

6: TAHMOOR COAL PTY LTD - GROUP MEMBER

Name	TAHMOOR COAL PTY LTD
Australian Business Number (ABN)	97076663968
Australian Company Number (ACN)	076663968
Australian Registered Body Number (ARBN)	-
Trading Name	-
Street address line 1	c/o GFG Alliance Australia
Street address line 2	Level 28
Street address line 3	88 Phillip Street
Street city/suburb	Sydney
Street state	New South Wales
Street postcode	2000
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
1,238,774	87,644	1,326,418

ENERGY PRODUCED AND ENERGY CONSUMED (GJ)		
Energy Consumed Total	Energy Consumed Net	Energy Produced
1,362,981	1,362,981	36,712,151

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
178,007	1,060,732	32	-	-	3	1,238,774

7: TAHMOOR COAL MINE - FACILITY

Name	TAHMOOR COAL MINE
Facility Street Address	Remembrance Drive TAHMOOR New South Wales 2573 AUSTRALIA
Geographic Coordinates	Latitude 34.250S / Longitude 150.576E
Facility location	-
Activity location	New South Wales
Location description	-
Activity description	-
ANZSIC Code	060 - Coal mining
Operational Control	TAHMOOR COAL PTY LTD
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 TAHMOOR COAL PTY LTD.

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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	1,286.978 kL	EC (GJ/Unit): 38.6 Z (GJ): 49,677	Gas: CH ₄ EF (kg CO₂-e / GJ): 0.1 Method: Method 1	5
				Gas: N ₂ O EF (kg CO₂-e / GJ): 0.2 Method: Method 1	10
				Gas: CO ₂ EF (kg CO₂-e / GJ): 69.9 Method: Method 1	3,472

<p>Source category: Fuel combustion</p> <p>Source of emissions: Stationary and Transport energy purposes (excluding electricity generation)</p> <p>Activity type: Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes</p>	<p>Fuel / Energy commodity: Gasoline (other than for use as fuel in an aircraft) - Transport post-2004</p> <p>Fuel usage: combustion</p> <p>Criterion: A</p>	<p>1.701 kL</p>	<p>EC (GJ/Unit): 34.2</p> <p>Z (GJ): 58</p>	<p>Gas: CO2</p> <p>EF (kg CO2-e / GJ): 67.4</p> <p>Method: Method 1</p>	4
				<p>Gas: CH4</p> <p>EF (kg CO2-e / GJ): 0.02</p> <p>Method: Method 2</p>	0
				<p>Gas: N2O</p> <p>EF (kg CO2-e / GJ): 0.2</p> <p>Method: Method 2</p>	0
<p>Source category: Fuel combustion</p> <p>Source of emissions: Stationary and Transport energy purposes (excluding electricity generation)</p> <p>Activity type: Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes</p>	<p>Fuel / Energy commodity: Diesel oil - Transport post-2004</p> <p>Fuel usage: combustion</p> <p>Criterion: A</p>	<p>2.237 kL</p>	<p>EC (GJ/Unit): 38.6</p> <p>Z (GJ): 86</p>	<p>Gas: CO2</p> <p>EF (kg CO2-e / GJ): 69.9</p> <p>Method: Method 1</p>	6
				<p>Gas: N2O</p> <p>EF (kg CO2-e / GJ): 0.6</p> <p>Method: Method 2</p>	0
				<p>Gas: CH4</p> <p>EF (kg CO2-e / GJ): 0.01</p> <p>Method: Method 2</p>	0
<p>Source category: Fuel combustion</p> <p>Source of emissions: Stationary and Transport energy purposes (excluding electricity generation)</p> <p>Activity type: Emissions released from combustion of petroleum based oils or greases</p>	<p>Fuel / Energy commodity: Petroleum based oils (other than petroleum based oil used as fuel)</p> <p>Fuel usage: combustion</p> <p>Criterion: A</p>	<p>147.975 kL</p>	<p>EC (GJ/Unit): 38.8</p> <p>Z (GJ): 5,741</p>	<p>Gas: CO2</p> <p>EF (kg CO2-e / GJ): 13.9</p> <p>Method: Method 1</p>	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	6.279 kL	EC (GJ/Unit): 38.8 Z (GJ): 244	Gas: CO2 EF (kg CO2-e / GJ): 3.5 Method: Method 1	1
Source Total			55,806		3,578
Source category: Fugitive emissions Source of emissions: Underground mines Activity type: Emissions released from coal mine waste gas flared	Fuel / Energy commodity: Coal mine waste gas that is captured for combustion Fuel usage: combustion	24,340,777 m3	EC (GJ/Unit): 0.0377 Z (GJ): 917,647	Gas: CH4 EF (kg CO2-e / GJ): 4.1 Method: Method 2	2,987
				Gas: CO2 EF (kg CO2-e / GJ): 49.12525 Method: Method 2	44,391
				Gas: N2O EF (kg CO2-e / GJ): 0.03 Method: Method 2	22
Source category: Fugitive emissions Source of emissions: Underground mines Activity type: Fugitive emissions from extraction of coal	-	-	-	Gas: CH4 EF (kg CO2-e / GJ): - Method: Method 4	1,024,229
				Gas: CO2 EF (kg CO2-e / GJ): - Method: Method 4	130,053
Source category: Fugitive emissions Source of emissions: Underground mines Activity type: Fugitive emissions from post mining activities	-	-	-	Gas: CH4 EF (kg CO2-e / GJ): 0.017 Method: Method 1	33,511
Source Total			917,647		1,235,193

Source category: Industrial processes	-	335.94 tonnes	-	Gas: SF6	3
Source of emissions: Emissions of hydrofluorocarbons and sulphur hexafluoride gases				EF (kg CO2-e / GJ): -	
Activity type: Emissions of sulphur hexafluoride gases from gas insulated switchgear and circuit breaker applications				Method: Method 1	
Source Total			-		3
Total			973,453		1,238,774

MATTERS TO BE IDENTIFIED (MTBI) PER SOURCE

Source of Emissions	MTBI	Methods	Activity	Activity Value	Unit
Underground mines	the tonnes of coal mine waste gas (CO2-e) flared	Method 1	-	47400	tonnes (CO2-e)(flared)
Underground mines	the tonnes of raw coal produced	Method 4	Fugitive emissions from extraction of coal	1971256	tonnes
		Method 1	Fugitive emissions from post mining activities	1971256	tonnes
	the tonnes of carbon dioxide captured for energy production on site	Method 4	Fugitive emissions from extraction of coal	0	tonnes (CO2-e)
	the tonnes of methane (CO2-e) captured for energy production on site	Method 4	Fugitive emissions from extraction of coal	0	tonnes (CO2-e)
	the tonnes of carbon dioxide captured and transferred off site	Method 4	Fugitive emissions from extraction of coal	6647	tonnes (CO2-e)
	the tonnes of methane (CO2-e) captured and transferred off site	Method 4	Fugitive emissions from extraction of coal	265976	tonnes (CO2-e)
	the tonnes of carbon dioxide flared	Method 4	Fugitive emissions from extraction of coal	8605	tonnes (CO2-e)
	the tonnes of methane (CO2-e) flared	Method 4	Fugitive emissions from extraction of coal	334399	tonnes (CO2-e)
	whether the mine is a gassy mine or a non-gassy mine	Method 1	Fugitive emissions from post mining activities	Gassy	

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	108,202,157	kWh	0.81	87,644
Total				87,644

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	-	1.701	kL	34.2	58
Emissions released from combustion of liquid fuels other than petroleum oils or greases - Transport energy purposes	Diesel oil - Transport post-2004	combustion	A	-	2.237	kL	38.6	86
Total								144

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	-	1,286.978	kL	38.6	49,677
Emissions released from combustion of petroleum based oils or greases	Petroleum based oils (other than petroleum based oil used as fuel)	combustion	A	-	147.975	kL	38.8	5,741
Emissions released from combustion of petroleum based oils or greases	Petroleum based greases	combustion	A	-	6.279	kL	38.8	244
Emissions released from coal mine waste gas flared	Coal mine waste gas that is captured for combustion	combustion	-	-	24,340,777	m3	0.0377	917,647
Total								973,309

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	-	-	-	-	108,202,157	kWh	0.0036	389,528
Total								389,528

ENERGY PRODUCED

Activity Type	Fuel / Energy Commodity	Primary/Secondary	Amount	Units	Energy Content Factor	Converted Amount (GJ)
Energy content of fuel produced	Coking coal	Primary	1,168,954	tonnes	30	35,068,620
Energy content of fuel produced	Coal mine waste gas that is captured for combustion	Primary	24,340,777	m3	0.0377	917,647
Energy content of fuel produced	Coal mine waste gas that is captured for combustion	Primary	19,254,224	m3	0.0377	725,884
Total						36,712,151