



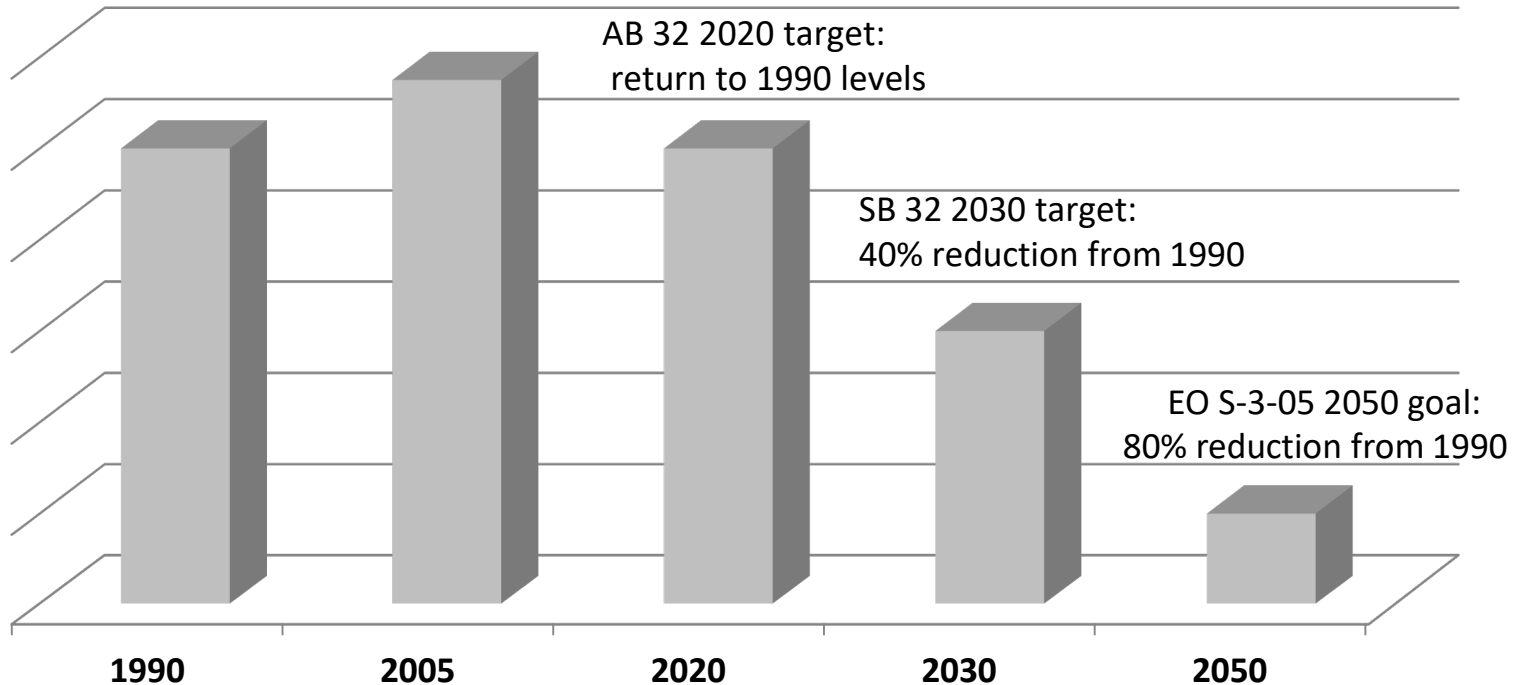
City of Carmel 2018 Community-wide GHG Inventory

And Climate Action Planning Overview

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

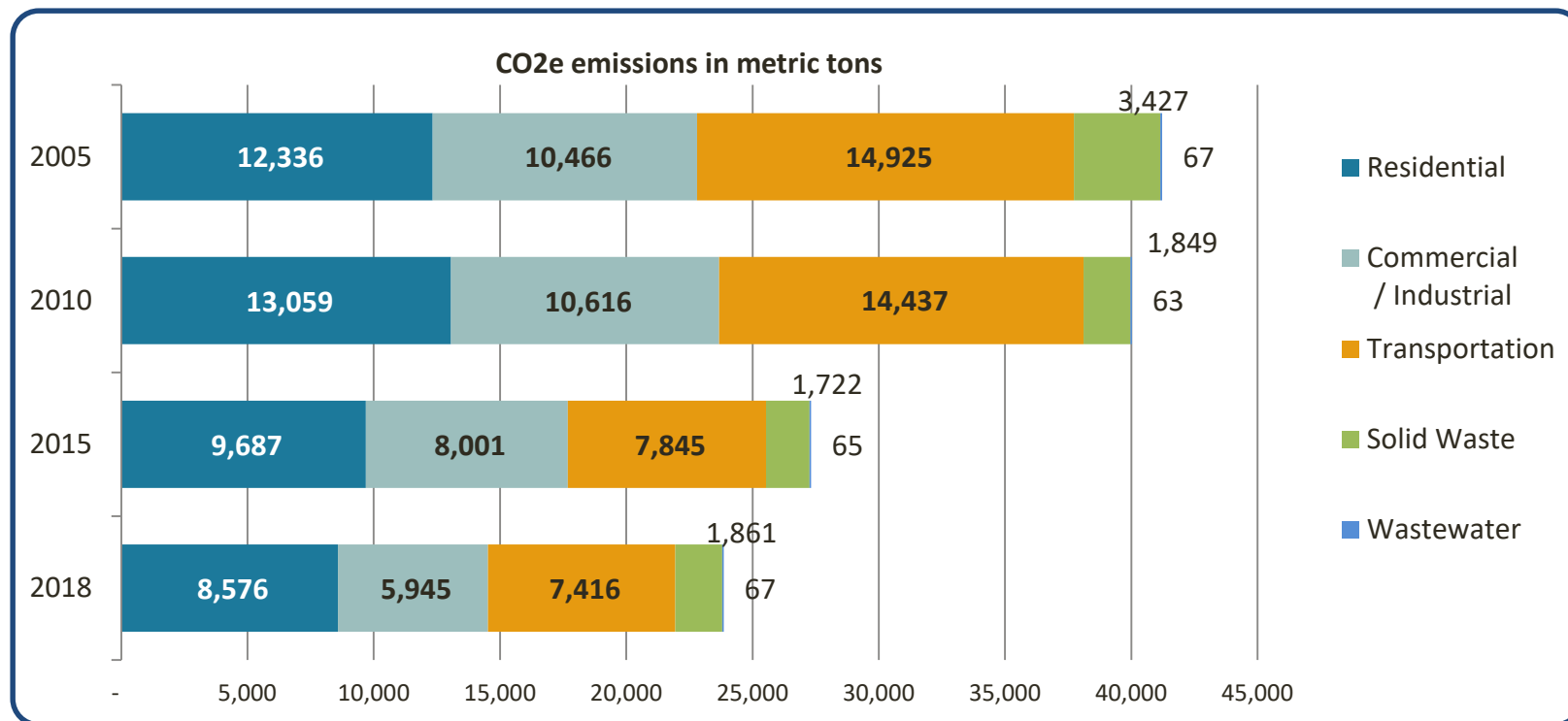
California GHG Reduction Targets



1990 is California's statewide baseline year
2005 emissions are 15% higher than 1990 emissions.
2005 is the year used as a baseline year by most cities

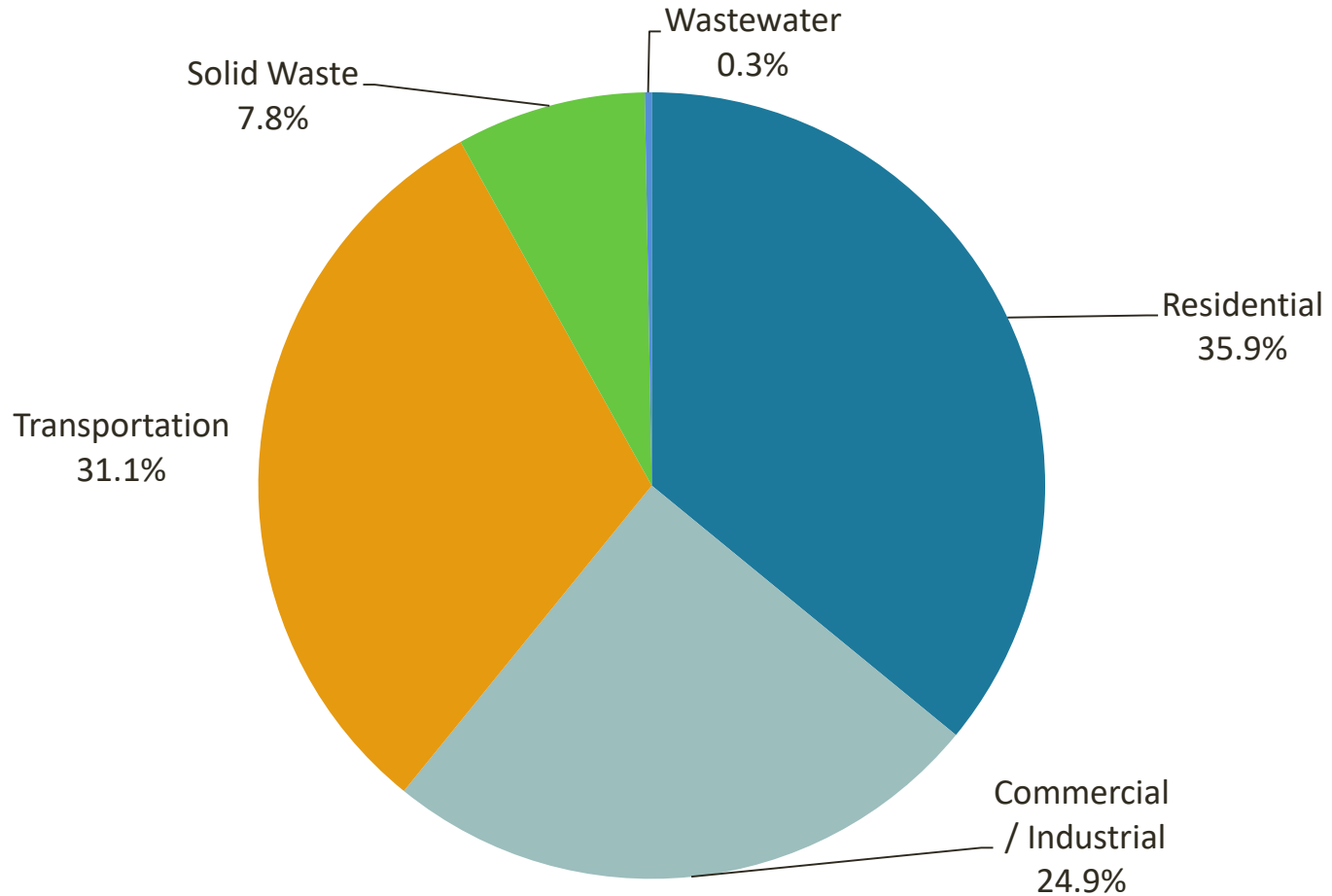
In 2018 EO B-55-18 2045 was signed
setting the goal of achieving carbon neutrality by 2045

City of Carmel 2018 Community-wide GHG emissions

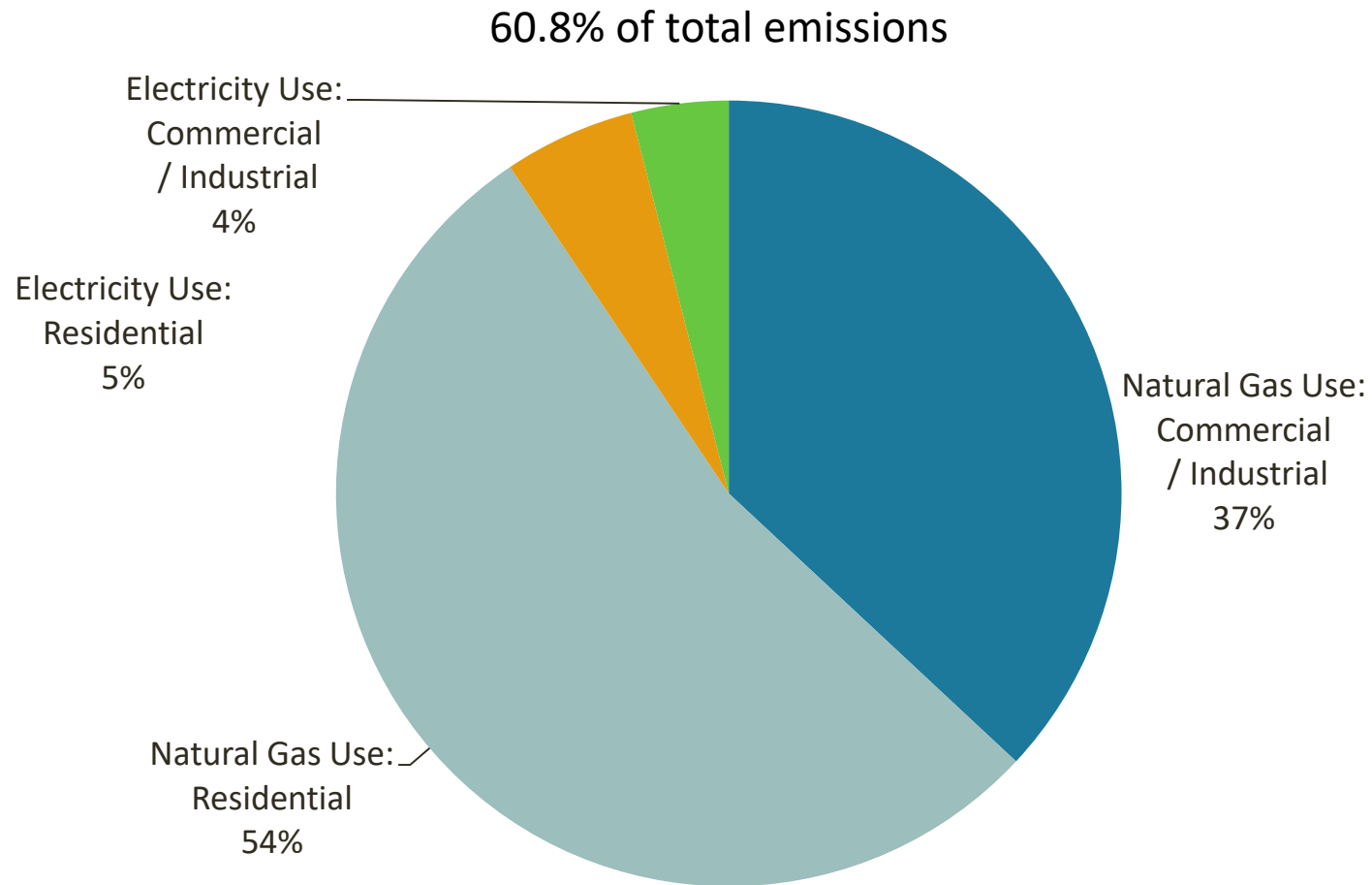


Community CO2e Emissions by Sector	Residential	Commercial / Industrial	Transportation	Solid Waste	Wastewater	Total
2005	12,336	10,466	14,925	3,427	67	41,221
2010	13,059	10,616	14,437	1,849	63	40,024
2015	9,687	8,001	7,845	1,722	65	27,320
2018	8,576	5,945	7,416	1,861	67	23,866
% change 2005- 2018	-30%	-43%	-50%	-46%	1%	-42%

City of Carmel 2018 GHG Emissions by Sector



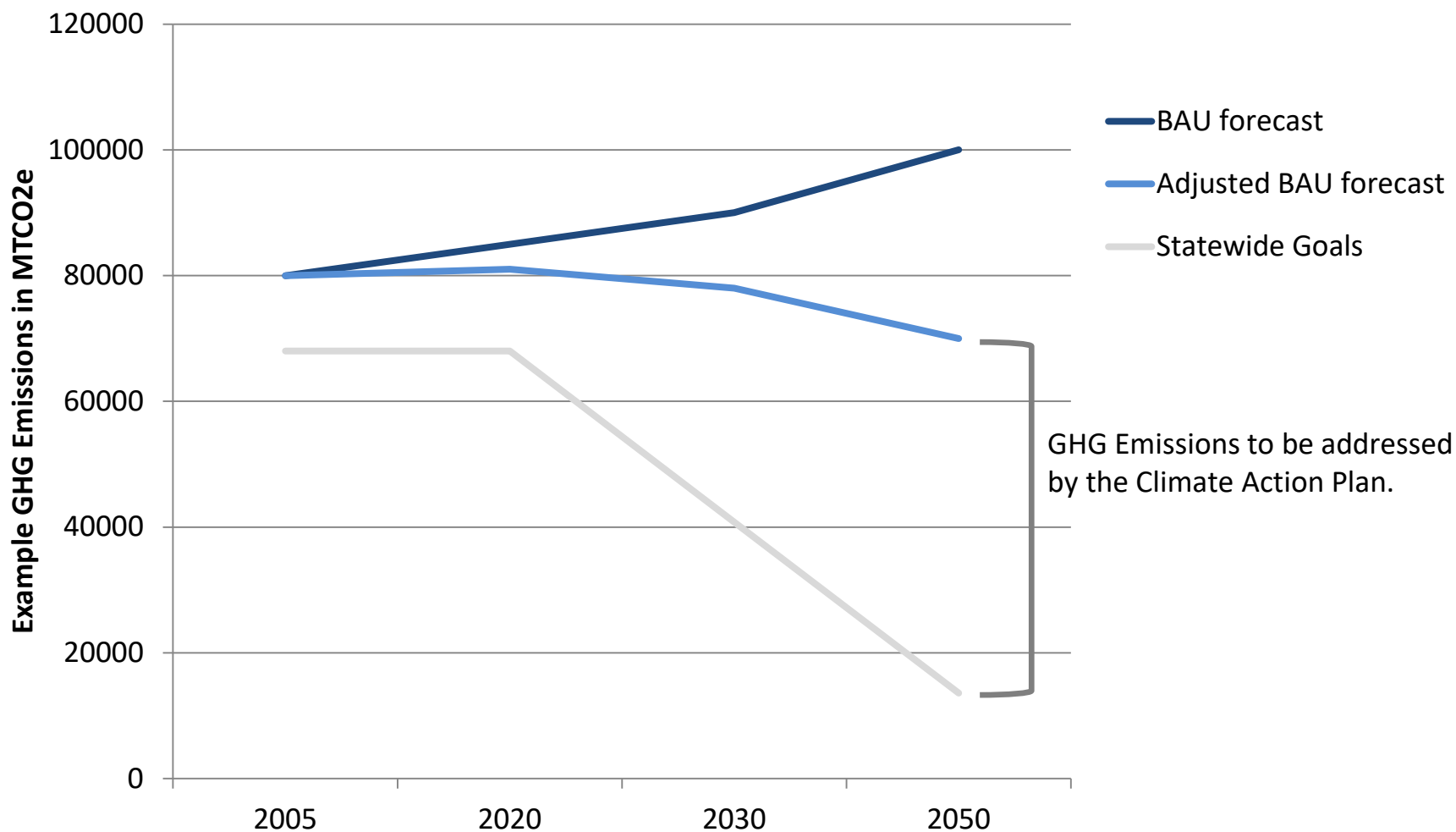
City of Carmel 2018 Energy Use Emissions



Steps to Complete a Climate Action Plan

- Complete a GHG inventory
- Conduct a business as usual (BAU) forecast
- Adjust the BAU forecast to account for statewide mandates which would reduce emissions
- Identify GHG emission reductions still required to meet Statewide GHG reduction targets.

Example GHG Emissions Forecast



GHG Emissions to be addressed by the Climate Action Plan.

Steps to Complete a Climate Action Plan

- Conduct a broad public engagement process to identify the needs of the community
- Draft GHG reduction measures (GHG reduction potentials, costs, and funding sources)
- Include very specific implementation and monitoring requirements for all GHG reduction measures

Steps to Complete a Climate Action Plan

- Create the draft plan and receive public comments
- If the plan will be used for the purposes of CEQA streamlining or created as part of a General Plan update, prepare and certify an EIR
- Adopt the Climate Action Plan

Implementing a Climate Action Plan

- Implementation is the key to successfully planning for climate change
- Each GHG reduction measure should have funding sources identified as well as dedicated staff time or resources for implementation.
- Each GHG reduction measure should have an implementation metric to gauge success



Questions?