

Evolving Climate Action Planning:

How municipal climate action plans got a seat at the planning table

Housing

Transportation

Land Use

Climate



SF Environment

Our home. Our city. Our planet.

Until the passage of SB375 and the BAAQMD's new CEQA GHG Threshold Guidelines municipal climate action plans were created as high level, generalized policy statements. Facing new policy mandates and possible legal enforcement municipal CAPS must now develop to interface technically and feasibly with other city plans (general plans, transportation plans, project level plans etc).

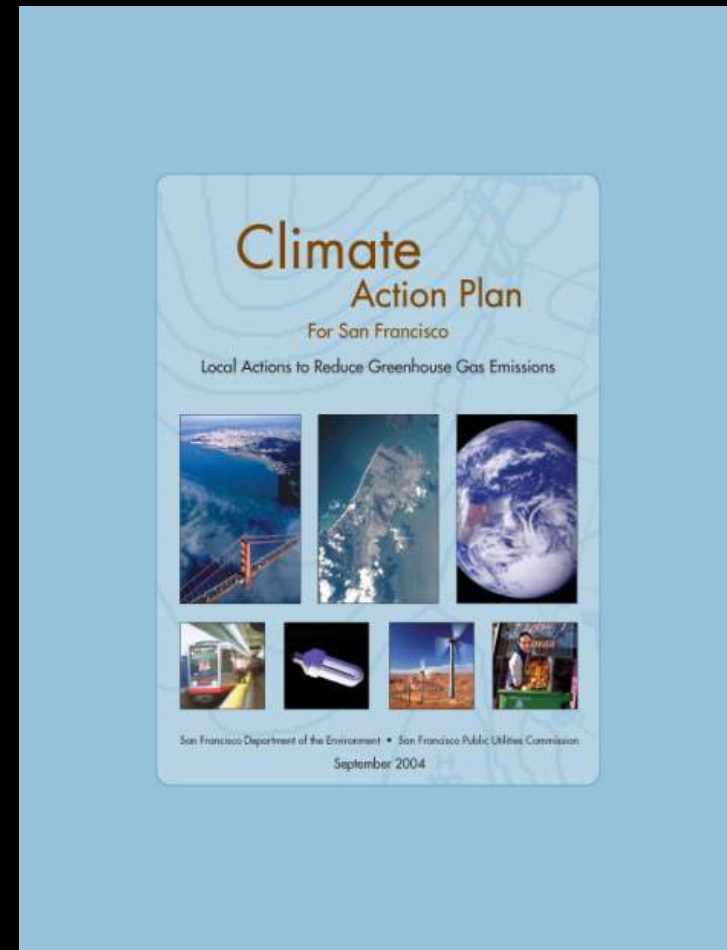
What are the challenges and opportunities associated with this evolution?

In the beginning there was good will

The Cities for Climate Protection® Campaign

The 5 Milestones

- **Baseline inventory**
- **Reduction target**
- **Local Action Plan**
- **Implementation**
- **Monitor and report**



Community Wide GHG Inventory Inputs

Stationary

Stationary

Stationary

Stationary

Stationary

Stationary

Stationary

Stationary

Stationary

Stationary

Mobile

Mobile

Mobile

Mobile

Mobile

Mobile

Residential Electricity

Residential Natural Gas

Commercial Electricity

Commercial Natural Gas

Industrial Electricity

Industrial Natural Gas (3)

Direct Access

Steam Loop

Municipal Electricity (2)

Municipal Natural Gas

MUNI Fleet Electricity

Intraregional Road Vehicles

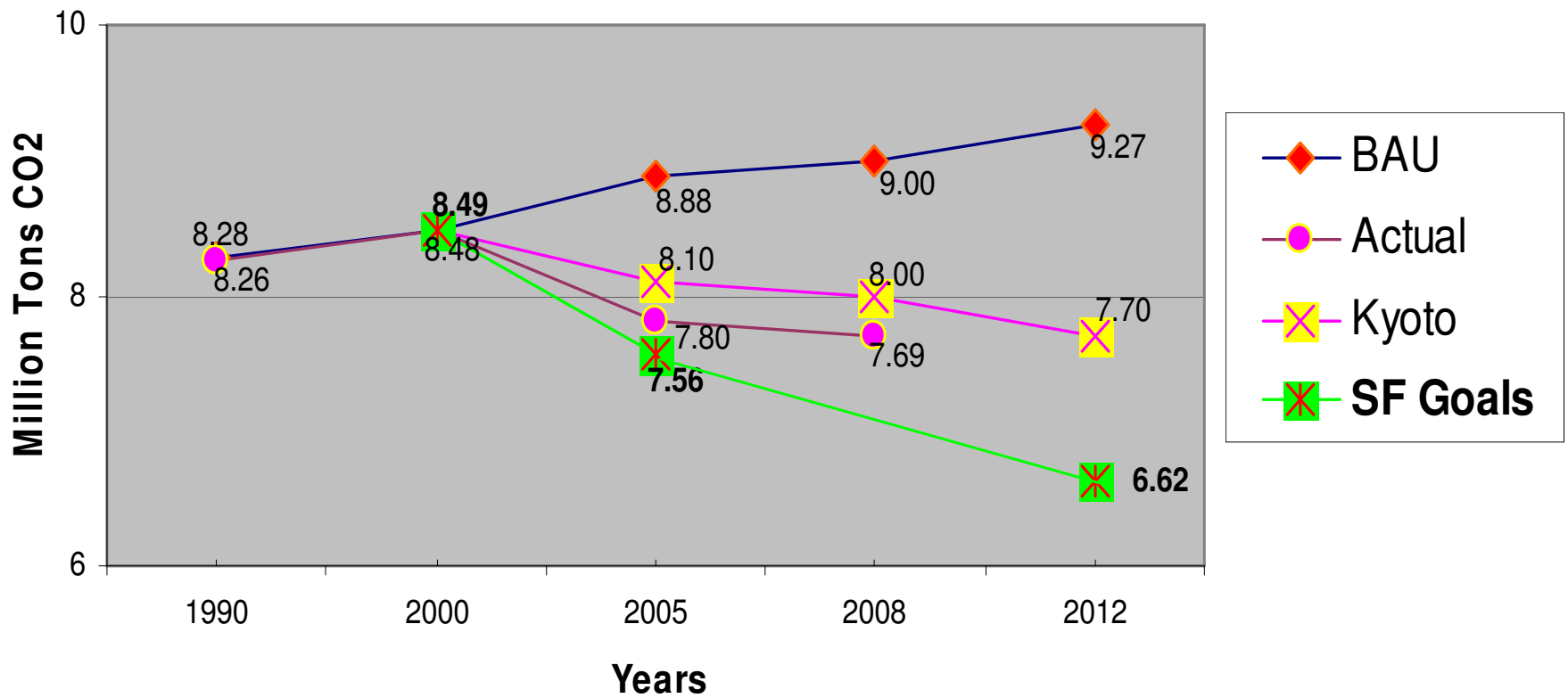
SF Road Vehicles (4)

Rail - Caltrain Diesel Fuel

Rail - BART Electricity

Ferry - Diesel Fuel

San Francisco GHG Emission Forecast Political Goal and Current Emissions



Then there was Law and Policy

BAAQMD CEQA Guidelines Thresholds of Significance

SB 375 requires CA ARB to set regional targets for the purpose of reducing greenhouse gas emissions from passenger vehicles, for 2020 and 2035.

Baseline Greenhouse Gas Emissions from Residential Development GHG Evaluation for SF Housing Element

2009 Emissions Source (MT CO₂e per year)

Natural Gas Consumption 319,925*

Electricity Use 204,811

Water Consumption 17,191

Waste Generation 9,712

Motor Vehicle Use 3,741,640

Landscape Equipment Use 36

Operational

Emissions

Total Operational 4,293,315

Source: Christopher A. Joseph & Associate

* Red identifies categories of overlap with the 2004 SF Community Wide Climate Action Plan

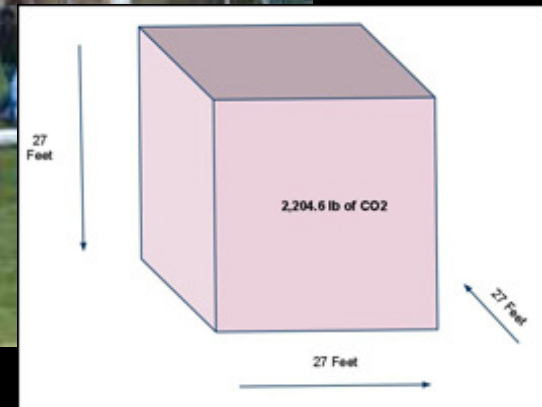
2004 CAP Annual Usage VS URBEMIS Projections

- Natural Gas = 709,213
- Electricity = 415,980
- Total = 1,125,193

- Natural Gas = 319,925
- Electricity = 204,811
- Total = 524,736

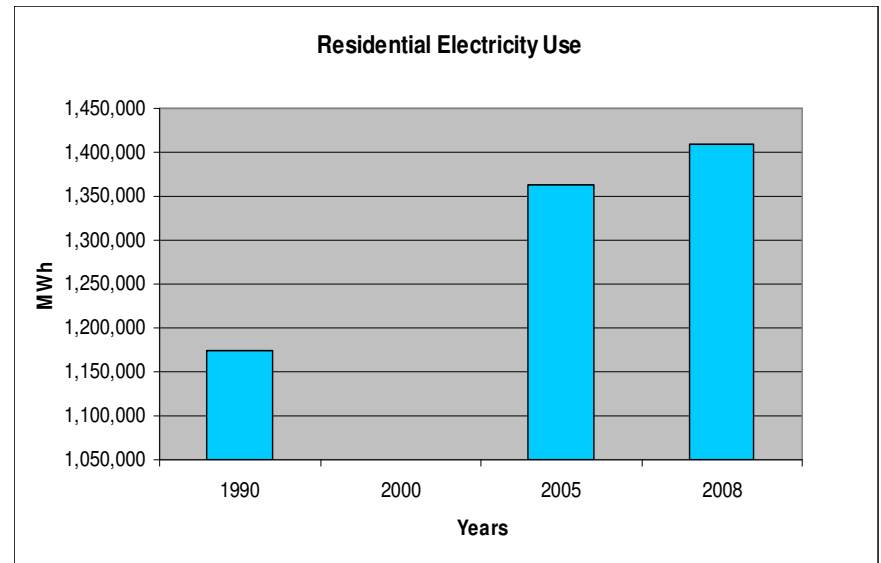
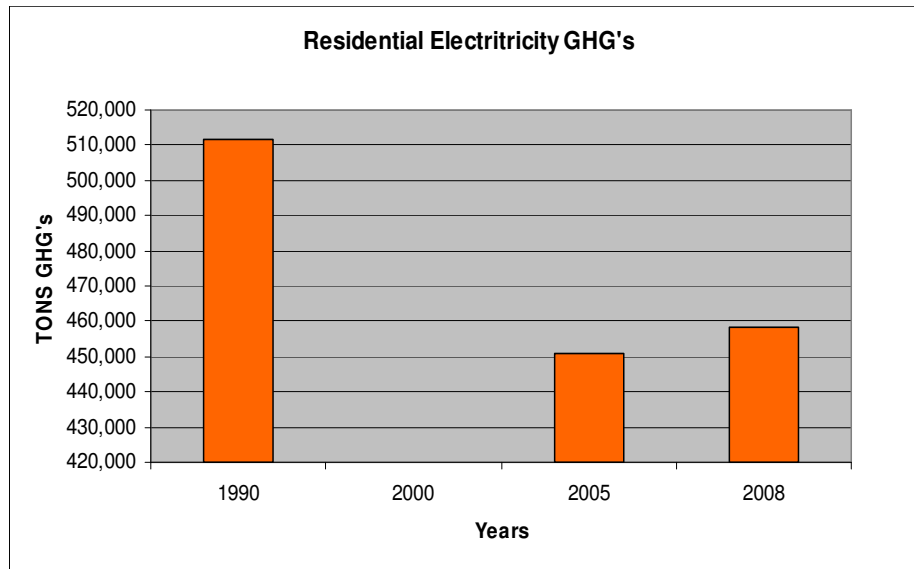
Difference = 600,457 Metric Tons

That's 600,457 of these....



...per year.

Where we get our emissions reductions



Cleaner electricity: 1990= 871.2lbs CO₂/MWh 2008=650.7 lbs CO₂/MWh

What its going to take

- Making Models Smarter
- Allow for specific emissions factors
- Relate inputs and outputs model to model and inventory to model
- Check that modeling matches up with performance
- Integrating transportation sector emissions inventory practices
- Communication, cooperation, & patience

Thank you!
Enjoy your crayons

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