

Step 1: Project Size	Mtons / Person - New Resid		# People	CO2 (MTons)	lb CO2e	
	Total Residential	Residential Buildings				
Base	6.6	2.20	47	103.4	227,959	Note 1, 2
Target 1990	3.7	1.23	47	58.0	127,795	Note 3
Carbon Reduction Required		0.97	47	45.4	100,164	

Step 2: Density & Transit Credits		% Reduction	Per Person Reduction	# People	CO2 (MTons)	lb CO2e	% of Reduction	
							Total	
Project Density	High	5%	0.11	47	(5.2)	(11,398)	10.7%	Note 4
	Medium	2%						
Proximity to Transit	Less than 1/4 mile	5%	0.11	47	(5.2)	(11,398)	10.7%	Note 5
	1/4-1/2 mile	2%						
	1/2-3/4 mile	1%						
Total Credits					(10.3)	(22,796)		

Step 3: Mitigation Measure Credits		lb CO2e /unit	Mtons CO2e /unit	# Units	CO2 (MTons)	lb CO2e	% of Reduction	
							Total	Note
Apartment Energy Efficiency Upgrades	15% Better than 2016 Title-24 Code	2,129	0.97	27	(26.1)	(57,470)	53.9%	Note 7, 8
	+ ENERGY STAR Appliances + 100% LED							
On-Site Renewable Generation (PV)	25 kW of PV	-	-		(12.0)	(26,380)	24.7%	Note 9
Total Reduction Due to Mitigation		2,129	0.97		(38.0)	(83,849)		

Step 4: Project Calculations	CO2 (MTons)	lb CO2e	% Compliance
Project Reductions Required (from Step 1)	45.4	100,164	
Project Credits (from Step 2 & 3)	(48.4)	(106,645)	106.5%
Adjusted Project Reductions / Balance to Mitigate	(2.9)	(6,482)	

See Notes on Page 2

DISCLAIMER: Davis Energy Group does not guarantee estimated energy usage or estimated savings presented here. Energy use will vary based on final design, occupancy, and operating conditions.

Notes:

1. Based on the April 21, 2009 Staff Report on "Greenhouse gas emission thresholds and standards for new residential development". Per Table 1, baseline residential value is 6.6 Mtons per person, with 33% of that value attributed to building energy use ($6.6 \times 33\% = 2.20$ Mtons).
2. Number of units provided by developer. Total = 27 residential units, (7) 1-bedroom units and (20) 2-bedroom unit. Number of bedrooms used for estimate of number of people.
3. Based on the April 21, 2009 Staff Report on "Greenhouse gas emission thresholds and standards for new residential development". Per Table 1, 1990 residential value is 3.7 Mtons per person, with 33% of that value attributed to building energy use ($3.7 \times 33\% = 1.23$ Mtons).
4. Project credits based on Table 2 of the April 21, 2009 Staff Report on "Greenhouse gas emission thresholds and standards for new residential development". Project housing density of 90 units / 2.27 gross acres = 39.6 du/acre.
5. Project credits based on Table 2 of the April 21, 2009 Staff Report on "Greenhouse gas emission thresholds and standards for new residential development". Proximity to transit determined from site plan.
6. GHG emission rates for electricity based on US EPA 2007 emissions rates for California (0.724 lbs. CO₂ per kWh).
http://www.epa.gov/cleanenergy/documents/egridzips/eGRID2007V1_1_year05_GHGOutputRates.pdf
GHG emissions rates for natural gas combustion as reported by the U.S. Energy Information Administration (11.7 lbs CO₂ per therm) (EIA 2011).
7. Savings are relative to the 2013 Title 24 energy code baseline. GHG/unit savings are normalized to the average unit size for the building.
8. Based on modeling using Beopt software and reflects savings for ENERGY STAR refrigerators, clothes washers and dishwashers in every unit, and 100% LED lighting for the project.
9. PV offsets based on an average of 1,457 kWh per kW of PV capacity where the average production reflects the various orientations at which PV may be located at the project site.