

City of Carmel-by-the-Sea Greenhouse Gas Inventory Presentation

**City of Carmel Climate Committee Meeting
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AMBAG Energy Watch Introduction

2006 – 2018

Service to our AMBAG Community

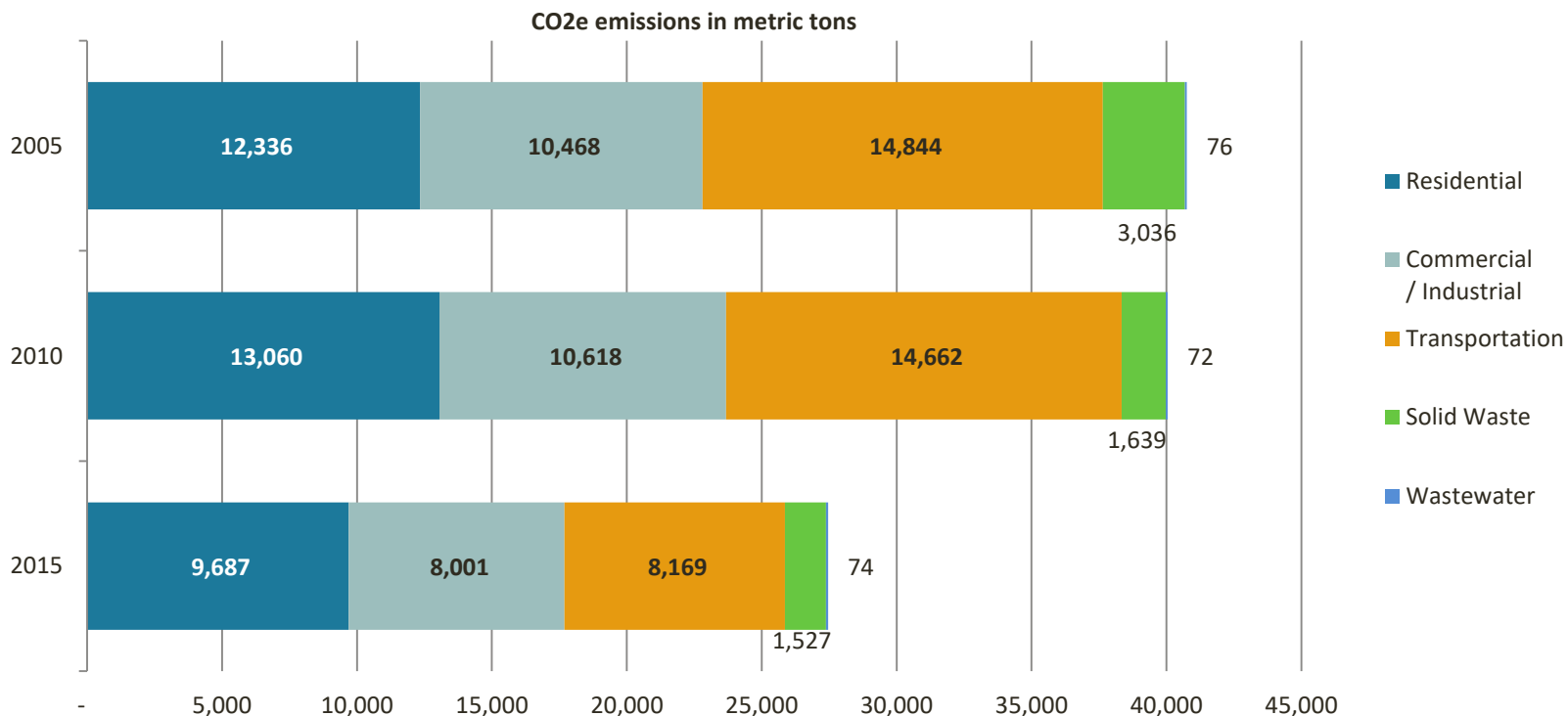
- Created in 2006 by a unanimous decision of the of the AMBAG Board of Directors with the goal of increasing energy efficiency across the region
- 110 million annual kWh of energy savings from 2006 – 2019 as well as approximately \$75 million in avoided energy costs.
- In 2009 it was unanimously decided by staff from AMBAG’s 21 jurisdictions that AMBAG Energy Watch would conduct the 2005 GHG inventories using the best available protocol and software
- In 2013 AMBAG Energy Watch conducted the 2010 GHG inventories using the US Community Protocol and the SEEC software tools which were provided at no cost.
- In 2018 AMBAG Energy Watch conducted the 2015 GHG inventories and updated the 2005 and 2010 to the latest iteration of the US Community Protocol . All Inventories were calculated using the Clearpath tool suite.

Related Terms

- **Baseline year:** A specific year against which emissions are tracked over time
- **Greenhouse gases (GHGs):** carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O). Emissions are expressed in equivalents of carbon dioxide (CO₂e)
- **Community Greenhouse Gas Inventory:** a calculation of GHG emissions generated as a result of activities within a community

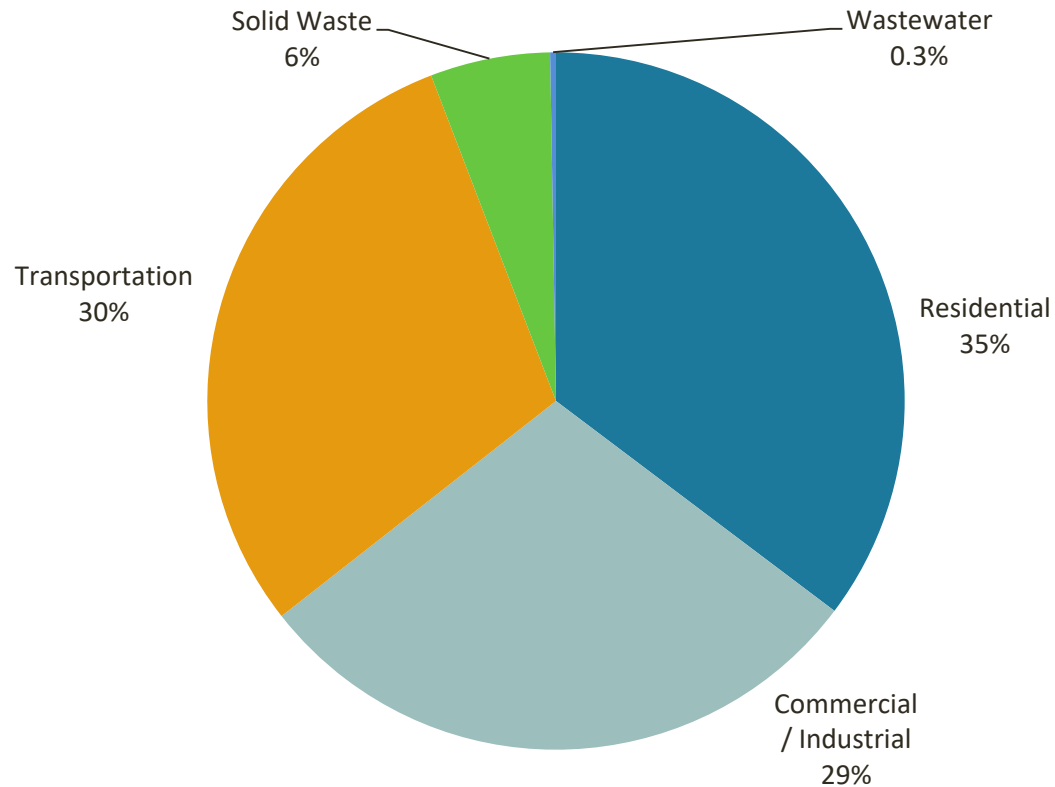
2005-2015 Greenhouse Gas inventories

2005 to 2015 Emissions by Sector



Community Emissions by Sector	Residential	Commercial / Industrial	Transportation	Solid Waste	Wastewater	Total
2005	12,336	10,468	14,844	3,036	76	40,760
2010	13,060	10,618	14,662	1,639	72	40,051
2015	9,687	8,001	8,169	1,527	74	27,458
% change 2005- 2015	-21%	-24%	-45%	-50%	-3%	-33%

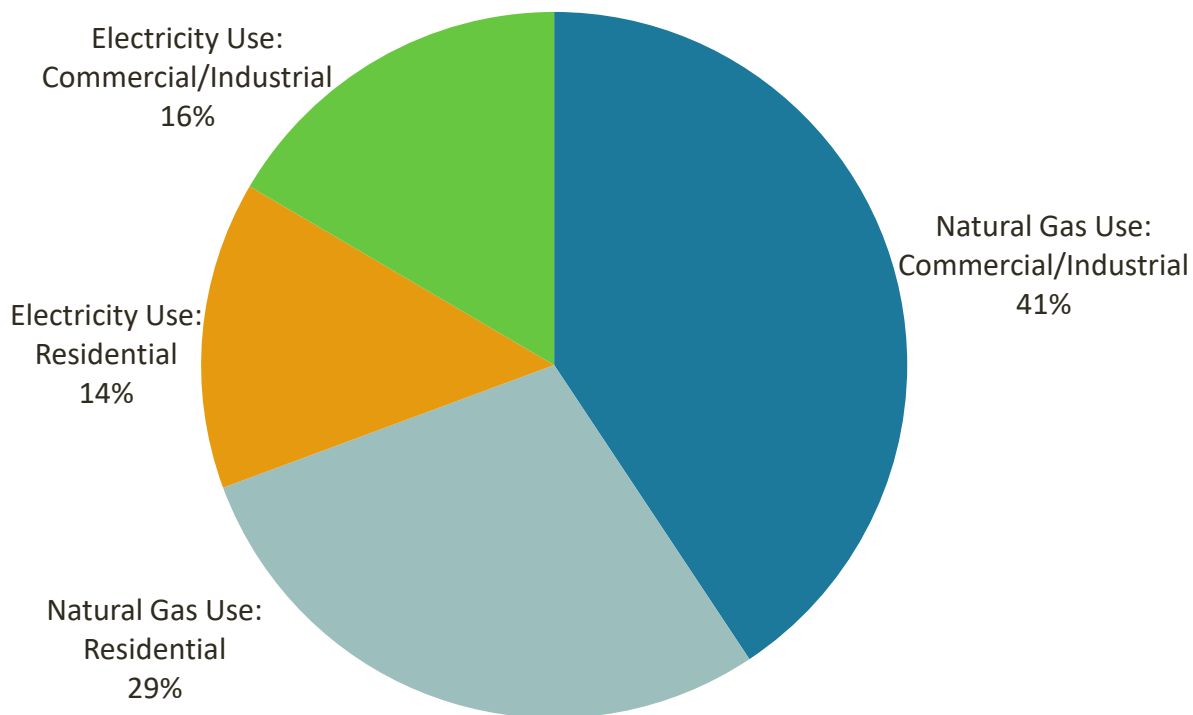
2015 GHG Emissions by Sector



2015 Community Emissions by Sector	Residential	Commercial / Industrial	Transportation	Solid Waste	Wastewater	Total
CO ₂ e (metric tons)	9,687	8,001	8,169	1,527	74	27,458
% of Total CO ₂ e	35%	29%	30%	6%	0.3%	100%

Energy Use Emissions

64% of Total Emissions*

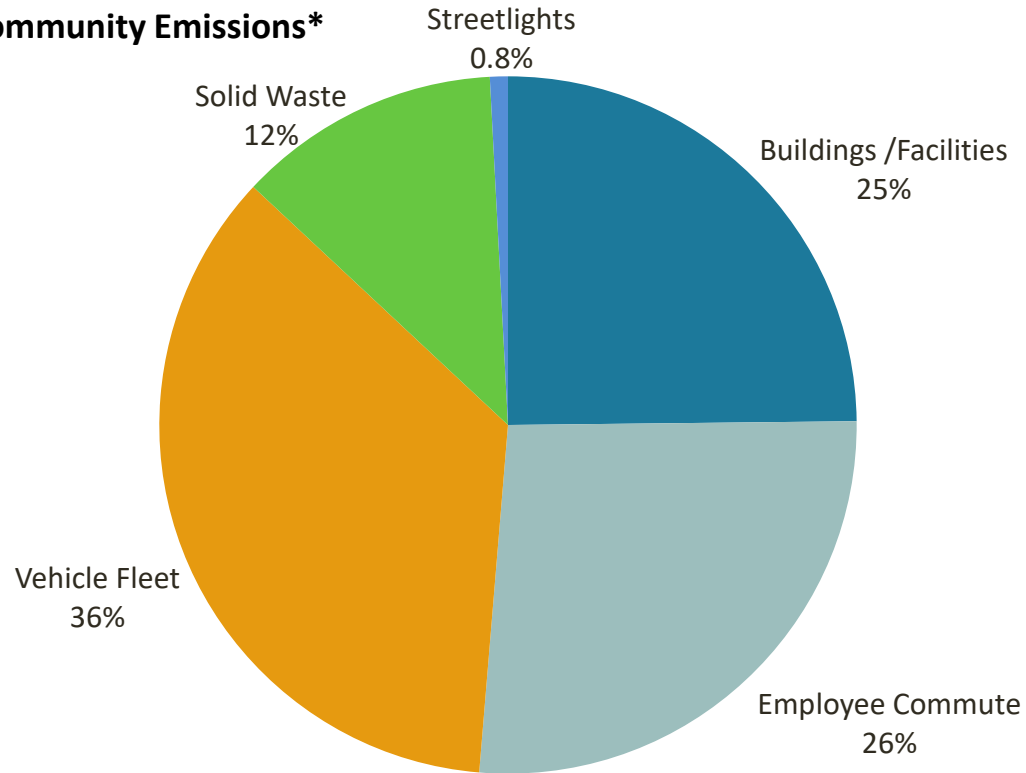


Emissions Source	Natural Gas Use:		Electricity Use:		Combined
	Commercial/Industrial	Residential	Commercial/Industrial	Residential	
Sector					Across Sectors
CO₂e (metric tons)	7,194	5,073	2,493	2,928	17,688
% of Total Energy Use	41%	29%	16%	14%	100%

*The transportation, solid waste and wastewater sector are excluded from this analysis

2005 Government GHG Emissions by Sector

2% of Total 2005 Community Emissions*



2015 Community Emissions by Sector	Buildings /Facilities	Streetlights	Solid Waste	Vehicle Fleet	Employee Commute	Total
CO ₂ e (metric tons)	179	6	88	191	257	721
% of Total CO ₂ e	35%	29%	30%	6%	0.3%	100%

Questions ?

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