

**Education Services Australia Limited**

# **ENVIRONMENT REPORT**

**2014-15**



Education  
Services  
Australia

Education Services Australia Limited  
ABN 18 007 342 421

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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 fifth 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 the Environment website.

Education Services Australia is one of 22 companies to have achieved NCOS accreditation in Australia.



## Environment Targets 2014-15

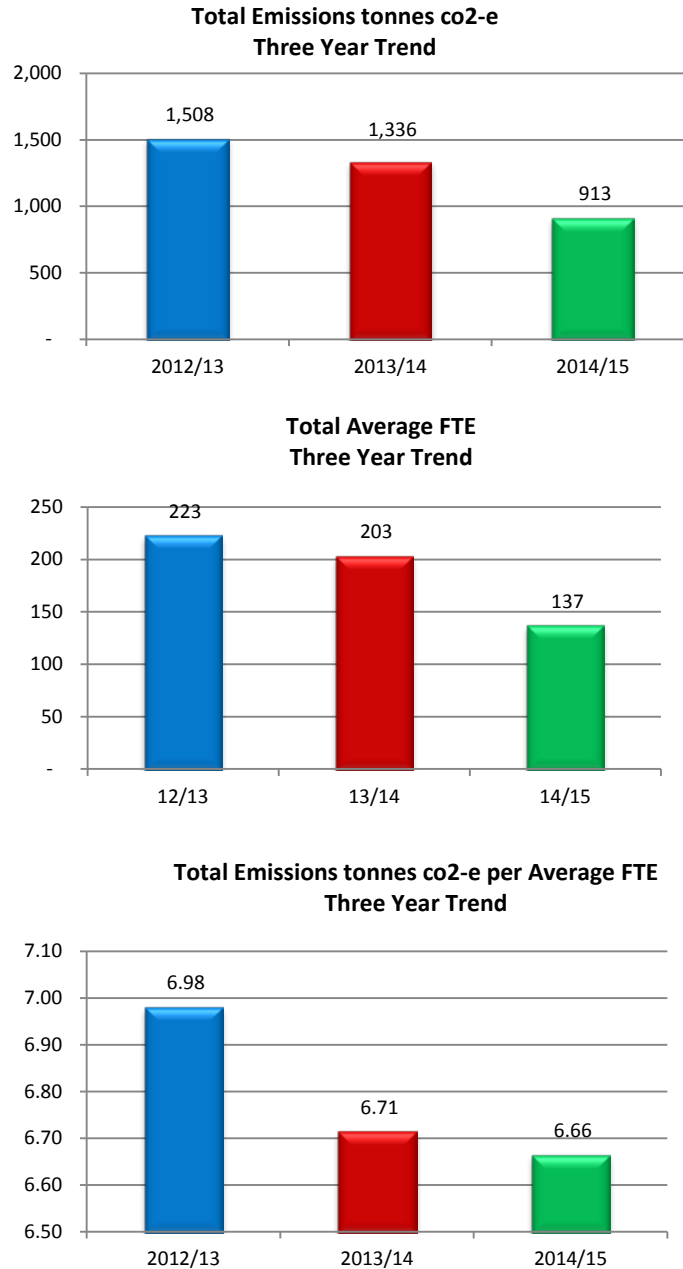
Education Services Australia's environment targets for the 2014–15 year was to maintain emissions per FTE at 2013-14 levels.

The company exceeded its 2014–15 target. The result was a reduction in emission per FTE of .05 CO<sub>2</sub>-e (tonnes) in 2014-15. Total emissions decreased due to a decrease in FTE, reduced rental occupancy and the closure of the Publications business during the 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).

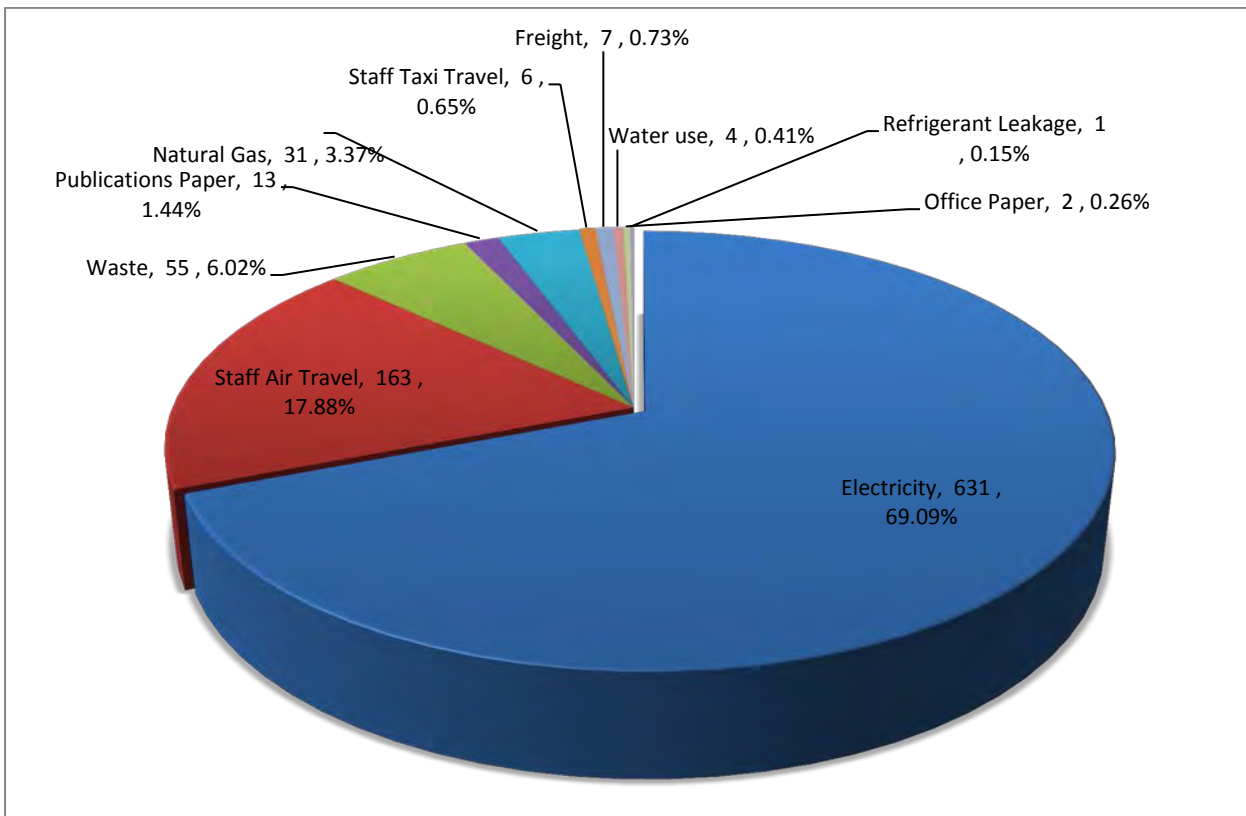
Figure 1: Summary of emissions inventory



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'

Figure 2 provides an overview of the company's emissions by source measured in tonnes of carbon dioxide equivalents (t CO<sub>2</sub>-e) and proportion of the overall inventory for 2014–15. The emission inventory results for 2012–15 are summarised in Tables 1 and 2. Detailed results for 2014–15 are provided at Appendix 4.

Figure 2: CO<sub>2</sub>-e emissions by source 2014–15 (tonnes and percentage)



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 at Appendixes 2 and 3.

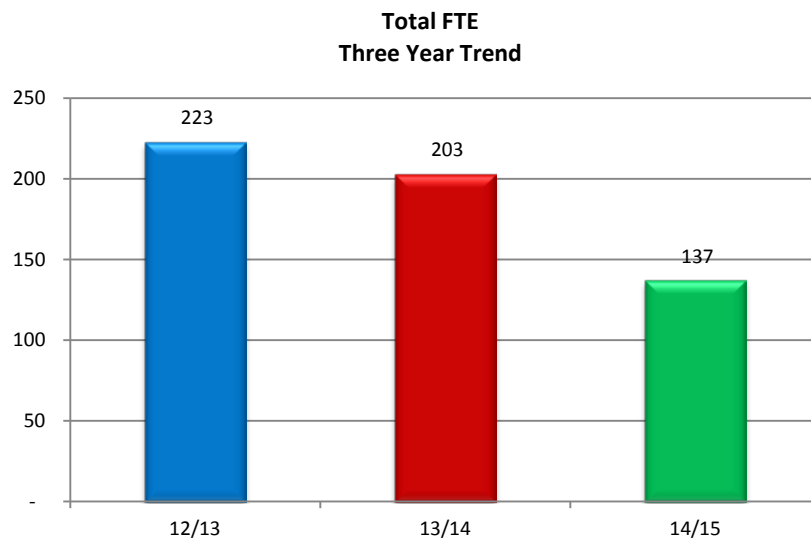
The summary of the inventory results from 2012-13 to current year 2014-15 based on absolute measures is provided in Table 1.

Table 1: Emissions inventory three year summary 2013-2015

	2012-2013	2013-2014	2014-2015
Emission Source	CO2-e (tonnes)	CO2-e (tonnes)	CO2-e (tonnes)
Electricity	916	833	631
Staff Air Travel	428	361	163
Waste	21	22	55
Publications Paper	48	28	13
Natural Gas	41	42	31
Staff Taxi Travel	15	11	6
Freight	31	29	7
Water use	5	6	4
Office Paper	3	2	2
Refrigerant Leakage	1	1	1
<b>Total Emissions</b>	<b>1,508</b>	<b>1,336</b>	<b>913</b>
<b>Emissions Source</b>			
Eligible VCU's purchased	(1,508)	(1,336)	(1,000)
<b>Total NET Emissions</b>	<b>-</b>	<b>-</b>	<b>(87)</b>

A single intensity measure, full-time equivalent (FTE) staffing, is based on the staffing levels below.

Figure 3: FTE staffing 2012-2015



Education Services Australia's average FTE decreased during 2014–15 by 32.5%.

Care needs to be exercised when reviewing some intensity measures using FTE. For example, 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. So, while the absolute electricity consumption reduced by 202 CO2e (tonnes) from the previous year, the CO2-e (tonnes) per FTE has increased. This can be attributed to a disproportionate decrease in FTE compared to electricity consumption. Staff taxi, air travel and FTE have a more linear relationship and this is evident in the decrease of emissions per FTE across these areas compared to the previous year.

Figure 4: CO2 -e emission per FTE 2013-15.

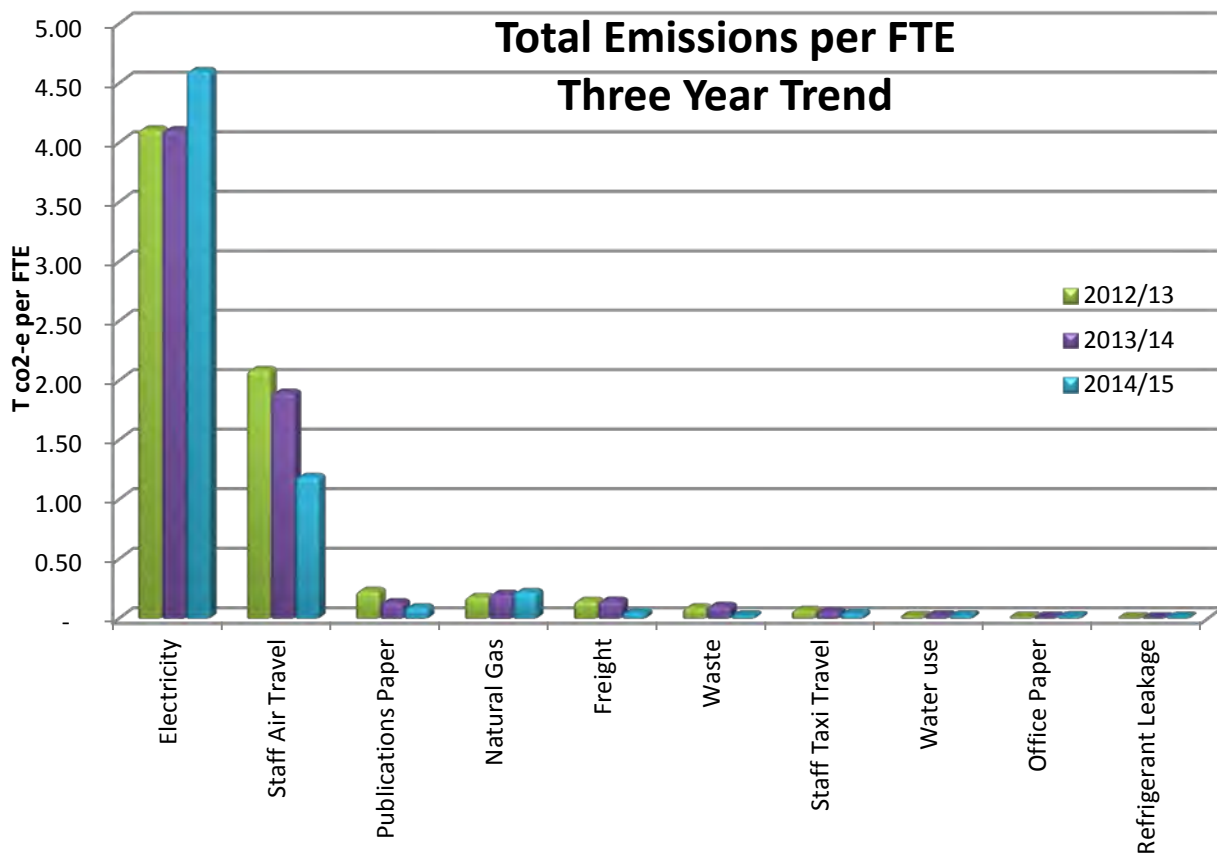




Table 2: Emissions inventory summary 2013-15 by staffing (FTE)

	2012-2013	2013-2014	2014-2015
Emission Source	CO2-e (tonnes) per FTE	CO2-e (tonnes) per FTE	CO2-e (tonnes) per FTE
Electricity	4.11	4.11	4.61
Staff Air Travel	2.09	1.90	1.19
Waste	0.23	0.14	0.40
Publications Paper	0.18	0.21	0.10
Natural Gas	0.15	0.15	0.22
Staff Taxi Travel	0.09	0.11	0.04
Freight	0.07	0.06	0.05
Water use	0.02	0.03	0.03
Office Paper	0.01	0.01	0.02
Refrigerant Leakage	0.00	0.00	0.01
<b>Total Emissions</b>	<b>6.98</b>	<b>6.71</b>	<b>6.66</b>
<b>Offset Measures</b>			
None	(6.98)	(6.71)	(6.66)
<b>Total NET Emissions</b>	<b>-</b>	<b>-</b>	<b>-</b>

In years 2012-2014 contractors and sub-tenants have been excluded from Table 2 calculations of staff air travel, staff taxi travel, freight and publications paper as Education Services Australia has no influence on these activities. In 2014-2015 contractors and sub-tenants have been excluded from organisational boundary of the report.

# OFFSETS

Electricity and air flights are responsible for 87 percent of Education Services Australia's emissions. These cannot be eliminated through increased efficiencies alone.

In 2015, Education Services Australia purchased and retired 1,000 tonnes of carbon offsets through Carbon Trade Exchange. The offsets were sourced from the Hebei Chongli Qingsanying 49.3MW Wind Farm Project (VCU serial numbers: 738-32915440-32916439-VCU-008-APX-CN-1-394-14082008-22022009-0; Date of retirement: Oct 8 2015 7:28PM)

The VCUs were issued in accordance to Verified Carbon Standard 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 VCUs has been tracked in VCS Registries using unique serial numbers to prevent double counting or double selling.

## External assurance

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

The 2011–12 and 2013-14 submission did not require verification under the NCOS standard.

## ACHIEVEMENTS 2014-15

The 2014-15 year was identified as one of sustained consolidation and activity was focused on ensuring Education Services Australia continued to meet published targets.

Many measures undertaken in previous years continue to assist in keeping emissions down.

### Carbon neutrality and national carbon offset standard accreditation

Education Services Australia was accredited as a carbon neutral company under the Australian Government National Carbon Offset Standard (NCOS) scheme in March 2012.

### 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.

## **Opportunities 2015–16**

Research will be conducted into electronic invoice and statement distribution to reduce emissions from paper usage.

## **Environment targets 2015–16**

Maintain emissions per FTE at 2014-15 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 2014-15 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](mailto: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 (formerly 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 (formerly 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	Methodology reference	Methodology	Energy content factor	Emission factor
1	Air Conditioning and kitchen fridges (Fridge)	DEFRA Environmental Reporting Guidelines Option2 GHG reporting update Feb 2014 - pg 87 & GWP from NGA Factors 2014 pg 58 table 26	Kg charge and refrigerant type identified for each unit. Global warming potential of each refrigerant and standard leakage rates obtained from NGA Factors 2014, pg 58, table 26.	0.03%	Leakage rate
1	Air Conditioning and kitchen fridges (AirCon)	DEFRA Environmental Reporting Guidelines Option2 GHG reporting update Feb 2014 - pg 87 & GWP DEFRA April 2011	Kg charge and refrigerant type identified for each unit. Global warming potential of each refrigerant and standard leakage rates obtained from NGA Factors 2014, pg 58, table 26.	0.06%	Leakage rate
1	Staff Taxi Travel (Direct)	Emissions factor for LPG per NGA factors 2014 for post-2004 vehicles p 17, Table 4	Dollars spent, obtained from financial records and converted into a km-travelled figure using an average \$/km taxi fare based on information from EPA Victoria's Greenhouse Inventory Management Plan: 20012-13	60.2	kg CO2-e/GJ
2	Purchased Electricity excluding base building use - Victoria	EF for purchased electricity per Table 41, pg 68 2014 NGA factors	Usage in kWh obtained from supplier invoice data.	1.18	kg CO2-e/KWH
3	Staff Taxi Travel (Indirect)	Emissions factor for LPG per NGA factors 2014 Table 40	Dollars spent, obtained from financial records and converted into a km-travelled figure using an average \$/km taxi fare based on information from EPA Victoria's Greenhouse Inventory Management Plan: 20012-13	5	kg CO2-e/GJ
3	Purchased Electricity tenants share of base buildings use- Victoria	EF for purchased electricity per Table 41, pg 68 2014 NGA factors	Usage in kWh obtained from landlord's from landlord's invoices and percentage share of net lettable area applied to calculate user's share.	1.18	kg CO2-e/KWH
3	Emissions from fuel extraction & T&D line losses for purchased electricity - Victoria	Emissions factor for purchased electricity per Table 41, pg 69 2014 NGA factors	Usage in kWh obtained from supplier invoice data.	0.15	kg CO2-e/KWH
3	Emissions from fuel extraction & T&D line losses for tenants share of base building electricity - Victoria tenants share	Emissions factor for purchased electricity per Table 41, pg 69 July 2014 NGA factors	Usage in kWh obtained from landlord's energy-management system or from landlord's invoices and percentage share of net lettable area applied to calculate user's share.	0.15	kg CO2-e/KWH
3	Natural Gas used on site by landlord as part of base building services	NGA factors for natural gas 2014, p 13, Table 2	Usage in GJ obtained from landlord's energy-management system or from landlord's invoices and percentage share of net lettable area applied to calculate users share	51.6	kg CO2-e/GJ
3	Emissions from fuel extraction of natural gas - Victoria	NGA factors 2014, p 67, Table 37	Usage in GJ obtained from landlord's landlord's invoices and percentage share of net lettable area applied to calculate users share.	3.9	kg CO2-e/GJ



3	Reticulated Water Supplied by Landlord as part of base building services	RMIT Centre for Design 2007 as quoted in "EPA Victoria's Greenhouse Inventory Management Plan: 2010-11 Update"		2.34	kg CO2-e/m3 water
3	Staff Air Travel - Domestic <1,000 km	2014 DEFRA/DECC's GHG Conversion Factors	Flight distance data obtained from company travel agents and multiplied by emissions factor.	0.29316	kg CO2-e/passenger KM
3	Staff Air Travel - Short Haul Intl 1,000-3,700km economy	2014 DEFRA/DECC's GHG Conversion Factors	Flight distance data obtained from company travel agents and multiplied by emissions factor.	0.15835	kg CO2-e/passenger KM
3	Staff Air Travel - Long Haul Int econ >3,700km	2014 DEFRA/DECC's GHG Conversion Factors	Flight distance data obtained from company travel agents and multiplied by emissions factor.	0.15054	kg CO2-e/passenger KM
3	General municipal solid waste	Municipal solid waste from NGA factors 2014, p 74, Table 44	All building bins measured to calculate bin volume, multiplied by the number of annual empties and an estimate of percentage bin capacity used.	1.2	t CO2-e/tonne waste
3	Recycled paper waste	Municipal solid waste from NGA factors 2014, p 74, Table 44	Office stationery supplier provided details of reams consumed or obtained from invoices and converted to kg at standard weight of 2.5 kg per ream.	1.2	t CO2-e/tonne of recycled paper
3	Recycled waste	Municipal solid waste from NGA factors 2014, p 74, Table 44		1.2	t CO2-e/tonne of recycled paper
3	Freight - Long Haul International Air Freight	2014 DEFRA/DECC's GHG Conversion Factors	Data for kg of product imported from US and UK collected from purchasing records, distances travelled obtained from Google maps based on supplier's location.	1.27944	kg CO2-e/tonne-KM
3	Sea Freight - Average Sea Container	2014 DEFRA/DECC's GHG Conversion Factors	Data for kg of product imported from US and UK collected from purchasing records, distances travelled obtained from Google maps based on supplier's location.	0.020162	kg CO2-e/tonne-KM
3	Office Paper	EPA Victoria Greenhouse Gas Emissions Factors for Office Copy paper, 2012-2013	Office stationery supplier provided details of reams consumed or obtained from invoices and converted to kg at standard weight of 2.5 kg per ream.	1.3	kg CO2-e/kg of paper
3	Publications Paper	research conducted by The Gaia Partnership for Sustainability Victoria as part of a 2009-10 EMS Publication Audit as approved by Low Carbon Australia	Publication team provided data of books published, quantity, page count and page weight, which provides weight of paper consumed.	2.59	kg CO2-e/kg of paper

## Appendix 4 : Detailed emission inventory 2014-15

Emission Source	Consumption Units	Consumption	CO2-e (tonnes)	Proportion of total inventory	
<b>Direct Emissions - Scope 1</b>					
Refrigerant Leakage	NA	NA	1	0.15%	
Staff Taxi Travel	kl of LPG	3	5	0.60%	
Subtotal - Direct emissions Scope1:				7	0.75%
<b>Indirect Emissions - Scope 2</b>					
Purchased Electricity excluding base building	kWh	231,131	273	29.86%	
Subtotal - Indirect emissions Scope 2:				273	29.86%
<b>Indirect Emissions - Scope 3</b>					
Purchased Electricity - tenant's share of base building use	kWh	243,278	287	31.43%	
Staff Air Travel	km	691,702	163	17.88%	
Emissions from fuel extraction & T&D line losses for purchased electricity	kWh	231,131	35	3.80%	
Emissions from fuel extraction & T&D line losses for tenant's share of base building electricity	kWh	243,278	36	4.00%	
Publications Paper	kg	5,062	13	1.44%	
Natural Gas used on site by landlord as part of base building services	GJ	556	29	3.14%	
Freight	tonnes x km	9,334	7	0.73%	
General commercial and industrial solid waste	tonnes	28	34	3.74%	
Staff Taxi Travel	kl of LPG	3	0	0.05%	
Landlord supplied reticulated water use	kL	1,617	4	0.41%	
Emissions from fuel extraction for natural gas used on site by landlord	GJ	556	2	0.24%	
Office Paper	reams	738	2	0.26%	
Commingled Recyclable Waste	tonnes	10	12	1.27%	
Recycled Paper Waste	tonnes	8	9	1.02%	
Subtotal - Indirect emissions Scope 3:				634	69.39%
<b>Total Emissions</b>			<b>913</b>	<b>100%</b>	
<b>Reduction Measures</b>					
Offsets Purchases			(1,000)		
<b>Total Net Emissions</b>			<b>(87)</b>		