UNCLASSIFIED: FOR OFFICIAL USE ONLY

Australian Government
Clean Energy Regulator

ABN/ACN/ARBN/Trading Name:	15211513464
Version No:	1
Submission Status:	Submitted
Submission Date:	21/10/2020

NATIONAL GREENHOUSE AND ENERGY REPORTING SECTION 19 - EMISSIONS AND ENERGY REPORT UNIVERSITY OF SYDNEY FOR THE REPORTING YEAR 2019 – 2020

REPORT UNDER SECTION 19 OF THE *NATIONAL GREENHOUSE AND ENERGY REPORTING ACT 2007*

Corporations registered under Division 3 of Part 2 of the *National Greenhouse and Energy Reporting Act 2007* (the NGER Act) are required to provide a report to the Clean Energy Regulator (the Regulator) by 31 October each year in respect of the previous financial year relating to:

- greenhouse gas emissions; and
- energy production; and
- energy consumption;

from the operation of facilities under the operational control of the corporation and entities that are members of the corporation's group, during that financial year.

A report under section 19 of the NGER Act must be given in a manner and form approved by the Regulator and set out the information specified in the *National Greenhouse and Energy Reporting Regulations 2008* (the NGER Regulations). The report must also be based on the methods, or methods which meet criteria, set out in the *National Greenhouse and Energy Reporting (Measurement) Determination 2008* (the Measurement Determination).

This report is an approved form in which a report under section 19 of the NGER Act may be given to the Regulator.

Giving false or misleading information is a serious offence.

SUBMITTING THE REPORT

The approved manner for submission of the section 19 report is completion and submission of the report in the Emissions and Energy Reporting System.

Your report must be submitted to the Regulator by 31 October 2020.

If a copy of this report is printed in hardcopy form for any purpose it does not represent, nor can it be treated as, an official version of the report submitted to the Regulator.

CONTROLLING CORPORATION DETAILS

Name	UNIVERSITY OF SYDNEY
Australian Business Number (ABN)	15211513464
Australian Company Number (ACN)	-
Australian Registered Body Number (ARBN)	-
Trading Name	-
Head office postal address:	
Postal address line 1	Campus Infrastructure Services
Postal address line 2	Building G12
Postal address line 3	-
Postal city/suburb	THE UNIVERSITY OF SYDNEY
Postal state	New South Wales
Postal postcode	2006
Postal country	AUSTRALIA
Head office street address:	
Street address line 1	Campus Infrastructure Services
Street address line 2	Services Building G12
Street address line 3	-
Street city/suburb	THE UNIVERSITY OF SYDNEY
Street state	New South Wales
Street postcode	2006
Street country	AUSTRALIA

EXECUTIVE OFFICER (OR EQUIVALENT) DETAILS

Name	Michael Spence
Position	CEO
Phone	0293515051
Mobile	-
Fax	02 9351 4596
Email	vice-chancellor@vcc.usyd.edu.au
Postal address line 1	The Quadrangle A14
Postal address line 2	Services Building G12
Postal address line 3	-
Postal city/suburb	The University of Sydney
Postal state	New South Wales
Postal postcode	2006
Postal country	AUSTRALIA

CONTACT PERSON DETAILS

Name	Tracey Ho
Position	
Phone	0468 339778
Mobile	-
Fax	-
Email	tracey.ho@sydney.edu.au
Postal address line 1	The University of Sydney
Postal address line 2	Services Building
Postal address line 3	22 Codrington Street
Postal city/suburb	Darlington
Postal state	
Postal postcode	2008
Postal country	AUSTRALIA

UNIVERSITY OF SYDNEY EMISSION AND ENERGY REPORT SUMMARY

The table below reports total scope 1 and scope 2 greenhouse gas emissions, energy produced and energy consumed by the corporate group UNIVERSITY OF SYDNEY for the 2019 - 2020 reporting period.

GREENHOUSE GAS EMISSIONS (t CO2-e)		
Scope 1	**Scope 2**	**Total of Scope 1 and Scope 2**
6,785	92,252	99,037

ENERGY PRODUCED AND ENERGY CONSUMED (GJ)		
Energy Consumed Total	**Energy Consumed Net**	**Energy Produced**
545,752	541,943	3,809

GREENHOUSE GAS SCOPE 1 EMISSIONS BY GAS (t CO2-e)						
Carbon Dioxide CO2	**Methane CH4**	**Nitrous Oxide N2O**	**Perfluorocarbons PFCs**	**Hydro Fluoro Carbons HFCs**	**Sulphur Hexafluoride SF6**	**Total**
6,767	12	6	-	-	-	6,785

UNIVERSITY OF SYDNEY EMISSION AND ENERGY REPORT DETAIL

Corporate Structure

The table below lists the entities whose greenhouse gas emissions and energy production and energy consumption are included in the S19 report.

No.	Entity Details	Scope 1 Emissions (t CO2-e)	Scope 2 Emissions (t CO2-e)	Energy Consumed Total (GJ)	Energy Consumed Net (GJ)	Energy Produced (GJ)
1	Arthursleigh Farm **Type:** Facility	43	0	624	624	0
2	Biomedical Building - Australian Technology Park **Type:** Facility	3	676	3,042	3,042	0
3	Broken Hill - University Department of Rural Health **Type:** Facility	26	124	944	944	0
4	Burren St Campus **Type:** Facility	3	110	548	548	0
5	Camden Campus **Type:** Facility	110	5,955	28,278	28,278	0
6	Camperdown Campus **Type:** Facility	3,610	47,804	285,511	283,422	2,089
7	CBD Campus **Type:** Facility	1	218	978	978	0
8	Conservatorium of Music **Type:** Facility	90	1,977	10,529	10,529	0
9	Cumberland Campus **Type:** Facility	354	4,413	26,478	26,478	0
10	Darlington Campus **Type:** Facility	1,679	22,628	136,357	134,683	1,674
11	Dubbo Campus **Type:** Facility	67	104	1,774	1,774	0
12	Mallett St Campus **Type:** Facility	376	5,621	32,374	32,328	46
13	Middle Point - Research Station **Type:** Facility	0	43	251	251	0
14	Molonglo Observatory **Type:** Facility	0	269	1,195	1,195	0
15	Narrabri **Type:** Facility	196	1,122	7,771	7,771	0
16	Nepean **Type:** Facility	7	565	2,643	2,643	0
17	Nowley - Spring Ridge **Type:** Facility	114	22	1,720	1,720	0
18	Orange Campus **Type:** Facility	0	68	310	310	0
19	Pearl Beach - Field Site **Type:** Facility	0	5	24	24	0
20	Rozelle Campus	106	528	4,401	4,401	0

	Type: Facility					

1: ARTHURSLEIGH FARM - FACILITY

Name	Arthursleigh Farm
Facility Street Address	Arthursleigh Farm MARULAN New South Wales 2579 AUSTRALIA
Geographic Coordinates	Latitude 34.581S / Longitude 150.045E
Facility location	-
Activity location	New South Wales
Location description	
Activity description	-
ANZSIC Code	810 - Tertiary education
Operational Control	UNIVERSITY OF SYDNEY
Number of Days with Operational Control	Full Year
Operational Control Dates	01/07/2019 - 30/06/2020
Grid Connected Electricity Generator	No

The following tables summarise total greenhouse gas emissions from operation of this facility during the period that it was under the operational control of UNIVERSITY OF SYDNEY.

GREENHOUSE GAS EMISSIONS (t CO2-e)

Scope 1	Scope 2	Total of Scope 1 and Scope 2
43	-	43

ENERGY PRODUCED AND ENERGY CONSUMED (GJ)

Energy Consumed Total	Energy Consumed Net	Energy Produced
624	624	-

GREENHOUSE GAS SCOPE 1 EMISSIONS BY GAS (t CO2-e)

Carbon Dioxide CO2	Methane CH4	Nitrous Oxide N2O	Perfluorocarbons PFCs	Hydro Fluoro Carbons HFCs	Sulphur Hexafluoride SF6	Total
43	-	-	-	-	-	43

SCOPE 1 EMISSIONS

EC = Energy Content Factor, Z = Energy Content, EF = Emission Factor

Source Activity	Fuel / Criterion	Quantity	Energy Values (EC & Z)	Gas / Method	Scope 1 Emissions (t CO2-e)
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of gaseous fuels - Stationary energy purposes	**Fuel / Energy commodity:** Natural gas distributed in a pipeline **Fuel usage:** combustion **Criterion:** A	0 GJ	**EC (GJ/Unit):** 1 **Z (GJ):** -	**Gas:** - **EF (kg CO2-e / GJ):** - **Method:** -	-
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of liquid fuels other than petroleum oils or greases - Stationary energy purposes	**Fuel / Energy commodity:** Diesel oil **Fuel usage:** combustion **Criterion:** A	3.12 kL	**EC (GJ/Unit):** 38.6 **Z (GJ):** 120	**Gas:** CO2 **EF (kg CO2-e / GJ):** 69.9 **Method:** Method 1	8
				Gas: N2O **EF (kg CO2-e / GJ):** 0.2 **Method:**	0

				Method 1	
				Gas: CH4 **EF (kg CO2-e / GJ):** 0.1 **Method:** Method 1	0
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	**Fuel / Energy commodity:** Diesel oil - Transport **Fuel usage:** combustion **Criterion:** A	13.056 kL	**EC (GJ/Unit):** 38.6 **Z (GJ):** 504	**Gas:** N2O **EF (kg CO2-e / GJ):** 0.5 **Method:** Method 1	0
				Gas: CO2 **EF (kg CO2-e / GJ):** 69.9 **Method:** Method 1	35
				Gas: CH4 **EF (kg CO2-e / GJ):** 0.1 **Method:** Method 1	0
			Source Total	624	43
			Total	624	43

SCOPE 2 EMISSIONS

Activity Type	Quantity	Units	Emission Factor (kg CO2-e / unit)	Scope 2 Emissions (t CO2-e)
Purchase and loss of electricity from main electricity grid in a State or Territory	0		-	0
			Total	0

ENERGY CONSUMED BY MEANS OF COMBUSTION FOR TRANSPORT

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	Diesel oil - Transport	combustion	A	-	13.056	kL	38.6	504
							Total	504

ENERGY CONSUMED BY MEANS OF COMBUSTION FOR PURPOSES OTHER THAN PRODUCING ELECTRICITY, PRODUCING A CHEMICAL OR METAL PRODUCT OR FOR TRANSPORT

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Emissions released from combustion of gaseous fuels - Stationary energy purposes	Natural gas distributed in a pipeline	combustion	A	-	0	GJ	1	0
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Stationary energy purposes	Diesel oil	combustion	A	-	3.12	kL	38.6	120
							Total	120

ENERGY CONSUMED BY MEANS OTHER THAN COMBUSTION

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Purchase and loss of electricity from main electricity grid in a State or Territory	-	-	-	-	0	-	1	0
							Total	-

2: BIOMEDICAL BUILDING - AUSTRALIAN TECHNOLOGY PARK - FACILITY

Name	Biomedical Building - Australian Technology Park
Facility Street Address	1 Central Avenue EVELEIGH New South Wales 2015 AUSTRALIA
Geographic Coordinates	Latitude 33.896S / Longitude 151.195E
Facility location	-
Activity location	New South Wales
Location description	
Activity description	-
ANZSIC Code	810 - Tertiary education
Operational Control	UNIVERSITY OF SYDNEY
Number of Days with Operational Control	Full Year
Operational Control Dates	01/07/2019 - 30/06/2020
Grid Connected Electricity Generator	No

The following tables summarise total greenhouse gas emissions from operation of this facility during the period that it was under the operational control of UNIVERSITY OF SYDNEY.

GREENHOUSE GAS EMISSIONS (t CO2-e)

Scope 1	Scope 2	Total of Scope 1 and Scope 2
3	676	679

ENERGY PRODUCED AND ENERGY CONSUMED (GJ)

Energy Consumed Total	Energy Consumed Net	Energy Produced
3,042	3,042	-

GREENHOUSE GAS SCOPE 1 EMISSIONS BY GAS (t CO2-e)

Carbon Dioxide CO2	Methane CH4	Nitrous Oxide N2O	Perfluorocarbons PFCs	Hydro Fluoro Carbons HFCs	Sulphur Hexafluoride SF6	Total
3	-	-	-	-	-	3

SCOPE 1 EMISSIONS

EC = Energy Content Factor, Z = Energy Content, EF = Emission Factor

Source Activity	Fuel / Criterion	Quantity	Energy Values (EC & Z)	Gas / Method	Scope 1 Emissions (t CO2-e)
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	**Fuel / Energy commodity:** Diesel oil - Transport post-2004 **Fuel usage:** combustion **Criterion:** A	0.984 kL	**EC (GJ/Unit):** 38.6 **Z (GJ):** 38	**Gas:** CO2 **EF (kg CO2-e / GJ):** 69.9 **Method:** Method 1	3
				Gas: CH4 **EF (kg CO2-e / GJ):** 0.01 **Method:** Method 2	0
				Gas: N2O **EF (kg CO2-e / GJ):** 0.6 **Method:**	0

				Method 2	
			Source Total	38	3
			Total	38	3

SCOPE 2 EMISSIONS

Activity Type	Quantity	Units	Emission Factor (kg CO2-e / unit)	Scope 2 Emissions (t CO2-e)
Purchase and loss of electricity from main electricity grid in a State or Territory	834,444	kWh	0.81	676
			Total	676

ENERGY CONSUMED BY MEANS OF COMBUSTION FOR TRANSPORT

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	Diesel oil - Transport post-2004	combustion	A	-	0.984	kL	38.6	38
							Total	38

ENERGY CONSUMED BY MEANS OTHER THAN COMBUSTION

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Purchase and loss of electricity from main electricity grid in a State or Territory	-	-	-	-	834,444	kWh	0.0036	3,004
							Total	3,004

3: BROKEN HILL - UNIVERSITY DEPARTMENT OF RURAL HEALTH - FACILITY

Name	Broken Hill - University Department of Rural Health
Facility Street Address	Broken Hill BROKEN HILL New South Wales 2880 AUSTRALIA
Geographic Coordinates	Latitude 31.946S / Longitude 141.454E
Facility location	-
Activity location	New South Wales
Location description	
Activity description	-
ANZSIC Code	810 - Tertiary education
Operational Control	UNIVERSITY OF SYDNEY
Number of Days with Operational Control	Full Year
Operational Control Dates	01/07/2019 - 30/06/2020
Grid Connected Electricity Generator	No

The following tables summarise total greenhouse gas emissions from operation of this facility during the period that it was under the operational control of UNIVERSITY OF SYDNEY.

GREENHOUSE GAS EMISSIONS (t CO2-e)

Scope 1	Scope 2	Total of Scope 1 and Scope 2
26	124	150

ENERGY PRODUCED AND ENERGY CONSUMED (GJ)

Energy Consumed Total	Energy Consumed Net	Energy Produced
944	944	-

GREENHOUSE GAS SCOPE 1 EMISSIONS BY GAS (t CO2-e)

Carbon Dioxide CO2	Methane CH4	Nitrous Oxide N2O	Perfluorocarbons PFCs	Hydro Fluoro Carbons HFCs	Sulphur Hexafluoride SF6	Total
26	-	-	-	-	-	26

SCOPE 1 EMISSIONS

EC = Energy Content Factor, Z = Energy Content, EF = Emission Factor

Source Activity	Fuel / Criterion	Quantity	Energy Values (EC & Z)	Gas / Method	Scope 1 Emissions (t CO2-e)
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of liquid fuels other than petroleum oils or greases - Stationary energy purposes	**Fuel / Energy commodity:** Liquefied petroleum gas **Fuel usage:** combustion **Criterion:** A	5.988 kL	**EC (GJ/Unit):** 25.7 **Z (GJ):** 154	**Gas:** N2O **EF (kg CO2-e / GJ):** 0.2 **Method:** Method 1	0
				Gas: CO2 **EF (kg CO2-e / GJ):** 60.2 **Method:** Method 1	9
				Gas: CH4 **EF (kg CO2-e / GJ):** 0.2 **Method:**	0

				Method 1	
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	**Fuel / Energy commodity:** Gasoline (other than for use as fuel in an aircraft) - Transport post-2004 **Fuel usage:** combustion **Criterion:** A	5.958 kL	**EC (GJ/Unit):** 34.2 **Z (GJ):** 204	**Gas:** CO2 **EF (kg CO2-e / GJ):** 67.4 **Method:** Method 1	14
				Gas: N2O **EF (kg CO2-e / GJ):** 0.2 **Method:** Method 2	0
				Gas: CH4 **EF (kg CO2-e / GJ):** 0.02 **Method:** Method 2	0
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	**Fuel / Energy commodity:** Diesel oil - Transport post-2004 **Fuel usage:** combustion **Criterion:** A	0.948 kL	**EC (GJ/Unit):** 38.6 **Z (GJ):** 37	**Gas:** CO2 **EF (kg CO2-e / GJ):** 69.9 **Method:** Method 1	3
				Gas: N2O **EF (kg CO2-e / GJ):** 0.6 **Method:** Method 2	0
				Gas: CH4 **EF (kg CO2-e / GJ):** 0.01 **Method:** Method 2	0
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	**Fuel / Energy commodity:** Ethanol for use as a fuel in an internal combustion engine - Transport post-2004 **Fuel usage:** combustion **Criterion:** A	0.006 kL	**EC (GJ/Unit):** 23.4 **Z (GJ):** -	**Gas:** CO2 **EF (kg CO2-e / GJ):** 0 **Method:** Method 1	0

				Gas: CH4 **EF (kg CO2-e / GJ):** 0.2 **Method:** Method 2	0
				Gas: N2O **EF (kg CO2-e / GJ):** 0.2 **Method:** Method 2	0
			Source Total	395	26
			Total	395	26

SCOPE 2 EMISSIONS

Activity Type	Quantity	Units	Emission Factor (kg CO2-e / unit)	Scope 2 Emissions (t CO2-e)
Purchase and loss of electricity from main electricity grid in a State or Territory	152,472	kWh	0.81	124
			Total	124

ENERGY CONSUMED BY MEANS OF COMBUSTION FOR TRANSPORT

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	Gasoline (other than for use as fuel in an aircraft) - Transport post-2004	combustion	A	-	5.958	kL	34.2	204
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	Diesel oil - Transport post-2004	combustion	A	-	0.948	kL	38.6	37
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	Ethanol for use as a fuel in an internal combustion engine - Transport post-2004	combustion	A	-	0.006	kL	23.4	0
							Total	241

ENERGY CONSUMED BY MEANS OF COMBUSTION FOR PURPOSES OTHER THAN PRODUCING ELECTRICITY, PRODUCING A CHEMICAL OR METAL PRODUCT OR FOR TRANSPORT

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Stationary energy purposes	Liquefied petroleum gas	combustion	A	-	5.988	kL	25.7	154
							Total	154

ENERGY CONSUMED BY MEANS OTHER THAN COMBUSTION

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Purchase and loss of electricity from main electricity grid in a State or Territory	-	-	-	-	152,472	kWh	0.0036	549
							Total	549

4: BURREN ST CAMPUS - FACILITY

Name	Burren St Campus
Facility Street Address	Burren St NEWTOWN New South Wales 2042 AUSTRALIA
Geographic Coordinates	Latitude 33.895S / Longitude 151.184E
Facility location	-
Activity location	New South Wales
Location description	
Activity description	-
ANZSIC Code	810 - Tertiary education
Operational Control	UNIVERSITY OF SYDNEY
Number of Days with Operational Control	Full Year
Operational Control Dates	01/07/2019 - 30/06/2020
Grid Connected Electricity Generator	No

The following tables summarise total greenhouse gas emissions from operation of this facility during the period that it was under the operational control of UNIVERSITY OF SYDNEY.

GREENHOUSE GAS EMISSIONS (t CO2-e)

Scope 1	Scope 2	Total of Scope 1 and Scope 2
3	110	113

ENERGY PRODUCED AND ENERGY CONSUMED (GJ)

Energy Consumed Total	Energy Consumed Net	Energy Produced
548	548	-

GREENHOUSE GAS SCOPE 1 EMISSIONS BY GAS (t CO2-e)

Carbon Dioxide CO2	Methane CH4	Nitrous Oxide N2O	Perfluorocarbons PFCs	Hydro Fluoro Carbons HFCs	Sulphur Hexafluoride SF6	Total
3	-	-	-	-	-	3

SCOPE 1 EMISSIONS

EC = Energy Content Factor, Z = Energy Content, EF = Emission Factor

Source Activity	Fuel / Criterion	Quantity	Energy Values (EC & Z)	Gas / Method	Scope 1 Emissions (t CO2-e)
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of gaseous fuels - Stationary energy purposes	**Fuel / Energy commodity:** Natural gas distributed in a pipeline **Fuel usage:** combustion **Criterion:** A	60.927 GJ	**EC (GJ/Unit):** 1 **Z (GJ):** 61	**Gas:** CO2 **EF (kg CO2-e / GJ):** 51.4 **Method:** Method 1	3
				Gas: CH4 **EF (kg CO2-e / GJ):** 0.1 **Method:** Method 1	0
				Gas: N2O **EF (kg CO2-e / GJ):** 0.03 **Method:** Method 1	0

			Source Total	61	3
			Total	61	3

SCOPE 2 EMISSIONS

Activity Type	Quantity	Units	Emission Factor (kg CO2-e / unit)	Scope 2 Emissions (t CO2-e)
Purchase and loss of electricity from main electricity grid in a State or Territory	135,314	kWh	0.81	110
			Total	110

ENERGY CONSUMED BY MEANS OF COMBUSTION FOR PURPOSES OTHER THAN PRODUCING ELECTRICITY, PRODUCING A CHEMICAL OR METAL PRODUCT OR FOR TRANSPORT

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Emissions released from combustion of gaseous fuels - Stationary energy purposes	Natural gas distributed in a pipeline	combustion	A	-	60.927	GJ	1	61
							Total	61

ENERGY CONSUMED BY MEANS OTHER THAN COMBUSTION

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Purchase and loss of electricity from main electricity grid in a State or Territory	-	-	-	-	135,314	kWh	0.0036	487
							Total	487

5: CAMDEN CAMPUS - FACILITY

Name	Camden Campus
Facility Street Address	Camden-Cobbitty Werombi Road BROWNLOW HILL New South Wales 2570 AUSTRALIA
Geographic Coordinates	Latitude 34.032S / Longitude 150.657E
Facility location	-
Activity location	New South Wales
Location description	
Activity description	-
ANZSIC Code	810 - Tertiary education
Operational Control	UNIVERSITY OF SYDNEY
Number of Days with Operational Control	Full Year
Operational Control Dates	01/07/2019 - 30/06/2020
Grid Connected Electricity Generator	No

The following tables summarise total greenhouse gas emissions from operation of this facility during the period that it was under the operational control of UNIVERSITY OF SYDNEY.

GREENHOUSE GAS EMISSIONS (t CO2-e)

Scope 1	Scope 2	Total of Scope 1 and Scope 2
110	5,955	6,065

ENERGY PRODUCED AND ENERGY CONSUMED (GJ)

Energy Consumed Total	Energy Consumed Net	Energy Produced
28,278	28,278	-

GREENHOUSE GAS SCOPE 1 EMISSIONS BY GAS (t CO2-e)

Carbon Dioxide CO2	Methane CH4	Nitrous Oxide N2O	Perfluorocarbons PFCs	Hydro Fluoro Carbons HFCs	Sulphur Hexafluoride SF6	Total
110	-	-	-	-	-	110

SCOPE 1 EMISSIONS

EC = Energy Content Factor, Z = Energy Content, EF = Emission Factor

Source Activity	Fuel / Criterion	Quantity	Energy Values (EC & Z)	Gas / Method	Scope 1 Emissions (t CO2-e)
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of gaseous fuels - Stationary energy purposes	**Fuel / Energy commodity:** Natural gas distributed in a pipeline **Fuel usage:** combustion **Criterion:** A	859.896 GJ	**EC (GJ/Unit):** 1 **Z (GJ):** 860	**Gas:** CO2 **EF (kg CO2-e / GJ):** 51.4 **Method:** Method 1	44
				Gas: CH4 **EF (kg CO2-e / GJ):** 0.1 **Method:** Method 1	0
				Gas: N2O **EF (kg CO2-e / GJ):** 0.03	0

				Method: Method 1	
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of liquid fuels other than petroleum oils or greases - Stationary energy purposes	**Fuel / Energy commodity:** Diesel oil **Fuel usage:** combustion **Criterion:** A	0 kL	**EC (GJ/Unit):** 38.6 **Z (GJ):** -	**Gas:** CH4 **EF (kg CO2-e / GJ):** 0.1 **Method:** Method 1	0
				Gas: N2O **EF (kg CO2-e / GJ):** 0.2 **Method:** Method 1	0
				Gas: CO2 **EF (kg CO2-e / GJ):** 69.9 **Method:** Method 1	0
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	**Fuel / Energy commodity:** Gasoline (other than for use as fuel in an aircraft) - Transport post-2004 **Fuel usage:** combustion **Criterion:** A	4.236 kL	**EC (GJ/Unit):** 34.2 **Z (GJ):** 145	**Gas:** CO2 **EF (kg CO2-e / GJ):** 67.4 **Method:** Method 1	10
				Gas: CH4 **EF (kg CO2-e / GJ):** 0.02 **Method:** Method 2	0
				Gas: N2O **EF (kg CO2-e / GJ):** 0.2 **Method:** Method 2	0
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	**Fuel / Energy commodity:** Ethanol for use as a fuel in an internal combustion engine - Transport post-2004 **Fuel usage:** combustion **Criterion:** A	0.36 kL	**EC (GJ/Unit):** 23.4 **Z (GJ):** 8	**Gas:** CO2 **EF (kg CO2-e / GJ):** 0 **Method:** Method 1	0

				Gas: N2O **EF (kg CO2-e / GJ):** 0.2 **Method:** Method 2	0
				Gas: CH4 **EF (kg CO2-e / GJ):** 0.2 **Method:** Method 2	0
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	**Fuel / Energy commodity:** Diesel oil - Transport **Fuel usage:** combustion **Criterion:** A	20.64 kL	**EC (GJ/Unit):** 38.6 **Z (GJ):** 797	**Gas:** CH4 **EF (kg CO2-e / GJ):** 0.1 **Method:** Method 1	0
				Gas: N2O **EF (kg CO2-e / GJ):** 0.5 **Method:** Method 1	0
				Gas: CO2 **EF (kg CO2-e / GJ):** 69.9 **Method:** Method 1	56
			Source Total	1,810	110
			Total	1,810	110

SCOPE 2 EMISSIONS

Activity Type	Quantity	Units	Emission Factor (kg CO2-e / unit)	Scope 2 Emissions (t CO2-e)
Purchase and loss of electricity from main electricity grid in a State or Territory	7,352,255	kWh	0.81	5,955
			Total	5,955

ENERGY CONSUMED BY MEANS OF COMBUSTION FOR TRANSPORT

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	Gasoline (other than for use as fuel in an aircraft) - Transport post-2004	combustion	A	-	4.236	kL	34.2	145
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	Ethanol for use as a fuel in an internal combustion engine - Transport post-2004	combustion	A	-	0.36	kL	23.4	8
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	Diesel oil - Transport	combustion	A	-	20.64	kL	38.6	797
							Total	950

ENERGY CONSUMED BY MEANS OF COMBUSTION FOR PURPOSES OTHER THAN PRODUCING ELECTRICITY, PRODUCING A CHEMICAL OR METAL PRODUCT OR FOR TRANSPORT

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Emissions released from combustion of gaseous fuels - Stationary energy purposes	Natural gas distributed in a pipeline	combustion	A	-	859.896	GJ	1	860
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Stationary energy purposes	Diesel oil	combustion	A	-	0	kL	38.6	0
							Total	860

ENERGY CONSUMED BY MEANS OTHER THAN COMBUSTION

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Purchase and loss of electricity from main electricity grid in a State or Territory	-	-	-	-	7,352,255	kWh	0.0036	26,468
							Total	26,468

6: CAMPERDOWN CAMPUS - FACILITY

Name	Camperdown Campus
Facility Street Address	Campus Infrastructure Services Services Building G12 THE UNIVERSITY OF SYDNEY New South Wales 2006 AUSTRALIA
Geographic Coordinates	Latitude 33.892S / Longitude 151.192E
Facility location	-
Activity location	New South Wales
Location description	
Activity description	-
ANZSIC Code	810 - Tertiary education
Operational Control	UNIVERSITY OF SYDNEY
Number of Days with Operational Control	Full Year
Operational Control Dates	01/07/2019 - 30/06/2020
Grid Connected Electricity Generator	No

The following tables summarise total greenhouse gas emissions from operation of this facility during the period that it was under the operational control of UNIVERSITY OF SYDNEY.

GREENHOUSE GAS EMISSIONS (t CO2-e)

Scope 1	Scope 2	Total of Scope 1 and Scope 2
3,610	47,804	51,414

ENERGY PRODUCED AND ENERGY CONSUMED (GJ)

Energy Consumed Total	Energy Consumed Net	Energy Produced
285,511	283,422	2,089

GREENHOUSE GAS SCOPE 1 EMISSIONS BY GAS (t CO2-e)

Carbon Dioxide CO2	Methane CH4	Nitrous Oxide N2O	Perfluorocarbons PFCs	Hydro Fluoro Carbons HFCs	Sulphur Hexafluoride SF6	Total
3,600	7	3	-	-	-	3,610

SCOPE 1 EMISSIONS

EC = Energy Content Factor, Z = Energy Content, EF = Emission Factor

Source Activity	Fuel / Criterion	Quantity	Energy Values (EC & Z)	Gas / Method	Scope 1 Emissions (t CO2-e)
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of gaseous fuels - Stationary energy purposes	**Fuel / Energy commodity:** Natural gas distributed in a pipeline **Fuel usage:** combustion **Criterion:** A	65,208.855 GJ	**EC (GJ/Unit):** 1 **Z (GJ):** 65,209	**Gas:** CO2 **EF (kg CO2-e / GJ):** 51.4 **Method:** Method 1	3,352
				Gas: N2O **EF (kg CO2-e / GJ):** 0.03 **Method:** Method 1	2
				Gas: CH4 **EF (kg CO2-e / GJ):**	7

				0.1 **Method:** Method 1	
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	**Fuel / Energy commodity:** Gasoline (other than for use as fuel in an aircraft) - Transport post-2004 **Fuel usage:** combustion **Criterion:** A	45.965 kL	**EC (GJ/Unit):** 34.2 **Z (GJ):** 1,572	**Gas:** CO2 **EF (kg CO2-e / GJ):** 67.4 **Method:** Method 1	106
				Gas: CH4 **EF (kg CO2-e / GJ):** 0.02 **Method:** Method 2	0
				Gas: N2O **EF (kg CO2-e / GJ):** 0.2 **Method:** Method 2	0
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	**Fuel / Energy commodity:** Diesel oil - Transport post-2004 **Fuel usage:** combustion **Criterion:** A	52.632 kL	**EC (GJ/Unit):** 38.6 **Z (GJ):** 2,032	**Gas:** CO2 **EF (kg CO2-e / GJ):** 69.9 **Method:** Method 1	142
				Gas: N2O **EF (kg CO2-e / GJ):** 0.6 **Method:** Method 2	1
				Gas: CH4 **EF (kg CO2-e / GJ):** 0.01 **Method:** Method 2	0
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of liquid	**Fuel / Energy commodity:** Ethanol for use as a fuel in an internal combustion engine - Transport post-2004 **Fuel usage:** combustion **Criterion:** A	2.527 kL	**EC (GJ/Unit):** 23.4 **Z (GJ):** 59	**Gas:** CO2 **EF (kg CO2-e / GJ):** 0 **Method:**	0

fuels other than petroleum oils or greases - Transport energy purposes				Method 1	
				Gas: N2O **EF (kg CO2-e / GJ):** 0.2 **Method:** Method 2	0
				Gas: CH4 **EF (kg CO2-e / GJ):** 0.2 **Method:** Method 2	0
			Source Total	68,872	3,610
			Total	68,872	3,610

SCOPE 2 EMISSIONS

Activity Type	Quantity	Units	Emission Factor (kg CO2-e / unit)	Scope 2 Emissions (t CO2-e)
Purchase and loss of electricity from main electricity grid in a State or Territory	59,017,054	kWh	0.81	47,804
			Total	47,804

ENERGY CONSUMED BY MEANS OF COMBUSTION FOR TRANSPORT

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	Gasoline (other than for use as fuel in an aircraft) - Transport post-2004	combustion	A	-	45.965	kL	34.2	1,572
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	Diesel oil - Transport post-2004	combustion	A	-	52.632	kL	38.6	2,032
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	Ethanol for use as a fuel in an internal combustion engine - Transport post-2004	combustion	A	-	2.527	kL	23.4	59
							Total	3,663

ENERGY CONSUMED BY MEANS OF COMBUSTION FOR PURPOSES OTHER THAN PRODUCING ELECTRICITY, PRODUCING A CHEMICAL OR METAL PRODUCT OR FOR TRANSPORT

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Emissions released from combustion of gaseous fuels - Stationary energy purposes	Natural gas distributed in a pipeline	combustion	A	-	65,208.855	GJ	1	65,209
							Total	65,209

ENERGY CONSUMED BY MEANS OTHER THAN COMBUSTION

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Purchase and loss of electricity from main electricity grid in a State or Territory	-	-	-	-	59,017,054	kWh	0.0036	212,461
Energy consumed (not combusted)	Electricity	non-combustion	-	-	2,089	GJ	1	2,089
Energy commodities	Solar energy for electricity generation	non-combustion	-	-	2,089	GJ	1	2,089
							Total	216,639

ELECTRICITY PRODUCED

Activity Type	Usage	Amount	Units	Energy Content Factor (GJ/Unit)	Converted Energy Content Amount (GJ)
Electricity (solar generation)	For use onsite	580,308	kWh	0.0036	2,089
				Total	2,089

7: CBD CAMPUS - FACILITY

Name	CBD Campus
Facility Street Address	Castlereagh Street SYDNEY New South Wales 2000 AUSTRALIA
Geographic Coordinates	Latitude 33.869S / Longitude 151.211E
Facility location	-
Activity location	New South Wales
Location description	-
Activity description	-
ANZSIC Code	810 - Tertiary education
Operational Control	UNIVERSITY OF SYDNEY
Number of Days with Operational Control	Full Year
Operational Control Dates	01/07/2019 - 30/06/2020
Grid Connected Electricity Generator	No

The following tables summarise total greenhouse gas emissions from operation of this facility during the period that it was under the operational control of UNIVERSITY OF SYDNEY.

GREENHOUSE GAS EMISSIONS (t CO2-e)

Scope 1	Scope 2	Total of Scope 1 and Scope 2
1	218	219

ENERGY PRODUCED AND ENERGY CONSUMED (GJ)

Energy Consumed Total	Energy Consumed Net	Energy Produced
978	978	-

GREENHOUSE GAS SCOPE 1 EMISSIONS BY GAS (t CO2-e)

Carbon Dioxide CO2	Methane CH4	Nitrous Oxide N2O	Perfluorocarbons PFCs	Hydro Fluoro Carbons HFCs	Sulphur Hexafluoride SF6	Total
1	-	-	-	-	-	1

SCOPE 1 EMISSIONS

EC = Energy Content Factor, Z = Energy Content, EF = Emission Factor

Source Activity	Fuel / Criterion	Quantity	Energy Values (EC & Z)	Gas / Method	Scope 1 Emissions (t CO2-e)
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	**Fuel / Energy commodity:** Gasoline (other than for use as fuel in an aircraft) - Transport post-2004 **Fuel usage:** combustion **Criterion:** A	0.24 kL	**EC (GJ/Unit):** 34.2 **Z (GJ):** 8	**Gas:** CO2 **EF (kg CO2-e / GJ):** 67.4 **Method:** Method 1	1
				Gas: N2O **EF (kg CO2-e / GJ):** 0.2 **Method:** Method 2	0
				Gas: CH4 **EF (kg CO2-e / GJ):** 0.02 **Method:**	0

				Method 2	
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	**Fuel / Energy commodity:** Ethanol for use as a fuel in an internal combustion engine - Transport post-2004 **Fuel usage:** combustion **Criterion:** A	0 kL	**EC (GJ/Unit):** 23.4 **Z (GJ):** -	**Gas:** - **EF (kg CO2-e / GJ):** - **Method:** -	-
		Total	8		1

SCOPE 2 EMISSIONS

Activity Type	Quantity	Units	Emission Factor (kg CO2-e / unit)	Scope 2 Emissions (t CO2-e)
Purchase and loss of electricity from main electricity grid in a State or Territory	269,329	kWh	0.81	218
			Total	218

ENERGY CONSUMED BY MEANS OF COMBUSTION FOR TRANSPORT

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	Gasoline (other than for use as fuel in an aircraft) - Transport post-2004	combustion	A	-	0.24	kL	34.2	8
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	Ethanol for use as a fuel in an internal combustion engine - Transport post-2004	combustion	A	-	0	kL	23.4	0
							Total	8

ENERGY CONSUMED BY MEANS OTHER THAN COMBUSTION

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Purchase and loss of electricity from main electricity grid in a State or Territory	-	-	-	-	269,329	kWh	0.0036	970
							Total	970

8: CONSERVATORIUM OF MUSIC - FACILITY

Name	Conservatorium of Music
Facility Street Address	Macquarie St Services Building G12 THE UNIVERSITY OF SYDNEY New South Wales 2006 AUSTRALIA
Geographic Coordinates	Latitude 33.863S / Longitude 151.214E
Facility location	-
Activity location	New South Wales
Location description	
Activity description	-
ANZSIC Code	810 - Tertiary education
Operational Control	UNIVERSITY OF SYDNEY
Number of Days with Operational Control	Full Year
Operational Control Dates	01/07/2019 - 30/06/2020
Grid Connected Electricity Generator	No

The following tables summarise total greenhouse gas emissions from operation of this facility during the period that it was under the operational control of UNIVERSITY OF SYDNEY.

GREENHOUSE GAS EMISSIONS (t CO2-e)

Scope 1	Scope 2	Total of Scope 1 and Scope 2
90	1,977	2,067

ENERGY PRODUCED AND ENERGY CONSUMED (GJ)

Energy Consumed Total	Energy Consumed Net	Energy Produced
10,529	10,529	-

GREENHOUSE GAS SCOPE 1 EMISSIONS BY GAS (t CO2-e)

Carbon Dioxide CO2	Methane CH4	Nitrous Oxide N2O	Perfluorocarbons PFCs	Hydro Fluoro Carbons HFCs	Sulphur Hexafluoride SF6	Total
90	-	-	-	-	-	90

SCOPE 1 EMISSIONS

EC = Energy Content Factor, Z = Energy Content, EF = Emission Factor

Source Activity	Fuel / Criterion	Quantity	Energy Values (EC & Z)	Gas / Method	Scope 1 Emissions (t CO2-e)
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of gaseous fuels - Stationary energy purposes	**Fuel / Energy commodity:** Natural gas distributed in a pipeline **Fuel usage:** combustion **Criterion:** A	1,733.208 GJ	**EC (GJ/Unit):** 1 **Z (GJ):** 1,733	**Gas:** CO2 **EF (kg CO2-e / GJ):** 51.4 **Method:** Method 1	89
				Gas: N2O **EF (kg CO2-e / GJ):** 0.03 **Method:** Method 1	0
				Gas: CH4 **EF (kg CO2-e / GJ):**	0

				0.1 **Method:** Method 1	
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	**Fuel / Energy commodity:** Gasoline (other than for use as fuel in an aircraft) - Transport post-2004 **Fuel usage:** combustion **Criterion:** A	0.317 kL	**EC (GJ/Unit):** 34.2 **Z (GJ):** 11	**Gas:** CO2 **EF (kg CO2-e / GJ):** 67.4 **Method:** Method 1	1
				Gas: CH4 **EF (kg CO2-e / GJ):** 0.02 **Method:** Method 2	0
				Gas: N2O **EF (kg CO2-e / GJ):** 0.2 **Method:** Method 2	0
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	**Fuel / Energy commodity:** Ethanol for use as a fuel in an internal combustion engine - Transport post-2004 **Fuel usage:** combustion **Criterion:** A	0.019 kL	**EC (GJ/Unit):** 23.4 **Z (GJ):** -	**Gas:** CO2 **EF (kg CO2-e / GJ):** 0 **Method:** Method 1	0
				Gas: CH4 **EF (kg CO2-e / GJ):** 0.2 **Method:** Method 2	0
				Gas: N2O **EF (kg CO2-e / GJ):** 0.2 **Method:** Method 2	0
		Source Total	1,744		90
		Total	1,744		90

SCOPE 2 EMISSIONS

Activity Type	Quantity	Units	Emission Factor (kg CO2-e / unit)	Scope 2 Emissions (t CO2-e)

Purchase and loss of electricity from main electricity grid in a State or Territory	2,440,404	kWh	0.81	1,977
			Total	1,977

ENERGY CONSUMED BY MEANS OF COMBUSTION FOR TRANSPORT

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	Gasoline (other than for use as fuel in an aircraft) - Transport post-2004	combustion	A	-	0.317	kL	34.2	11
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	Ethanol for use as a fuel in an internal combustion engine - Transport post-2004	combustion	A	-	0.019	kL	23.4	0
							Total	11

ENERGY CONSUMED BY MEANS OF COMBUSTION FOR PURPOSES OTHER THAN PRODUCING ELECTRICITY, PRODUCING A CHEMICAL OR METAL PRODUCT OR FOR TRANSPORT

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Emissions released from combustion of gaseous fuels - Stationary energy purposes	Natural gas distributed in a pipeline	combustion	A	-	1,733.208	GJ	1	1,733
							Total	1,733

ENERGY CONSUMED BY MEANS OTHER THAN COMBUSTION

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Purchase and loss of electricity from main electricity grid in a State or Territory	-	-	-	-	2,440,404	kWh	0.0036	8,785
							Total	8,785

9: CUMBERLAND CAMPUS - FACILITY

Name	Cumberland Campus
Facility Street Address	75 East St Services Building G12 LIDCOMBE New South Wales 2141 AUSTRALIA
Geographic Coordinates	Latitude 33.881S / Longitude 151.048E
Facility location	-
Activity location	New South Wales
Location description	
Activity description	-
ANZSIC Code	810 - Tertiary education
Operational Control	UNIVERSITY OF SYDNEY
Number of Days with Operational Control	Full Year
Operational Control Dates	01/07/2019 - 30/06/2020
Grid Connected Electricity Generator	No

The following tables summarise total greenhouse gas emissions from operation of this facility during the period that it was under the operational control of UNIVERSITY OF SYDNEY.

GREENHOUSE GAS EMISSIONS (t CO2-e)

Scope 1	Scope 2	Total of Scope 1 and Scope 2
354	4,413	4,767

ENERGY PRODUCED AND ENERGY CONSUMED (GJ)

Energy Consumed Total	Energy Consumed Net	Energy Produced
26,478	26,478	-

GREENHOUSE GAS SCOPE 1 EMISSIONS BY GAS (t CO2-e)

Carbon Dioxide CO2	Methane CH4	Nitrous Oxide N2O	Perfluorocarbons PFCs	Hydro Fluoro Carbons HFCs	Sulphur Hexafluoride SF6	Total
353	1	-	-	-	-	354

SCOPE 1 EMISSIONS

EC = Energy Content Factor, Z = Energy Content, EF = Emission Factor

Source Activity	Fuel / Criterion	Quantity	Energy Values (EC & Z)	Gas / Method	Scope 1 Emissions (t CO2-e)
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of gaseous fuels - Stationary energy purposes	**Fuel / Energy commodity:** Natural gas distributed in a pipeline **Fuel usage:** combustion **Criterion:** A	6,863.572 GJ	**EC (GJ/Unit):** 1 **Z (GJ):** 6,864	**Gas:** CO2 **EF (kg CO2-e / GJ):** 51.4 **Method:** Method 1	353
				Gas: CH4 **EF (kg CO2-e / GJ):** 0.1 **Method:** Method 1	1
				Gas: N2O **EF (kg CO2-e / GJ):** 0.03 **Method:** Method 1	0

			Source Total	6,864	354
			Total	6,864	354

SCOPE 2 EMISSIONS

Activity Type	Quantity	Units	Emission Factor (kg CO2-e / unit)	Scope 2 Emissions (t CO2-e)
Purchase and loss of electricity from main electricity grid in a State or Territory	5,448,235	kWh	0.81	4,413
			Total	4,413

ENERGY CONSUMED BY MEANS OF COMBUSTION FOR PURPOSES OTHER THAN PRODUCING ELECTRICITY, PRODUCING A CHEMICAL OR METAL PRODUCT OR FOR TRANSPORT

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Emissions released from combustion of gaseous fuels - Stationary energy purposes	Natural gas distributed in a pipeline	combustion	A	-	6,863.572	GJ	1	6,864
							Total	6,864

ENERGY CONSUMED BY MEANS OTHER THAN COMBUSTION

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Purchase and loss of electricity from main electricity grid in a State or Territory	-	-	-	-	5,448,235	kWh	0.0036	19,614
							Total	19,614

10: DARLINGTON CAMPUS - FACILITY

Name	Darlington Campus
Facility Street Address	Campus Infrastructure Services Services Building G12 THE UNIVERSITY OF SYDNEY New South Wales 2006 AUSTRALIA
Geographic Coordinates	Latitude 33.891S / Longitude 151.192E
Facility location	-
Activity location	New South Wales
Location description	
Activity description	-
ANZSIC Code	810 - Tertiary education
Operational Control	UNIVERSITY OF SYDNEY
Number of Days with Operational Control	Full Year
Operational Control Dates	01/07/2019 - 30/06/2020
Grid Connected Electricity Generator	No

The following tables summarise total greenhouse gas emissions from operation of this facility during the period that it was under the operational control of UNIVERSITY OF SYDNEY.

GREENHOUSE GAS EMISSIONS (t CO2-e)

Scope 1	Scope 2	Total of Scope 1 and Scope 2
1,679	22,628	24,307

ENERGY PRODUCED AND ENERGY CONSUMED (GJ)

Energy Consumed Total	Energy Consumed Net	Energy Produced
136,357	134,683	1,674

GREENHOUSE GAS SCOPE 1 EMISSIONS BY GAS (t CO2-e)

Carbon Dioxide CO2	Methane CH4	Nitrous Oxide N2O	Perfluorocarbons PFCs	Hydro Fluoro Carbons HFCs	Sulphur Hexafluoride SF6	Total
1,675	3	1	-	-	-	1,679

SCOPE 1 EMISSIONS

EC = Energy Content Factor, Z = Energy Content, EF = Emission Factor

Source Activity	Fuel / Criterion	Quantity	Energy Values (EC & Z)	Gas / Method	Scope 1 Emissions (t CO2-e)
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of gaseous fuels - Stationary energy purposes	**Fuel / Energy commodity:** Natural gas distributed in a pipeline **Fuel usage:** combustion **Criterion:** A	31,979.333 GJ	**EC (GJ/Unit):** 1 **Z (GJ):** 31,979	**Gas:** N2O **EF (kg CO2-e / GJ):** 0.03 **Method:** Method 1	1
				Gas: CH4 **EF (kg CO2-e / GJ):** 0.1 **Method:** Method 1	3
				Gas: CO2 **EF (kg CO2-e / GJ):**	1,644

				51.4 **Method:** Method 1	
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	**Fuel / Energy commodity:** Gasoline (other than for use as fuel in an aircraft) - Transport post-2004 **Fuel usage:** combustion **Criterion:** A	4.085 kL	**EC (GJ/Unit):** 34.2 **Z (GJ):** 140	**Gas:** CO2 **EF (kg CO2-e / GJ):** 67.4 **Method:** Method 1	9
				Gas: N2O **EF (kg CO2-e / GJ):** 0.2 **Method:** Method 2	0
				Gas: CH4 **EF (kg CO2-e / GJ):** 0.02 **Method:** Method 2	0
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	**Fuel / Energy commodity:** Diesel oil - Transport post-2004 **Fuel usage:** combustion **Criterion:** A	8.16 kL	**EC (GJ/Unit):** 38.6 **Z (GJ):** 315	**Gas:** CO2 **EF (kg CO2-e / GJ):** 69.9 **Method:** Method 1	22
				Gas: CH4 **EF (kg CO2-e / GJ):** 0.01 **Method:** Method 2	0
				Gas: N2O **EF (kg CO2-e / GJ):** 0.6 **Method:** Method 2	0
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of liquid	**Fuel / Energy commodity:** Ethanol for use as a fuel in an internal combustion engine - Transport post-2004 **Fuel usage:** combustion **Criterion:** A	0.163 kL	**EC (GJ/Unit):** 23.4 **Z (GJ):** 4	**Gas:** CO2 **EF (kg CO2-e / GJ):** 0 **Method:**	0

fuels other than petroleum oils or greases - Transport energy purposes				Method 1	
				Gas: N2O **EF (kg CO2-e / GJ):** 0.2 **Method:** Method 2	0
				Gas: CH4 **EF (kg CO2-e / GJ):** 0.2 **Method:** Method 2	0
			Source Total	32,438	1,679
			Total	32,438	1,679

SCOPE 2 EMISSIONS

Activity Type	Quantity	Units	Emission Factor (kg CO2-e / unit)	Scope 2 Emissions (t CO2-e)
Purchase and loss of electricity from main electricity grid in a State or Territory	27,936,353	kWh	0.81	22,628
			Total	22,628

ENERGY CONSUMED BY MEANS OF COMBUSTION FOR TRANSPORT

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	Gasoline (other than for use as fuel in an aircraft) - Transport post-2004	combustion	A	-	4.085	kL	34.2	140
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	Diesel oil - Transport post-2004	combustion	A	-	8.16	kL	38.6	315
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	Ethanol for use as a fuel in an internal combustion engine - Transport post-2004	combustion	A	-	0.163	kL	23.4	4
							Total	459

ENERGY CONSUMED BY MEANS OF COMBUSTION FOR PURPOSES OTHER THAN PRODUCING ELECTRICITY, PRODUCING A CHEMICAL OR METAL PRODUCT OR FOR TRANSPORT

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Emissions released from combustion of gaseous fuels - Stationary energy purposes	Natural gas distributed in a pipeline	combustion	A	-	31,979.333	GJ	1	31,979
							Total	31,979

ENERGY CONSUMED BY MEANS OTHER THAN COMBUSTION

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Purchase and loss of electricity from main electricity grid in a State or Territory	-	-	-	-	27,936,353	kWh	0.0036	100,571
Energy consumed (not combusted)	Electricity	non-combustion	-	-	1,674	GJ	1	1,674
Energy commodities	Solar energy for electricity generation	non-combustion	-	-	1,674	GJ	1	1,674
							Total	103,919

ELECTRICITY PRODUCED

Activity Type	Usage	Amount	Units	Energy Content Factor (GJ/Unit)	Converted Energy Content Amount (GJ)
Electricity (solar generation)	For use onsite	465,132	kWh	0.0036	1,674
				Total	1,674

11: DUBBO CAMPUS - FACILITY

Name	Dubbo Campus
Facility Street Address	11 Moran Drive DUBBO New South Wales 2830 AUSTRALIA
Geographic Coordinates	Latitude 32.237S / Longitude 148.621E
Facility location	-
Activity location	New South Wales
Location description	
Activity description	-
ANZSIC Code	810 - Tertiary education
Operational Control	UNIVERSITY OF SYDNEY
Number of Days with Operational Control	Full Year
Operational Control Dates	01/07/2019 - 30/06/2020
Grid Connected Electricity Generator	No

The following tables summarise total greenhouse gas emissions from operation of this facility during the period that it was under the operational control of UNIVERSITY OF SYDNEY.

GREENHOUSE GAS EMISSIONS (t CO2-e)

Scope 1	Scope 2	Total of Scope 1 and Scope 2
67	104	171

ENERGY PRODUCED AND ENERGY CONSUMED (GJ)

Energy Consumed Total	Energy Consumed Net	Energy Produced
1,774	1,774	-

GREENHOUSE GAS SCOPE 1 EMISSIONS BY GAS (t CO2-e)

Carbon Dioxide CO2	Methane CH4	Nitrous Oxide N2O	Perfluorocarbons PFCs	Hydro Fluoro Carbons HFCs	Sulphur Hexafluoride SF6	Total
67	-	-	-	-	-	67

SCOPE 1 EMISSIONS

EC = Energy Content Factor, Z = Energy Content, EF = Emission Factor

Source Activity	Fuel / Criterion	Quantity	Energy Values (EC & Z)	Gas / Method	Scope 1 Emissions (t CO2-e)
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of gaseous fuels - Stationary energy purposes	**Fuel / Energy commodity:** Natural gas distributed in a pipeline **Fuel usage:** combustion **Criterion:** A	1,313.225 GJ	**EC (GJ/Unit):** 1 **Z (GJ):** 1,313	**Gas:** CH4 **EF (kg CO2-e / GJ):** 0.1 **Method:** Method 1	0
				Gas: CO2 **EF (kg CO2-e / GJ):** 51.4 **Method:** Method 1	67
				Gas: N2O **EF (kg CO2-e / GJ):** 0.03 **Method:**	0

				Method 1	
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	**Fuel / Energy commodity:** Gasoline (other than for use as fuel in an aircraft) - Transport post-2004 **Fuel usage:** combustion **Criterion:** A	0 kL	**EC (GJ/Unit):** 34.2 **Z (GJ):** -	**Gas:** - **EF (kg CO2-e / GJ):** - **Method:** -	-
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	**Fuel / Energy commodity:** Ethanol for use as a fuel in an internal combustion engine - Transport post-2004 **Fuel usage:** combustion **Criterion:** A	0 kL	**EC (GJ/Unit):** 23.4 **Z (GJ):** -	**Gas:** - **EF (kg CO2-e / GJ):** - **Method:** -	-
		Total	1,313		67

SCOPE 2 EMISSIONS

Activity Type	Quantity	Units	Emission Factor (kg CO2-e / unit)	Scope 2 Emissions (t CO2-e)
Purchase and loss of electricity from main electricity grid in a State or Territory	128,076	kWh	0.81	104
			Total	104

ENERGY CONSUMED BY MEANS OF COMBUSTION FOR TRANSPORT

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	Gasoline (other than for use as fuel in an aircraft) - Transport post-2004	combustion	A	-	0	kL	34.2	0
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	Ethanol for use as a fuel in an internal combustion engine - Transport post-2004	combustion	A	-	0	kL	23.4	0
							Total	-

ENERGY CONSUMED BY MEANS OF COMBUSTION FOR PURPOSES OTHER THAN PRODUCING ELECTRICITY, PRODUCING A CHEMICAL OR METAL PRODUCT OR FOR TRANSPORT

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Emissions released from combustion of gaseous fuels - Stationary energy purposes	Natural gas distributed in a pipeline	combustion	A	-	1,313.225	GJ	1	1,313
							Total	1,313

ENERGY CONSUMED BY MEANS OTHER THAN COMBUSTION

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Purchase and loss of electricity from main electricity grid in a State or Territory	-	-	-	-	128,076	kWh	0.0036	461
							Total	461

12: MALLETT ST CAMPUS - FACILITY

Name	Mallett St Campus
Facility Street Address	88 Mallett St CAMPERDOWN New South Wales 2050 AUSTRALIA
Geographic Coordinates	Latitude 33.888S / Longitude 151.177E
Facility location	-
Activity location	New South Wales
Location description	
Activity description	-
ANZSIC Code	810 - Tertiary education
Operational Control	UNIVERSITY OF SYDNEY
Number of Days with Operational Control	Full Year
Operational Control Dates	01/07/2019 - 30/06/2020
Grid Connected Electricity Generator	No

The following tables summarise total greenhouse gas emissions from operation of this facility during the period that it was under the operational control of UNIVERSITY OF SYDNEY.

GREENHOUSE GAS EMISSIONS (t CO2-e)

Scope 1	Scope 2	Total of Scope 1 and Scope 2
376	5,621	5,997

ENERGY PRODUCED AND ENERGY CONSUMED (GJ)

Energy Consumed Total	Energy Consumed Net	Energy Produced
32,374	32,328	46

GREENHOUSE GAS SCOPE 1 EMISSIONS BY GAS (t CO2-e)

Carbon Dioxide CO2	Methane CH4	Nitrous Oxide N2O	Perfluorocarbons PFCs	Hydro Fluoro Carbons HFCs	Sulphur Hexafluoride SF6	Total
375	1	-	-	-	-	376

SCOPE 1 EMISSIONS

EC = Energy Content Factor, Z = Energy Content, EF = Emission Factor

Source Activity	Fuel / Criterion	Quantity	Energy Values (EC & Z)	Gas / Method	Scope 1 Emissions (t CO2-e)
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of gaseous fuels - Stationary energy purposes	**Fuel / Energy commodity:** Natural gas distributed in a pipeline **Fuel usage:** combustion **Criterion:** A	7,300.782 GJ	**EC (GJ/Unit):** 1 **Z (GJ):** 7,301	**Gas:** CO2 **EF (kg CO2-e / GJ):** 51.4 **Method:** Method 1	375
				Gas: CH4 **EF (kg CO2-e / GJ):** 0.1 **Method:** Method 1	1
				Gas: N2O **EF (kg CO2-e / GJ):** 0.03 **Method:**	0

				Method 1	
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	**Fuel / Energy commodity:** Gasoline (other than for use as fuel in an aircraft) - Transport post-2004 **Fuel usage:** combustion **Criterion:** A	0 kL	**EC (GJ/Unit):** 34.2 **Z (GJ):** -	**Gas:** - **EF (kg CO2-e / GJ):** - **Method:** -	-
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	**Fuel / Energy commodity:** Ethanol for use as a fuel in an internal combustion engine - Transport post-2004 **Fuel usage:** combustion **Criterion:** A	0 kL	**EC (GJ/Unit):** 23.4 **Z (GJ):** -	**Gas:** - **EF (kg CO2-e / GJ):** - **Method:** -	-
		Total	7,301		376

SCOPE 2 EMISSIONS

Activity Type	Quantity	Units	Emission Factor (kg CO2-e / unit)	Scope 2 Emissions (t CO2-e)
Purchase and loss of electricity from main electricity grid in a State or Territory	6,939,104	kWh	0.81	5,621
			Total	5,621

ENERGY CONSUMED BY MEANS OF COMBUSTION FOR TRANSPORT

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	Gasoline (other than for use as fuel in an aircraft) - Transport post-2004	combustion	A	-	0	kL	34.2	0
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	Ethanol for use as a fuel in an internal combustion engine - Transport post-2004	combustion	A	-	0	kL	23.4	0
							Total	-

ENERGY CONSUMED BY MEANS OF COMBUSTION FOR PURPOSES OTHER THAN PRODUCING ELECTRICITY, PRODUCING A CHEMICAL OR METAL PRODUCT OR FOR TRANSPORT

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Emissions released from combustion of gaseous fuels - Stationary energy purposes	Natural gas distributed in a pipeline	combustion	A	-	7,300.782	GJ	1	7,301
							Total	7,301

ENERGY CONSUMED BY MEANS OTHER THAN COMBUSTION

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Purchase and loss of electricity from main electricity grid in a State or Territory	-	-	-	-	6,939,104	kWh	0.0036	24,981
Energy consumed (not combusted)	Electricity	non-combustion	-	-	46	GJ	1	46
Energy commodities	Solar energy for electricity generation	non-combustion	-	-	46	GJ	1	46
							Total	25,073

ELECTRICITY PRODUCED

Activity Type	Usage	Amount	Units	Energy Content Factor (GJ/Unit)	Converted Energy Content Amount (GJ)
Electricity (solar generation)	For use onsite	12,804	kWh	0.0036	46
				Total	46

13: MIDDLE POINT - RESEARCH STATION - FACILITY

Name	Middle Point - Research Station
Facility Street Address	Lot 1534,535 Anzac Parade MIDDLE POINT Northern Territory 0822 AUSTRALIA
Geographic Coordinates	Latitude 12.574S / Longitude 131.317E
Facility location	-
Activity location	Northern Territory
Location description	
Activity description	-
ANZSIC Code	810 - Tertiary education
Operational Control	UNIVERSITY OF SYDNEY
Number of Days with Operational Control	Full Year
Operational Control Dates	01/07/2019 - 30/06/2020
Grid Connected Electricity Generator	No

The following tables summarise total greenhouse gas emissions from operation of this facility during the period that it was under the operational control of UNIVERSITY OF SYDNEY.

GREENHOUSE GAS EMISSIONS (t CO2-e)

Scope 1	Scope 2	Total of Scope 1 and Scope 2
-	43	43

ENERGY PRODUCED AND ENERGY CONSUMED (GJ)

Energy Consumed Total	Energy Consumed Net	Energy Produced
251	251	-

GREENHOUSE GAS SCOPE 1 EMISSIONS BY GAS (t CO2-e)

Carbon Dioxide CO2	Methane CH4	Nitrous Oxide N2O	Perfluorocarbons PFCs	Hydro Fluoro Carbons HFCs	Sulphur Hexafluoride SF6	Total
-	-	-	-	-	-	-

SCOPE 1 EMISSIONS

EC = Energy Content Factor, Z = Energy Content, EF = Emission Factor

Source Activity	Fuel / Criterion	Quantity	Energy Values (EC & Z)	Gas / Method	Scope 1 Emissions (t CO2-e)
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	**Fuel / Energy commodity:** Diesel oil - Transport post-2004 **Fuel usage:** combustion **Criterion:** A	0 kL	**EC (GJ/Unit):** 38.6 **Z (GJ):** -	**Gas:** - **EF (kg CO2-e / GJ):** - **Method:** -	-
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	**Fuel / Energy commodity:** Gasoline (other than for use as fuel in an aircraft) - Transport post-2004 **Fuel usage:** combustion **Criterion:** A	0.156 kL	**EC (GJ/Unit):** 34.2 **Z (GJ):** 5	**Gas:** CO2 **EF (kg CO2-e / GJ):** 67.4 **Method:** Method 1	0
				Gas: N2O **EF (kg CO2-e / GJ):** 0.2 **Method:**	0

				Method 2 **Gas:** CH4 **EF (kg CO2-e / GJ):** 0.02 **Method:** Method 2	0
			Source Total	5	-
			Total	5	-

SCOPE 2 EMISSIONS

Activity Type	Quantity	Units	Emission Factor (kg CO2-e / unit)	Scope 2 Emissions (t CO2-e)
Purchase and loss of electricity from main electricity grid in a State or Territory	68,450	kWh	0.63	43
			Total	43

ENERGY CONSUMED BY MEANS OF COMBUSTION FOR TRANSPORT

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	Diesel oil - Transport post-2004	combustion	A	-	0	kL	38.6	0
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	Gasoline (other than for use as fuel in an aircraft) - Transport post-2004	combustion	A	-	0.156	kL	34.2	5
							Total	5

ENERGY CONSUMED BY MEANS OTHER THAN COMBUSTION

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Purchase and loss of electricity from main electricity grid in a State or Territory	-	-	-	-	68,450	kWh	0.0036	246
							Total	246

14: MOLONGLO OBSERVATORY - FACILITY

Name	Molonglo Observatory
Facility Street Address	1152 Bungendore/Hoskintown Rd BUNGENDORE New South Wales 2621 AUSTRALIA
Geographic Coordinates	Latitude 35.371S / Longitude 149.426E
Facility location	-
Activity location	New South Wales
Location description	
Activity description	-
ANZSIC Code	810 - Tertiary education
Operational Control	UNIVERSITY OF SYDNEY
Number of Days with Operational Control	Full Year
Operational Control Dates	01/07/2019 - 30/06/2020
Grid Connected Electricity Generator	No

The following tables summarise total greenhouse gas emissions from operation of this facility during the period that it was under the operational control of UNIVERSITY OF SYDNEY.

GREENHOUSE GAS EMISSIONS (t CO2-e)

Scope 1	Scope 2	Total of Scope 1 and Scope 2
-	269	269

ENERGY PRODUCED AND ENERGY CONSUMED (GJ)

Energy Consumed Total	Energy Consumed Net	Energy Produced
1,195	1,195	-

GREENHOUSE GAS SCOPE 1 EMISSIONS BY GAS (t CO2-e)

Carbon Dioxide CO2	Methane CH4	Nitrous Oxide N2O	Perfluorocarbons PFCs	Hydro Fluoro Carbons HFCs	Sulphur Hexafluoride SF6	Total
-	-	-	-	-	-	-

SCOPE 2 EMISSIONS

Activity Type	Quantity	Units	Emission Factor (kg CO2-e / unit)	Scope 2 Emissions (t CO2-e)
Purchase and loss of electricity from main electricity grid in a State or Territory	331,993	kWh	0.81	269
			Total	269

ENERGY CONSUMED BY MEANS OTHER THAN COMBUSTION

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Purchase and loss of electricity from main electricity grid in a State or Territory	-	-	-	-	331,993	kWh	0.0036	1,195
							Total	1,195

15: NARRABRI - FACILITY

Name	Narrabri
Facility Street Address	Narrabri Campus 12656 Newell Highway NARRABRI New South Wales 2390 AUSTRALIA
Geographic Coordinates	Latitude 30.271S / Longitude 149.804E
Facility location	-
Activity location	New South Wales
Location description	
Activity description	-
ANZSIC Code	810 - Tertiary education
Operational Control	UNIVERSITY OF SYDNEY
Number of Days with Operational Control	Full Year
Operational Control Dates	01/07/2019 - 30/06/2020
Grid Connected Electricity Generator	No

The following tables summarise total greenhouse gas emissions from operation of this facility during the period that it was under the operational control of UNIVERSITY OF SYDNEY.

GREENHOUSE GAS EMISSIONS (t CO2-e)

Scope 1	Scope 2	Total of Scope 1 and Scope 2
196	1,122	1,318

ENERGY PRODUCED AND ENERGY CONSUMED (GJ)

Energy Consumed Total	Energy Consumed Net	Energy Produced
7,771	7,771	-

GREENHOUSE GAS SCOPE 1 EMISSIONS BY GAS (t CO2-e)

Carbon Dioxide CO2	Methane CH4	Nitrous Oxide N2O	Perfluorocarbons PFCs	Hydro Fluoro Carbons HFCs	Sulphur Hexafluoride SF6	Total
195	-	1	-	-	-	196

SCOPE 1 EMISSIONS

EC = Energy Content Factor, Z = Energy Content, EF = Emission Factor

Source Activity	Fuel / Criterion	Quantity	Energy Values (EC & Z)	Gas / Method	Scope 1 Emissions (t CO2-e)
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of liquid fuels other than petroleum oils or greases - Stationary energy purposes	**Fuel / Energy commodity:** Gasoline (other than for use as fuel in an aircraft) **Fuel usage:** combustion **Criterion:** A	0.816 kL	**EC (GJ/Unit):** 34.2 **Z (GJ):** 28	**Gas:** CO2 **EF (kg CO2-e / GJ):** 67.4 **Method:** Method 1	2
				Gas: N2O **EF (kg CO2-e / GJ):** 0.2 **Method:** Method 1	0
				Gas: CH4 **EF (kg CO2-e / GJ):** 0.2	0

				Method: Method 1	
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of liquid fuels other than petroleum oils or greases - Stationary energy purposes	**Fuel / Energy commodity:** Diesel oil **Fuel usage:** combustion **Criterion:** A	13.272 kL	**EC (GJ/Unit):** 38.6 **Z (GJ):** 512	**Gas:** N2O **EF (kg CO2-e / GJ):** 0.2 **Method:** Method 1	0
				Gas: CO2 **EF (kg CO2-e / GJ):** 69.9 **Method:** Method 1	36
				Gas: CH4 **EF (kg CO2-e / GJ):** 0.1 **Method:** Method 1	0
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	**Fuel / Energy commodity:** Diesel oil - Transport post-2004 **Fuel usage:** combustion **Criterion:** A	58.08 kL	**EC (GJ/Unit):** 38.6 **Z (GJ):** 2,242	**Gas:** CO2 **EF (kg CO2-e / GJ):** 69.9 **Method:** Method 1	157
				Gas: CH4 **EF (kg CO2-e / GJ):** 0.01 **Method:** Method 2	0
				Gas: N2O **EF (kg CO2-e / GJ):** 0.6 **Method:** Method 2	1
		Source Total	2,782		196
		Total	2,782		196

SCOPE 2 EMISSIONS

Activity Type	Quantity	Units	Emission Factor (kg CO2-e / unit)	Scope 2 Emissions (t CO2-e)

Purchase and loss of electricity from main electricity grid in a State or Territory	1,385,801	kWh	0.81	1,122
			Total	1,122

ENERGY CONSUMED BY MEANS OF COMBUSTION FOR TRANSPORT

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	Diesel oil - Transport post-2004	combustion	A	-	58.08	kL	38.6	2,242
							Total	2,242

ENERGY CONSUMED BY MEANS OF COMBUSTION FOR PURPOSES OTHER THAN PRODUCING ELECTRICITY, PRODUCING A CHEMICAL OR METAL PRODUCT OR FOR TRANSPORT

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Stationary energy purposes	Gasoline (other than for use as fuel in an aircraft)	combustion	A	-	0.816	kL	34.2	28
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Stationary energy purposes	Diesel oil	combustion	A	-	13.272	kL	38.6	512
							Total	540

ENERGY CONSUMED BY MEANS OTHER THAN COMBUSTION

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Purchase and loss of electricity from main electricity grid in a State or Territory	-	-	-	-	1,385,801	kWh	0.0036	4,989
							Total	4,989

16: NEPEAN - FACILITY

Name	Nepean
Facility Street Address	Nepean KINGSWOOD New South Wales 2747 AUSTRALIA
Geographic Coordinates	Latitude 33.761S / Longitude 150.712E
Facility location	-
Activity location	New South Wales
Location description	
Activity description	-
ANZSIC Code	810 - Tertiary education
Operational Control	UNIVERSITY OF SYDNEY
Number of Days with Operational Control	Full Year
Operational Control Dates	01/07/2019 - 30/06/2020
Grid Connected Electricity Generator	No

The following tables summarise total greenhouse gas emissions from operation of this facility during the period that it was under the operational control of UNIVERSITY OF SYDNEY.

GREENHOUSE GAS EMISSIONS (t CO2-e)

Scope 1	Scope 2	Total of Scope 1 and Scope 2
7	565	572

ENERGY PRODUCED AND ENERGY CONSUMED (GJ)

Energy Consumed Total	Energy Consumed Net	Energy Produced
2,643	2,643	-

GREENHOUSE GAS SCOPE 1 EMISSIONS BY GAS (t CO2-e)

Carbon Dioxide CO2	Methane CH4	Nitrous Oxide N2O	Perfluorocarbons PFCs	Hydro Fluoro Carbons HFCs	Sulphur Hexafluoride SF6	Total
7	-	-	-	-	-	7

SCOPE 1 EMISSIONS

EC = Energy Content Factor, Z = Energy Content, EF = Emission Factor

Source Activity	Fuel / Criterion	Quantity	Energy Values (EC & Z)	Gas / Method	Scope 1 Emissions (t CO2-e)
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of gaseous fuels - Stationary energy purposes	**Fuel / Energy commodity:** Natural gas distributed in a pipeline **Fuel usage:** combustion **Criterion:** A	132.273 GJ	**EC (GJ/Unit):** 1 **Z (GJ):** 132	**Gas:** CO2 **EF (kg CO2-e / GJ):** 51.4 **Method:** Method 1	7
				Gas: N2O **EF (kg CO2-e / GJ):** 0.03 **Method:** Method 1	0
				Gas: CH4 **EF (kg CO2-e / GJ):** 0.1 **Method:** Method 1	0

			Source Total	132	7
			Total	132	7

SCOPE 2 EMISSIONS

Activity Type	Quantity	Units	Emission Factor (kg CO2-e / unit)	Scope 2 Emissions (t CO2-e)
Purchase and loss of electricity from main electricity grid in a State or Territory	697,614	kWh	0.81	565
			Total	565

ENERGY CONSUMED BY MEANS OF COMBUSTION FOR PURPOSES OTHER THAN PRODUCING ELECTRICITY, PRODUCING A CHEMICAL OR METAL PRODUCT OR FOR TRANSPORT

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Emissions released from combustion of gaseous fuels - Stationary energy purposes	Natural gas distributed in a pipeline	combustion	A	-	132.273	GJ	1	132
							Total	132

ENERGY CONSUMED BY MEANS OTHER THAN COMBUSTION

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Purchase and loss of electricity from main electricity grid in a State or Territory	-	-	-	-	697,614	kWh	0.0036	2,511
							Total	2,511

17: NOWLEY - SPRING RIDGE - FACILITY

Name	Nowley - Spring Ridge
Facility Street Address	AUSTRALIA
Geographic Coordinates	Latitude 31.353S / Longitude 150.110E
Facility location	-
Activity location	New South Wales
Location description	-
Activity description	-
ANZSIC Code	810 - Tertiary education
Operational Control	UNIVERSITY OF SYDNEY
Number of Days with Operational Control	Full Year
Operational Control Dates	01/07/2019 - 30/06/2020
Grid Connected Electricity Generator	No

The following tables summarise total greenhouse gas emissions from operation of this facility during the period that it was under the operational control of UNIVERSITY OF SYDNEY.

GREENHOUSE GAS EMISSIONS (t CO2-e)

Scope 1	Scope 2	Total of Scope 1 and Scope 2
114	22	136

ENERGY PRODUCED AND ENERGY CONSUMED (GJ)

Energy Consumed Total	Energy Consumed Net	Energy Produced
1,720	1,720	-

GREENHOUSE GAS SCOPE 1 EMISSIONS BY GAS (t CO2-e)

Carbon Dioxide CO2	Methane CH4	Nitrous Oxide N2O	Perfluorocarbons PFCs	Hydro Fluoro Carbons HFCs	Sulphur Hexafluoride SF6	Total
113	-	1	-	-	-	114

SCOPE 1 EMISSIONS

EC = Energy Content Factor, Z = Energy Content, EF = Emission Factor

Source Activity	Fuel / Criterion	Quantity	Energy Values (EC & Z)	Gas / Method	Scope 1 Emissions (t CO2-e)
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of liquid fuels other than petroleum oils or greases - Stationary energy purposes	**Fuel / Energy commodity:** Diesel oil **Fuel usage:** combustion **Criterion:** A	8.136 kL	**EC (GJ/Unit):** 38.6 **Z (GJ):** 314	**Gas:** CH4 **EF (kg CO2-e / GJ):** 0.1 **Method:** Method 1	0
				Gas: N2O **EF (kg CO2-e / GJ):** 0.2 **Method:** Method 1	0
				Gas: CO2 **EF (kg CO2-e / GJ):** 69.9 **Method:**	22

				Method 1	
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of liquid fuels other than petroleum oils or greases - Stationary energy purposes	**Fuel / Energy commodity:** Liquefied petroleum gas **Fuel usage:** combustion **Criterion:** A	2.016 kL	**EC (GJ/Unit):** 25.7 **Z (GJ):** 52	**Gas:** N2O **EF (kg CO2-e / GJ):** 0.2 **Method:** Method 1	0
				Gas: CO2 **EF (kg CO2-e / GJ):** 60.2 **Method:** Method 1	3
				Gas: CH4 **EF (kg CO2-e / GJ):** 0.2 **Method:** Method 1	0
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	**Fuel / Energy commodity:** Diesel oil - Transport post-2004 **Fuel usage:** combustion **Criterion:** A	32.532 kL	**EC (GJ/Unit):** 38.6 **Z (GJ):** 1,256	**Gas:** CO2 **EF (kg CO2-e / GJ):** 69.9 **Method:** Method 1	88
				Gas: CH4 **EF (kg CO2-e / GJ):** 0.01 **Method:** Method 2	0
				Gas: N2O **EF (kg CO2-e / GJ):** 0.6 **Method:** Method 2	1
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	**Fuel / Energy commodity:** Gasoline (other than for use as fuel in an aircraft) - Transport post-2004 **Fuel usage:** combustion **Criterion:** A	0 kL	**EC (GJ/Unit):** 34.2 **Z (GJ):** -	**Gas:** - **EF (kg CO2-e / GJ):** - **Method:** -	-

Total	1,622		114

SCOPE 2 EMISSIONS

Activity Type	Quantity	Units	Emission Factor (kg CO2-e / unit)	Scope 2 Emissions (t CO2-e)
Purchase and loss of electricity from main electricity grid in a State or Territory	27,348	kWh	0.81	22
			Total	22

ENERGY CONSUMED BY MEANS OF COMBUSTION FOR TRANSPORT

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	Diesel oil - Transport post-2004	combustion	A	-	32.532	kL	38.6	1,256
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	Gasoline (other than for use as fuel in an aircraft) - Transport post-2004	combustion	A	-	0	kL	34.2	0
							Total	1,256

ENERGY CONSUMED BY MEANS OF COMBUSTION FOR PURPOSES OTHER THAN PRODUCING ELECTRICITY, PRODUCING A CHEMICAL OR METAL PRODUCT OR FOR TRANSPORT

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Stationary energy purposes	Diesel oil	combustion	A	-	8.136	kL	38.6	314
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Stationary energy purposes	Liquefied petroleum gas	combustion	A	-	2.016	kL	25.7	52
							Total	366

ENERGY CONSUMED BY MEANS OTHER THAN COMBUSTION

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Purchase and loss of electricity from main electricity grid in a State or Territory	-	-	-	-	27,348	kWh	0.0036	98
							Total	98

18: ORANGE CAMPUS - FACILITY

Name	Orange Campus
Facility Street Address	Corner of Acacia Way and Canobolas Drive 1502 Forest Road ORANGE New South Wales 2800 AUSTRALIA
Geographic Coordinates	Latitude 33.276S / Longitude 149.101E
Facility location	-
Activity location	New South Wales
Location description	
Activity description	-
ANZSIC Code	810 - Tertiary education
Operational Control	UNIVERSITY OF SYDNEY
Number of Days with Operational Control	Full Year
Operational Control Dates	01/07/2019 - 30/06/2020
Grid Connected Electricity Generator	No

The following tables summarise total greenhouse gas emissions from operation of this facility during the period that it was under the operational control of UNIVERSITY OF SYDNEY.

GREENHOUSE GAS EMISSIONS (t CO2-e)

Scope 1	Scope 2	Total of Scope 1 and Scope 2
-	68	68

ENERGY PRODUCED AND ENERGY CONSUMED (GJ)

Energy Consumed Total	Energy Consumed Net	Energy Produced
310	310	-

GREENHOUSE GAS SCOPE 1 EMISSIONS BY GAS (t CO2-e)

Carbon Dioxide CO2	Methane CH4	Nitrous Oxide N2O	Perfluorocarbons PFCs	Hydro Fluoro Carbons HFCs	Sulphur Hexafluoride SF6	Total
-	-	-	-	-	-	-

SCOPE 1 EMISSIONS

EC = Energy Content Factor, Z = Energy Content, EF = Emission Factor

Source Activity	Fuel / Criterion	Quantity	Energy Values (EC & Z)	Gas / Method	Scope 1 Emissions (t CO2-e)
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of gaseous fuels - Stationary energy purposes	**Fuel / Energy commodity:** Natural gas distributed in a pipeline **Fuel usage:** combustion **Criterion:** A	6.048 GJ	**EC (GJ/Unit):** 1 **Z (GJ):** 6	**Gas:** CH4 **EF (kg CO2-e / GJ):** 0.1 **Method:** Method 1	0
				Gas: CO2 **EF (kg CO2-e / GJ):** 51.4 **Method:** Method 1	0
				Gas: N2O **EF (kg CO2-e / GJ):**	0

				0.03 **Method:** Method 1	
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	**Fuel / Energy commodity:** Gasoline (other than for use as fuel in an aircraft) - Transport post-2004 **Fuel usage:** combustion **Criterion:** A	0 kL	**EC (GJ/Unit):** 34.2 **Z (GJ):** -	**Gas:** - **EF (kg CO2-e / GJ):** - **Method:** -	-
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	**Fuel / Energy commodity:** Ethanol for use as a fuel in an internal combustion engine - Transport post-2004 **Fuel usage:** combustion **Criterion:** A	0 kL	**EC (GJ/Unit):** 23.4 **Z (GJ):** -	**Gas:** - **EF (kg CO2-e / GJ):** - **Method:** -	-
		Total	6		-

SCOPE 2 EMISSIONS

Activity Type	Quantity	Units	Emission Factor (kg CO2-e / unit)	Scope 2 Emissions (t CO2-e)
Purchase and loss of electricity from main electricity grid in a State or Territory	84,504	kWh	0.81	68
			Total	68

ENERGY CONSUMED BY MEANS OF COMBUSTION FOR TRANSPORT

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	Gasoline (other than for use as fuel in an aircraft) - Transport post-2004	combustion	A	-	0	kL	34.2	0
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	Ethanol for use as a fuel in an internal combustion engine - Transport post-2004	combustion	A	-	0	kL	23.4	0
							Total	-

ENERGY CONSUMED BY MEANS OF COMBUSTION FOR PURPOSES OTHER THAN PRODUCING ELECTRICITY, PRODUCING A CHEMICAL OR METAL PRODUCT OR FOR TRANSPORT

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Emissions released from combustion of gaseous fuels - Stationary energy purposes	Natural gas distributed in a pipeline	combustion	A	-	6.048	GJ	1	6
							Total	6

ENERGY CONSUMED BY MEANS OTHER THAN COMBUSTION

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Purchase and loss of electricity from main electricity grid in a State or Territory	-	-	-	-	84,504	kWh	0.0036	304
							Total	304

19: PEARL BEACH - FIELD SITE - FACILITY

Name	Pearl Beach - Field Site
Facility Street Address	75 Crystal Ave PEARL BEACH New South Wales 2256 AUSTRALIA
Geographic Coordinates	Latitude 33.549S / Longitude 151.299E
Facility location	-
Activity location	New South Wales
Location description	
Activity description	-
ANZSIC Code	810 - Tertiary education
Operational Control	UNIVERSITY OF SYDNEY
Number of Days with Operational Control	Full Year
Operational Control Dates	01/07/2019 - 30/06/2020
Grid Connected Electricity Generator	No

The following tables summarise total greenhouse gas emissions from operation of this facility during the period that it was under the operational control of UNIVERSITY OF SYDNEY.

GREENHOUSE GAS EMISSIONS (t CO2-e)

Scope 1	Scope 2	Total of Scope 1 and Scope 2
-	5	5

ENERGY PRODUCED AND ENERGY CONSUMED (GJ)

Energy Consumed Total	Energy Consumed Net	Energy Produced
24	24	-

GREENHOUSE GAS SCOPE 1 EMISSIONS BY GAS (t CO2-e)

Carbon Dioxide CO2	Methane CH4	Nitrous Oxide N2O	Perfluorocarbons PFCs	Hydro Fluoro Carbons HFCs	Sulphur Hexafluoride SF6	Total
-	-	-	-	-	-	-

SCOPE 1 EMISSIONS

EC = Energy Content Factor, Z = Energy Content, EF = Emission Factor

Source Activity	Fuel / Criterion	Quantity	Energy Values (EC & Z)	Gas / Method	Scope 1 Emissions (t CO2-e)
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	**Fuel / Energy commodity:** Gasoline (other than for use as fuel in an aircraft) - Transport post-2004 **Fuel usage:** combustion **Criterion:** A	0 kL	**EC (GJ/Unit):** 34.2 **Z (GJ):** -	**Gas:** - **EF (kg CO2-e / GJ):** - **Method:** -	-
		Total	-		-

SCOPE 2 EMISSIONS

Activity Type	Quantity	Units	Emission Factor (kg CO2-e / unit)	Scope 2 Emissions (t CO2-e)
Purchase and loss of electricity from main electricity grid in a State or Territory	6,774	kWh	0.81	5
			Total	5

ENERGY CONSUMED BY MEANS OF COMBUSTION FOR TRANSPORT

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	Gasoline (other than for use as fuel in an aircraft) - Transport post-2004	combustion	A	-	0	kL	34.2	0
							Total	-

ENERGY CONSUMED BY MEANS OTHER THAN COMBUSTION

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Purchase and loss of electricity from main electricity grid in a State or Territory	-	-	-	-	6,774	kWh	0.0036	24
							Total	24

20: ROZELLE CAMPUS - FACILITY

Name	Rozelle Campus
Facility Street Address	Balmain Road ROZELLE New South Wales 2039 AUSTRALIA
Geographic Coordinates	Latitude 33.865S / Longitude 151.163E
Facility location	-
Activity location	New South Wales
Location description	
Activity description	-
ANZSIC Code	810 - Tertiary education
Operational Control	UNIVERSITY OF SYDNEY
Number of Days with Operational Control	Full Year
Operational Control Dates	01/07/2019 - 30/06/2020
Grid Connected Electricity Generator	No

The following tables summarise total greenhouse gas emissions from operation of this facility during the period that it was under the operational control of UNIVERSITY OF SYDNEY.

GREENHOUSE GAS EMISSIONS (t CO2-e)

Scope 1	Scope 2	Total of Scope 1 and Scope 2
106	528	634

ENERGY PRODUCED AND ENERGY CONSUMED (GJ)

Energy Consumed Total	Energy Consumed Net	Energy Produced
4,401	4,401	-

GREENHOUSE GAS SCOPE 1 EMISSIONS BY GAS (t CO2-e)

Carbon Dioxide CO2	Methane CH4	Nitrous Oxide N2O	Perfluorocarbons PFCs	Hydro Fluoro Carbons HFCs	Sulphur Hexafluoride SF6	Total
106	-	-	-	-	-	106

SCOPE 1 EMISSIONS

EC = Energy Content Factor, Z = Energy Content, EF = Emission Factor

Source Activity	Fuel / Criterion	Quantity	Energy Values (EC & Z)	Gas / Method	Scope 1 Emissions (t CO2-e)
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of gaseous fuels - Stationary energy purposes	**Fuel / Energy commodity:** Natural gas distributed in a pipeline **Fuel usage:** combustion **Criterion:** A	2,036.049 GJ	**EC (GJ/Unit):** 1 **Z (GJ):** 2,036	**Gas:** N2O **EF (kg CO2-e / GJ):** 0.03 **Method:** Method 1	0
				Gas: CO2 **EF (kg CO2-e / GJ):** 51.4 **Method:** Method 1	105
				Gas: CH4 **EF (kg CO2-e / GJ):** 0.1 **Method:**	0

				Method 1	
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	**Fuel / Energy commodity:** Gasoline (other than for use as fuel in an aircraft) - Transport post-2004 **Fuel usage:** combustion **Criterion:** A	0.528 kL	**EC (GJ/Unit):** 34.2 **Z (GJ):** 18	**Gas:** CO2 **EF (kg CO2-e / GJ):** 67.4 **Method:** Method 1	1
				Gas: N2O **EF (kg CO2-e / GJ):** 0.2 **Method:** Method 2	0
				Gas: CH4 **EF (kg CO2-e / GJ):** 0.02 **Method:** Method 2	0
Source category: Fuel combustion **Source of emissions:** Stationary and Transport energy purposes (excluding electricity generation) **Activity type:** Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	**Fuel / Energy commodity:** Ethanol for use as a fuel in an internal combustion engine - Transport post-2004 **Fuel usage:** combustion **Criterion:** A	0.036 kL	**EC (GJ/Unit):** 23.4 **Z (GJ):** 1	**Gas:** CO2 **EF (kg CO2-e / GJ):** 0 **Method:** Method 1	0
				Gas: CH4 **EF (kg CO2-e / GJ):** 0.2 **Method:** Method 2	0
				Gas: N2O **EF (kg CO2-e / GJ):** 0.2 **Method:** Method 2	0
			Source Total	2,055	106
			Total	2,055	106

SCOPE 2 EMISSIONS

Activity Type	Quantity	Units	Emission Factor (kg CO2-e / unit)	Scope 2 Emissions (t CO2-e)
Purchase and loss of electricity from main electricity grid in a	651,793	kWh	0.81	528

State or Territory						
					Total	528

ENERGY CONSUMED BY MEANS OF COMBUSTION FOR TRANSPORT

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	Gasoline (other than for use as fuel in an aircraft) - Transport post-2004	combustion	A	-	0.528	kL	34.2	18
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	Ethanol for use as a fuel in an internal combustion engine - Transport post-2004	combustion	A	-	0.036	kL	23.4	1
							Total	19

ENERGY CONSUMED BY MEANS OF COMBUSTION FOR PURPOSES OTHER THAN PRODUCING ELECTRICITY, PRODUCING A CHEMICAL OR METAL PRODUCT OR FOR TRANSPORT

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Emissions released from combustion of gaseous fuels - Stationary energy purposes	Natural gas distributed in a pipeline	combustion	A	-	2,036.049	GJ	1	2,036
							Total	2,036

ENERGY CONSUMED BY MEANS OTHER THAN COMBUSTION

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Purchase and loss of electricity from main electricity grid in a State or Territory	-	-	-	-	651,793	kWh	0.0036	2,346
							Total	2,346

CORPORATE GROUP THRESHOLD MET

The corporate group of UNIVERSITY OF SYDNEY has met a corporate group threshold prescribed in sections 13 (1)(a),(b), or (c) of the NGER Act during the reporting year and is reporting under Divisions 4.3 to 4.5 of the NGER Regulations (regulation 4.03).

PRIVACY STATEMENT

PROTECTION OF INFORMATION

The Clean Energy Regulator is bound by the secrecy provisions of Part 3 of the *Clean Energy Regulator Act 2011* (CER Act) in regard to information it collects in relation to this report and also by the *Privacy Act 1988* in regard to personal information it collects.

PRIVACY NOTICE

'Personal information' is defined in the Privacy Act 1988 to mean information or an opinion about an identified individual, or an individual who is reasonably identifiable:

(a) whether the information or opinion is true or not; and
(b) whether the information or opinion is recorded in a material form or not.

The collection of personal information relating to this report is authorised by the *National Greenhouse and Energy Reporting Act 2007* (NGER Act) and the National Greenhouse and Energy Reporting Regulations 2008.

Personal information collected in relation to this report will be used for the purposes of assessing the report content, auditing compliance, enforcement of relevant laws and regulations, the performance of our statutory functions and for related purposes. We will also use the personal information which you provide for our administrative purposes, for example, to pre-populate other Clean Energy Regulator forms which you wish to fill out online in the future, and for improving our service delivery to you. We cannot process the application if we do not collect relevant personal information.

The Clean Energy Regulator's Privacy Policy contains information about the agency's procedures for handling personal information including how a person can access their personal information held by the agency, and how to seek correction of such information. The Privacy Policy also contains information about how to complain about a breach of the Australian Privacy Principles. The Clean Energy Regulator's Privacy Policy can be found at www.cleanenergyregulator.gov.au.

DISCLOSURE OF INFORMATION

The Clean Energy Regulator is only able to disclose information relating to this report (including personal information) in accordance with the CER Act, the NGER Act, the Privacy Act 1988 or as otherwise required by law.

The circumstances in which such information may be disclosed include:

- Disclosure to the Secretary or authorised officer of a Department for the purpose of administering a program or collecting statistics relating to greenhouse gas emissions, energy consumption or energy production;
- Disclosure to certain agencies, bodies or persons where the Regulator is satisfied that disclosure will enable or assist those agencies, bodies or persons to perform or exercise their functions or powers, including the Australian Securities and Investments Commission, the Australian Competition and Consumer Commission and the Commissioner of Taxation;
- Disclosure for the purposes of law enforcement;
- Disclosure to States and Territories in accordance with the NGER Act; and
- Disclosure for the purposes of a climate change law or for the purposes of the performance of our functions under a climate change law.

DECLARATION

The Executive Officer (or equivalent), as described in the *National Greenhouse and Energy Reporting Act 2007* (NGER Act), should read the following declaration below before electronically submitting the emissions and energy report.

It is the responsibility of the reporting entity to ensure that the information provided in the emissions and energy report is prepared in accordance with the requirements set out in the NGER Act and the National Greenhouse and Energy Reporting Regulations 2008 (NGER Regulations) and that the data it contains is based on methods prescribed in the National Greenhouse and Energy Reporting (Measurement) Determination 2008 (NGER Measurement Determination).

Under the NGER Act and the NGER Regulations, the reporting entity remains responsible for the truth and accuracy of the contents of the emissions and energy report despite the assistance, if any, of a third party in its preparation.

Section 19 of the NGER Act includes a civil penalty provision, a breach of which may attract a pecuniary penalty of up to 2,000 penalty units. The *Crimes Act 1914* provides that one penalty unit is $222.

In accordance with section 22 of the NGER Act, a reporting entity is required to keep records of the activities of the members of its group that, inter alia, allow it to report accurately and enable the Clean Energy Regulator to ascertain whether it has complied with its obligations under the NGER Act. Records must be retained for a period of 5 years from the end of the year in which the activities took place. Section 22 includes a civil penalty provision, a breach of which may attract a pecuniary penalty of up to 1,000 penalty units.

By electronically submitting, the signatory declares that:

- they have read and understood the penalties that apply for breaching the NGER Act;
- the information provided in this emissions and energy report (including any attachments) is true and correct, and that they understand that the provision of false or misleading information is a serious offence under the *Criminal Code 1995* and may have consequences under the NGER Act;
- the information provided in this emissions and energy report has been prepared and supplied in accordance with the requirements set out in the NGER Act, the NGER Regulations and the NGER Measurement Determination;
- they are duly authorised to act, including submitting this emissions and energy report, on behalf of the reporting entity;
- the Clean Energy Regulator may compel or conduct an audit of the information contained in this emissions and energy report or in relation to compliance with the NGER Act, the NGER Regulations and the NGER Measurement Determination;
- the Clean Energy Regulator may request further clarification or documentation to verify the information supplied in this emissions and energy report; and
- the entity providing the emissions and energy report and each group member (if any) listed in the report is a body corporate.