Community Greenhouse Gas Emissions in 2005
Detailed Report

	Equiv CO_2 (tons)	Equiv CO_2 (%)	Energy (MBtu)
Residential			
Newark, California			
Community Residential			
Electricity	21,701	5.7	282,154,259
Natural Gas	33,304	8.7	539,053,800
Subtotal Community Residential	55,005	14.3	821,208,059
Subtotal Residential	55,005	14.3	821,208,059
Commercial			
Newark, California			
Community Commercial/Industrial			
Electricity	80,762	21.0	1,050,049,249
Natural Gas	122,810	32.0	1,987,786,600
Subtotal Community Commercial/Industrial	203,572	53.0	3,037,835,849

Data Sources:

1. Request for electricity and natural gas data processed by Greg San Martin, Climate Protection Program Manager, PG&E, GJS8@pge.com, (415)973-6905 and Jasmin Ansar, Manager, Environmental Policy, PG&E, JxA2@pge.com, (415)973-4570.
2. PG&E specific eCO2 emissions factor of 0.525 lbs/kWh (or 262.5 short tons CO2/GWh) of delivered electricity in 2005 provided by Greg San Martin.
3. Growth Projections and Household indicator data based on Association of Bay Area Government (ABAG) Projections 2005.

Notes:

1. The PG&E coefficient set is based on the PG&E - specific eCO2 emissions factor for 2005 and default criteria air pollutant emissions factors for the 2004 Region 13 - Western Systems Coordinating Council/CNV Average Grid Electricity Set. The PG&E coefficient set does not have emissions factors for CH4 and N2O as the eCO2 emissions factor includes CH4 and N2O emissions in CO2 equivalents. The business-as-usual projections for 2020 assume no change in the PG & E eCO2 emissions factor.
2. The eCO2 emissions factor is pending independent verification and certification from the California Climate Action Registry; the confirmed eCO2 factor will be made public by CCAR at the end of 2006, at which time the emissions factor used in this analysis should be updated if it has changed.
3. The residential sector includes energy consumed in all residential buildings of the city.
4. The commercial sector includes energy consumed in the industrial sector of the city. The commercial sector also includes energy consumed by city buildings/operations and facilities as well as the district facilities like the East Bay Municipal Utility District (EBMUD), Bay Area Rapid Transit (BART) and School Districts.

Data entry: Data entered on September 27, 2006 by Palak Joshi, Program Assistant, ICLEI, palak.joshi@iclei.org. ICLEI supervisor, Timothy Burroughs, timothy.burroughs@iclei.org.
Reference file: ICLEI_Newark_Community_Res_Com_CY2005

Subtotal Commercial	203,572	53.0	3,037,835,849

Community Greenhouse Gas Emissions in 2005
Detailed Report

	Equiv CO_2 (tons)	Equiv CO_2 (%)	Energy (MBtu)
Transportation			
Newark, California			
Community VMT data for Newark			
Gasoline	86,667	22.6	1,013,772,492
Diesel	49,535	12.9	570,990,498
Subtotal Community VMT data for Newark	136,202	35.5	1,584,762,990

Data Sources:
1. Citywide VMT data provided on July 18, 2006 by Harold Brazil, Air Quality Associate, Metropolitan Transportation Commission (MTC) hbrazil@mtc.ca.gov, (510) 817-5747
2. VMT by vehicle type data provided on July 5, 2006 by Amir Fanai, Principal Air Quality Engineer, Bay Area Air Quality Management District, AFanai@baaqmd.gov
3. Annual growth rates are extrapolated from population growth data published by the Association of Bay Area Governments (Projections 2005)

Notes:
1. VMT data for 2005 is not currently available. The estimated 2005 VMT data was calculated by applying an annual population growth rate to 2004 MTC VMT data.
2. The VMT data provided by MTC includes Daily VMT (DVMT) for weekdays only. VMT including weekends is calculated with the MTC's weekdays/weekends VMT ratio: 1.1489. Hence Annual VMT = DVMT x (number of weekdays in the base year) + DVMT/1.1489 x (365 - number of weekdays in the base year).
3. The VMT by fuel and vehicle type is calculated using Alameda County VMT % (by vehicle type) and the default CACP fleet breakdown by fuel type.

Data entry:
Palak Joshi, Program Assistant, ICLEI, palak.joshi@iclei.org, (510) 844-0699, on August 25, 2006. Timothy Burroughs, Supervisor, timothy.burroughs@iclei.org.

Subtotal Transportation	136,202	35.5	1,584,762,990
Waste			
Newark, California			
Newark ADC Tonnage			*Disposal Method - Managed Landfill*
Plant Debris	-3,554	-0.9	
Subtotal Newark ADC Tonnage	-3,554	-0.9	
Newark Altamont Landfill Disposal Tonnage			*Disposal Method - Managed Landfill*
Paper Products	-15	0.0	
Food Waste	26	0.0	
Plant Debris	-22	0.0	
Wood/Textiles	-62	0.0	
Subtotal Newark Altamont Landfill Disposal Tonnage		0.0	

Community Greenhouse Gas Emissions in 2005
Detailed Report

	Equiv CO_2 (tons)	Equiv CO_2 (%)	Energy (MBtu)	
Newark Kettleman Hills Landfill Disposal Tonnage				*Disposal Method -*
Paper Products	-303	-0.1		
Food Waste	527	0.1		
Plant Debris	-446	-0.1		
Wood/Textiles	-1,261	-0.3		
Subtotal Newark Kettleman Hills Landfill Disposal Tonnage		-0.4		
Newark Other Landfills Disposal Tonnage				*Disposal Method -*
Paper Products	-13	0.0		
Food Waste	22	0.0		
Plant Debris	-19	0.0		
Wood/Textiles	-54	0.0		
Subtotal Newark Other Landfills Disposal Tonnage	-63	0.0		
Newark Tri-Cities Landfill Disposal Tonnage				*Disposal Method -*
Paper Products	-1,128	-0.3		
Food Waste	1,962	0.5		
Plant Debris	-1,660	-0.4		
Wood/Textiles	-4,694	-1.2		
Subtotal Newark Tri-Cities Landfill Disposal Tonnage		-1.4		

Data Sources:
1. Landfill data provided on July 20, 2006 by Meghan Starkey, Senior Program Manager, Alameda County Waste Management Authority (StopWaste.org), mstarkey@stopwate.org, (510) 614-1699
2. Waste characterization data based on 2000 Alameda County Waste Characterization study available online at http://www.stopwaste.org/home/index.asp?page=590
3. Methane recovery factors for individual landfill sites provided by Victoria Ludwig, Program Manager EPA Landfill Methane Outreach Program, Ludwig.Victoria@epamail.epa.gov
4. Growth rate based on Projections 2005, published by the Association of Bay Area Governments

Notes:
1. Weighted average methane recovery factor for the city based on tonnage hauled to each landfill.
2. Other landfills include landfills that receive less than 1% of the total waste from the city.
3. Recycling and compost tonnage has been omitted from this analysis as complete recycling and compost data was not available.
4. Annual population growth rate is extrapolated from ABAG population projection data for 2000-2030.
5. The record containing Alternative Daily Cover (ADC) includes Green Materials categorized as 'Plant Debris' and ADC like the Solidify Class II Cover, C & D, Roofing, Auto shred fluff , Roofing, Sludge/ biosolid waste categorized as 'All Other waste'.

Data entry:
Palak Joshi, Program Assistant, ICLEI, palak.joshi@iclei.org, August 29, 2006 - Reference file: ICLEI_Newark_CommunityWaste_CY2005

Subtotal Waste	-10,692	-2.8	
Total	384,087	100.0	5,443,806,898

This report has been generated for Newark, California using STAPPA/ALAPCO and ICLEI's Clean Air and Climate Protection Software developed by Torrie Smith Associates Inc.