

**California State University, Hayward Campus Master Plan
Greenhouse Gas Emissions from Motor Vehicles**

Source	Annual CO ₂ Emissions (tons/yr) ¹	Annual CO ₂ E Emissions (metric tons/yr) ^{2,3}
Proposed Land Uses	8,346.5	7,970.3

1. Estimated emissions from URBEMIS2007
2. CO₂ emissions are assumed to be 95% of GHG emissions on a CO₂ equivalent basis. (U.S. EPA, "Emission Facts - Greenhouse Gas Emissions from a Typical Passenger Vehicle", Office of Transportation and Air Quality, EPA420-F-05-004, February 2005)
3. 1 metric ton = 1.102 tons

**California State University, Hayward Campus Master Plan
Greenhouse Gas Emissions from Area Sources**

	Natural Gas Emission Factor	
GHG	(kg/MMBtu) ¹	GWP
CO ₂	53.06	1
N ₂ O	0.0001	310
CH ₄	0.0059	21
CO ₂ E (multiplier)	1.0029	
	Annual CO ₂ (tons/yr) ²	Annual CO ₂ E (metric tons/yr) ³
Proposed Land Uses	1,092.3	994.1
Total		994.1

1. CA Climate Action Registry, General Reporting Protocol, 2008.
2. Estimated CO₂ emissions from URBEMIS2007
3. 1 metric ton = 1.102 tons