

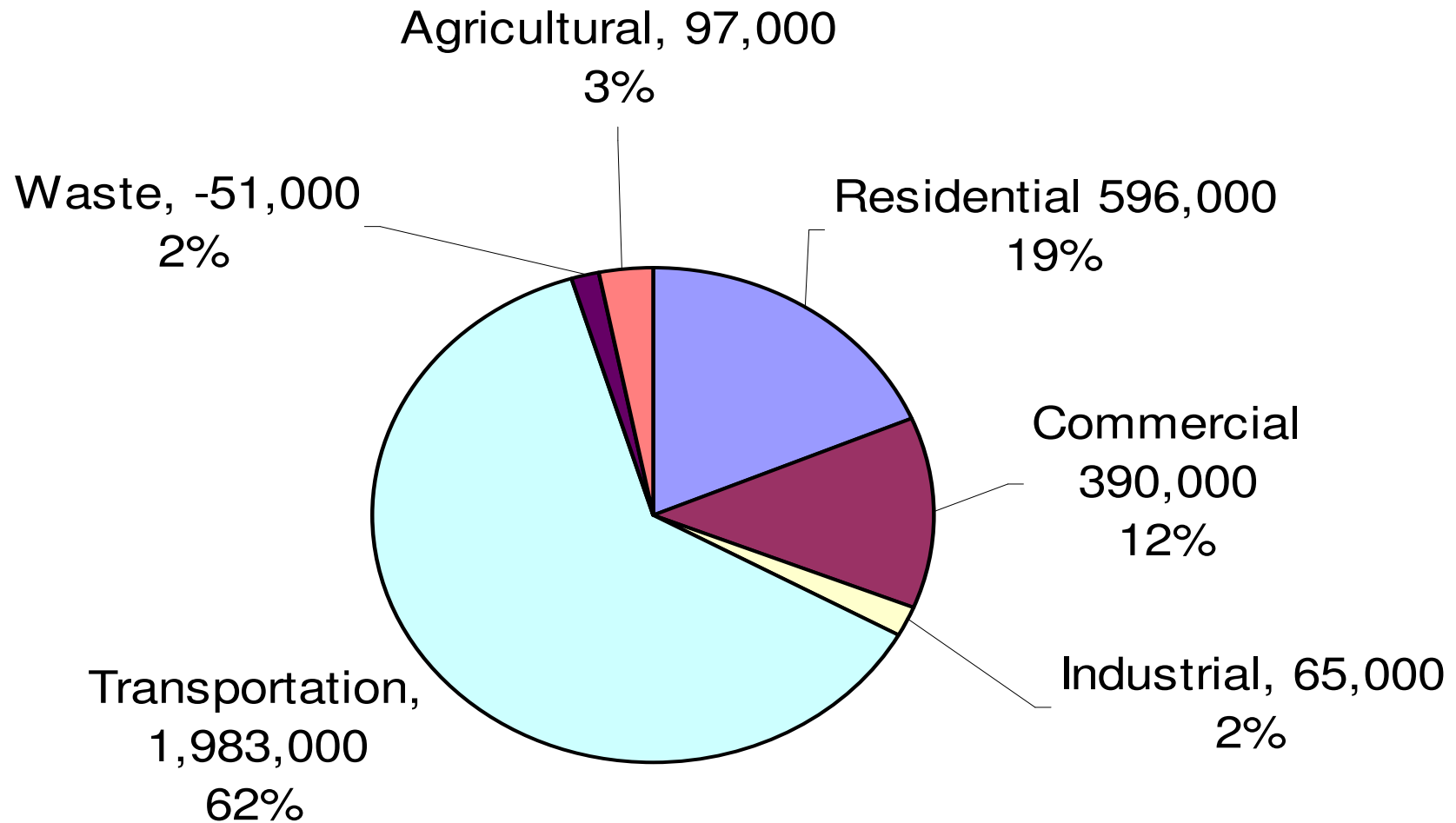
# County of Marin

## Greenhouse Gas Emissions Re-inventory



September 25, 2007

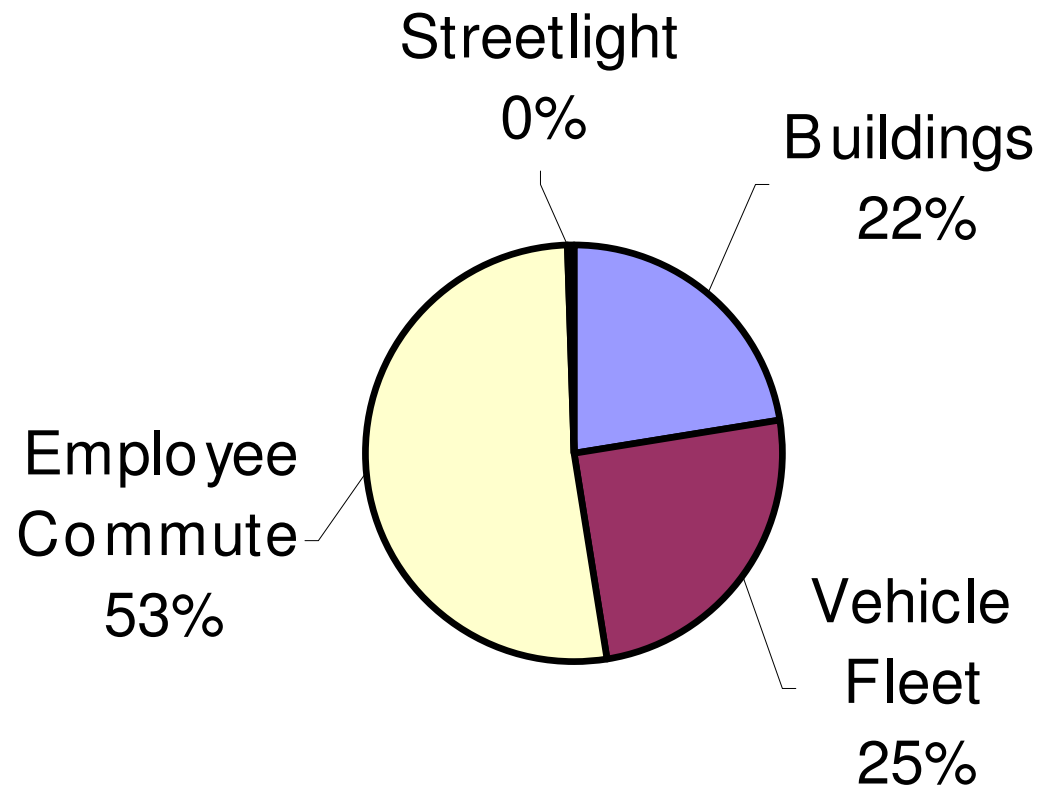
## 2005 Countywide GHG Emissions Tons eCO2 and Percent by Sector



# Countywide Emissions

Source	1990	1995	2000	2005
Residential (% of Annual total)	598,000 (20%)	600,000 (21%)	660,000 (20%)	596,000 (19%)
Commercial and Industrial	366,200 (12%)	366,000 (13%)	516,000 (16%)	455,000 (14%)
Transportation	1,849,400 (62%)	1,756,000 (60%)	1,933,000 (59%)	1,983,000 (62%)
Waste	74,054 (2%)	90,935 (3%)	36,757 (1%)	56,965 (2%)
Agriculture	118,000 (4%)	112,000 (4%)	107,000 (3%)	97,000 (3%)
<b>TOTAL Tons eCO2</b>	<b>3,005,674</b>	<b>2,916,005</b>	<b>3,252,049</b>	<b>3,188,522</b>
<b>% Change from 1990</b>	<b>0%</b>	<b>-3%</b>	<b>8%</b>	<b>6%</b>

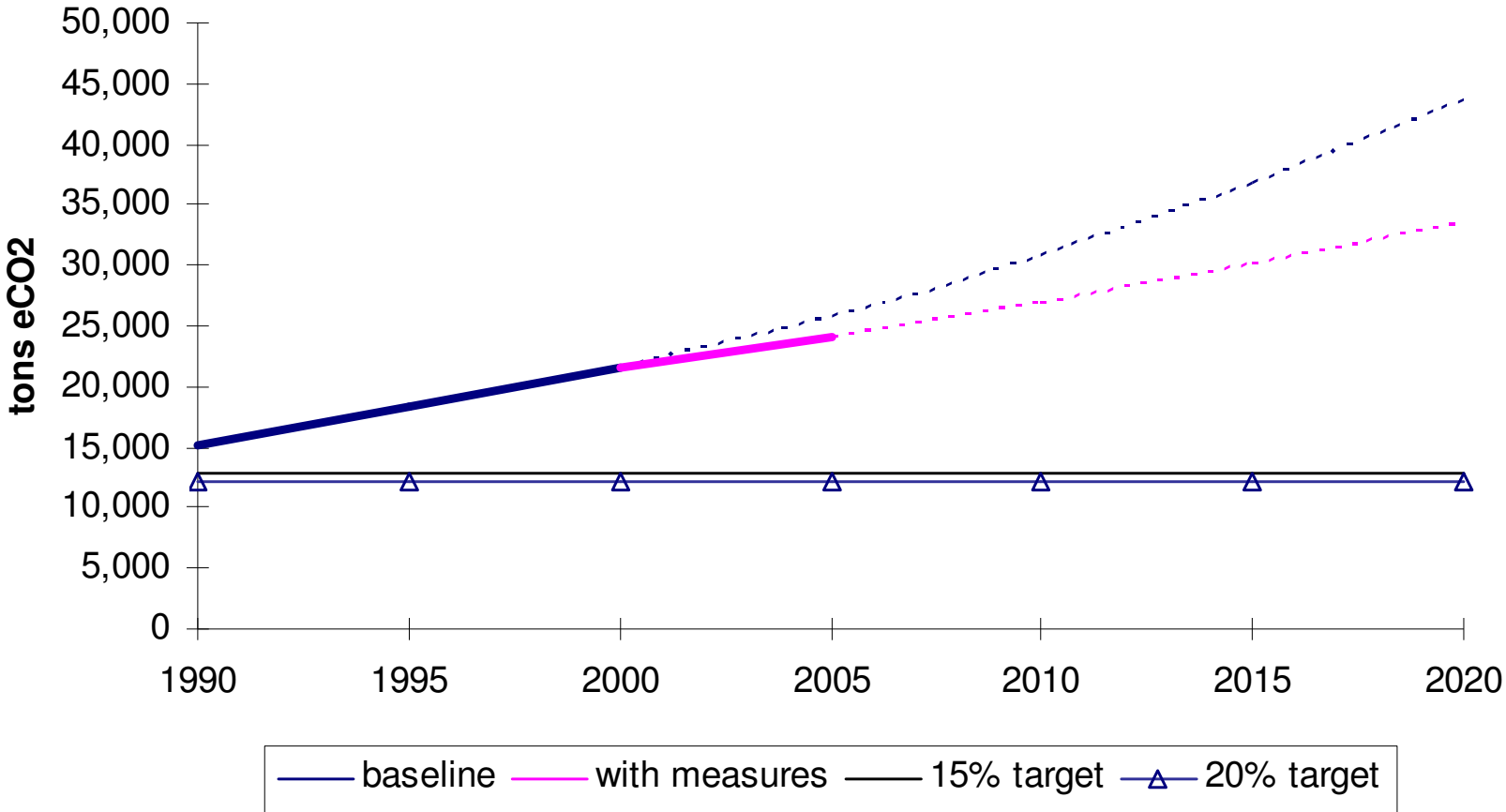
## Government Emissions 2005



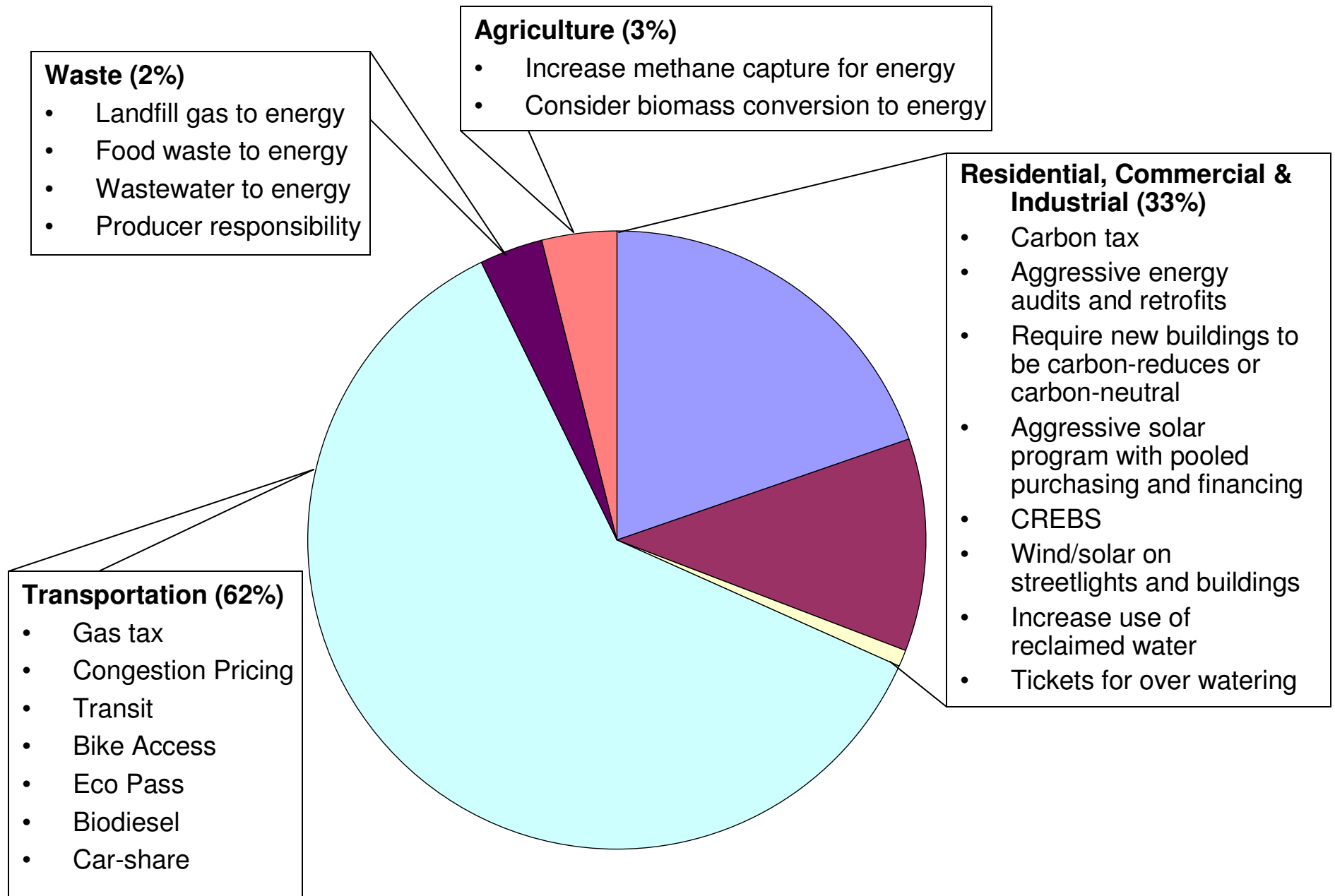
# Internal Government Emissions

Sector	1990	2000	2005
Buildings (% of Annual total)	3,100 (18%)	5,500 (25%)	5,400 (22%)
Vehicle Fleet	4,900 (29%)	5,700 (26%)	6,000 (25%)
Employee Commute	7,100 (42%)	10,400 (48%)	12,600 (52%)
Streetlights	52 (0.3%)	43 (0.2%)	42 (0.2%)
Waste	28.8 (0.2%)	18.9 (0.1%)	15.5 (0.1%)
<b>TOTAL (Tons eCO2)</b>	<b>16,857</b>	<b>21,685</b>	<b>24,124</b>
<b>% Change from 1990</b>	<b>0</b>	<b>29%</b>	<b>43%</b>

# Internal GHG Emissions and Targets 1990-2020 (Dashed line indicates projection)



# How others are solving the GHG problem:



## Waste (2%)

- Landfill gas to energy
- Food waste to energy
- Wastewater to energy
- Producer responsibility

## Agriculture (3%)

- Increase methane capture for energy
- Consider biomass conversion to energy

## Residential, Commercial & Industrial (33%)

- Carbon tax
- Aggressive energy audits and retrofits
- Require new buildings to be carbon-reduces or carbon-neutral
- Aggressive solar program with pooled purchasing and financing
- CREBS
- Wind/solar on streetlights and buildings
- Increase use of reclaimed water
- Tickets for over watering

## Transportation (62%)

- Gas tax
- Congestion Pricing
- Transit
- Bike Access
- Eco Pass
- Biodiesel
- Car-share

# Transportation Measures

- **Gas tax** (Oregon)
- **Congestion pricing** (San Francisco, London)
- **Aggressive & frequent bus/trolley/jitney system**  
(Boulder, Portland)
- **Bike access** (Portland, Davis, Netherlands)
- **Eco pass for transit \$25-\$95 annual** (Boulder)
- **Biodiesel requirement** (Portland)
- **Car-share program with designated parking**  
(Portland)

# Residential & Commercial



- **Carbon tax added to energy bill (Boulder)**
- Aggressive energy audits and retrofits (Santa Monica)
- Require new buildings to be carbon-reduces or carbon-neutral (United Kingdom)
- Aggressive solar program with pooled purchasing and financing
- CREBS – solar follow up
- Wind/solar on streetlights & building (United Kingdom)
- Increase use of reclaimed water (King County, WA)
- Tickets for over watering (Santa Monica)

# Agriculture

- Increase methane capture for energy
- Consider biomass conversion to energy

# Waste

- Landfill gas to energy
- Food waste to energy
- Wastewater to energy
- Producer responsibility

# Next Steps

- Implement Greenhouse Gas Reduction Plan
- Implement Countywide Plan
- Continue to pursue community choice aggregation (=10% annual reduction by 2017)
- Consider participation in CA Climate Registry
- Assist cities in climate protection process