

RMCP Meeting- RICAPS GHG Inventories

September 18, 2024



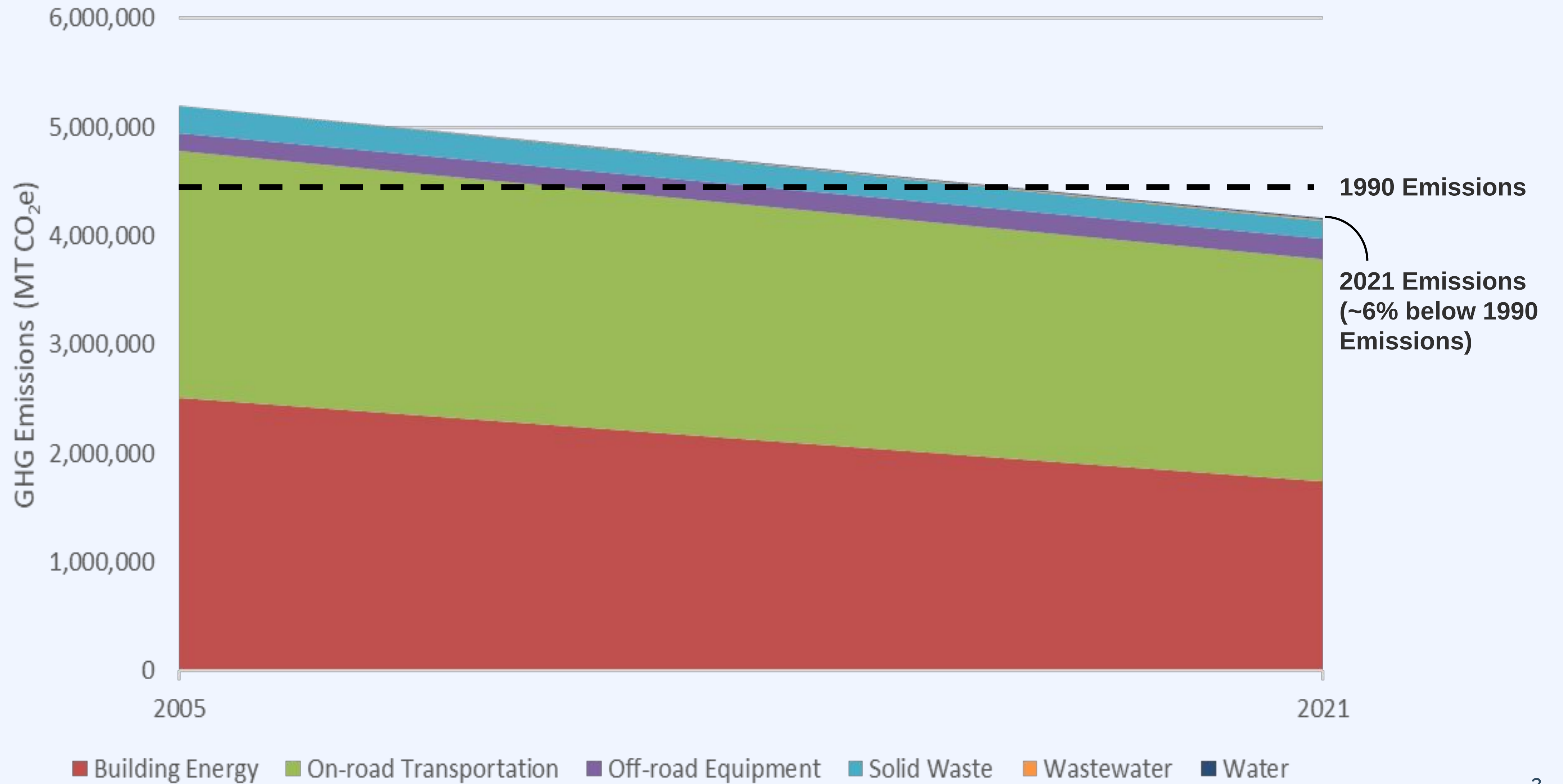
Agenda



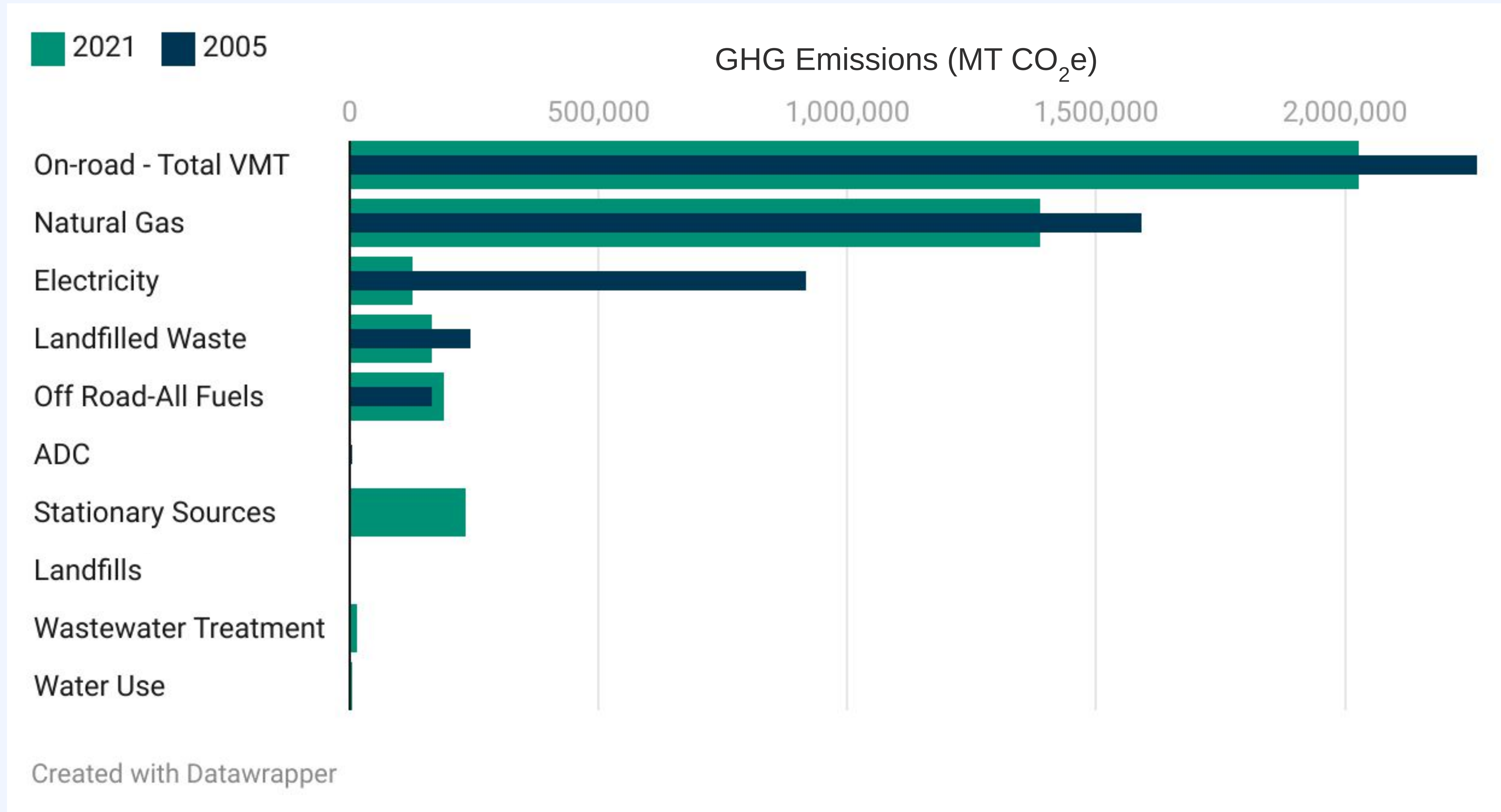
1. Countywide GHG emissions trends
2. Inventory updates
3. Consistency challenges and potential solutions
4. Status of climate action planning vs. 2030 targets
5. Discussion



Countywide GHG Emissions Trends



Countywide GHG Emissions Trends



Countywide GHG Emissions Trends



Sector	Subsector	2005 GHG Emissions (MT CO ₂ e)	2021 GHG Emissions (MT CO ₂ e)	Percent Change (%)
Building Energy	Electricity	919,295	126,468	-86%
	Natural Gas	1,593,804	1,388,974	-13%
	Stationary Sources	N/A	233,269	-
On-road Transportation	On-road - Total VMT	2,267,643	2,030,830	-10%
Off-road Equipment	Off Road-All Fuels	169,346	190,031	12%
Solid Waste*	Landfilled Waste	242,777	167,456	-31%
	ADC	5,306	0	-100%
	Landfills*	0	0	-
Wastewater	Wastewater Treatment	N/A	19,093	-
Water	Water Use	N/A	1,990	-
Total		5,198,171	4,158,111	-20%



Inventory Updates

- New VMT accounting methodology to align with statewide best practice (origin-destination)
- Incorporation of new subsectors:
 - Natural gas methane leakage
 - Electricity transmission and distribution losses
- Use of new CARB transportation emission models
 - OFFROAD2021 and EMFAC2021
- Use of 2014 CalRecycle data as SB 1383 baseline

VMT = vehicle miles traveled, CARB = California Air Resources Board



Challenges for Inventory Consistency

- Model updates:
 - MTC's VMT model
 - CARB's OFFROAD and EMFAC models

- 15/15 Rule data gaps

MTC = Metropolitan Transportation Commission, VMT = vehicle miles traveled, CARB = California Air Resources Board, 15/15 Rule = a California Public Utilities Commission (CPUC) privacy standard

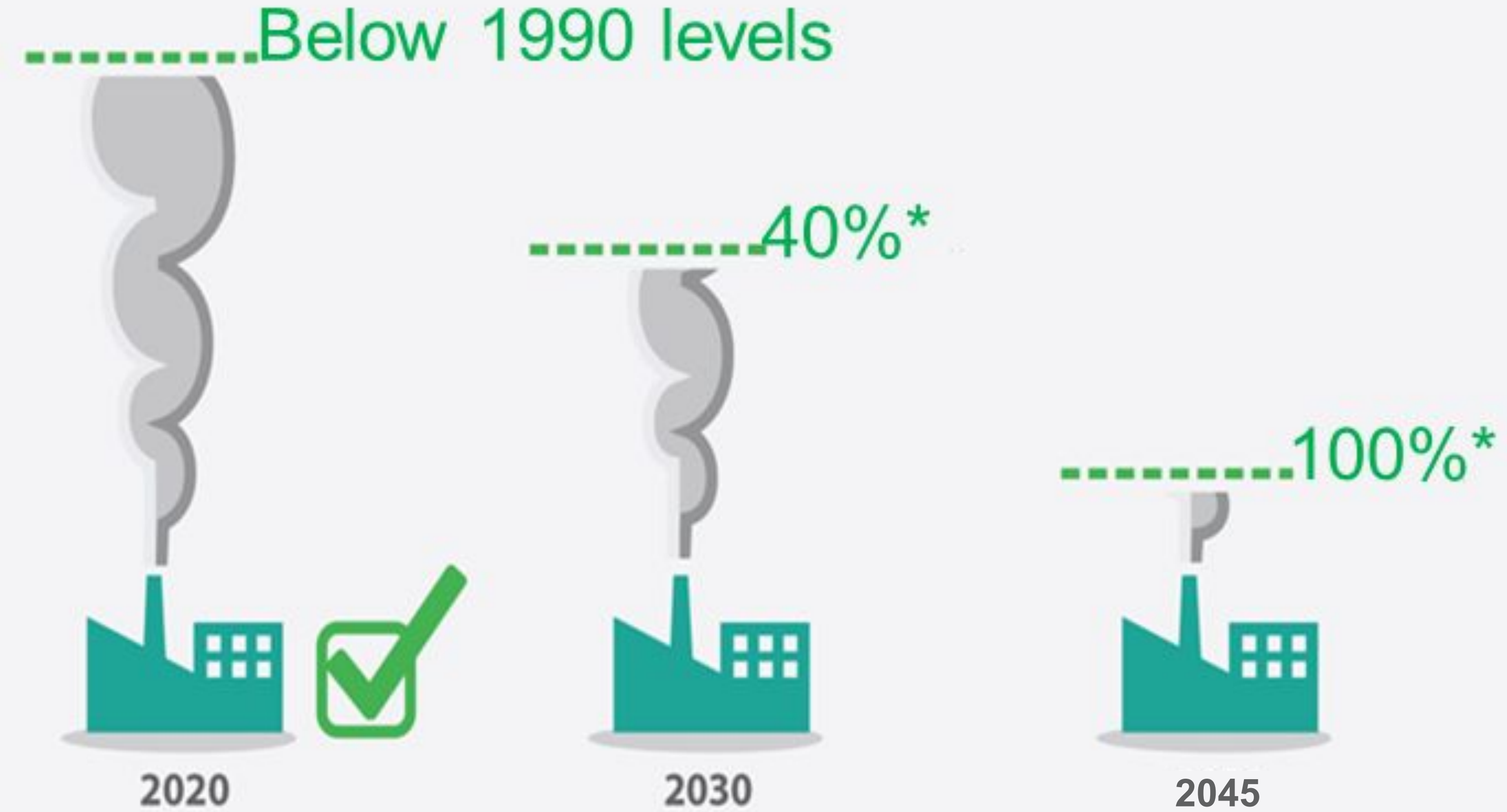


Consistency vs. Accuracy

- Updating historic inventories to reflect model updates gets harder every year
- Models change often
 - MTC's VMT model
 - CARB's OFFROAD and EMFAC models
- Post-2030, the goal will shift towards accuracy and away from consistency (due to carbon neutrality)



Consistency vs. Accuracy

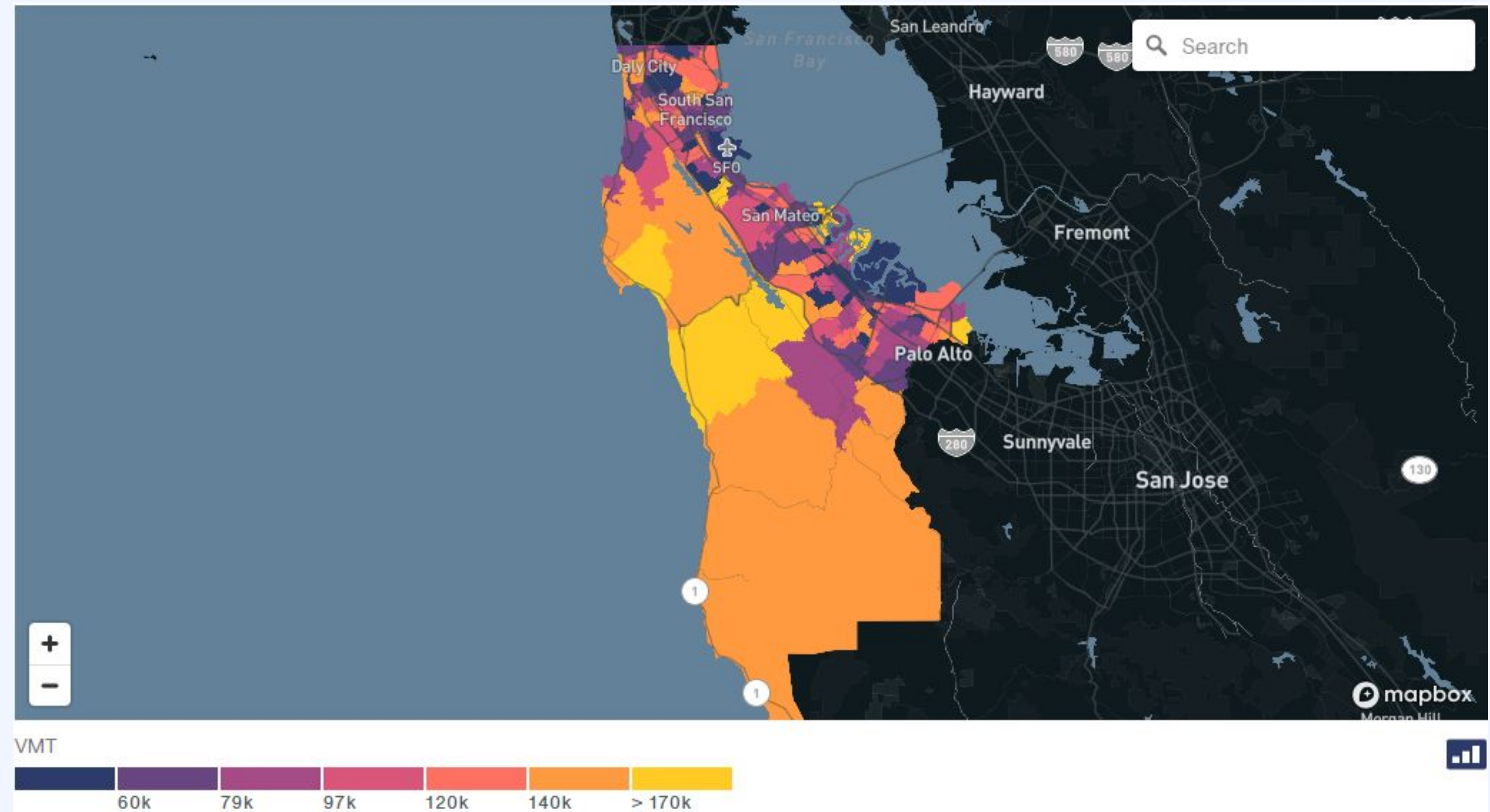


* below 1990 greenhouse gas emission levels



Next Steps for Inventory Consistency & Accuracy

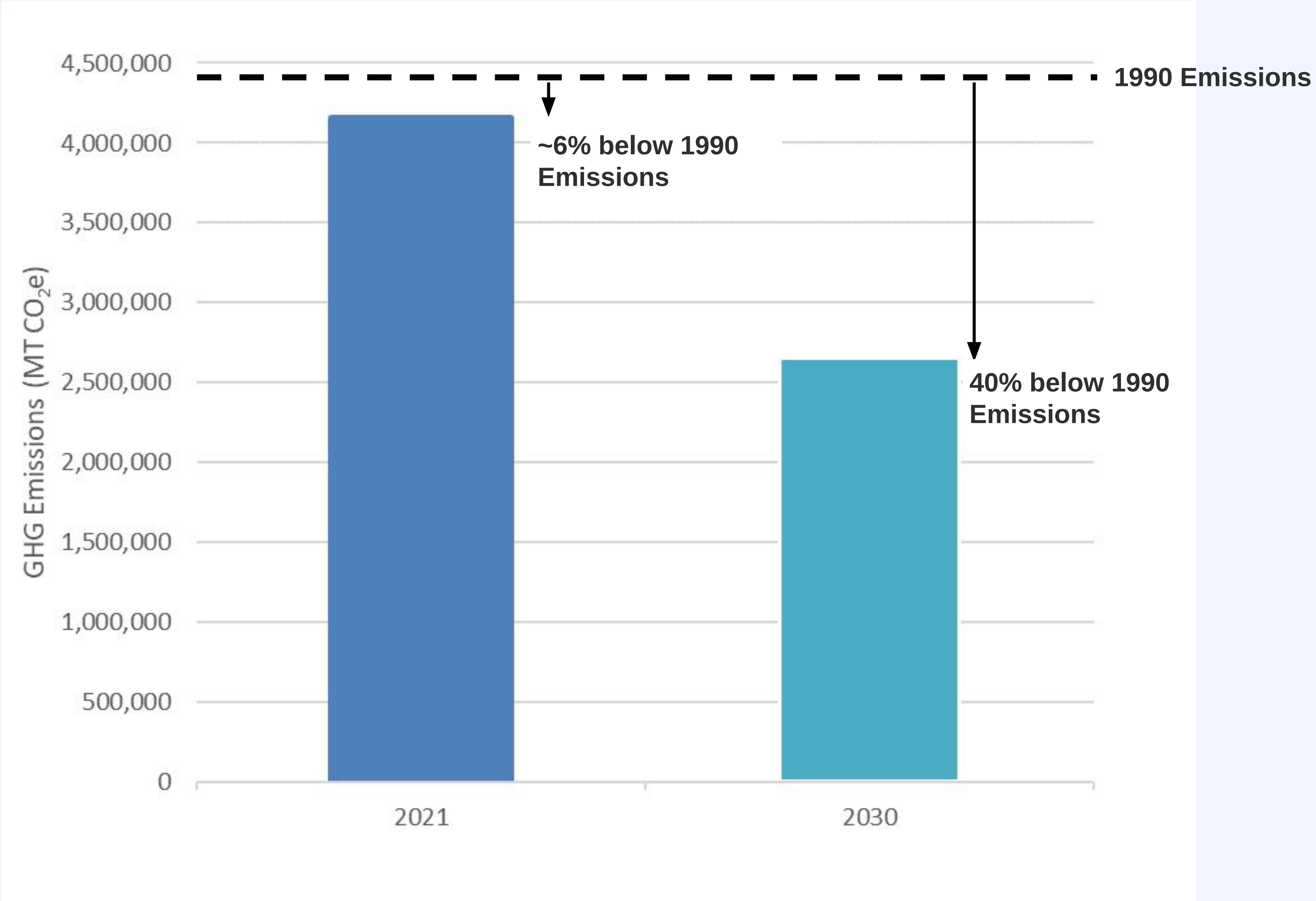
- Data Updates
 - CPUC hearing on 15/15 Rule
 - New data sources (e.g., Replica)



CPUC = California Public Utilities Commission, 15/15 Rule = a CPUC privacy standard



Where do we stand?



Looking to 2030: Climate Action Planning Status



Make new construction all-electric



Increase active transportation and public transit mode share (currently declining/flat)



Reduce existing building natural gas consumption (from 2021 levels)



Reduce emissions from off-road equipment (from 2021 levels)



Increase ZEV adoption (from ~4% in 2021)



Reduce landfilled organic waste (from 2014 levels)



Comply with SB 1383 compost procurement requirements



Discussion

- Does anything stand out to you from the inventories or the trends?
- What decisions or changes do you think we need to make in order to reach our goals?
- How can we use this data (or other data) to ensure the necessary decisions and changes are made?
- What challenges might we face when implementing these changes? How can we best prepare for or address those in advance?



Thank you!



RICAPS technical assistance is available due to funding from the City/County Association of Governments (C/CAG), Peninsula Clean Energy, and the San Mateo County Energy Watch program, which is funded by California utility customers, administered by Pacific Gas and Electric Company (PG&E) under the auspices of the California Public Utilities Commission and additional funding provided by Peninsula Clean Energy.