

Appendix C - Emission Factors and References

Source	Emission Factor			Emission Factor			Emission Factor			Reference
	CO2E	CO2	IPCC, 2001	21	CH4	310	N2O	IPCC, 2001		
Electricity	1.56	lbs CO2/kWh	U.S. EPA eGRID2006 Version 2.1 State File (Year 2004 Data) Released May 2007 (1)	0.0000196	lbs CH4/kWh	0.0000244	lbs N2O/kWh	U.S. EPA eGRID2006 Version 2.1 State File (Year 2004 Data) Released May 2007 (1); CH4 and N2O factors are based on the Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2005, EPA 430-R-07-002, Washington, DC, April 2007 (Annex 3, Table A-69)		
Natural gas	11.71	lbs CO2/therm	The Climate Trust, 2007 RFP Conversion Metrics (2)	0.0011023	lbs CH4/therm	0.0000220	lbs N2O/therm	EPA Climate Leaders Greenhouse Gas Inventory Protocol Core Module Guidance: Stationary Combustion Sources (October 2004)		
Gasoline	19.56	lbs CO2/gallon	The Climate Trust, 2007 RFP Conversion Metrics (2)	0.0028660	lbs CH4/gallon	0.0002205	lbs N2O/gallon	EPA Climate Leaders Greenhouse Gas Inventory Protocol Core Module Guidance: Direct Emissions from Mobile Sources (October 2004)		
Diesel	22.38	lbs CO2/gallon	The Climate Trust, 2007 RFP Conversion Metrics (2)	0.0030864	lbs CH4/gallon	0.0002205	lbs N2O/gallon	EPA Climate Leaders Greenhouse Gas Inventory Protocol Core Module Guidance: Direct Emissions from Mobile Sources (October 2004)		
Biodiesel	17.89	lbs CO2/gallon	Energy Information Administration, Documentation for Emissions of Greenhouse Gases in the U.S. 2005, DOE/EIA-0638 (2005), October 2007							
Solid waste disposed	941	lbs CO2E/ton	EPA Waste Reduction Model, Version 8, August 2006 (3)	n/a	n/a	n/a	n/a			
Organic waste composted	-432.00	lbs CO2E/ton	EPA Waste Reduction Model, Version 8, August 2006 (3)	n/a	n/a	n/a	n/a			
Solid waste recycled	-6428.00	lbs CO2E/ton	EPA Waste Reduction Model, Version 8, August 2006 (3)	n/a	n/a	n/a	n/a			

Notes:

- (1) Electricity sources based on U.S. EPA eGRID2006 Version 2.1 (Year 2004 Data) Released May 2007.
- (2) Climate Trust RFP Conversion Metrics downloaded on March 24, 2007 (http://www.climatetrust.org/solicitations_2007_Metrics.php).
- (3) Based on national average landfill gas recovery and transportation distances for municipal solid waste and mixed recyclables, requires an ANNUAL UPDATE (<http://yosemite.epa.gov/oar/globalwarming.nsf/WARM?OpenForm>).