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City and County of San Francisco
Department of Environment
SF Projected vs Actual GHG Reductions

2004 CAP projected: 2,614,000 tons
   – modified with new methodology: 1,935,118 MTCO2e

Actual measured reduction 1990-2010:
   893,022 MTCO2e
SF Emissions Decline With Cleaner Electricity and Waste Recycling

- Kyoto Target (7% below 1990)
- SF Target (20% below 1990)

<table>
<thead>
<tr>
<th>Year</th>
<th>Waste</th>
<th>Transportation</th>
<th>Building Natural Gas</th>
<th>Building Electricity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>1,559,000</td>
<td>1,939,000</td>
<td>2,179,000</td>
<td>473,000</td>
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<td>2000</td>
<td>1,593,000</td>
<td>1,971,000</td>
<td>2,411,000</td>
<td>480,000</td>
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<td>2005</td>
<td>1,496,000</td>
<td>1,625,000</td>
<td>2,218,000</td>
<td>366,000</td>
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<td>2010</td>
<td>1,498,000</td>
<td>1,276,000</td>
<td>2,223,000</td>
<td>262,000</td>
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</tbody>
</table>
SF VMT and GHG Emissions

Vehicle Miles Traveled

Emissions

VMT (cars & trucks)  Emissions from VMT
Natural Gas Use in San Francisco, 1990 - 2010

Therms

Residential

Commercial

Electricity Use in San Francisco, 1990 - 2010

Electricity (million MWh)

- Commercial
- Residential
19.6% reduction in carbon intensity of SF’s electricity supply

Carbon Intensity of San Francisco’s Electricity Supply
1990 - 2050

- Actual Emissions Factors 1990 - 2010
- Emissions Factors - 33% RSP
- Emissions Factors - 100% Renewables

- 2006: Hunters Point power plant shutdown
- 2010: Potrero power plant shutdown
- 2020: Utilities to achieve 33% RPS goal
- 2030: SF reaches 100% renewables target & BART switches to Hetch Hetchy
Renewable energy installations hit an all-time record with at least 17 GW of new nameplate capacity added in 2012.

In April 2012, electricity generation from natural gas equaled that from coal for the first time in US history.

Policies and approaches for financing energy efficiency continued to make market headway; energy intensity for US commercial buildings has now dropped by more than 40% since 1980 and investments in smart grid topped $4 billion.

Carbon dioxide (CO₂) emissions from the energy sector were on pace to sink to their lowest level since 1994, 13% reduction over the past 5yrs.
San Francisco Economy Grows as Emissions Decline

Estimated San Francisco County Gross Domestic Product (GDP) from Moody's in 2005 dollars.