop printers are kept to an absolute minimum. The majority of staff use multifunction printers, with energy saver and 'follow-me' user functions, 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. 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

The introduction of a new online payment portals has significantly reduced emissions from paper usage

### Terracycle Recycling Programs

In 2016-17 at the initiation of staff, ESA commenced participation in the following waste recycling programs run by

Terracycle:

- **Office Supplies Zero Waste Box**-Recycles non-electric supplies, including tape, desk organisers, binders, pens staplers, staples, paper clips, document filers and label sheets.
- **EXPRESSI Coffee** capsules recycling
- **Oral care Recycling**-Recycles toothpaste tubes, toothbrushes, floss containers and outer packaging.
- **Personal Care and beauty packaging**-Includes cosmetics, haircare and skin care packaging.
- **Bausch + Lomb**-recycling of contact lenses and blister packs.

## **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 2017–18**

Maintain emissions per FTE at 2016-17 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 2016-17 levels and identify new emissions reduction strategies if possible.

# 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 Secretariat. The Secretariat 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	Unit	Activity data	Consumption Unit	t CO <sub>2</sub> -e
1	Air Conditioning and kitchen fridges (Fridge)	Labels on refrigerators, manuals and supplier information	DEFRA Environmental Reporting Guidelines: Including mandatory greenhouse gas emissions reporting guidance June 2013, pg 78.	HFC 134a, GWP 1430	0.3% annual leakage rate	N/A	0.82	kg	0.004
1	Air Conditioning and kitchen fridges (AirCon)	Labels on refrigerators, manuals and supplier information	DEFRA Environmental Reporting Guidelines: Including mandatory greenhouse gas emissions reporting guidance June 2013, pg 78	HCFC - 22 (r22), GWP 1810 HCFC410A (R410A), GWP 2087.50	6.0% annual leakage rate	N/A	12.65	kg	1.49
1	Natural Gas used on site by landlord as part of base building services	Landlords supplier invoices	Table 2, pg 13, July 2017 NGA factors for natural gas	39.3 x 10 <sup>3</sup> GJ/m <sup>3</sup>	51.53	kg CO <sub>2</sub> -e/GJ	4,256.43	GJ	28.18
2	Purchased electricity excluding base building use	Supplier invoices	Table 41 pg 71 or Table 5 pg 20, July 2017 NGA factors	N/A	1.08	kg CO <sub>2</sub> -e/KWH	192,293.87	kWh	207.68
2	Purchased Electricity tenants share of base buildings use	Landlords supplier invoices	Table 41 pg 71 or Table 5 pg 20, July 2017 NGA factors	N/A	1.08	kg CO <sub>2</sub> -e/KWH	210,674.60	kWh	227.53
3	Emissions from fuel extraction & T&D line losses for purchased electricity	Supplier invoices	Table 41 pg 71, July 2017 NGA factors	N/A	0.10	kg CO <sub>2</sub> -e/KWH	192,293.87	kWh	19.23
3	Emissions from fuel extraction & T&D line losses for tenants share of base building electricity	Landlords supplier invoices	Table 41 pg 71, July 2017 NGA factors	N/A	0.10	kg CO <sub>2</sub> -e/KWH	210,674.60	kWh	21.07
3	Staff Taxi Travel	Supplier invoices	EPA Victoria's Greenhouse Gas Inventory Management Plan: 2012-13 Update, Appendix C, pg 51 and 56	26.2 G/kL	1.577	t CO <sub>2</sub> -e/kL	3.87	kL of LPG	6.11





