

Barloworld Emissions and Energy Conversion Factors 2016

Emissions (tCO₂e) conversion factors

The updated factors have been applied in Barloworld's 2016 financial period and for comparative purposes been applied to 2014 and 2015 financial periods as well.

Region Description	Factor	Diesel (GJ)	Petrol (GJ)	Heavy Oil (GJ)	LPG (GJ)	CNG / LNG (GJ)	Electricity (MWh)	Reference Source
Europe/Russia	Old Factors	0.07476667	0.07069167	0.06858056	0.06396389	0.05710278	0.487	DEFRA/DECC/GHG 2010
	New Factors	0.06987308	0.06673419	0.07443739	0.05963333	0.05123162	0.35047	DEFRA 2015
	Impact of change:	-7%	-6%	9%	-7%	-10%	-28%	
Middle East & Africa	Old Factors	0.07476667	0.07069167	0.06858056	0.06396389	0.05710278	0.9143	DEFRA/DECC/GHG 2010
	New Factors	0.06987308	0.06673419	0.07443739	0.05963333	0.05123162	0.68945	DEFRA 2015
	Impact of change:	-7%	-6%	9%	-7%	-10%	-27%	
North America	Old Factors	0.07476667	0.07069167	0.06858056	0.06396389	0.05710278	0.57831	eia.doe.gov/cneat/electricity/ep
	New Factors	0.06987308	0.06673419	0.07443739	0.05963333	0.05123162	0.49845	DEFRA 2015
	Impact of change:	-7%	-6%	9%	-7%	-10%	-14%	
Rest of Africa	Old Factors	0.07476667	0.07069167	0.06858056	0.06396389	0.05710278	0.738	DEFRA/DECC/GHG 2010
	New Factors	0.06987308	0.06673419	0.07443739	0.05963333	0.05123162	0.58198	DEFRA 2015
	Impact of change:	-7%	-6%	9%	-7%	-10%	-21%	
Southern Africa	Old Factors	0.07476667	0.07069167	0.06858056	0.06396389	0.05710278	1.03665	Eskom (2010 AR)
	New Factors	0.06987308	0.06673419	0.07443739	0.05963333	0.05123162	1.03	DEFRA 2015; Eskom 2015
	Impact of change:	-7%	-6%	9%	-7%	-10%	-1%	
United Kingdom	Old Factors	0.07476667	0.07069167	0.06858056	0.06396389	0.05710278	0.54284	DEFRA/DECC/GHG 2010
	New Factors	0.06987308	0.06673419	0.07443739	0.05963333	0.05123162	0.46219	DEFRA 2015
	Impact of change:	-7%	-6%	9%	-7%	-10%	-15%	

Energy (GJ) conversion factors

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Region Description	Factor	Diesel (litre)	Petrol (litre)	Heavy Oil (litre)	LPG (tonne)	CNG / LNG (m ³)	Electricity (MWh)	Reference Source
Europe/Russia	Old Factors	0.0358	0.0328	0.0394	45.9779	35	3.6	DEFRA/DECC/GHG 2010
	New Factors	0.03600202	0.03273728	0.04013797	45.95552457	35.71778841	3.6	DEFRA 2015
	Impact of change:	1%	0%	2%	0%	2%	0%	
Middle East & Africa	Old Factors	0.0371	0.0344	0.0394	45.9779	35	3.6	DEFRA/DECC/GHG 2010
	New Factors	0.03607383	0.03238304	0.03984221	47.3	35.80350195	3.6	IPCC 2006
	Impact of change:	-3%	-6%	1%	3%	2%	0%	
North America	Old Factors	0.0298	0.0269	0.0394	46.607	36.6	3.6	eia.doe.gov/cneat/electricity/ep
	New Factors	0.03607383	0.03238304	0.03984221	47.3	35.80350195	3.6	IPCC 2006
	Impact of change:	21%	20%	1%	1%	-2%	0%	
Rest of Africa	Old Factors	0.0371	0.0344	0.0394	45.9779	35	3.6	DEFRA/DECC/GHG 2010
	New Factors	0.03607383	0.03238304	0.03984221	47.3	35.80350195	3.6	IPCC 2006
	Impact of change:	-3%	-6%	1%	3%	2%	0%	
Southern Africa	Old Factors	0.0416	0.0339	0.0394	49.3848	41	3.6	Eskom (2010 AR)
	New Factors	0.0381	0.0342	0.042	46.1	38.1	3.6	SAPIA
	Impact of change:	-8%	1%	7%	-7%	-7%	0%	
United Kingdom	Old Factors	0.0358	0.0328	0.0394	45.9779	35	3.6	DEFRA/DECC/GHG 2010
	New Factors	0.03600202	0.03273728	0.04013797	45.95552457	35.71778841	3.6	DEFRA 2015
	Impact of change:	1%	0%	2%	0%	2%	0%	