

UNCLASSIFIED: FOR OFFICIAL USE ONLY



Australian Government
Clean Energy Regulator

ABN/ACN/ARBN/Trading Name:
Version No:
Submission Status:
Submission Date:

52009215347
1
Submitted
17/10/2019

NATIONAL GREENHOUSE AND ENERGY REPORTING
SECTION 19 - ENERGY AND EMISSIONS REPORT
SARACEN MINERAL HOLDINGS LIMITED
FOR THE REPORTING YEAR 2018 – 2019

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 2019.

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	SARACEN MINERAL HOLDINGS LIMITED
Australian Business Number (ABN)	52009215347
Australian Company Number (ACN)	-
Australian Registered Body Number (ARBN)	-
Trading Name	Saracen
Head office postal address:	
Postal address line 1	PO Box 2563
Postal address line 2	-
Postal address line 3	-
Postal city/suburb	Perth
Postal state	Western Australia
Postal postcode	6001
Postal country	AUSTRALIA
Head office street address:	
Street address line 1	Level 11
Street address line 2	40 The Esplanade
Street address line 3	-
Street city/suburb	Perth
Street state	Western Australia
Street postcode	6000
Street country	AUSTRALIA

EXECUTIVE OFFICER (OR EQUIVALENT) DETAILS

Name	Raleigh Finlayson
Position	Managing Director
Phone	0862299114
Mobile	0408900527
Fax	0862299114
Email	rfinlayson@saracen.com.au
Postal address line 1	P.O. Box 2563
Postal address line 2	-
Postal address line 3	-
Postal city/suburb	PERTH
Postal state	
Postal postcode	6001
Postal country	AUSTRALIA

CONTACT PERSON DETAILS

Name	Robert Mills
Position	Environmental Coordinator
Phone	08 62299519
Mobile	-
Fax	0862299599
Email	rmills@saracen.com.au
Postal address line 1	GPO Box 2563
Postal address line 2	-
Postal address line 3	-
Postal city/suburb	PERTH
Postal state	
Postal postcode	6001
Postal country	AUSTRALIA

SARACEN MINERAL HOLDINGS LIMITED 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 SARACEN MINERAL HOLDINGS LIMITED for the 2018 - 2019 reporting period.

GREENHOUSE GAS EMISSIONS (t CO₂-e)

Scope 1	Scope 2	Total of Scope 1 and Scope 2
177,909	62	177,971

ENERGY PRODUCED AND ENERGY CONSUMED (GJ)

Energy Consumed Total	Energy Consumed Net	Energy Produced
3,584,806	2,882,439	702,367

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

Carbon Dioxide CO ₂	Methane CH ₄	Nitrous Oxide N ₂ O	Perfluorocarbons PFCs	Hydro Fluoro Carbons HFCs	Sulphur Hexafluoride SF ₆	Total
177,209	278	406	-	-	16	177,909

UNCERTAINTY

The NGER Regulations require a registered corporation's report to include the amount of uncertainty associated with estimates of scope 1 emissions for their corporate group. Uncertainty is to be assessed for an emissions estimate so that a range for statistical uncertainty is provided at a 95% confidence level. The uncertainty of emissions estimates is to be calculated in accordance with the rules set out in Chapter 8 of the NGER Determination, including in accordance with the Greenhouse Gas Protocol guidance on uncertainty assessment in greenhouse gas inventories and calculating statistical parameter uncertainty (September 2003), as applicable.

FACILITY NAME : CAROSUE DAM OPERATIONS

Fuel Type	Emission Total (tCO ₂ -e)	Uncertainty %
Diesel oil	51,894	2.2
Liquefied natural gas	26,169	8.2

FACILITY NAME : THUNDERBOX OPERATIONS

Fuel Type	Emission Total (tCO ₂ -e)	Uncertainty %
Diesel oil	47,332	2.8
Natural gas distributed in a pipeline	35,986	5.8

SARACEN MINERAL HOLDINGS LIMITED 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	Perth Corporate Office Type: Facility	0	62	319	319	0
2	SARACEN GOLD MINES PTY LIMITED Type: Group Member	87,007	-	1,753,430	1,390,112	363,318
3	SARACEN GOLD MINES PTY LIMITED Type: Group Member Carosue Dam Operations Type: Facility	79,705	0	1,624,197	1,285,460	338,737
4	SARACEN GOLD MINES PTY LIMITED Type: Group Member Deep South Operations Type: Facility	7,302	0	129,233	104,652	24,581
5	SARACEN METALS PTY LIMITED Type: Group Member	90,902	-	1,831,057	1,492,008	339,049
6	SARACEN METALS PTY LIMITED Type: Group Member Kailis Operations Type: Facility	6,637	0	95,709	95,709	0
7	SARACEN METALS PTY LIMITED Type: Group Member Thunderbox Operations Type: Facility	84,265	0	1,735,348	1,396,299	339,049

1: PERTH CORPORATE OFFICE - FACILITY

Name	Perth Corporate Office
Facility Street Address	Level 11, 40 The Esplanade Perth Western Australia 6000
Geographic Coordinates	Latitude 31.956S / Longitude 115.856E
Facility location	-
Activity location	Western Australia
Location description	-
Activity description	-
ANZSIC Code	729 - Other administrative services
Operational Control	SARACEN MINERAL HOLDINGS LIMITED
Number of Days with Operational Control	Full Year
Operational Control Dates	01/07/2018 - 30/06/2019
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 SARACEN MINERAL HOLDINGS LIMITED.

GREENHOUSE GAS EMISSIONS (t CO₂-e)

Scope 1	Scope 2	Total of Scope 1 and Scope 2
-	62	62

ENERGY PRODUCED AND ENERGY CONSUMED (GJ)

Energy Consumed Total	Energy Consumed Net	Energy Produced
319	319	-

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

Carbon Dioxide CO ₂	Methane CH ₄	Nitrous Oxide N ₂ O	Perfluorocarbons PFCs	Hydro Fluoro Carbons HFCs	Sulphur Hexafluoride SF ₆	Total
-	-	-	-	-	-	-

SCOPE 2 EMISSIONS

Activity Type	Amount	Units	Emission Factor (kg CO ₂ -e / unit)	Scope 2 Emissions (t CO ₂ -e)
Purchase and loss of electricity from main electricity grid in a State or Territory	88,528	kWh	0.7	62
Total				62

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	-	-	-	-	88,528	kWh	0.0036	319
Total								319

2: SARACEN GOLD MINES PTY LIMITED - GROUP MEMBER

Name	SARACEN GOLD MINES PTY LIMITED
Australian Business Number (ABN)	14116649122
Australian Company Number (ACN)	116649122
Australian Registered Body Number (ARBN)	-
Trading Name	-
Street address line 1	Level 11, 40 The Esplanade
Street address line 2	-
Street address line 3	-
Street city/suburb	Perth
Street state	Western Australia
Street postcode	6000
Street country	AUSTRALIA

The following tables summarise total greenhouse gas emissions and energy data for all facilities that were under the operational control of this group member during the reporting period.

GREENHOUSE GAS EMISSIONS (t CO ₂ -e)		
Scope 1	Scope 2	Total of Scope 1 and Scope 2
87,007	-	87,007

ENERGY PRODUCED AND ENERGY CONSUMED (GJ)		
Energy Consumed Total	Energy Consumed Net	Energy Produced
1,753,430	1,390,112	363,318

GREENHOUSE GAS SCOPE 1 EMISSIONS BY GAS (t CO ₂ -e)						
Carbon Dioxide CO ₂	Methane CH ₄	Nitrous Oxide N ₂ O	Perfluorocarbons PFCs	Hydro Fluoro Carbons HFCs	Sulphur Hexafluoride SF ₆	Total
86,639	130	224	-	-	14	87,007

3: CAROSUE DAM OPERATIONS - FACILITY

Name	Carosue Dam Operations
Facility Street Address	120km NE of Kalgoorlie (Via Yarri rd) Kalgoorlie Western Australia 6430 AUSTRALIA
Geographic Coordinates	Latitude 30.154S / Longitude 122.352E
Facility location	-
Activity location	Western Australia
Location description	-
Activity description	-
ANZSIC Code	080 - Metal ore mining
Operational Control	SARACEN GOLD MINES PTY LIMITED
Number of Days with Operational Control	Full Year
Operational Control Dates	01/07/2018 - 30/06/2019
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 SARACEN GOLD MINES PTY LIMITED.

GREENHOUSE GAS EMISSIONS (t CO ₂ -e)		
Scope 1	Scope 2	Total of Scope 1 and Scope 2
79,705	-	79,705

ENERGY PRODUCED AND ENERGY CONSUMED (GJ)		
Energy Consumed Total	Energy Consumed Net	Energy Produced
1,624,197	1,285,460	338,737

GREENHOUSE GAS SCOPE 1 EMISSIONS BY GAS (t CO ₂ -e)						
Carbon Dioxide CO ₂	Methane CH ₄	Nitrous Oxide N ₂ O	Perfluorocarbons PFCs	Hydro Fluoro Carbons HFCs	Sulphur Hexafluoride SF ₆	Total
79,371	120	201	-	-	13	79,705

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 CO ₂ -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: Gaseous fossil fuels other than those mentioned in items 17 to 26 Fuel usage: combustion Criterion: A	380 m3	EC (GJ/Unit): 0.0393 Z (GJ): 15	Gas: CO ₂ EF (kg CO₂-e / GJ): 51.4 Method: Method 1	1
				Gas: CH ₄ EF (kg CO₂-e / GJ): 0.1 Method: Method 1	0
				Gas: N ₂ O 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 - Stationary energy purposes	Fuel / Energy commodity: Diesel oil Fuel usage: combustion Criterion: AA	5,284.418 kL	EC (GJ/Unit): 38.6 Z (GJ): 203,979	Gas: CO2 EF (kg CO2-e / GJ): 69.9 Method: Method 1	14,258
				Gas: CH4 EF (kg CO2-e / GJ): 0.1 Method: Method 1	20
				Gas: N2O EF (kg CO2-e / GJ): 0.2 Method: Method 1	41
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	517.506 kL	EC (GJ/Unit): 25.7 Z (GJ): 13,300	Gas: CO2 EF (kg CO2-e / GJ): 60.2 Method: Method 1	801
				Gas: CH4 EF (kg CO2-e / GJ): 0.2 Method: Method 1	3
				Gas: N2O EF (kg CO2-e / GJ): 0.2 Method: Method 1	3
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: Fuel oil Fuel usage: combustion Criterion: BBB	251.182 kL	EC (GJ/Unit): 39.7 Z (GJ): 9,972	Gas: CO2 EF (kg CO2-e / GJ): 73.6 Method: Method 1	734

				Gas: CH4 EF (kg CO2-e / GJ): 0.04 Method: Method 1	0
				Gas: N2O EF (kg CO2-e / GJ): 0.2 Method: Method 1	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: Diesel oil - Transport post-2004 Fuel usage: combustion Criterion: AA	2,122.652 kL	EC (GJ/Unit): 38.6 Z (GJ): 81,934	Gas: CO2 EF (kg CO2-e / GJ): 69.9 Method: Method 1	5,727
				Gas: CH4 EF (kg CO2-e / GJ): 0.01 Method: Method 2	1
				Gas: N2O EF (kg CO2-e / GJ): 0.6 Method: Method 2	49
Source category: Fuel combustion Source of emissions: Stationary and Transport energy purposes (excluding electricity generation) Activity type: Emissions released from combustion of petroleum based oils or greases	Fuel / Energy commodity: Petroleum based oils (other than petroleum based oil used as fuel) Fuel usage: combustion Criterion: A	148.016 kL	EC (GJ/Unit): 38.8 Z (GJ): 5,743	Gas: CO2 EF (kg CO2-e / GJ): 13.9 Method: Method 1	80
Source category: Fuel combustion Source of emissions: Stationary and Transport energy purposes (excluding electricity generation) Activity type: Emissions released from combustion of petroleum based oils or greases	Fuel / Energy commodity: Petroleum based greases Fuel usage: combustion Criterion: A	36.21 kL	EC (GJ/Unit): 38.8 Z (GJ): 1,405	Gas: CO2 EF (kg CO2-e / GJ): 3.5 Method: Method 1	5
Source Total			316,348		21,725

Source category: Fuel combustion Source of emissions: Emissions released from fuel use by certain industries (including electricity generation) Activity type: Electricity production - Gaseous fuels	Fuel / Energy commodity: Liquefied natural gas Fuel usage: combustion Criterion: A	20,072.695 kL	EC (GJ/Unit): 25.3 Z (GJ): 507,839	Gas: CO2 EF (kg CO2-e / GJ): 51.4 Method: Method 1	26,103
				Gas: CH4 EF (kg CO2-e / GJ): 0.1 Method: Method 1	51
				Gas: N2O EF (kg CO2-e / GJ): 0.03 Method: Method 1	15
Source category: Fuel combustion Source of emissions: Emissions released from fuel use by certain industries (including electricity generation) Activity type: Electricity production - Liquid fuels	Fuel / Energy commodity: Diesel oil Fuel usage: combustion Criterion: AA	11,734.837 kL	EC (GJ/Unit): 38.6 Z (GJ): 452,965	Gas: CO2 EF (kg CO2-e / GJ): 69.9 Method: Method 1	31,662
				Gas: CH4 EF (kg CO2-e / GJ): 0.1 Method: Method 1	45
				Gas: N2O EF (kg CO2-e / GJ): 0.2 Method: Method 1	91
Source Total			960,804		57,967
Source category: Industrial processes Source of emissions: Emissions of hydrofluorocarbons and sulphur hexafluoride gases Activity type: Emissions of sulphur hexafluoride gases from gas insulated switchgear and circuit breaker applications	-	1,493.856 tonnes	-	Gas: SF6 EF (kg CO2-e / GJ): - Method: Method 1	13
Source Total			-		13

	Total	1,277,152		79,705
--	-------	-----------	--	--------

ENERGY CONSUMED BY MEANS OF COMBUSTION FOR PRODUCING ELECTRICITY

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Electricity production - Gaseous fuels	Liquefied natural gas	combustion	A	-	20,072.695	kL	25.3	507,839
Electricity production - Liquid fuels	Diesel oil	combustion	AA	-	11,734.837	kL	38.6	452,965
Total								960,804

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	Diesel oil - Transport post-2004	combustion	AA	-	2,122.652	kL	38.6	81,934
Total								81,934

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	Gaseous fossil fuels other than those mentioned in items 17 to 26	combustion	A	-	380	m3	0.0393	15
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Stationary energy purposes	Diesel oil	combustion	AA	-	5,284.418	kL	38.6	203,979
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Stationary energy purposes	Liquefied petroleum gas	combustion	A	-	517.506	kL	25.7	13,300
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Stationary energy purposes	Fuel oil	combustion	BBB	-	251.182	kL	39.7	9,972
Emissions released from combustion of petroleum based oils or greases	Petroleum based oils (other than petroleum based oil used as fuel)	combustion	A	-	148.016	kL	38.8	5,743
Emissions released from combustion of petroleum based oils or greases	Petroleum based greases	combustion	A	-	36.21	kL	38.8	1,405
Total								234,414

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)
Energy consumed (not combusted)	Electricity	non-combustion	-	-	338,736.564	GJ	1	338,737
Energy consumed (not combusted)	Petroleum based oils (other than petroleum based oil used as fuel)	non-combustion	A	-	214.134	kL	38.8	8,308
Total								347,045

ELECTRICITY PRODUCED

Activity Type	Usage	Amount	Units	Energy Content Factor (GJ/Unit)	Converted Energy Content Amount (GJ)
Electricity (thermal generation)	For use onsite	94,093,490	kWh	0.0036	338,737
Total					338,737

CONTRACTORS

Name of Contractor	Pacific Energy (KPS) Pty Ltd
Contractor's Identifying Details	ABN 92134226056 ACN 134226056 338 Gnangara Rd Landsdale, Western Australia 6065

CONTRACTOR GREENHOUSE GAS EMISSIONS

Total Greenhouse Gas Emissions (t CO2-e)	57,967
---	--------

CONTRACTOR ENERGY PRODUCED AND ENERGY CONSUMED (GJ)

Energy Consumed (GJ)	Energy Produced (GJ)
960,804	338,737

Name of Contractor	ByrneCut Australia Pty Ltd
Contractor's Identifying Details	ABN 94 129 142 516 Level 1 Bravo Building 1 George Wiencke Drive Perth Airport, Western Australia 6105

CONTRACTOR GREENHOUSE GAS EMISSIONS

Total Greenhouse Gas Emissions (t CO2-e)	11,710
---	--------

CONTRACTOR ENERGY PRODUCED AND ENERGY CONSUMED (GJ)

Energy Consumed (GJ)	Energy Produced (GJ)
166,656	0

4: DEEP SOUTH OPERATIONS - FACILITY

Name	Deep South Operations
Facility Street Address	East of Goldfields Hwy Kookynie Western Australia 6431 AUSTRALIA
Geographic Coordinates	Latitude 29.546S / Longitude 122.547E
Facility location	-
Activity location	Western Australia
Location description	-
Activity description	-
ANZSIC Code	080 - Metal ore mining
Operational Control	SARACEN GOLD MINES PTY LIMITED
Number of Days with Operational Control	Full Year
Operational Control Dates	01/07/2018 - 30/06/2019
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 SARACEN GOLD MINES PTY LIMITED.

GREENHOUSE GAS EMISSIONS (t CO ₂ -e)		
Scope 1	Scope 2	Total of Scope 1 and Scope 2
7,302	-	7,302

ENERGY PRODUCED AND ENERGY CONSUMED (GJ)		
Energy Consumed Total	Energy Consumed Net	Energy Produced
129,233	104,652	24,581

GREENHOUSE GAS SCOPE 1 EMISSIONS BY GAS (t CO ₂ -e)						
Carbon Dioxide CO ₂	Methane CH ₄	Nitrous Oxide N ₂ O	Perfluorocarbons PFCs	Hydro Fluoro Carbons HFCs	Sulphur Hexafluoride SF ₆	Total
7,268	10	23	-	-	1	7,302

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 CO ₂ -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: Gaseous fossil fuels other than those mentioned in items 17 to 26 Fuel usage: combustion Criterion: A	72 m3	EC (GJ/Unit): 0.0393 Z (GJ): 3	Gas: CO ₂ EF (kg CO₂-e / GJ): 51.4 Method: Method 1	0
				Gas: CH ₄ EF (kg CO₂-e / GJ): 0.1 Method: Method 1	0
				Gas: N ₂ O 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 - Stationary energy purposes	Fuel / Energy commodity: Diesel oil Fuel usage: combustion Criterion: A	841.997 kL	EC (GJ/Unit): 38.6 Z (GJ): 32,501	Gas: CO2 EF (kg CO2-e / GJ): 69.9 Method: Method 1	2,272
				Gas: CH4 EF (kg CO2-e / GJ): 0.1 Method: Method 1	3
				Gas: N2O EF (kg CO2-e / GJ): 0.2 Method: Method 1	7
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: BBB	12.234 kL	EC (GJ/Unit): 38.6 Z (GJ): 472	Gas: CO2 EF (kg CO2-e / GJ): 69.9 Method: Method 1	33
				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
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	68.403 kL	EC (GJ/Unit): 38.6 Z (GJ): 2,640	Gas: CO2 EF (kg CO2-e / GJ): 69.9 Method: Method 1	185

				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	2
Source category: Fuel combustion Source of emissions: Stationary and Transport energy purposes (excluding electricity generation) Activity type: Emissions released from combustion of petroleum based oils or greases	Fuel / Energy commodity: Petroleum based oils (other than petroleum based oil used as fuel) Fuel usage: combustion Criterion: A	9.7 kL	EC (GJ/Unit): 38.8 Z (GJ): 376	Gas: CO2 EF (kg CO2-e / GJ): 13.9 Method: Method 1	5
Source category: Fuel combustion Source of emissions: Stationary and Transport energy purposes (excluding electricity generation) Activity type: Emissions released from combustion of petroleum based oils or greases	Fuel / Energy commodity: Petroleum based greases Fuel usage: combustion Criterion: A	1.762 kL	EC (GJ/Unit): 38.8 Z (GJ): 68	Gas: CO2 EF (kg CO2-e / GJ): 3.5 Method: Method 1	0
Source Total			36,060		2,507
Source category: Fuel combustion Source of emissions: Emissions released from fuel use by certain industries (including electricity generation) Activity type: Electricity production - Liquid fuels	Fuel / Energy commodity: Diesel oil Fuel usage: combustion Criterion: A	1,768.959 kL	EC (GJ/Unit): 38.6 Z (GJ): 68,282	Gas: CO2 EF (kg CO2-e / GJ): 69.9 Method: Method 1	4,773
				Gas: CH4 EF (kg CO2-e / GJ): 0.1 Method: Method 1	7
				Gas: N2O EF (kg CO2-e / GJ): 0.2 Method: Method 1	14

		Source Total	68,282		4,794
Source category: Industrial processes Source of emissions: Emissions of hydrofluorocarbons and sulphur hexafluoride gases Activity type: Emissions of sulphur hexafluoride gases from gas insulated switchgear and circuit breaker applications	-	106.704 tonnes	-	Gas: SF6 EF (kg CO2-e / GJ): - Method: Method 1	1
		Source Total	-		1
		Total	104,342		7,302

ENERGY CONSUMED BY MEANS OF COMBUSTION FOR PRODUCING ELECTRICITY

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Electricity production - Liquid fuels	Diesel oil	combustion	A	-	1,768.959	kL	38.6	68,282
Total								68,282

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	-	68.403	kL	38.6	2,640
Total								2,640

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	Gaseous fossil fuels other than those mentioned in items 17 to 26	combustion	A	-	72	m3	0.0393	3
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Stationary energy purposes	Diesel oil	combustion	A	-	841.997	kL	38.6	32,501
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Stationary energy purposes	Diesel oil	combustion	BBB	-	12.234	kL	38.6	472
Emissions released from combustion of petroleum based oils or greases	Petroleum based oils (other than petroleum based oil used as fuel)	combustion	A	-	9.7	kL	38.8	376
Emissions released from combustion of petroleum based oils or greases	Petroleum based greases	combustion	A	-	1.762	kL	38.8	68
Total								33,420

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)
Energy consumed (not combusted)	Electricity	non-combustion	-	-	24,581.454	GJ	1	24,581
Energy consumed (not combusted)	Petroleum based oils (other than petroleum based oil used as fuel)	non-combustion	A	-	8	kL	38.8	310
Total								24,891

ELECTRICITY PRODUCED

Activity Type	Usage	Amount	Units	Energy Content Factor (GJ/Unit)	Converted Energy Content Amount (GJ)
Electricity (thermal generation)	For use onsite	6,828,181.74	kWh	0.0036	24,581
Total					24,581

Incidental Emissions and Energy

This Report contains greenhouse gas emissions and energy information from facilities that is incidental to the operation of the facility and reported in accordance with NGER Regulation 4.27.

The following tables summarise total greenhouse gas emissions and energy that are incidental to the operation of this facility during the reporting period.

GREENHOUSE GAS EMISSIONS (t CO ₂ -e)		
Scope 1	Scope 2	Total of Scope 1 and Scope 2
-	-	-

ENERGY PRODUCED AND ENERGY CONSUMED (GJ)		
Energy Consumed Total	Energy Consumed Net	Energy Produced
24,581	-	24,581

GREENHOUSE GAS SCOPE 1 EMISSIONS BY GAS (t CO ₂ -e)						
Carbon Dioxide CO ₂	Methane CH ₄	Nitrous Oxide N ₂ O	Perfluorocarbons PFCs	Hydro Fluoro Carbons HFCs	Sulphur Hexafluoride SF ₆	Total
-	-	-	-	-	-	-

INCIDENTAL ENERGY CONSUMED BY A MEANS OTHER THAN COMBUSTION								
Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub- criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Incidental Energy Content (GJ)
Energy consumed (not combusted)	Electricity	non- combustion	-	-	24,581.454	GJ	1	24,581
Total								24,581

INCIDENTAL ELECTRICITY PRODUCED						
Activity Type	Usage	Amount	Units	Energy Content Factor (GJ/Unit)	Converted Energy Content Amount (GJ)	
Electricity (thermal generation)	For use onsite	6,828,181.74	kWh	0.0036	24,581	
Total					24,581	

5: SARACEN METALS PTY LIMITED - GROUP MEMBER

Name	SARACEN METALS PTY LIMITED
Australian Business Number (ABN)	15107154727
Australian Company Number (ACN)	107154727
Australian Registered Body Number (ARBN)	-
Trading Name	-
Street address line 1	Level 11, 40 The Esplanade
Street address line 2	-
Street address line 3	-
Street city/suburb	Perth
Street state	Western Australia
Street postcode	6000
Street country	AUSTRALIA

The following tables summarise total greenhouse gas emissions and energy data for all facilities that were under the operational control of this group member during the reporting period.

GREENHOUSE GAS EMISSIONS (t CO₂-e)

Scope 1	Scope 2	Total of Scope 1 and Scope 2
90,902	-	90,902

ENERGY PRODUCED AND ENERGY CONSUMED (GJ)

Energy Consumed Total	Energy Consumed Net	Energy Produced
1,831,057	1,492,008	339,049

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

Carbon Dioxide CO ₂	Methane CH ₄	Nitrous Oxide N ₂ O	Perfluorocarbons PFCs	Hydro Fluoro Carbons HFCs	Sulphur Hexafluoride SF ₆	Total
90,570	148	182	-	-	2	90,902

6: KAILIS OPERATIONS - FACILITY

Name	Kailis Operations
Facility Street Address	Leonora - Wiluna Hwy Leonora Western Australia 6438 AUSTRALIA
Geographic Coordinates	Latitude 28.844S / Longitude 121.292E
Facility location	-
Activity location	Western Australia
Location description	-
Activity description	-
ANZSIC Code	080 - Metal ore mining
Operational Control	SARACEN METALS PTY LIMITED
Number of Days with Operational Control	Full Year
Operational Control Dates	01/07/2018 - 30/06/2019
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 SARACEN METALS PTY LIMITED.

GREENHOUSE GAS EMISSIONS (t CO₂-e)

Scope 1	Scope 2	Total of Scope 1 and Scope 2
6,637	-	6,637

ENERGY PRODUCED AND ENERGY CONSUMED (GJ)

Energy Consumed Total	Energy Consumed Net	Energy Produced
95,709	95,709	-

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

Carbon Dioxide CO ₂	Methane CH ₄	Nitrous Oxide N ₂ O	Perfluorocarbons PFCs	Hydro Fluoro Carbons HFCs	Sulphur Hexafluoride SF ₆	Total
6,609	9	19	-	-	-	6,637

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 CO ₂ -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	2,440.229 kL	EC (GJ/Unit): 38.6 Z (GJ): 94,193	Gas: CO ₂ EF (kg CO₂-e / GJ): 69.9 Method: Method 1	6,584
				Gas: CH ₄ EF (kg CO₂-e / GJ): 0.1 Method: Method 1	9
				Gas: N ₂ O EF (kg CO₂-e / GJ): 0.2 Method:	19

				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: BBB	4.265 kL	EC (GJ/Unit): 38.6 Z (GJ): 165	Gas: CO2 EF (kg CO2-e / GJ): 69.9 Method: Method 1	12
				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
Source category: Fuel combustion Source of emissions: Stationary and Transport energy purposes (excluding electricity generation) Activity type: Emissions released from combustion of petroleum based oils or greases	Fuel / Energy commodity: Petroleum based oils (other than petroleum based oil used as fuel) Fuel usage: combustion Criterion: A	22.278 kL	EC (GJ/Unit): 38.8 Z (GJ): 864	Gas: CO2 EF (kg CO2-e / GJ): 13.9 Method: Method 1	12
Source category: Fuel combustion Source of emissions: Stationary and Transport energy purposes (excluding electricity generation) Activity type: Emissions released from combustion of petroleum based oils or greases	Fuel / Energy commodity: Petroleum based greases Fuel usage: combustion Criterion: A	7.56 kL	EC (GJ/Unit): 38.8 Z (GJ): 293	Gas: CO2 EF (kg CO2-e / GJ): 3.5 Method: Method 1	1
Source Total			95,515		6,637
Total			95,515		6,637

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	-	2,440.229	kL	38.6	94,193
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Stationary energy purposes	Diesel oil	combustion	BBB	-	4.265	kL	38.6	165
Emissions released from combustion of petroleum based oils or greases	Petroleum based oils (other than petroleum based oil used as fuel)	combustion	A	-	22.278	kL	38.8	864
Emissions released from combustion of petroleum based oils or greases	Petroleum based greases	combustion	A	-	7.56	kL	38.8	293
Total								95,515

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)
Energy consumed (not combusted)	Petroleum based oils (other than petroleum based oil used as fuel)	non-combustion	A	-	5	kL	38.8	194
Total								194

7: THUNDERBOX OPERATIONS - FACILITY

Name	Thunderbox Operations
Facility Street Address	GOLDFIELDS HIGHWAY Leinster Western Australia 6437
Geographic Coordinates	Latitude 28.193S / Longitude 121.006E
Facility location	-
Activity location	Western Australia
Location description	-
Activity description	-
ANZSIC Code	080 - Metal ore mining
Operational Control	SARACEN METALS PTY LIMITED
Number of Days with Operational Control	Full Year
Operational Control Dates	01/07/2018 - 30/06/2019
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 SARACEN METALS PTY LIMITED.

GREENHOUSE GAS EMISSIONS (t CO₂-e)

Scope 1	Scope 2	Total of Scope 1 and Scope 2
84,265	-	84,265

ENERGY PRODUCED AND ENERGY CONSUMED (GJ)

Energy Consumed Total	Energy Consumed Net	Energy Produced
1,735,348	1,396,299	339,049

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

Carbon Dioxide CO ₂	Methane CH ₄	Nitrous Oxide N ₂ O	Perfluorocarbons PFCs	Hydro Fluoro Carbons HFCs	Sulphur Hexafluoride SF ₆	Total
83,961	139	163	-	-	2	84,265

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 CO ₂ -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: Gaseous fossil fuels other than those mentioned in items 17 to 26 Fuel usage: combustion Criterion: A	335.4 m ³	EC (GJ/Unit): 0.0393 Z (GJ): 13	Gas: CO ₂ EF (kg CO₂-e / GJ): 51.4 Method: Method 1	1
				Gas: CH ₄ EF (kg CO₂-e / GJ): 0.1 Method: Method 1	0
				Gas: N ₂ O 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 - Stationary energy purposes	Fuel / Energy commodity: Diesel oil Fuel usage: combustion Criterion: A	15,004.118 kL	EC (GJ/Unit): 38.6 Z (GJ): 579,159	Gas: CO2 EF (kg CO2-e / GJ): 69.9 Method: Method 1	40,483
				Gas: CH4 EF (kg CO2-e / GJ): 0.1 Method: Method 1	58
				Gas: N2O EF (kg CO2-e / GJ): 0.2 Method: Method 1	116
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	542.174 kL	EC (GJ/Unit): 25.7 Z (GJ): 13,934	Gas: CO2 EF (kg CO2-e / GJ): 60.2 Method: Method 1	839
				Gas: CH4 EF (kg CO2-e / GJ): 0.2 Method: Method 1	3
				Gas: N2O EF (kg CO2-e / GJ): 0.2 Method: Method 1	3
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	273.964 kL	EC (GJ/Unit): 38.6 Z (GJ): 10,575	Gas: CO2 EF (kg CO2-e / GJ): 69.9 Method: Method 1	739

				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	6
Source category: Fuel combustion Source of emissions: Stationary and Transport energy purposes (excluding electricity generation) Activity type: Emissions released from combustion of petroleum based oils or greases	Fuel / Energy commodity: Petroleum based oils (other than petroleum based oil used as fuel) Fuel usage: combustion Criterion: A	170.666 kL	EC (GJ/Unit): 38.8 Z (GJ): 6,622	Gas: CO2 EF (kg CO2-e / GJ): 13.9 Method: Method 1	92
Source category: Fuel combustion Source of emissions: Stationary and Transport energy purposes (excluding electricity generation) Activity type: Emissions released from combustion of petroleum based oils or greases	Fuel / Energy commodity: Petroleum based greases Fuel usage: combustion Criterion: A	47.947 kL	EC (GJ/Unit): 38.8 Z (GJ): 1,860	Gas: CO2 EF (kg CO2-e / GJ): 3.5 Method: Method 1	7
Source Total			612,163		42,347
Source category: Fuel combustion Source of emissions: Emissions released from fuel use by certain industries (including electricity generation) Activity type: Electricity production - Gaseous fuels	Fuel / Energy commodity: Natural gas distributed in a pipeline Fuel usage: combustion Criterion: A	698,350 GJ	EC (GJ/Unit): 1 Z (GJ): 698,350	Gas: CO2 EF (kg CO2-e / GJ): 51.4 Method: Method 1	35,895
				Gas: CH4 EF (kg CO2-e / GJ): 0.1 Method: Method 1	70
				Gas: N2O EF (kg CO2-e / GJ): 0.03 Method: Method 1	21

Source category: Fuel combustion Source of emissions: Emissions released from fuel use by certain industries (including electricity generation) Activity type: Electricity production - Liquid fuels	Fuel / Energy commodity: Diesel oil Fuel usage: combustion Criterion: A	2,188.684 kL	EC (GJ/Unit): 38.6 Z (GJ): 84,483	Gas: CO2 EF (kg CO2-e / GJ): 69.9 Method: Method 1	5,905
				Gas: CH4 EF (kg CO2-e / GJ): 0.1 Method: Method 1	8
				Gas: N2O EF (kg CO2-e / GJ): 0.2 Method: Method 1	17
Source Total			782,833		41,916
Source category: Industrial processes Source of emissions: Emissions of hydrofluorocarbons and sulphur hexafluoride gases Activity type: Emissions of sulphur hexafluoride gases from gas insulated switchgear and circuit breaker applications	-	228 tonnes	-	Gas: SF6 EF (kg CO2-e / GJ): - Method: Method 1	2
Source Total			-		2
Total			1,394,996		84,265

ENERGY CONSUMED BY MEANS OF COMBUSTION FOR PRODUCING ELECTRICITY

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Energy Content (GJ)
Electricity production - Gaseous fuels	Natural gas distributed in a pipeline	combustion	A	-	698,350	GJ	1	698,350
Electricity production - Liquid fuels	Diesel oil	combustion	A	-	2,188.684	kL	38.6	84,483
Total								782,833

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	-	273.964	kL	38.6	10,575
Total								10,575

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	Gaseous fossil fuels other than those mentioned in items 17 to 26	combustion	A	-	335.4	m3	0.0393	13
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Stationary energy purposes	Diesel oil	combustion	A	-	15,004.118	kL	38.6	579,159
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Stationary energy purposes	Liquefied petroleum gas	combustion	A	-	542.174	kL	25.7	13,934
Emissions released from combustion of petroleum based oils or greases	Petroleum based oils (other than petroleum based oil used as fuel)	combustion	A	-	170.666	kL	38.8	6,622
Emissions released from combustion of petroleum based oils or greases	Petroleum based greases	combustion	A	-	47.947	kL	38.8	1,860
Total								601,588

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)
Energy consumed (not combusted)	Electricity	non-combustion	-	-	328,495.334	GJ	1	328,495
Energy consumed (not combusted)	Petroleum based oils (other than petroleum based oil used as fuel)	non-combustion	A	-	33.591	kL	38.8	1,303
Energy consumed (not combusted)	Electricity	non-combustion	-	-	10,553.627	GJ	1	10,554
Total								340,352

ELECTRICITY PRODUCED

Activity Type	Usage	Amount	Units	Energy Content Factor (GJ/Unit)	Converted Energy Content Amount (GJ)
Electricity (thermal generation)	For use onsite	91,248,704	kWh	0.0036	328,495
Electricity (thermal generation)	For use onsite	2,931,563.194	kWh	0.0036	10,554
Total					339,049

Incidental Emissions and Energy

This Report contains greenhouse gas emissions and energy information from facilities that is incidental to the operation of the facility and reported in accordance with NGER Regulation 4.27.

The following tables summarise total greenhouse gas emissions and energy that are incidental to the operation of this facility during the reporting period.

GREENHOUSE GAS EMISSIONS (t CO₂-e)

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

ENERGY PRODUCED AND ENERGY CONSUMED (GJ)

Energy Consumed Total	Energy Consumed Net	Energy Produced
10,554	-	10,554

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

Carbon Dioxide CO ₂	Methane CH ₄	Nitrous Oxide N ₂ O	Perfluorocarbons PFCs	Hydro Fluoro Carbons HFCs	Sulphur Hexafluoride SF ₆	Total
-	-	-	-	-	-	-

INCIDENTAL ENERGY CONSUMED BY A MEANS OTHER THAN COMBUSTION

Activity Type	Fuel / Energy Commodity	Fuel Usage	Criterion	Sub-criterion	Amount	Units	Energy Content Factor (GJ/Unit)	Incidental Energy Content (GJ)
Energy consumed (not combusted)	Electricity	non-combustion	-	-	10,553.627	GJ	1	10,554
Total								10,554

INCIDENTAL ELECTRICITY PRODUCED

Activity Type	Usage	Amount	Units	Energy Content Factor (GJ/Unit)	Converted Energy Content Amount (GJ)
Electricity (thermal generation)	For use onsite	2,931,563.194	kWh	0.0036	10,554
Total					10,554

CONTRACTORS

Name of Contractor	Pacific Energy (KPS) Pty Ltd
Contractor's Identifying Details	ABN 92134226056 ACN 134226056 338 Gngangara Road Landsdale, Western Australia 6065

CONTRACTOR GREENHOUSE GAS EMISSIONS

Total Greenhouse Gas Emissions (t CO₂-e)	39,859
--	--------

CONTRACTOR ENERGY PRODUCED AND ENERGY CONSUMED (GJ)

Energy Consumed (GJ)	Energy Produced (GJ)
753,518	328,495

CORPORATE GROUP THRESHOLD MET

The corporate group of SARACEN MINERAL HOLDINGS LIMITED 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).

REPORTING ABOUT INCIDENTAL EMISSIONS AND ENERGY

This Report contains greenhouse gas emissions and energy information from facilities that is incidental to the operation of the facility and reported in accordance with NGER Regulation 4.27.

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 report

It is the responsibility of the reporting entity to ensure that the information provided in the Report is prepared in accordance with the requirements set out in the NGER Act and the *National Greenhouse and Energy Reporting Regulations 2008* (the NGER Regulations) and that the data it contains is based on methods prescribed in the *National Greenhouse and Energy Reporting (Measurement) Determination 2008* (the 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 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 \$210.

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 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 *National Greenhouse and Energy Reporting Act 2007*;
- the information provided in this 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 *National Greenhouse and Energy Reporting Act 2007*;
- the information provided in this Report has been prepared and supplied in accordance with the requirements set out in the *National Greenhouse and Energy Reporting Act 2007*, the *National Greenhouse and Energy Reporting Regulations 2008* and the *National Greenhouse and Energy Reporting (Measurement) Determination 2008*;
- they are duly authorised to act, including submitting this report, on behalf of the reporting entity;
- the Clean Energy Regulator may compel or conduct an audit of the information contained in this report or in relation to compliance with the *National Greenhouse and Energy Reporting Act 2007* or the *National Greenhouse and Energy Reporting Regulations 2008*;
- the Clean Energy Regulator may request further clarification or documentation to verify the information supplied in this Report; and
- the entity providing the report and each group member (if any) listed in the report is a body corporate.