BMT Asia Pacific

Vehicle Emission Factors in Year 2030

Vehicle Type		Emission Factor predicted by EMFAC-HK g/veh-mi	
		NOx	PM
Petrol PC & LGV	Petrol Private Cars & Light Goods Vehicles	0.185	0.010
Diesel PC & LGV3	Diesel Private Cars & Light Goods Vehicles <2.5t	0.504	0.216
Diesel PC & LGV4	Diesel Private Cars & Light Goods Vehicles 2.5-3.5t	0.320	0.123
PLB	Public Light Buses	0.403	0.377
LGV6	Light Goods Vehicles 3.5-5.5t	2.702	0.278
HGV7	Medium & Heavy Goods Vehicles 5.5-15t	5.529	0.473
HGV8	Medium & Heavy Goods Vehicles >15t	6.856	0.434
FBDD	Double Deck Franchised Buses	3.866	0.168
MC	Motor Cycles	1.084	0.070
Taxi	Taxi	0.299	0.041
PrLB<3.5t	Private Light Buses <3.5t	0.353	0.278
PrLB>3.5t	Private Light Buses >3.5t	0.447	0.396
NFB6	Non-Franchised Buses <6.36t	2.054	0.141
NFB7	Non-Franchised Buses 6.36-15t	4.771	0.313
NFB8	Non-Franchised Buses >15t	4.995	0.267
FBSD	Single Deck Franchised Buses	0.000	0.000

Calculation of Emission Factors

Link Name in Caline4	Traffic Flow, Veh/hr	Vehicle Composition (%)																Composite Emission Factor, g/veh-mi [1]	
		Petrol PC & LGV	Diesel PC & LGV3	Diesel PC & LGV4	PLB	LGV6	HGV7	HGV8	FBDD	MC	Taxi	PrLB<3.5t	PrLB>3.5t	NFB6	NFB7	NFB8	FBSD	NOx[1]	RSP[2]
A1+A2	995	17.9%	14.2%	14.2%	3.2%	10.9%	12.4%	5.3%	2.0%	2.6%	14.2%	1.2%	0.6%	0.4%	0.4%	0.6%	0.0%	1.717	0.194
A3+A4	363	17.1%	13.8%	13.8%	3.3%	10.2%	7.2%	3.0%	1.7%	12.4%	13.8%	1.7%	1.1%	0.0%	0.0%	1.1%	0.0%	1.344	0.166
A5+B1	1609	17.7%	14.1%	14.1%	2.8%	10.6%	10.7%	4.6%	2.9%	4.7%	14.1%	1.1%	0.5%	0.5%	0.5%	1.0%	0.0%	1.653	0.185
B2+B5	631	18.5%	14.3%	14.3%	0.0%	10.7%	9.6%	4.2%	6.8%	3.2%	14.3%	0.0%	0.0%	0.9%	0.9%	2.2%	0.0%	1.775	0.174
B3+B4	1033	15.7%	12.5%	12.5%	1.1%	9.4%	19.6%	8.3%	2.2%	3.7%	12.5%	0.5%	0.2%	0.5%	0.5%	0.8%	0.0%	2.278	0.221
C1+C2	1199	18.1%	14.5%	14.5%	3.2%	10.9%	14.5%	6.3%	0.5%	0.9%	14.5%	1.2%	0.5%	0.0%	0.0%	0.3%	0.0%	1.789	0.203
C3+C4	1668	17.2%	13.7%	13.7%	3.1%	10.4%	16.2%	7.0%	1.1%	1.2%	13.7%	1.2%	0.4%	0.2%	0.2%	0.3%	0.0%	1.954	0.212
D1+D2	82	15.9%	13.4%	13.4%	4.9%	9.7%	17.1%	7.3%	2.5%	0.0%	13.4%	2.5%	0.0%	0.0%	0.0%	0.0%	0.0%	2.013	0.222
D3+D4	353	15.9%	12.7%	12.7%	4.5%	9.4%	18.4%	7.7%	1.4%	1.1%	12.7%	1.7%	1.1%	0.0%	0.0%	0.6%	0.0%	2.094	0.228
D5+D6	712	16.0%	12.8%	12.8%	4.1%	9.6%	18.4%	7.9%	1.3%	1.1%	12.8%	1.5%	0.7%	0.3%	0.3%	0.6%	0.0%	2.125	0.226
D7+D8	1039	15.9%	12.7%	12.7%	4.3%	9.5%	18.4%	7.9%	1.4%	1.2%	12.7%	1.6%	0.5%	0.4%	0.4%	0.5%	0.0%	2.125	0.227
E1	1047	16.0%	12.7%	12.7%	4.2%	9.6%	18.3%	7.8%	1.3%	1.1%	12.7%	1.6%	0.8%	0.3%	0.3%	0.5%	0.0%	2.112	0.226
E2	915	16.0%	12.8%	12.8%	4.2%	9.6%	18.4%	7.8%	1.3%	1.2%	12.8%	1.6%	0.7%	0.2%	0.2%	0.5%	0.0%	2.112	0.226
E3	922	15.9%	12.8%	12.8%	4.2%	9.5%	18.2%	7.9%	1.3%	1.2%	12.8%	1.6%	0.7%	0.2%	0.2%	0.5%	0.0%	2.105	0.226
E4	884	16.0%	12.7%	12.7%	4.3%	9.6%	18.2%	7.9%	1.4%	1.2%	12.7%	1.7%	0.7%	0.2%	0.2%	0.6%	0.0%	2.117	0.227
E5	963	16.1%	12.8%	12.8%	4.3%	9.6%	18.4%	7.9%	1.2%	1.1%	12.8%	1.6%	0.6%	0.2%	0.2%	0.5%	0.0%	2.114	0.227
F1+F2	78	17.9%	14.1%	14.1%	5.2%	12.8%	6.4%	5.2%	5.2%	2.6%	14.1%	2.6%	0.0%	0.0%	0.0%	0.0%	0.0%	1.505	0.181
F3+F4	90	17.8%	13.3%	13.3%	6.7%	11.1%	5.6%	4.4%	4.4%	5.6%	13.3%	4.4%	0.0%	0.0%	0.0%	0.0%	0.0%	1.363	0.177

1. *Emission Factor, g/veh-mi* = $\sum$(Emission Factor of Vehicle Type i) x (% Vehicle Type i)