

RICAPS Monthly Meeting

February 25, 2025



Agenda

1:30-1:35 - Welcome & Agenda Review

1:35-1:40 - Announcements

1:40-2:25 - Charting the Course for 2025
Reach Codes - TRC

2:25-2:45 - Jurisdiction Round Robin Updates

2:45-2:55 - *Did you know we can help you with that?* RICAPS Tool and Resource Review

2:55-3:00 - RICAPS Website?!

3:00 - Closing



Announcements



Survey for Guest Speakers at RICAPS



San Mateo County Climate Collaborative Speaker Request Form

The San Mateo County climate collaborative, RICAPS, seeks innovative guest speakers for its programming. The collaborative is comprised of local jurisdiction staff and agency partners and each month the group convenes to learn, share information, and advance projects in the climate and sustainability realm. Program staff are seeking guest speakers from across the sectoral spectrum to bring new information, products, models, and innovative approaches to problem solving in the Bay Area and beyond. This includes but isn't limited to: EV adoption, EV charging infrastructure, building code, modeshift (i.e. transitioning away from single occupancy vehicles and towards more active forms of transportation), enhancing ridership on public transportation, building decarbonization, building electrification, climate action planning, emissions reduction planning, behavior change, innovative approaches by local governments solving environmental problems, innovative public private partnerships.

If you or your organization/agency is interested in this opportunity this coming year, please fill in the following brief questionnaire. For more information about the collaborative please follow this link: <https://www.smcsustainability.org/energy-resources-public-agency/>

* Required

1. Your Name *
2. Your Company/Organization/Agency/Group *
3. Your Role *
4. Your Email *
5. What would you like to present to our group on and why? *



BayREN Events



**From Foundation to Finish:
Fitting Embodied Carbon into our Decarbonization Goals**

Wednesday,
March 19, 2025
9:00 AM - 12:00 PM
via *Zoom*

bayren.org/events-training

Up to half of a building’s carbon emissions are produced before the doors even open. These “embodied carbon” emissions are created during the manufacture, transportation, maintenance, and disposal of building materials. This forum will discuss how California’s Green Building Code addresses embodied carbon, design choices that can reduce emissions over a building’s lifecycle, and **how local governments can lead the way in addressing embodied carbon.**

Wednesday, March 19, 2025 9:00 - 12:00 PM

Link to register in the chat



Local Governments Empowering Our Communities

**TRANSFORM YOUR PUBLIC AGENCY BUILDING
WITH THE DECARBONIZATION SHOWCASE**

Apply now to participate in BayREN's Decarbonization Showcase, a new service designed to help local governments and special districts transform their public buildings into showcases for decarbonization.

The Showcase will enroll a small selection of public buildings - approximately 10 - in different climate zones in the Bay Area to assist them with decarbonizing their building operations. Projects will implement recommended measures for energy efficiency, distributed energy resources, electrification, and demand response to demonstrate how public buildings can significantly reduce or eliminate emissions.

Selected participants will benefit from three core offerings:

- **Free Professional Engineering Assessments**
- **Funding & Financing Assistance**
- **Ongoing Technical & Engineering Support**

Key Dates

February 25, 2025 – Application question period closes. Submit your questions to publicbuildings@bayren.org.

March 18, 2025 – Application period closes. All applications must be received by 5:00pm PST to be considered.

Additional Announcements...



Green Cities CA Opens Up All-Network Call for Local Gov Staff Discussion about Influencing Utility Rates in CA

February 27, 2025 All-network call to non-GCC CA jurisdictions and extend the time to 90 minutes (3:00-4:30 pm). This first session of a three part discussion series is designed for local government staff to **explore strategies for advocating and influencing utility rates in California.** The discussion will be structured in two parts. First, we will be joined by a series of guest speakers who will present on key topics, including the drivers of electric rates, grid benefits of distributed energy resources, and potential solutions to high electricity costs. Then, after our guest speakers leave, we will have a private conversation among local government staff to share takeaways, ask questions of their peers, and coalescing around potential solutions. **See full agenda, [here](#).**

Because this discussion, which is exclusive to California local government staff, is an open and extended meeting, we ask that you register in advance and help spread the word by sharing the registration link with other local government staff from your city and neighboring jurisdictions who might be interested. **Please register [here](#).**

We hope you can join us for this important conversation, as we work to identify actionable approaches to ensure affordability, equity, and sustainability in energy policy.



Bay Area Regional Climate Action Plan Survey

The Bay Area is taking the lead on addressing global climate change, and we need you to weigh in on how we do it: **Please take our [Bay Area Regional Climate Action Plan \(BARCAP\) Survey](#) today!**

We are gathering feedback from Bay Area communities on priorities and concerns regarding regional climate goals and potential strategies and actions. Public input is critical to guiding the priorities for BARCAP development — *we urge you to forward this on to your networks.*

This survey takes 5-10 minutes to complete. Submit a response for a chance to win one of four \$50 Amazon gift cards!

PCE's Energy Advisor and Turnkey Services are LIVE!!!



In-house call center

- Better customer experience
- Support on programs

Electrification Advisor

- Personalized 1-on-1 support
- Scheduled service



Free upgrades for income-qualified residents

- Whole-home electrification at no-cost

Incentives and fixed pricing for all other residents

- PCE-backed installation with select vetted contractors





Charting the Course for 2025 Reach Codes

RICAPS Meeting

Feb 25, 2025



Purpose

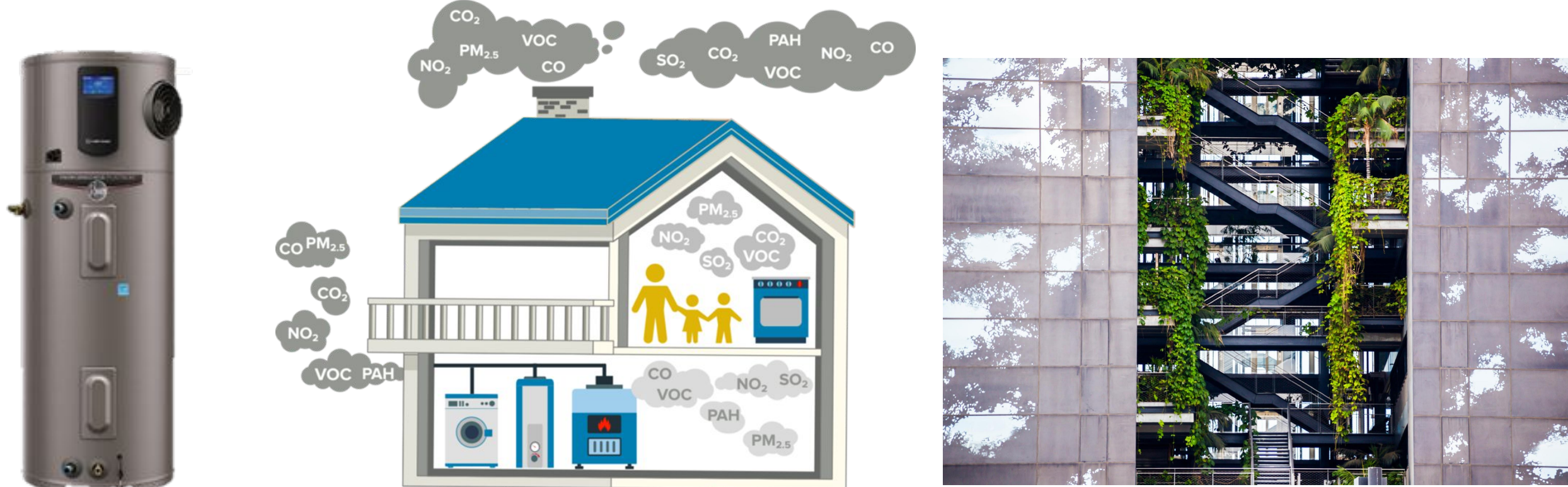


1 Understand regular reach code opportunities.

2 Introduce potential alternative reach codes.

3 Foster opportunities for jurisdictions to connect, ask questions, and find alignment.

4 Identify jurisdiction reach code priorities and resource needs.



Topics	Timing
Introduction	3 min
Regular Reach Code Approaches	15 min
<i>Discussion</i>	10 min
Alternative Reach Code Approaches	15 min
<i>Discussion</i>	10 min
Survey	10 min
Closing	2 min

Reach Codes Website Update



BayAreaReachCodes.org

The screenshot displays the website's layout. At the top, there is a header with logos for Peninsula Clean Energy, Silicon Valley Clean Energy, San Mateo County Sustainability Department, and Santa Clara County. Below this is a dark blue navigation bar with links for Home, Model Reach Codes, Reach Code Resources, and Electrification Resources. The main content area features a large blue banner with the title "Bay Area Reach Codes" and the subtitle "Supporting local agencies in adopting Reach Codes for a sustainable future". Below the banner is a "PROGRAM DETAILS" section with text about the partnership between Peninsula Clean Energy, Silicon Valley Clean Energy, Santa Clara County, and the San Mateo County Office of Sustainability. To the right, a section titled "EXISTING BUILDINGS" discusses the impact of reach codes on existing homes. Below this, there is a section for "AC to Heat Pump" with a photo of two outdoor units and two buttons: "AC TO HEAT PUMP MODEL ORDINANCE" and "EDUCATIONAL SLIDES". At the bottom right, it says "Coming Soon (Q2 2025)".

PROGRAM DETAILS

[Peninsula Clean Energy](#), [Silicon Valley Clean Energy](#), [Santa Clara County](#) and the [San Mateo County Office of Sustainability](#) are joining together to reduce greenhouse gas (GHG) emissions within their service territories by developing forward-thinking building and transportation electrification reach codes.

EXISTING BUILDINGS

Reach codes for existing buildings can be highly impactful. **There are approximately 117 existing homes for every new construction housing unit in California**, and most of those homes predated modern energy efficiency standards. Retrofit policies play a critical role in reducing greenhouse gas emissions by improving the energy efficiency in this majority housing stock and strengthening the resiliency of our communities.



AC to Heat Pump

This model reach code establishes a 'Time of Replacement' policy. It requires that property owners upgrade their equipment at the time of equipment replacement, such as during failures or renovations, by either installing a heat pump or implementing a set of designated energy efficiency measures. This approach targets a natural point of intervention in a building's lifecycle. By focusing on equipment replacement events, this policy minimizes disruption to property owners while ensuring progress toward decarbonization.

[AC TO HEAT PUMP MODEL ORDINANCE](#)

[EDUCATIONAL SLIDES](#)

Coming Soon (Q2 2025)

Regular Reach Code Approaches

Reach codes with available information today

- **Existing Buildings**
 - AC to HP
 - SF FlexPath
 - Electric Readiness
- **New Construction**
 - Energy Performance



What was the last reach code your jurisdiction adopted?

- All-Electric / Gas Ban
- Energy Performance
- Electric Vehicle Infrastructure
- Electric Readiness
- Air Quality
- Other (Not sure / Have not adopted a reach code / etc.)

Is the next reach code cycle on your radar?

- Yes
- Somewhat
- No

Overview of Approaches



Existing Buildings

New Construction

Single Family AC to Heat Pump

Single Family FlexPath

Electric Readiness

Energy Performance Approach



- A “*Time of Replacement*” reach code that requires property owners at the time of AC equipment replacement (upgrades or burnouts) to install either:
 1. A heat pump
 2. Efficiency measures
- Originates from the 2025 CALGreen Tier 1 Voluntary Pathway.

- A “*Time of Renovation*” reach code that requires applicants that are already pulling a permit to abide by a flexible menu of:
 1. Energy efficiency measures
 2. Electrification measures
 3. Electric readiness requirements

- A “*Time of Renovation*” reach code that requires applicants that are completing a relevant addition or alteration to abide by electric readiness requirements.





- Requires a higher *Source Energy* compliance margin than what the state requires through the performance path of the Energy Code, Part 6.

Timeline to Adoption & Future Workshops



- CCAs, IOUs, and their consultants are collaborating to develop workshops and resources for jurisdictions
- Timeline is current best-guess

SF = Single Family
 MF = Multifamily
 NR = Nonresidential





	Approach	Q1 2025	Q2	Q3	Q4	Q1 2026
	Existing Building – Single Family AC to HP	CEC Building Electrification Summit	Cost-effectiveness workshop. Model code + resources published			
	Existing Building – Flex Path	Model code and resources published (SF)	Cost-effectiveness workshop (NR)	Cost-effectiveness workshop (MF)	Model code and resources published (MF, NR)	
	Existing Building – Electric Readiness		Model code and resources published (SF)		Model code and resources published (MF, NR)	
	New Construction – Energy Performance Approach			Cost-effectiveness workshop (SF)	Cost-effectiveness workshop (NR)	Cost-effectiveness workshop (MF)

Timeline to Adoption & Future Workshops



- CCAs, IOUs, and their consultants are collaborating to develop workshops and resources for jurisdictions
- Timeline is current best-guess

SF = Single Family
 MF = Multifamily
 NR = Nonresidential





	Approach	Q1 2025	Q2	Q3	Q4	Q1 2026
	Existing Building – Single Family AC to HP	CEC Building Electrification Summit	Cost-effectiveness workshop. Model code + resources published			
	Existing Building – Flex Path	Model code and resources published (SF)	Cost-effectiveness workshop (NR)	Cost-effectiveness workshop (MF)	Model code and resources published (MF, NR)	
	Existing Building – Electric Readiness		Model code and resources published (SF)		Model code and resources published (MF, NR)	
	New Construction – Energy Performance Approach			Cost-effectiveness workshop (SF)	Cost-effectiveness workshop (NR)	Cost-effectiveness workshop (MF)

Timeline to Adoption & Future Workshops



- CCAs, IOUs, and their consultants are collaborating to develop workshops and resources for jurisdictions
- Timeline is current best-guess

SF = Single Family
 MF = Multifamily
 NR = Nonresidential

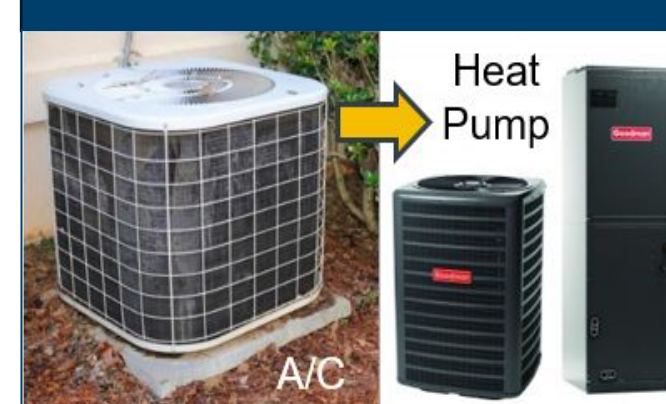



	Approach	Q1 2025	Q2	Q3	Q4	Q1 2026
	Existing Building – Single Family AC to HP	CEC Building Electrification Summit	Cost-effectiveness workshop. Model code + resources published			
	Existing Building – Flex Path	Model code and resources published (SF)	Cost-effectiveness workshop (NR)	Cost-effectiveness workshop (MF)	Model code and resources published (MF, NR)	
	Existing Building – Electric Readiness		Model code and resources published (SF)		Model code and resources published (MF, NR)	
	New Construction – Energy Performance Approach			Cost-effectiveness workshop (SF)	Cost-effectiveness workshop (NR)	Cost-effectiveness workshop (MF)

Timeline to Adoption & Future Workshops



- CCAs, IOUs, and their consultants are collaborating to develop workshops and resources for jurisdictions
- Timeline is current best-guess

SF = Single Family
 MF = Multifamily
 NR = Nonresidential





	Approach	Q1 2025	Q2	Q3	Q4	Q1 2026
	Existing Building – Single Family AC to HP	CEC Building Electrification Summit	Cost-effectiveness workshop. Model code + resources published			
	Existing Building – Flex Path	Model code and resources published (SF)	Cost-effectiveness workshop (NR)	Cost-effectiveness workshop (MF)	Model code and resources published (MF, NR)	
	Existing Building – Electric Readiness		Model code and resources published (SF)		Model code and resources published (MF, NR)	
	New Construction – Energy Performance Approach			Cost-effectiveness workshop (SF)	Cost-effectiveness workshop (NR)	Cost-effectiveness workshop (MF)

Timeline to Adoption & Future Workshops

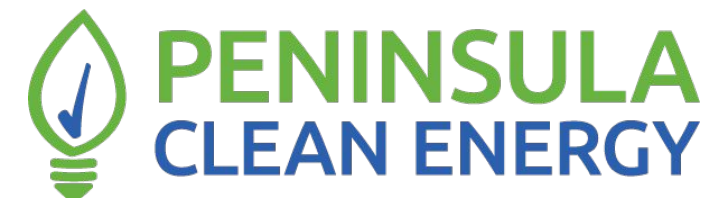


- CCAs, IOUs, and their consultants are collaborating to develop workshops and resources for jurisdictions
- Timeline is current best-guess

SF = Single Family
 MF = Multifamily
 NR = Nonresidential





	Approach	Q1 2025	Q2	Q3	Q4	Q1 2026
	Existing Building – Single Family AC to HP	CEC Building Electrification Summit	Cost-effectiveness workshop. Model code + resources published			
	Existing Building – Flex Path	Model code and resources published (SF)	Cost-effectiveness workshop (NR)	Cost-effectiveness workshop (MF)	Model code and resources published (MF, NR)	
	Existing Building – Electric Readiness		Model code and resources published (SF)		Model code and resources published (MF, NR)	
	New Construction – Energy Performance Approach			Cost-effectiveness workshop (SF)	Cost-effectiveness workshop (NR)	Cost-effectiveness workshop (MF)

Timeline to Adoption & Future Workshops



- CCAs, IOUs, and their consultants are collaborating to develop workshops and resources for jurisdictions
- Timeline is current best-guess

SF = Single Family
 MF = Multifamily
 NR = Nonresidential

	Approach	Q1 2025	Q2	Q3	Q4	Q1 2026
	Existing Building – Single Family AC to HP	CEC Building Electrification Summit	Cost-effectiveness workshop. Model code + resources published			
	Existing Building – Flex Path	Model code and resources published (SF)	Cost-effectiveness workshop (NR)	Cost-effectiveness workshop (MF)	Model code and resources published (MF, NR)	
	Existing Building – Electric Readiness		Model code and resources published (SF)		Model code and resources published (MF, NR)	
	New Construction – Energy Performance Approach			Cost-effectiveness workshop (SF)	Cost-effectiveness workshop (NR)	Cost-effectiveness workshop (MF)

Alternative Reach Code Approaches

Reach codes that can be developed/adopted in 2025, and may contain more uncertainty

- Gas WH to HPWH
- Air Quality
- Zero Carbon Energy
- Green Building Ordinance

Overview of Approaches



Existing Buildings	New Construction <i>and/or</i> Existing Buildings		
Gas WH to HPWH	Air Quality	Zero Carbon Energy	Green Building Ordinance
			
<ul style="list-style-type: none"> ■ For existing single family buildings ■ Replace a gas water heater with <ul style="list-style-type: none"> - Heat pump water heater; OR - Like-for-like gas + solar thermal ■ Cost effectiveness results <u>available</u> ■ Amends the 2025 Energy Code ■ Requires CEC approval 	<ul style="list-style-type: none"> ■ Can capture new construction and/or existing buildings ■ Regulates building or appliance nitrogen oxide (NOx) emissions ■ Fuel-neutral; focus is on emissions ■ Cost effectiveness not needed ■ Amends CALGreen, Part 11 ■ Does not require CEC approval 	<ul style="list-style-type: none"> ■ Can capture new construction and/or existing buildings ■ Buildings must utilize renewable energy through: <ul style="list-style-type: none"> - a) On-site renewable electricity; - b) Grid-sourced carbon free electricity; - c) Grid-sourced carbon free biogas; - d) Non-SOx-producing biofuels; - e) Renewably-produced hydrogen; - f) District system. ■ Amends Municipal or Building Code ■ Cost effectiveness not needed ■ Does not require CEC approval 	<ul style="list-style-type: none"> ■ Can capture new construction and/or existing buildings ■ Projects must either: <ul style="list-style-type: none"> - a) be zero-emission; or - b) comply with a fuel-neutral certification program containing many green initiatives. ■ Amends Municipal or Building Code ■ Cost effectiveness not needed ■ Does not require CEC approval

Jurisdiction Next Steps



Start conversations with your key stakeholders.



Identify questions to be answered.



Reach out with your support needs.



Stay tuned for more information in the coming months.



PCE/SVCE tentatively planning an Elected Officials Workshop in June 2025.

Jurisdiction Survey

Menti.com

Code 5115 8716

Link in chat



Please take 10 minutes to fill out the survey!

Regular Reach Code Options:

AC to HP

SF FlexPath

Electric Readiness

Energy Performance

Alternative Reach Code Options:

Gas WH to HPWH

Air Quality

Zero Carbon Energy

Green Building Ordinance



Thank you!

Contact TRC:

TTaylor@trccompanies.com

FFarahmand@trccompanies.com

Contact PCE/SVCE:

BHerrschaft@peninsulacleanenergy.com

Anthony.Eulo@svcleanenergy.org

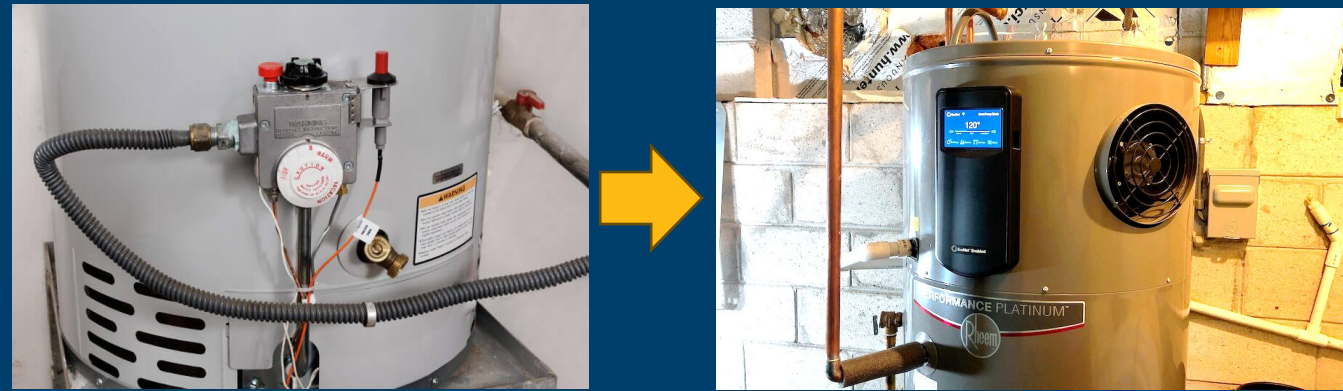


APPENDIX



Gas WH to HPWH

Gas Water Heater to Heat Pump Water Heater



Description:

- For existing single family buildings
- Replace a gas water heater with
 - Heat pump water heater; OR
 - Like-for-like gas + solar thermal
- Cost effectiveness results available
- Amends the 2025 Energy Code
- Requires CEC approval

Pros:

- Widely LSC cost-effective under variety of existing conditions and equipment types (e.g. 120V)

Cons:

- While it's close, On-Bill cost-effective is challenging without some of these:
 - Incentives
 - Demand Response program participation
 - Solar PV installation
 - Rate increases for gas surpassing electricity
 - POU rates

Legal Considerations:

- Similar to AC to HP for DHW, which is promoted by the CEC
- Includes an energy-equivalent pathway for gas water heating when combine with a 50% solar fraction solar thermal system
- Work on-going for alternate gas pathways to mitigate risks



Description:

- Can capture new construction and/or existing buildings
- Regulates building or appliance nitrogen oxide (NOx) emissions
- Fuel-neutral; focus is on emissions
- Cost effectiveness not needed
- Amends CALGreen, Part 11
- Does not require CEC approval



Pros:

- Direct benefit to air quality / health
- High impact on emissions reduction
- Likely to result in all-electric construction (construction cost savings)
- Regulates all emitting equipment (including cooking, fireplaces, dryers, etc.)

Cons:

- Limited precedence on implementation and enforcement



Legal Considerations:

- Legally untested
- Relies on Clean Air Act authority rather than Energy Policy and Conservation Act
- NYC Local Law No. 154 - GHGs
- Litigation Against SCAQMD

Zero Carbon Energy



Description:

- Can capture new construction and/or existing buildings
- Buildings must utilize renewable energy through:
 - a) On-site renewable electricity;
 - b) Grid-sourced carbon free electricity;
 - c) Grid-sourced carbon free biogas;
 - d) Non-SOx-producing biofuels;
 - e) Renewably-produced hydrogen;
 - f) District system.
- Amends Municipal or Building Code
- Cost effectiveness not needed
- Does not require CEC approval



Pros:

- High impact on emissions reduction
- Regulates all emitting equipment (including cooking, fireplaces, dryers, etc.)
- Likely to result in all-electric construction (construction cost savings)

Cons:

- Limited precedence on implementation and enforcement



Legal Considerations:

- Legally untested
- Allows different fuel sources, as long as they are renewable

Green Building Ordinance



Description:

- Can capture new construction and/or existing buildings
- Projects must either:
 - a) be zero-emission; or
 - b) comply with a fuel-neutral certification program containing many green initiatives.
- Amends Municipal or Building Code
- Cost effectiveness not needed
- Does not require CEC approval



Pros:

- Municipal code updates require fewer updates (compared to Energy Code updates)
- Zero emission buildings are the easy option

Cons:

- Certification program compliance can be complex and costly for applicants not choosing the zero-emissions option



Legal Considerations:

- Precedence with many green building codes adopted 15 – 20 years ago
- Certification programs (e.g., GreenPoint Rated or LEED) can be fuel-neutral or not require the achievement of energy credits for certification
- Legally untested

Jurisdiction Round-Robin: Verbal share out

- Methods for tracking CAP metrics?
- Challenges with tracking CAP metrics, or a specific metric that is difficult to get data on?
- Anyone work on developing a Two-Way AC Reach Code?



*Did you know we
can help you with
that?*

RICAPS Tool and Resource Review

February 25, 2025

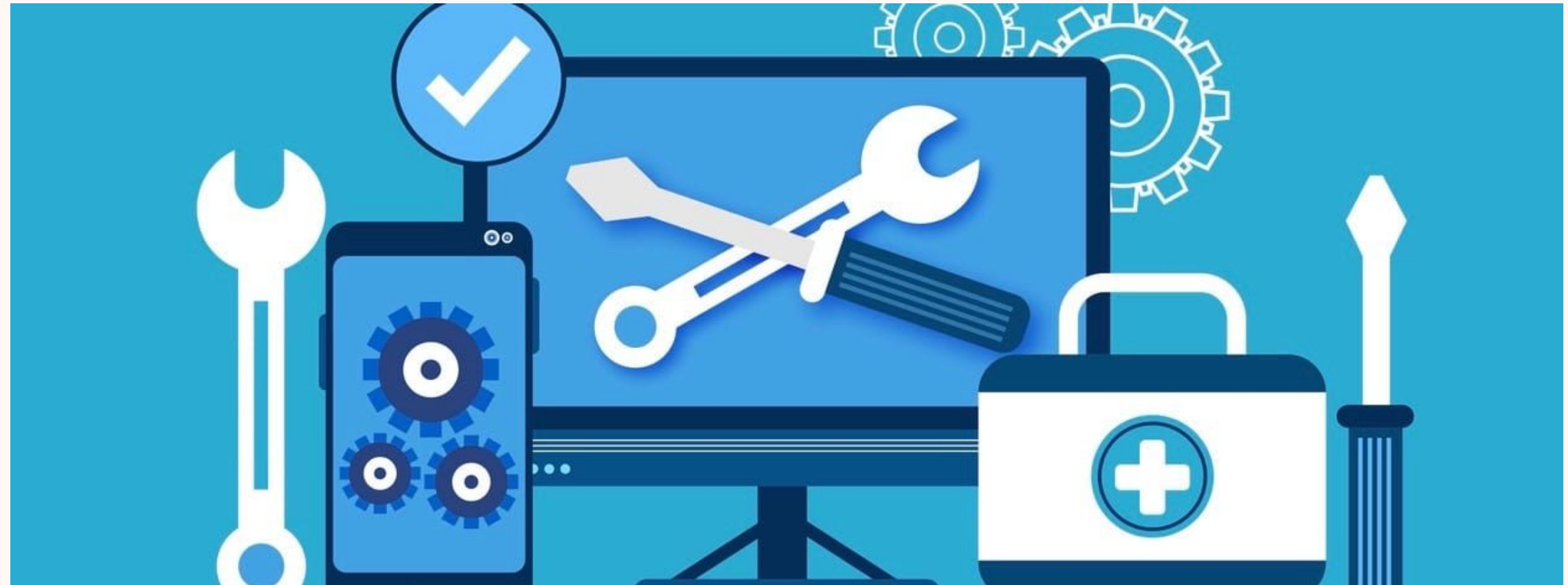
Anna Yip
Rincon Consultants



Available Tools and Resources



- GHG Inventory
- Forecast & SPARQ Tool
- Menu of Measures
- Building Electrification Model
- Methane Gas Catalogue Tool
- Electric First Policy
- CAP Template and CAP Support



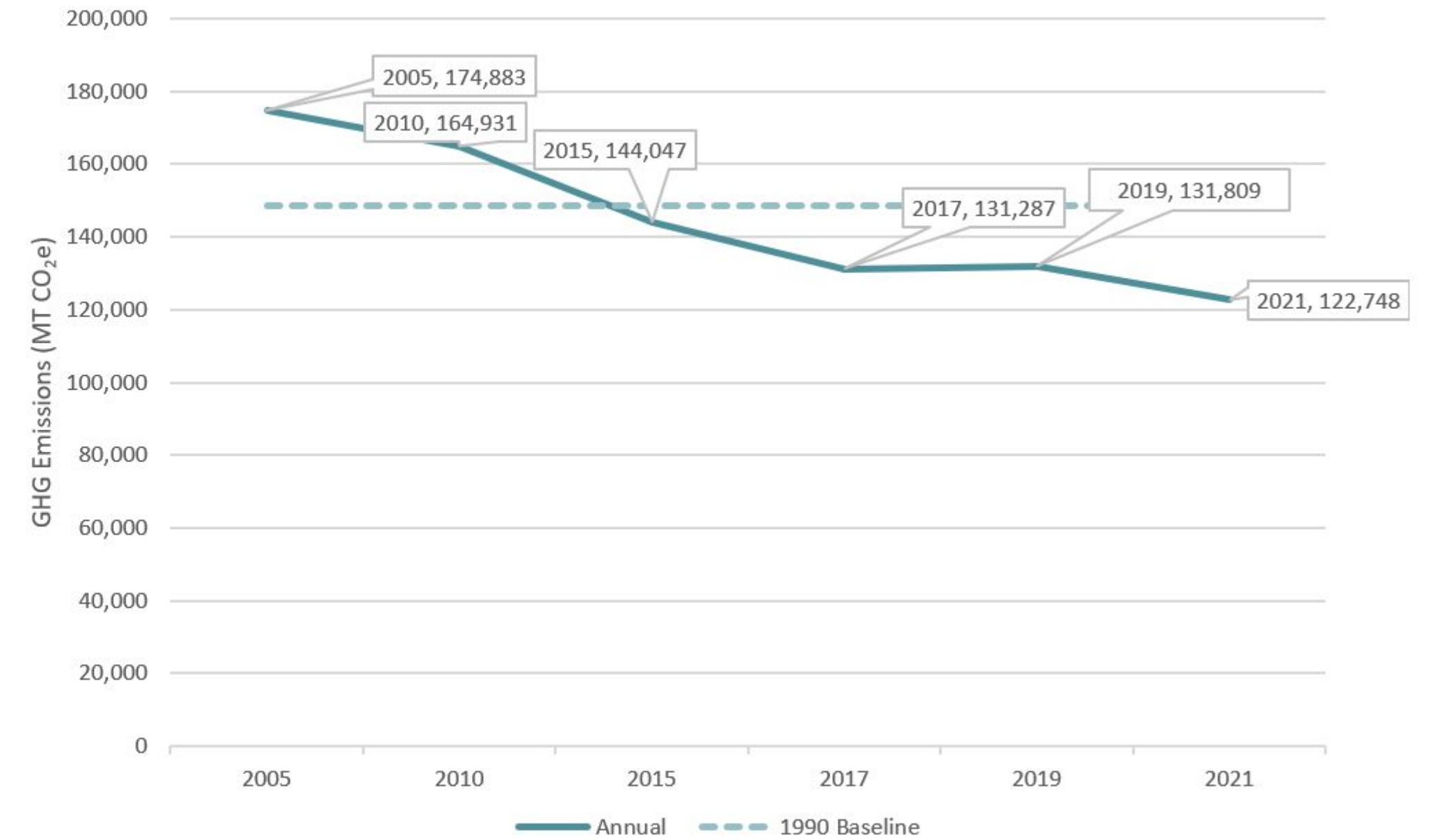
Available Tools and Resources



- **GHG Inventory**
- Forecast & SPARQ Tool
- Menu of Measures
- Building Electrification Model
- Methane Gas Catalogue Tool
- Electric First Policy
- CAP Template and CAP Support

GHG Emissions Over Time

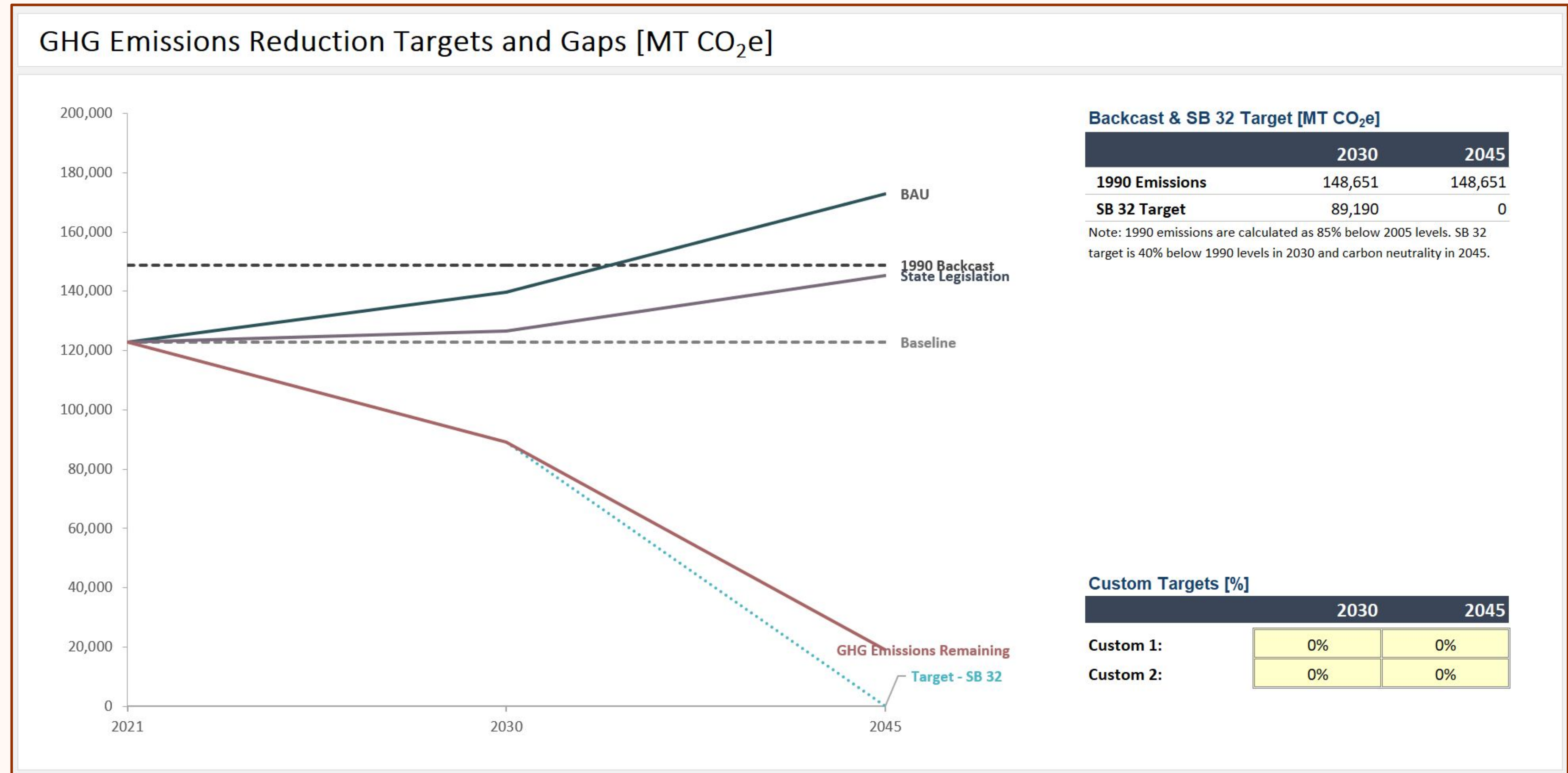
Year	Annual GHG Emissions (MT CO ₂ e)
1990	148,651
2005	174,883
2010	164,931
2015	144,047
2017	131,287
2019	131,809
2021	122,748



Available Tools and Resources



- GHG Inventory
- **Forecast & SPARQ Tool**
- Menu of Measures
- Building Electrification Model
- Methane Gas Catalogue Tool
- Electric First Policy
- CAP Template and CAP Support



Available Tools and Resources



- GHG Inventory
- Forecast & SPARQ Tool
- Menu of Measures
- Building Electrification Model
- Methane Gas Catalogue Tool
- Electric First Policy
- CAP Template and CAP Support

Select Measure/Action	Action ID #	Pillar	Action Text	2030 Potential Emission Reduction Impact (% Impact of Sector Emissions)	2045 Potential Emission Reduction Impact (% Impact of Sector Emissions)
Measure T-1					
	Measure T-1		Develop and implement an Active Transportation Plan to decrease VMT by [x]% in 2030, and [x]% in 2045, increasing active transportation mode share from X% to [4%-10%] in 2030 and [8%-15%] in 2045;		
	Action T-1.1	Structural Change	Develop an Active Transportation Plan by 2024 (designed for x% VMT reduction) focused on reallocating parking and vehicle roadways to active transportation infrastructure. The Plan should include: <ul style="list-style-type: none"> - An analysis of existing bicyclist and pedestrian conditions and infrastructure with a focus on identifying areas currently isolated due to freeways and busy roads; - A survey of recent bicycle and pedestrian collisions; - A prioritized list of bikeways to install including shared-use paths, buffered bike lanes, bike boulevards, and separated bikeways; - A schedule for reducing vehicle speed limits at prioritized locations; and - A prioritized list of projects for accelerated completion by 2030. 	1%-2% of on-road transportation emissions	1%-4% of on-road transportation emissions
	Action T-1.2	Structural Change	Provide Pedestrian Network Improvement: Increase sidewalk coverage to improve pedestrian access, building (x) miles of new sidewalks, while improving (x) miles of degraded or damaged sidewalks. Ensure sidewalk is contiguous, and links with existing and planned pedestrian facilities, and that network prioritizes pedestrian safety.	Up to 6% reduction in VMT from Study Area Quantifiable, dependent on existing sidewalk length in study area.	Up to 6% reduction in VMT from Study Area. Quantifiable, dependent on existing sidewalk length in study area.
	Action T-1.3	Structural Change	Construct or Improve Bike Boulevard, connecting to a larger existing bikeway network, expanding the network by (x) miles. Bicycle boulevards are a designation within a Class III bikeway that create safe, low-stress connections for people biking and walking on streets. Prioritize low-income and underserved areas, and communities with lower rates of vehicle ownership and fewer transit options.	Up to 0.2% of GHG emissions and VMT from vehicles on roadway. Quantifiable, based on percent of plan/community on VMT to have bicycle Boulevard	Up to 0.2% of GHG emissions and VMT from vehicles on roadway. Quantifiable, based on percent of plan/community on VMT to have bicycle Boulevard
	Action T-1.4	Structural Change	Expand Bikeway Network: increase the length of a city or community bikeway network by (x) miles, which is an interconnected system of bike routes, cycle tracks, bike paths, and bike lanes. Connect bike lanes to transit hubs. Bikeway network must either be Class I, II, or IV infrastructure.	Up to 0.5% of GHG emissions from vehicle travel in the plan/ community. Quantifiable, based on bikeway miles in plan/community,	Up to 0.5% of GHG emissions from vehicle travel in the plan/ community. Quantifiable, based on bikeway miles in plan/community,
	Action T-1.5	Structural Change	Implement Pedal (not electric) Bikeshare Program: Establish a bikeshare program (either docked or undocked) to provide users, equivalent to (x) percent of community access to bikeshare system, with on-demand access to bikes for short term rentals.	Up to 0.02% of GHG emissions and VMT from vehicle travel in the plan/ community. Quantifiable,	Up to 0.02% of GHG emissions and VMT from vehicle travel in the plan/ community. Quantifiable,



Available Tools and Resources



- GHG Inventory
- Forecast & SPARQ Tool
- Menu of Measures
- **Building Electrification Model**
- Methane Gas Catalogue Tool
- Electric First Policy
- CAP Template and CAP Support

Building Electrification Emission Reductions Calculations							
Emission Reduction Summary by Sector [MT CO ₂ e]							
Sector	Measure	Subsector	Yes/No	2030	2030.	2045	2045
New Building Electrification	Energy Performance Standard/2025 Building Code	Single-family	No	0		0	
		Multi-family	No	0		0	
		Nonresidential	No	0	0	0	0
		Single-family	Yes	3,006		4,732	
		Multi-family	Yes	420		720	
		Nonresidential	Yes	265	3,691	946	6,398
	Local Zero NOx Rule - New Appliances	Single-family	Yes	1,283		13,798	
		Multi-family	Yes	299		2,387	
		Nonresidential	Yes	11	1,593	238	16,423
		Single-family	Yes	5,072		0	
		Multi-family	Yes	158		0	
		Nonresidential	Yes	2,523	7,754	13,339	13,339
	BAAQMD Zero NOx Rule - New Furnaces and Water Heaters	Single-family	Yes	9,697		4,885	
		Multi-family	Yes	466		235	
		Nonresidential	Yes	1,059	11,222	16,430	21,549
		Single-family	Yes	3,590		0	
		Multi-family	Yes	904		0	
		Nonresidential	Yes	425	4,918	2,017	2,017
Two-Way AC	Single-family	Yes	7,809		62,590		
	Multi-family	Yes	1,472		7,795		
	Nonresidential	Yes	561	9,842	633	71,017	
	Single-family	Yes	7,450	7,450	25,621	25,621	
	Single-family	Yes	65		262		
	Multi-family	Yes	0	65	0	262	
Existing Building Electrification	Cooking Electrification at Kitchen Renovation	Single-family	Yes	65		262	
		Multi-family	Yes	0	65	0	262
Total				46,535	46,535	156,626	156,626



Available Tools and Resources



- GHG Inventory
- Forecast & SPARQ Tool
- Menu of Measures
- Building Electrification Model
- **Methane Gas Catalogue Tool**
- Electric First Policy
- CAP Template and CAP Support



San Mateo County Municipal Electrification
Roadmap

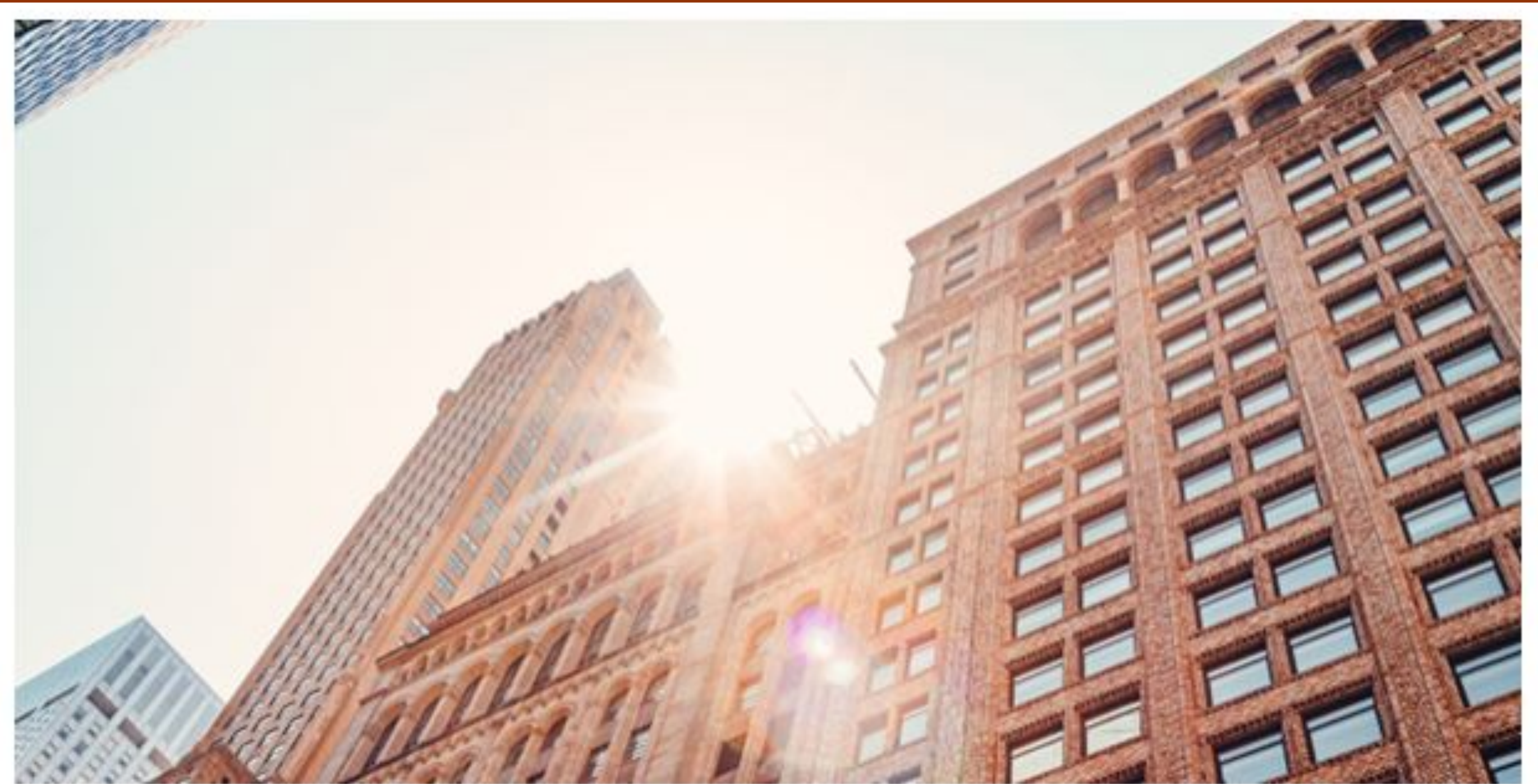
Methane Gas Catalog Tool



Available Tools and Resources



- GHG Inventory
- Forecast & SPARQ Tool
- Menu of Measures
- Building Electrification Model
- Methane Gas Catalogue Tool
- **Electric First Policy**
- CAP Template and CAP Support



Municipal Buildings Electric First Preferred Policy




Available Tools and Resources



- GHG Inventory
- Forecast & SPARQ Tool
- Menu of Measures
- Building Electrification Model
- Methane Gas Catalogue Tool
- Electric First Policy
- **CAP Template and CAP Support**





Climate Action Plan Template

City/County Association of Governments
of San Mateo County

Technical assistance from DNV
May 2021
Version 9.5

Instructions:
The following pages of this document contain the draft semi-standard language for the Climate Action Plan (CAP) Template. This can be provided to your consultant if you're using one. Individual cities should use the semi-standard language as a starting point for making modifications to customize information and projections for their specific communities. For sections where semi-standard language is not provided, comments are embedded to provide more guidance on how to complete these sections.

Green highlights provide guidance about how to use the document.
Yellow highlights indicate sections and text that cities must customize.
Blue highlights with italic text indicate information that will be designed in sidebars or call-out boxes.

The following fields are designed to allow cities to find and replace (Ctrl+h) to customize:

Field (include brackets)	Replacement text (for example)
[CITY]	San Mateo
[CITY's]	San Mateo's
[BaselineYear]	2005
[TargetYear]	2030
[Target%]	50%

Changes to this document since Version 9.4:

- Changed "50 percent reduction in emissions" to "at least 50 percent reduction in emissions" throughout the document.
- Added "Funding and Financing Climate Action Plans Report" to the Appendix F: Summary of Funding Sources.
- Incorporated references to gasoline consumption and added a gasoline sales graph.
- Made family icons gender neutral.
- On page 42, changed "State Level Actions" to also include county-level actions throughout the section.
- Added a disclaimer to Appendix B.4 and fixed two mistakes in the graphics.

These and a few other new changes are indicated in the comments. Search on "version 9.5" to find them.

Could our collaborative use a website?




The screenshot shows the 'Tools' page of the California's Fourth Climate Change Assessment website. The page has a brown header with navigation links: 'About the Assessment' and 'Settings' on the right, and 'STATEWIDE', 'REGIONAL', 'TECHNICAL REPORTS', 'TOOLS', 'EVENTS', and a search icon on the left. The main content area is white and features the title 'Tools' and a breadcrumb 'Home | Tools'. Below this is a sub-header 'Catalyzing action through new online resources' and a paragraph stating that the Fourth Assessment funded several tools. Three tool cards are listed: 'Cal-Adapt', 'Cal-Heat', and 'USGS Coastal Storm Modeling System (CoSMoS)'. Each card includes a logo, a description of the tool's purpose, and its website URL.

Tools

Home | Tools

Catalyzing action through new online resources


The Fourth Assessment funded the development and enhancement of several tools and resources to support climate action. These are linked and described below.



Cal-Adapt

Cal-Adapt is the State's portal for providing easy access to the climate change projections that underpin the Fourth Assessment, enabling data download and visualizations of climate scenarios at the local level as well as wildfire projections for the entire state. Visualization tools for key climate variables and many data sets are available to the public.


cal-adapt.org



Cal-Heat

The California Heat Assessment Tool is a new tool funded by the Fourth Assessment to inform the planning efforts of local public health officials. The tool provides health-informed heat thresholds for communities across California and examines how the frequency and severity of local heat waves are expected to change over time due to climate change.

www.Cal-Heat.org



USGS Coastal Storm Modeling System (CoSMoS)

The Fourth Assessment funded an expansion of the USGS CoSMoS model, which projects complex coastal dynamics in a variety of coastal flooding scenarios. This includes an update to the Our Coast Our Future (OCOF) Flood Viewer, developed by Point Blue Conservation Science, which provides a web tool to view CoSMoS flood hazard projections.

walrus.wr.usgs.gov/coastal_processes/cosmos/

Could our collaborative use a website?



A screenshot of a web application titled 'Solutions Center'. The interface is clean and modern, with a teal and white color scheme. At the top, there is a navigation bar with links to 'Knowledge Management (KM)', 'Information & Research Center (IRC)', 'Data & Analytics (D&A)', 'Market Insights (MI)', 'People & expertise', 'CoPs', 'My Dashboard', and 'Help & feedback'. A notification in the top right corner says 'IP for 5 new cases added - 2 days ago'. Below the navigation is a search bar with the text 'Search for cases, IP, research guides, data, market insights or people' and a 'Search tips' link. The main content area is divided into two sections: 'Go to' and 'My Dashboard'. The 'Go to' section contains eight cards for different categories: Knowledge Management (KM), Information & Research Center (IRC), Data & Analytics (D&A), Market Insights (MI), People, Communities of Practice (CoPs), My dashboard, and Help & feedback. The 'My Dashboard' section is further divided into 'My Collections' and 'Recommended for me'. 'My Collections' shows a list of items with titles like 'Sed ac sem dapibus velit ullamcorper eleifend nec bibendum lorem' and 'Nullam eleifend, justo at dapibus fringilla, quam ante blandit orci'. 'Recommended for me' is split into 'Based on my searches' and 'Popular', both showing a list of items with titles like 'Pellentesque placerat lectus et nunc vestibulum'. On the right side, there is a 'Curated resources' section with a list of items, each with a document icon and a title like 'Pellentesque placerat lectus et nunc vestibulum'. The bottom of the page shows a partial view of another collection item.

Thank you!

