

Environment Report 2017-18

April 2019

Contents

1	Introduction	3
1.1	Environment Policy	3
1.2	National Carbon Offset Standard (NCOS) Certification	3
1.3	Emissions Targets 2017–18	4
2	Emissions Inventory	5
2.1	Trend Data	6
3	Offsets	8
4	External Assurance	8
5	Achievements	9
5.1	2017-18 Achievements	9
5.2	Continuing initiatives	9
5.3	Environment Target 2018-19	10
6	Appendices	11
6.1	Appendix 1: Education Services Australia Environment Policy	11
6.2	Appendix 2: Emissions Inventory Scope	13
6.3	Appendix 3: Emission Calculations, Factors and Methodologies	14

1 Introduction

Established in March 2010, Education Services Australia (ESA) is a national not-for-profit company owned by the state, territory and Australian Government education ministers.

Its role as a leading education service provider is to work collaboratively in the interests of all Australian education jurisdictions to provide technology-based services for education. ESA develops cost-efficient products and services that can be adapted in response to emerging technologies and changing needs of the education and training sector.

ESA provides:

- development, sharing and deployment of nationally owned technical data and assessment systems
- digital teaching and learning resources, tools and services
- information and communications technology services.

1.1 Environment Policy

Education Services Australia (ESA) maintains a strong ethos of environmental responsibility. The company has an Environment Policy (Appendix 1), and the Board receives an annual environment report on the previous financial year, that is published on the ESA [website](#).

The ESA 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.

1.2 National Carbon Offset Standard (NCOS) Certification

In March 2012, Education Services Australia was certified as a carbon-neutral company under the Australian Government's National Carbon Offset Standard (NCOS) scheme. To achieve carbon neutral certification from the Department of the Environment and Energy, ESA must use the Standard to measure its emissions, reduce these where possible, offset remaining emissions and publically report on their carbon neutrality. An emissions inventory audit has also been required every two years. From November 2017, the requirement has been changed to every three years.

Education Services Australia is one of 46 companies to have achieved NCOS certification in Australia.

Details of the company's certification can be found in the National Carbon Offset Standard section of the Department of Environment and Energy [NCOS webpage](#).



Figure 1: NCOS Certification trademark

1.3 Emissions Targets 2017–18

Education Services Australia's environment target for the 2017–18 year was to maintain emissions per full-time equivalent (FTE) staff at 2016–17 levels. The company exceeded this target, reducing its emissions per FTE by 0.08 CO₂-e (tonnes). A decrease in absolute emissions of 26 CO₂-e (tonnes) was also achieved.

While the main decrease occurred in electricity and gas emissions as a result of a reduction in ESA's office floor space, emissions were lower across most key indicators.

2 Emissions Inventory

The Education Services Australia emissions inventory is 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.

ESA 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.

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

**Table 1: Education Services Australia Limited Greenhouse Gas Emissions Inventory
1 July 2017 - 30 June 2018**

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

Emission Source	Consumption Units	Consumption	CO ₂ -e (tonnes)	Proportion of total inventory
Direct Emissions - Scope 1				
Refrigerant Leakage	NA	NA	1	0.21%
Natural Gas used on site by landlord as part of base building services	GJ	4,608	21	3.03%
Subtotal - Direct emissions Scope 1:			23	3.24%
Indirect Emissions - Scope 2				
Purchased Electricity - excluding base building	kWh	187,632	203	28.84%
Purchased Electricity - tenant's share of base building use	kWh	153,656	166	23.62%
Subtotal - Indirect emissions Scope 2:			369	52.46%
Indirect Emissions - Scope 3				
Emissions from fuel extraction & T&D line losses for purchased electricity	kWh	187,632	19	2.67%
Emissions from fuel extraction & T&D line losses - tenant's share of base building electricity	kWh	153,656	15	2.19%
Emissions from fuel extraction of natural gas	GJ	4,608	2	0.23%
Reticulated Water Supplied by Landlord as part of base building services	kL	1,705	2	0.33%
Staff Travel - Taxi	kL of LPG	2	4	0.52%
Staff Travel - Accommodation	No of nights	333	19	2.66%
Staff Air Travel - Domestic <1000 km	km	235,789	42	6.05%
Staff Air Travel - Short haul 1000 - 3,700 km	km	297,346	52	7.44%
Staff Air Travel - Long haul > 3,700 km	km	153,475	50	7.11%
Staff Commute	km	2,331	52	7.35%
General municipal solid waste	tonne	22	31	4.46%
Recycled paper waste	tonne	6	9	1.28%
Commingled Recyclable Waste	tonne	9	13	1.85%
Office Paper	kg	825	1	0.15%
Subtotal - Indirect emissions Scope 3:			311	44.30%
Total Emissions			703	100.00%
Reduction Measures				
Prior years Offsets surplus			(106)	
Offsets Purchases			(700)	
Total Net Emissions			(103)	

2.1 Trend Data

Table 2 provides a summary of the inventory results from 2015-16 to current year 2017-18 based on absolute measures

It should be noted that following submission of the 2015-16 inventory, 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.

Table 2: Emissions Inventory Three-Year Summary 1 July 2015 – 30 June 2018

	2015/16	2016/17	2017/18
Emission Source	CO2-e (tonnes)	CO2-e (tonnes)	CO2-e (tonnes)
Electricity	555	480	403
Staff Air Travel	196	152	145
Waste	5	56	53
Publications/Paper ¹	-	-	-
Natural Gas	33	30	23
Staff Taxi Travel	5	6	4
Freight	-	-	-
Water use	2	3	2
Office Paper	2	1	1
Refrigerant Leakage	1	1	1
Accommodation ²	-	-	19
Staff Commute ²	-	-	52
Total Emissions	851	729	703
Offsets Measures			
Offsets Purchased	(1,000)	(600)	(700)
Total NET Emissions	(235)	(106)	(103)

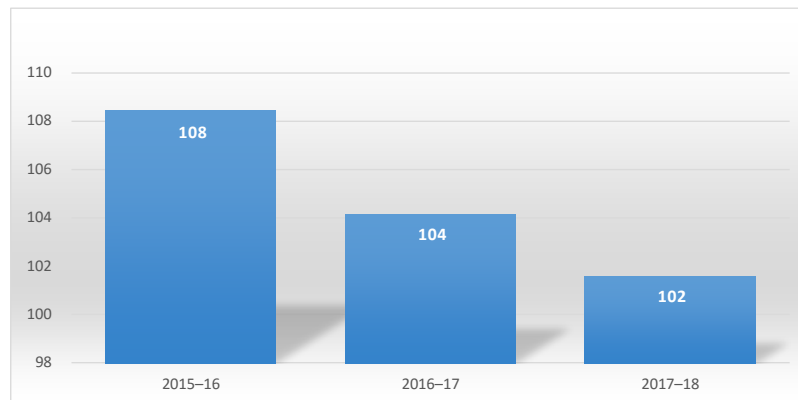
1. The 2015-16 reporting year was the first full year following the closure of ESA's publications unit.

2. Business travel related accommodation and staff commute to work have been included in the inventory for the first time in 2017-18.

The three-year trend shows that despite including business travel accommodation and staff commute to work for the first time in the inventory, ESA has managed to reduce its total emissions across most key indicators. This was mainly due to reducing the floor space occupied by ESA by 777.49m² and is reflected in the lower figures for electricity and gas usage.

ESA has been carrying excess floor space since 2013-14 when reductions in the average FTE staff occurred, taking the average FTE staff numbers from a high of 223 in 2012-13 to 108 by 2015-16. Staffing numbers have stabilized over the past three years, as can be seen in Figure 2 and the floor space occupied is now commensurate with the staff numbers.

Figure 2: Average FTE of Staff 2015-16 to 2017-18



Emissions per FTE have also continued to decline as shown in Table 3.

Table 3: Emissions Inventory Three-Year Summary per FTE 1 July 2015 – 30 June 2018

	2015/16	2016/17	2017/18
Emission Source	CO2-e (tonnes) Per FTE	CO2-e (tonnes) Per FTE	CO2-e (tonnes) Per FTE
Electricity	5.12	4.60	3.96
Staff Air Travel	1.81	1.46	1.42
Waste	0.53	0.54	0.53
Publications/Paper ¹	-	-	-
Natural Gas	0.30	0.29	0.23
Staff Taxi Travel	0.04	0.06	0.04
Freight	-	-	-
Water use	0.02	0.03	0.02
Office Paper	0.02	0.01	0.01
Refrigerant Leakage	0.01	0.01	0.01
Accommodation ²	-	-	0.18
Staff Commute ²	-	-	0.51
Total Emissions	7.85	7.00	6.92

1. The 2015-16 reporting year was the first full year following the closure of ESA's publications unit.
2. Business travel related accommodation and staff commute to work have been included in the inventory for the first time in 2017-18.

3 Offsets

An arrears approach to purchasing and retiring offsets is taken, whereby ESA calculates its carbon emissions at the end of the reporting period and then purchases and retires offsets equivalent to a net of zero at a minimum as shown in Table 4.

Education Services Australia purchases carbon offsets that are recognized under the National Carbon Offset Standard. From 2016-17 a preference has been given to purchasing Australian based offsets.

Table 4: ESA Offsets purchased 2013-14 to 2017-18

	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
Year 2017-18	703	-700	The Longdowns Regeneration Project in Australia	3,773,703,346 – 3,773,704,045
Closing balance		-103		

4 External Assurance

To maintain NCOS certification, ESA was required to obtain third-party verification of the emissions inventory on a biennial basis. The 2016-17 inventory was independently audited and re-certification confirmed by the Department of Environment and Energy in May 2018.

From November 2017, independent audits will be required every three years.

5 Achievements

5.1 2017-18 Achievements

During the year, Education Services Australia introduced online invoicing and payment for its Schools Cataloguing Information Service subscriptions. This has eliminated all paper-based invoicing for the service.

The company has also moved to using social media and emails as its main forms of marketing and communications.

As part of its Health and Wellbeing program, ESA has enabled staff access to the office via the stairs and encouraged their use instead of lifts, and walking generally, via a 10,000 Step Challenge for which prizes are awarded.

Another part of this program supplied glass water bottles to all staff to promote drinking more water and discourage the purchase of sugary beverages in plastic bottles.

While staff are encouraged to use keep-cups for purchased coffee, collection of paper coffee cups for recycling commenced during this year. The cups are taken to nearby 7-Eleven stores participating in the #cuprescue program.

5.2 Continuing initiatives

Education Services Australia continues to maintain the initiatives introduced since 2011:

Retrofit of Office Lighting

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

Automated Timer Switches

Automated timer switches are used in the main office areas, based on previous physical audits of how often lighting is left on overnight and at weekends.

Energy efficient equipment

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

Redundant computer equipment is 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.

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.

5.3 Environment Target 2018-19

Opportunities for further reduction of emissions in an office-based environment can be difficult to find. In the coming year, ESA will seek to maintain the initiatives introduced to date via a campaign to refresh staff awareness of its Environment Policy and to seek ideas from staff for further reducing emissions.

The target for 2018-19 will therefore be to maintain emissions per FTE at 2017-18 levels.

6 Appendices

6.1 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 reduce 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, 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, e.g. 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.

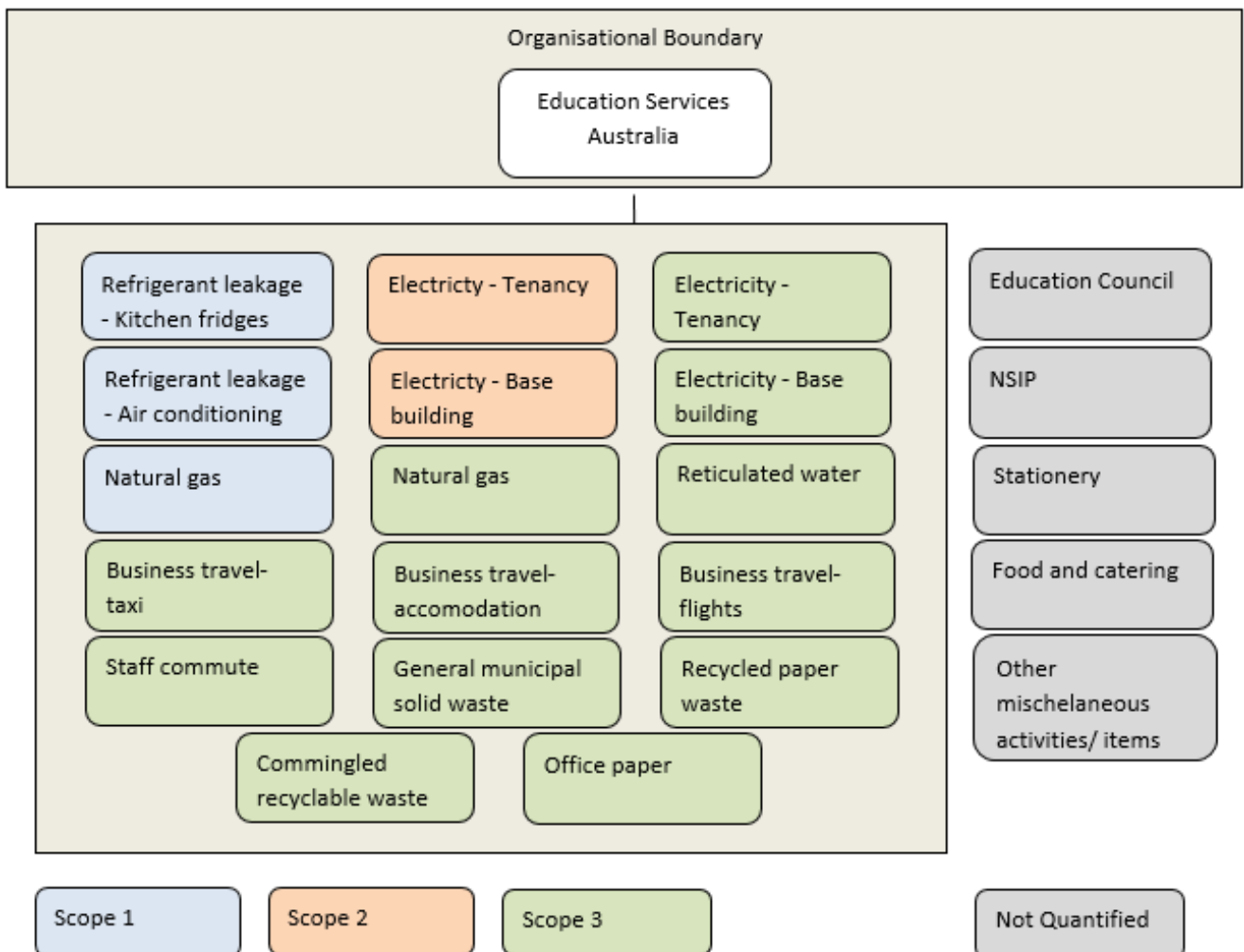
6.2 Appendix 2: Emissions Inventory Scope

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.

The National Schools Interoperability Program (NSIP) was also part of ESA's legal structure, but outside its operational control, until May 2018, after which it was incorporated into ESA operations. NSIP operations have therefore been excluded from this report, but will in future be included.

The following diagram shows the organizational boundary used for this report and the scope of emissions included.



6.3 Appendix 3: Emission Calculations, Factors and Methodologies

Scope	Emission source	Source of activity data	Method reference	Energy content factor	Emission factor	Unit	Activity data	Consumption Unit	t CO ₂ -e
1	Refrigerant leakage - Kitchen fridges	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	Refrigerant leakage - Air conditioning	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 2088	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 ³ GJ/m ³	51.53	kg CO ₂ -e/GJ	4,608.01	GJ	21.27
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 ₂ -e/KWH	187,631.66	kWh	202.64
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 ₂ -e/KWH	153,656.40	kWh	165.95
3	Emissions from fuel extraction & T&D line losses for purchased electricity	Supplier invoices	Table 41 pg 71, July 2017 NGA factors	N/A	0.1	kg CO ₂ -e/KWH	187,631.66	kWh	18.76

Scope	Emission source	Source of activity data	Method reference	Energy content factor	Emission factor	Unit	Activity data	Consumption Unit	t CO ₂ -e
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	0.1	kg CO ₂ -e/KWH	153,656.40	kWh	15.37
3	Emissions from fuel extraction of natural gas	Landlords supplier invoices	Table 38, pg 69, July 2017 NGA factors for natural gas	N/A	3.90	kg CO ₂ -e/GJ	4,608.01	GJ	1.61
3	Reticulated Water Supplied by Landlord as part of base building services	Landlords supplier invoices	EPA Victoria's Greenhouse Gas Inventory Management Plan: 2012-13 Update, Appendix A pg 60 - 62	N/A	1.36	kg CO ₂ -e/m ³ water	1,705.34	KL	2.32
3	Staff Travel - Taxi	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 ₂ -e/KL	2.31	KL of LPG	3.65
3	Staff Travel - Accommodation	Supplier report	65% of total hotel energy use is electricity and 35% is natural gas. Therefore 65% should be converted with electricity emission factors and 35% should be converted with natural gas emission factors as per The Australian Government's Carbon Neutral Program	N/A	N/A	N/A	333.00	No of nights	18.71

Scope	Emission source	Source of activity data	Method reference	Energy content factor	Emission factor	Unit	Activity data	Consumption Unit	t CO ₂ -e
			Guidance for Scope 3 Calculations Aug 2016, Travel accomodation (both Domestic and International), pg 6 - 7						
3	Staff Air Travel - Domestic <1000 km	Supplier invoices	Emissions provided by Corporate Traveler	N/A	N/A	t CO ₂ -e/km	235,789.23	km	42.49
3	Staff Air Travel - Short haul 1000 - 3,700 km	Supplier invoices	Emissions provided by Corporate Traveler	N/A	N/A	t CO ₂ -e/km	297,346.49	km	52.28
3	Staff Air Travel - Long haul > 3,700 km	Supplier invoices	Emissions provided by Corporate Traveler	N/A	N/A	t CO ₂ -e/km	153,474.71	km	49.99
3	Staff Commute	Payroll	EPA Victoria's Greenhouse Gas Inventory Management Plan: 2012-13 Update, part k for "Staff Commuting", pg 28 - 30	N/A	N/A	t CO ₂ -e/km	2,331.14	km	51.67
3	General municipal solid waste	Bin volumes	Municipal solid waste from NGA factors July 2017, pg 77, Table 44	N/A	1.40	t CO ₂ -e/tonne waste	22.39	tonne	31.35
3	Recycled paper waste	Bin volumes	Municipal solid waste from NGA factors July 2017, pg 77, Table 44 (On advise by Department of Environment and Energy)	N/A	1.40	t CO ₂ -e/tonne of recycled paper waste	6.45	tonne	9.03

Scope	Emission source	Source of activity data	Method reference	Energy content factor	Emission factor	Unit	Activity data	Consumption Unit	t CO ₂ -e
3	Commingled Recyclable Waste	Bin volumes	Municipal solid waste from NGA factors July 2017, pg 77, Table 44	N/A	1.40	t CO ₂ -e/tonne of recycled waste	9.29	tonne	13.01
3	Office Paper	Supplier records	EPA Victoria's Greenhouse Gas Inventory Management Plan: 2012-13 Update , pg 25 & 64	N/A	1.3	kg CO ₂ -e/kg of paper	825.00	kg	1.07
Total gross emissions									702.67

