

## Stationary Combustion Default Emission Factors: Cement Plants in California

Handout for Cement Technical Team Discussion: May 9, 2007

	California Climate Action Registry <sup>1</sup> Emission Factors (kg CO <sub>2</sub> /MMBtu)	WBCSD/WRI Emission Factors <sup>2</sup> (kg CO <sub>2</sub> /MMBtu)
<b>Biogenic</b>		
Wood - dry	90.94	116
<b>Alternative Fuels</b>		
Impregnated saw dust	79	79
Solvents	79	79
Plastics	79	79
Waste Oil	84	84
Other fossil based wastes	84	84
Tire-Derived Fuel (TDF)	90	90
Agricultural, organic, diaper waste, charcoal	116	116
<b>Fossil Fuels</b>		
Landfill Gas	52.07	N/A
Waste water treatment biogas	52.07	N/A
Natural Gas	53.05	59.2
Distillate Oil	73.14	81.6
Residual Oil	78.79	78.2
Bituminous Coal	93.50	101
Lignite Coal	96.61	101
Sub bituminous Coal	97.12	101
PET Coke	102.11	105

Source 1: California Climate Action Registry Power Utility and Cement Protocol

NOTE: Emission Factors Expressed as High Heating Values (HHV)

Source 2: WBCSD/WRI, The Cement Reporting Protocol

NOTE: Emission Factors Expressed as Low Heating Values (LHV)