

## Barloworld Emissions and Energy Conversion Factors 2019

These factors have been updated in the 2016 financial period and have been applied retrospectively to the comparative periods.

### Emissions (tCO<sub>2</sub>e) conversion factors

Region	Diesel (tCO <sub>2</sub> e/GJ)	Petrol (tCO <sub>2</sub> e/GJ)	Heavy Oil (tCO <sub>2</sub> e/GJ)	LPG (tCO <sub>2</sub> e/GJ)	CNG/LNG (tCO <sub>2</sub> e/GJ)	Electricity (tCO <sub>2</sub> e/MWh)	Source Reference
Europe/Russia	0.06987308	0.06673419	0.07443739	0.05963333	0.05123162	0.35047	DEFRA 2015
Middle East & Asia	0.06987308	0.06673419	0.07443739	0.05963333	0.05123162	0.66945	DEFRA 2015
Rest of Africa	0.06987308	0.06673419	0.07443739	0.05963333	0.05123162	0.58198	DEFRA 2015
South Africa	0.06987308	0.06673419	0.07443739	0.05963333	0.05123162	1.03	DEFRA 2015; Eskom 2015

### Energy (GJ) conversion factors

Region	Diesel (GJ/litre)	Petrol (GJ/litre)	Heavy Oil (GJ/litre)	LPG (GJ/tonne)	CNG/LNG (GJ/m <sup>3</sup> )	Electricity (GJ/MWh)	Source Reference
Europe/Russia	0.03600202	0.03273728	0.04013797	45.95552457	35.71778841	3.6	DEFRA 2015
Middle East & Asia	0.03607383	0.03238304	0.03984221	47.3	35.80350195	3.6	IPCC 2006
Rest of Africa	0.03607383	0.03238304	0.03984221	47.3	35.80350195	3.6	IPCC 2006
South Africa	0.0381	0.0342	0.042	46.1	38.1	3.6	SAPIA