

**Barloworld Emissions and Energy Conversion Factors 2023**

These factors have been updated in the 2023 financial period and have been applied retrospectively to the comparative periods.

Emissions (tCO2e) conversion factors											
Region Description	Diesel Rate (GJ)	Biodiesel (GJ)	Petrol Rate (GJ)	Heavy Oil Rate (GJ)	LPG Rate (GJ)	Sasol gas Rate (GJ)	CNG / LNG Rate (GJ)	Coal (GJ)	Acetylene Rate (GJ)	Electricity Rate (MWh)	Reference Source
Southern Africa	0.08266105	0.02446300	0.07106770	0.07764660	0.06321180	0.05615260	0.05615260	0.09506700	0.00173359	1.04000000	SA Technical Guidelines, Eskom 2015
Rest of Africa	0.07434660	0.02446300	0.06954660	0.07764660	0.06315260		0.05615260	0.09506700	0.00173359	0.72293180	IPCC2006/IGES v10.9
United Kingdom	0.07469784	0.02446300	0.07052753	0.07912188	0.06397340		0.05659330	0.09368274	0.00173359	0.23314000	DEFRA 2020
Europe	0.07434660	0.02446300	0.06954660	0.07764660	0.06315260		0.05615260	0.09506700	0.00173359	0.29580000	IPCC2006
Australia	0.07434660	0.02446300	0.06954660	0.07764660	0.06315260		0.05615260	0.09506700	0.00173359	0.80000000	IPCC2006
North America	0.07434660	0.02446300	0.06954660	0.07764660	0.06315260		0.05615260	0.09506700	0.00173359	0.47590000	IPCC2006
Middle East & Africa	0.07434660	0.02446300	0.06954660	0.07764660	0.06315260		0.05615260	0.09506700	0.00173359	0.67918019	IPCC2006/IGES v10.9
Mongolia	0.07434660	0.02446300	0.06954660	0.07764660	0.06315260		0.05615260	0.09506700	0.00173359	0.85900000	IPCC2006
Zimbabwe	0.07434660	0.02446300	0.06954660	0.07764660	0.06315260		0.05615260	0.09506700	0.00173359	0.94810000	IPCC2006/IGES v10.9

Energy (GJ) conversion factors											
Region Description	Diesel Rate (litre)	Biodiesel (litre)	Petrol Rate (litres)	Heavy Oil Rate (litre)	Stationary LPG Rate (kg)	Sasol gas Rate (Nm3)	CNG / LNG Rate (Nm3)	Coal (tonnes)	Acetylene (kg)	Electricity Rate (MWh)	Reference Source
Southern Africa	0.03810000	0.02082683	0.03420000	0.04119400	0.04610000	1.00000000	0.03810000	24.30000000	0.51282051	3.60000000	SAPIA
Rest of Africa	0.03604359	0.02082683	0.03252570	0.03992095	0.04730000		0.03832908	25.80000000	0.51282051	3.60000000	IPCC 2006
United Kingdom	0.03598324	0.02901716	0.03281938	0.04023123	0.04593800		0.03574027	25.40500000	0.51282051	3.60000000	DEFRA 2020
Europe	0.03604359	0.02082683	0.03252570	0.03992095	0.04730000		0.03832908	25.80000000	0.51282051	3.60000000	IPCC 2006
Australia	0.03604359	0.02082683	0.03252570	0.03992095	0.04730000		0.03832908	25.80000000	0.51282051	3.60000000	IPCC 2006
North America	0.03604359	0.02082683	0.03252570	0.03992095	0.04730000		0.03832908	25.80000000	0.51282051	3.60000000	IPCC 2006
Middle East & Africa	0.03604359	0.02082683	0.03252570	0.03992095	0.04730000		0.03832908	25.80000000	0.51282051	3.60000000	IPCC 2006
Mongolia	0.03604359	0.02082683	0.03252570	0.03992095	0.04730000		0.03832908	25.80000000	0.51282051	3.60000000	IPCC 2006
Zimbabwe	0.03604359	0.02082683	0.03252570	0.03992095	0.04730000		0.03832908	25.80000000	0.51282051	3.60000000	IPCC 2006