

Task	Complete an assessment of the anticipated GHG Emissions from the North Kiaka Quartzite Mine.
	The proponent, Simcoa Operations Pty Ltd, already operate an existing mine 15km north of Moora (MS813) the current mine. Quartz will be mined on a campaign basis by a team of 11 people. 6 days per week during daylight hours. Facility boundary encompasses one open pit, one waste dump, transport corridor to current Moora Quartzite Mine, internal access tracks, administration buildings, car park, product stock piles, weighbridge, process area and workshop. In comparison to the existing mine, the proposal is very similar having the same project elements (except for the processing and screening plant that will remain at the Existing Mine) and is expected to use the same equipment. However, the Proposal will have a lower processing rate of 130,000 tpa.
Context	Smelting of product will occur at the existing Simcoa Smelter. The Smelter is outside the facility boundary.

Existing Moora Mine Production (approximately) 160,000 tpa Section 2.1, page 7 of document titled 12518217 REP s38 Referral - Supporting Document-RevB

Emissions at Moora are from diesel consumption from mobile and stationary plant

Facility	Year	Greenhouse Gas Emissions (TOTAL SCOPE 1)	Checked and confirmed against NGER S19 Report	Energy Consumed	Checked and confirmed against NGER S19 Report	Emissions Intensity
		(tonnes CO2-e)		(GJ)		tCO2e/t
Moora Quartzite Mine	2011-12	1,231	✓	17,716	✓	0.008
Moora Quartzite Mine	2012-13	790	✓	11,378	✓	0.005
Moora Quartzite Mine	2013-14	1,014	✓	14,598	✓	0.006
Moora Quartzite Mine	2014-15	1,261	✓	18,132	✓	0.008
Moora Quartzite Mine	2015-16	1,440	✓	20,520	✓	0.009
Moora Quartzite Mine	2016-17	989	✓	14,095	✓	0.006
Moora Quartzite Mine	2017-18	1,006	✓	14,336	✓	0.006
Moora Quartzite Mine	2018-19	1,187	✓	16,917	✓	0.007
Moora Quartzite Mine	2019-20	1,328	✓	18,907	✓	0.008
Moora Quartzite Mine				9 year GHG intensity average		0.007

North Kiaka Mine Expected Production	130000 tpa
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Facility	Approach	Greenhouse Gas Emissions (Scope 1)
		tCo2e
North Kiaka Mine	Annual emissions (estimate)	925
North Kiaka Mine	Annual emissions (estimate)	1170

North Kiaka Mine Contribution to Western Australia's GHG Emission: % 1E-05

<https://www.industry.gov.au/data-and-publications/state-and-territory-greenhouse-gas-inventories-2018>

Sectors / Key Sub Sectors	Australia (Mt CO2e)	Western Australia (Mt CO2e)
ENERGY SECTOR	435.6	84.4
Stationary Energy	280.3	55.5
Energy Industries	213.8	35.3
Electricity generation	183.2	25.3
Other energy	30.7	10
industries		
Manufacturing and construction	40.7	16.7
Other sectors	25.8	3.5
Transport	100.8	14.7
Fugitive fuels	45.4	14.2
INDUSTRIAL PROCESSES	34.2	5
AGRICULTURE	75.6	9.4
Livestock	59	5.9
Other Agriculture	16.6	3.5
WASTE	12.7	1.6
LAND USE, LAND USE CHANGE AND FORESTRY	-20.6	-902.1
Total Inventory	537.4	91.5
Converted to tCO2e		91500000

Table 4: Sectoral breakdown of National, State, and Territory greenhouse gas inventories and contribution to National emissions, 2018^{abcd}

	AUSTRALIA	NSW*		QLD		VIC		WA	
	Emissions (Mt CO2-e)	Emissions (Mt CO2-e)	% Contribution to National Emissions	Emissions (Mt CO2-e)	% Contribution to National Emissions	Emissions (Mt CO2-e)	% Contribution to National Emissions	Emissions (Mt CO2-e)	% Contribution to National Emissions
Inventory total	537.4	131.7	24.5%	171.7	32.0%	102.2	19.0%	91.5	17.0%
SECTORS/KEY SUBSECTORS									
ENERGY SECTOR	435.6	109.1	25.0%	119.3	27.4%	91.5	21.0%	84.4	19.4%
Stationary Energy	280.3	67.4	24.0%	77.6	27.7%	64.2	22.9%	55.5	19.8%
Energy Industries	213.8	55.9	26.1%	64.6	30.2%	49.5	23.2%	35.3	16.5%
Electricity generation	183.2	52.1	28.4%	52.9	28.9%	46.4	25.4%	25.3	13.8%
Other energy industries	30.7	3.8	12.4%	11.8	38.3%	3.1	10.0%	10.0	32.7%
Manufacturing and construction	40.7	5.9	14.6%	9.5	23.4%	4.8	11.8%	16.7	40.9%
Other sectors	25.8	5.5	21.4%	3.5	13.5%	9.8	38.2%	3.5	13.7%
Transport	100.8	28.7	28.5%	22.6	22.4%	23.5	23.3%	14.7	14.6%
Fugitive Fuels	54.4	13.0	23.9%	19.1	35.0%	3.9	7.1%	14.2	26.1%
INDUSTRIAL PROCESSES	34.2	13.7	40.0%	5.9	17.3%	3.9	11.3%	5.0	14.8%
AGRICULTURE	75.6	18.0	23.8%	21.2	28.0%	15.7	20.8%	9.4	12.4%
Livestock	59.0	13.9	23.6%	18.5	31.3%	11.8	19.9%	5.9	10.0%
Other Agriculture	16.6	4.0	24.2%	2.7	16.4%	3.9	23.6%	3.5	21.0%
WASTE	12.7	4.3	33.7%	2.6	20.3%	2.6	20.4%	1.6	12.9%
LAND USE, LAND USE CHANGE AND FORESTRY	-20.6	-13.3	64.5%	2280.3%	-110.7%	-1143.6%	55.5%	-902.1%	43.8%
Inventory total	537.4	131.7	24.5%	171.7	32.0%	102.2	19.0%	91.5	17.0%