



CITY OF CARMEL-BY-THE-SEA CLIMATE COMMITTEE

Contact: 831.620.2000 www.ci.carmel.ca.us/carmel

All meetings are held in the City Council Chambers
East Side of Monte Verde Street
Between Ocean and 7th Avenues

REGULAR MEETING Thursday, February 17, 2022

3:30 PM

Governor Newsom's Executive Order N-29-20 has allowed local legislative bodies to hold public meetings via teleconference and to make public meetings accessible telephonically or otherwise electronically to all members of the public seeking to observe and to address the local legislative body. Also, see the Order by the Monterey County Public Health Officer issued March 17, 2020. The health and well-being of our residents is the top priority for the City of Carmel-by-the-Sea. To that end, this meeting will be held via teleconference and web-streamed on the City's website ONLY.

To attend via Zoom [https://ci-carmel-ca-us.zoom.us/j/93340805428? Meeting ID 93340805428](https://ci-carmel-ca-us.zoom.us/j/93340805428?MeetingID=93340805428), Passcode 669209; or to attend via telephone dial 1-312-626-6799. The public can also email comments to amartelet@ci.carmel.ca.us. Comments must be received 2 hours before the meeting in order to be provided to the committee. Comments received after that time and up to the beginning of the meeting will be added to the agenda and made part of the record.

CALL TO ORDER

PUBLIC APPEARANCES

Members of the public are entitled to speak on matters of municipal concern not on the agenda during Public Appearances. Each person's comments shall be limited to 3 minutes, or as otherwise established by the Chair. Matters not appearing on the agenda will not receive action at this meeting and may be referred to staff. Persons are not required to provide their names, and it is helpful for speakers to state their names so they may be identified in the minutes of the meeting.

ANNOUNCEMENTS

ORDERS OF BUSINESS

Orders of Business are agenda items that require Committee discussion, debate, direction to staff, and/or action.

1. Review the Revised Greenhouse Gas Reduction Implementation Strategy
2. Receive a Project Status Update and Discuss Community Outreach

3. Discuss the Future of the Climate Committee and Climate Change Planning in Carmel

FUTURE AGENDA ITEMS AND ADJOURNMENT

This agenda was posted at City Hall, Monte Verde Street between Ocean Avenue and 7th Avenue, outside the Park Branch Library, NE corner of Mission Street and 6th Avenue, the Carmel-by-the-Sea Post Office, 5th Avenue between Dolores Street and San Carlos Street, and the City's webpage <http://www.ci.carmel.ca.us> in accordance with applicable legal requirements.

SUPPLEMENTAL MATERIAL RECEIVED AFTER THE POSTING OF THE AGENDA

Any supplemental writings or documents distributed to a majority of the Climate Committee regarding any item on this agenda, received after the posting of the agenda will be available at the Public Works Department located on the east side of Junipero Street between Fourth and Fifth Avenues during normal business hours.

SPECIAL NOTICES TO PUBLIC

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the City Clerk's Office at 831-620-2000 at least 48 hours prior to the meeting to ensure that reasonable arrangements can be made to provide accessibility to the meeting (28CFR 35.102-35.104 ADA Title II).



CITY OF CARMEL-BY-THE-SEA

Climate Committee

Staff Report

February 17, 2022
ORDERS OF BUSINESS

TO:	Climate Committee Members
SUBMITTED BY:	Agnes Martelet, Environmental Compliance Manager
SUBJECT:	Review the Revised Greenhouse Gas Reduction Implementation Strategy

RECOMMENDATION:

Review and provide comments on the revised Greenhouse Gas Reduction Implementation Strategy provided by LSA Associates (consultant).

BACKGROUND/SUMMARY:

At the January 2022 Climate Committee meeting, LSA presented an updated Greenhouse Gas (GHG) emissions inventory for Carmel. The GHG emissions inventory (Attachment 1) is the foundation of planning for future reductions and categorizes the major sources of GHG emissions produced over a single calendar year. LSA also presented a Business-As-Usual and Adjusted-Business-As-Usual GHG emissions forecasts for 2030 and 2045 (Attachment 1). The forecasts allow the City to gauge how emissions are expected to increase or decrease in the future.

Based on these forecasts, LSA identified GHG reduction targets to meet State GHG reduction goals. Attachment 2 includes an updated table of GHG reduction measures to meet these targets. The table also takes into account comments received at the November Climate Committee workshop.

FISCAL IMPACT:

Costs of strategies to reduce GHG emissions have not yet been developed.

ATTACHMENTS:

Attachment 1: Carmel-by-the-Sea Greenhouse Gas Inventory Update, Forecast, and Reduction Targets Technical Memorandum

Attachment 2: Greenhouse Gas Reduction Implementation Strategy



MEMORANDUM

DATE: January 12, 2022

TO: Agnes Martelet, City of Carmel By-The-Sea

FROM: Michael Hendrix, LSA

SUBJECT: Carmel By-The-Sea Greenhouse Gas Inventory Update, Forecast, Reduction Targets (LSA Project No.CML2101)

The purpose of this technical memorandum is to present the Carmel By-The-Sea Greenhouse Gas (GHG) emissions inventory update, forecasts, and targets to the City for review and feedback. The GHG emissions inventory update, forecasts and targets presented in this memorandum will form the basis of our next steps in refining and quantifying the GHG reduction strategies for the City.

CARMEL BY-THE-SEA GHG EMISSIONS INVENTORY, FORECAST, AND TARGETS

1.1 GHG Emissions Inventory Update

GHG emissions inventories are the foundation of planning for future reductions. Establishing an inventory of emissions helps to identify and categorize the major sources of emissions produced over a single calendar year. A community inventory includes GHG emissions that result from the activities of city residents and businesses. The inventory identifies the major sources of GHG emissions resulting from activities in sectors that are specific to community activities.

The Association of Monterey Bay Area Governments (AMBAG) prepared community inventories for the years 2005, 2010, 2015, 2018, and 2019. The 2019 inventory is the most recent year for which data is available. Table A provides the sectors evaluated in the GHG inventories.

Table A: Community Sectors Evaluated in the Inventories

Community Sectors
Residential Energy (Electricity and Natural Gas)
Commercial/Industrial Energy (Electricity and Natural Gas)
On-Road Transportation
Solid Waste
Wastewater

AMBAG calculated GHG emissions using the available activity data (e.g., kilowatt-hours of electricity) in the State Energy Efficiency Collaborative (SEEC) ClearPath tools to convert activity data to emissions output using relevant emission factors.

1.1.1 *Vehicle Miles Traveled Analysis*

One of the issues that needs to be resolved is the drastic reduction in the GHG emissions associated with the on-road transportation sector in years 2010 and 2015. LSA met with AMBAG and City staff to discuss the issue. AMBAG stated that between 2010 and 2015 they updated the Monterey County Regional Travel Demand Model (RTDM) which resulted in a reduction to the vehicle miles traveled (VMT) allocated to the City. Another issue was that the RTDM allocated VMT based upon the City boundaries rather than determine VMT based upon vehicle trips origins or destinations.

AMBAG followed the International Council for Local Environmental Initiatives (ICLEI) protocols in developing the GHG inventories including the on-road transportation sector. Allocating VMT using the RTDM is an accepted practice.

However, the City has a unique tourist-based economy that attracts visitors from around the world and the City wanted to better understand the relationship between its tourist economy and the GHG emissions resulting from tourism. There are two motivations the City has in understanding the relationship between tourism and GHG emissions. First, there is concern that the on-road transportation sector in the GHG inventories is underestimated because of the way the RTDM allocates VMT and the City wants to know the GHG emissions from the on-road transportation sector based upon the origins and destinations of vehicle trips attributable to the City. Second, the City wants to provide GHG reduction strategies that will be effective for different types of vehicle trips including vehicle trips resulting from tourism, vacation homes, employee commutes, delivery services, and other local trips. This second motivation requires that the City not only know the origin and destination of the trip but also know the purposes of the vehicle trips.

There are several challenges in determining the origins and destinations of vehicle trips attributable to the City and its tourist economy as well as determining the types and purposes of vehicle trips. First there is not enough time to develop, calibrate, and run an origin/destination traffic demand model for the City. In addition an origin/destination traffic demand model would not completely capture the full length of a visitor trip traveling from San Francisco to Carmel or other origins outside of the region.

To address these concerns and limitations, LSA proposed to evaluate the different types of trips and logical origins of trips associated with tourism, vacation homes, employee commutes, deliveries, as well as local trips, determine the distance between the trip origin and the City for each trip type, estimate the number of vehicle trips per year using the RTDM, proportion the RTDM vehicle trips by trip type and estimate VMT using the trip distances for each trip type.

First, LSA looked at tourists visiting Carmel-By-The-Sea. To do this LSA used several sources of information from the Carmel Chamber of Commerce and the Carmel Visitors Center including the Visit Carmel 2019 Annual Report,¹ and the Carmel Visitors Spending Report.²

These reports revealed that domestic tourists make of the majority (90.43 percent) of visitors and originated at the following locations:

- San Francisco Bay Area (41.95 percent with an average vehicle trip length of 110 miles),
- Salinas (39.79 percent with an average trip length of 27 miles),
- Los Angeles/Orange County (7.73 percent with an average trip length of 322 miles),
- Sacramento/Yolo County (5.31 percent with an average trip length of 190 miles),
- Fresno (2.21 percent with an average trip length of 157 miles), and
- New York/New Jersey/long Island (2.19 percent).

Salinas is a trip origin for a significant number of day visitors driving to Carmel-By-The-Sea. Visitors from San Francisco Bay Area, Los Angeles/Orange County, Sacramento/Yolo County, and Fresno also drove to Carmel-By-The-Sea; whereas visitors from New York, New Jersey and Long Island flew into San Francisco International Airport (SFO) and drove or took a tour bus to Carmel-By-The-Sea with an average vehicle trip length of 110 miles.

The reports also reveal that approximately 9.57 percent of all visitors are international tourists who originated from the following locations:

- China (38.35 percent),
- Canada (26.38 percent),
- Brazil (9.3 percent),
- United Kingdom (15.74 percent),
- France (5.65 percent), and
- Australia (4.65 percent).

All of the international visitors flew into SFO and most (89.73 percent) took a tour bus to Carmel-By-The-Sea. Each vehicle trip averaged 110 miles between SFO and Carmel-By-The-Sea.

Carmel Realty Company³ assisted in providing generic information on second homes and vacation homes within the City of Carmel-by-the-Sea, which resulted in an estimate of approximately 20 percent of vehicle trips result from the occupants of second homes with an average trip length of

¹ Carmel Visitors Center. Visit Carmel 2019 Annual Report. Website: https://www.carmelcalifornia.com/userfiles/file/Visit_Carmel_2019_Annual_Report_Final_LowRes.pdf (accessed December 2021)

² Carmel Chamber of Commerce. 2014. Carmel Visitor Spending Report. Website: <https://www.carmelchamber.org/carmel-visitor-spending-report/> (accessed December 2021)

³ <https://www.carmelrealtycompany.com/company-history.htm> (accessed December 2021)

120 miles between the origin of the trip and the second home/vacation home during the start and end of the visit. Vehicle trip lengths of the occupants of these homes during their stay in Carmel-By-The-Sea averaged 6.5 miles.

Commute Trips represented 38 percent of all vehicle trips in the City and averaged 27 miles per trip. Local trips—vehicle trips from local residents related to shopping, school, library and other local destinations—made up 6.5 percent of all vehicle trips in the City and averaged 6.5 miles.

Delivery services providing supplies to local businesses and construction sites within the City made up approximately 10 percent of all vehicle trips and averaged 27 miles.

Using the trip origins summarized above, a gross total of 134,607,473 VMT occurred in 2019. However, only local trips within the City are counted 100 percent. Vehicle trips with origins or destinations outside of the City are shared with the jurisdiction that the other end of the trip is located. The miles for these types of trips are multiplied by 0.5 to allocate half the trip length to Carmel-By-The-Sea. This results in a total of 67,439,064 VMT allocated to the City in 2019.

There is one final issue in estimating VMT using this method. Regional origin destination models are limited to the regional boundaries of the model. There is no origin destination model that would track vehicle trips between San Francisco, Los Angeles, Fresno and the City. Such an analysis would require a statewide origin destination model. Because of this, the VMT distribution is limited to the regional model boundaries. Reviewing the Monterey County RTDM boundaries, the VMT attributable to the City is 32,658,143 in 2019.

Using the protocols, the GHG emissions associated with the VMT within the Monterey County RTDM boundaries are considered Scope 1 emissions and are counted in the GHG inventory and target setting. The United States Environmental Protection Agency (U.S. EPA) describes Scope 1 emissions as direct sources (smoke stacks or tailpipes that release emissions within an organizational boundary) of GHG emissions.¹ This definition fits well for on-road transportation related emissions within the RTDM boundaries.

The City is also interested in influencing tourist-related emissions and wants to provide strategies customized to reduce the emissions from vehicle trips originating in locations outside of the regional model limits. The U.S. Community Protocol for Accounting and Reporting GHG Emissions (version 1.2)² describes Scope 3 emissions as indirect emissions not covered under Scopes 1 and 2. The GHG emissions associated with the remaining VMT (34,780,921) outside of the Monterey County RTDM boundaries are considered Scope 3 indirect emissions and the City will develop reduction strategies focused on reducing these emissions as well.

¹ U.S. EPA. 2020. Scope 1 and Scope 2 Inventory Guidance. Website: <https://www.epa.gov/climateleadership/scope-1-and-scope-2-inventory-guidance> (accessed January 2022).

² ICLEI. 2019. U.S Community Protocol for Accounting and Reporting GHG Emissions. Website: <https://urbandrawdown.solutions/resource-database/uscp-ghge-accounting-2019> (accessed January 2022).

Table B summarizes the activity data inputs for updating the 2019 GHG inventory using the revised VMT values.

Table B: 2019 Community GHG Inventory Data Inputs Used

Sector	2019 Data Input	Source
Electricity (KWh)		
Residential	2,493	3C&E
Commercial	2,928	
Natural Gas (Therms)		
Residential	7,194	PG&E
Commercial	5,073	
Transportation		
On-Road (VMT) Scope 1	32,658,143	AMBAG Model with Out of Model Adjustments
On-Road (VMT) Scope 3	34,780,921	
Solid Waste (tons/year)	1,527	GreenWaste Recovery
Wastewater (million gallons)	74	California American Water (CalAm)/ Carmel Area Wastewater

MT CO_{2e} = metric tons of carbon dioxide equivalent
 KWh: Kilowatt Hours
 VMT: Vehicle miles traveled
 PG&E: Pacific Gas & Electric AMBAG: Association of Monterey Bay Area Governments
 CARB: California Air Resources Board

1.1.2 2019 Greenhouse Gas Emissions Summary

The City’s total emissions in 2019 were 30,962 MT CO_{2e}. As shown in Table C, the on-road transportation sector was the largest contributor to emissions in the 2019 inventory, with 45.8 percent of the City’s total GHG emissions. Natural gas made up 43.2 percent followed by solid waste at 10.3 percent of total emissions. Electricity (0.5 percent), and wastewater (0.2 percent) comprised the rest of the emissions.

Table C: Communitywide GHG Emissions by Sector for 2019

Sector	2019 (MT CO _{2e})	Percent of Total
On-road Transportation:		
Scope 1	14,173	45.8%
Scope 3	15,115	
Electricity		
Residential	63	0.5%
Commercial	92	
Natural Gas		
Residential	8,138	43.2%
Commercial	5,250	
Solid Waste	3,178	10.3%
Wastewater	68	0.2%
Total Scope 1 and Scope 2 Emissions	30,962	
Total with Scope 3 Emissions	46,076	100

Source: AMBAG and LSA 2021.
 MT CO_{2e} = metric tons of carbon dioxide equivalent

Figure 1 shows the 2019 GHG emissions by sector with energy (electricity and natural gas) divided between residential and commercial/industrial land uses. Figure 2 shows the proportion of electricity and natural gas in the energy sector.

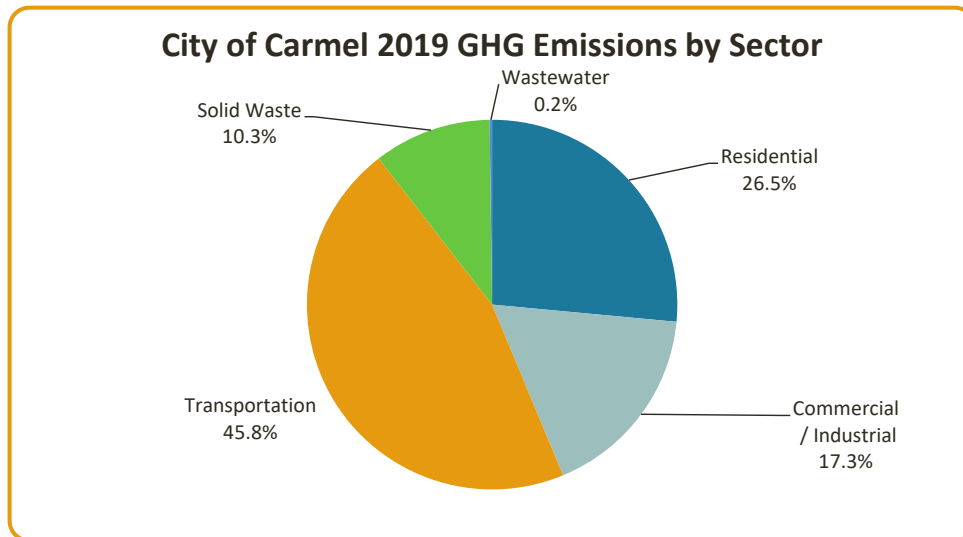


Figure 1: Communitywide GHG Emissions by Sector in 2019

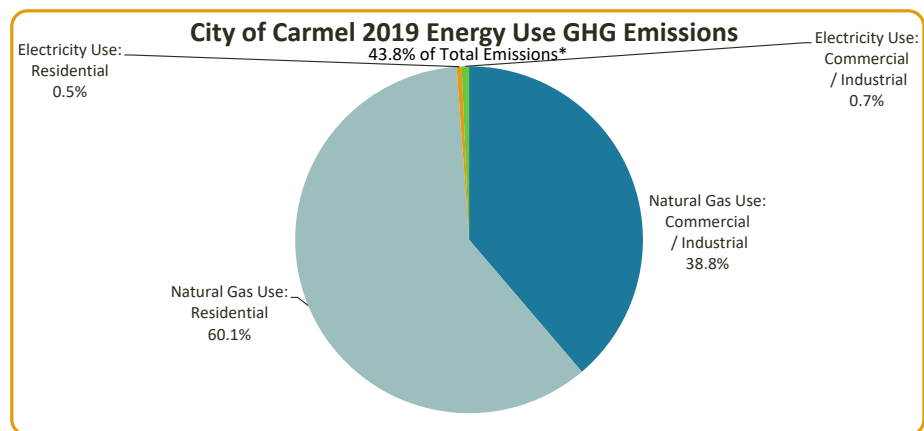


Figure 2: Energy Sector Emissions in 2019

Figure 3 breaks down the various sources of electrical generation by 3CE.

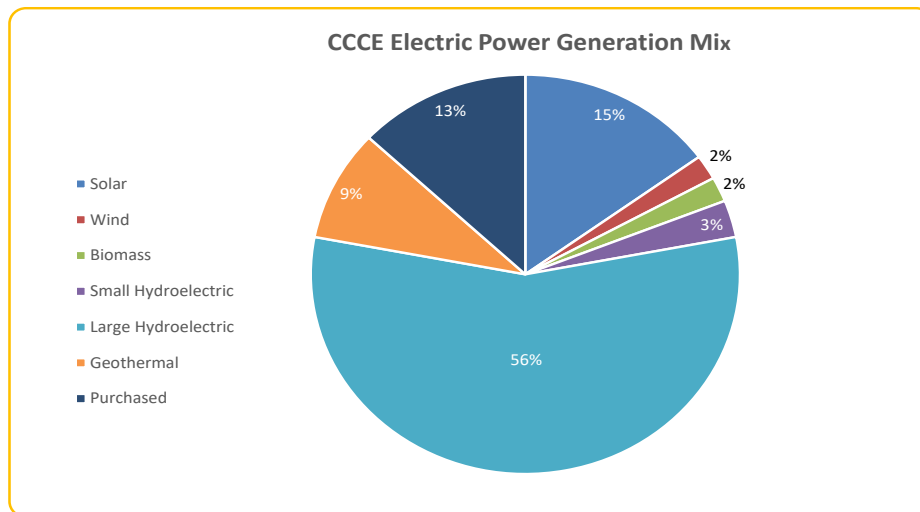


Figure 3: Sources of Electrical Power Generation

2.1 GHG Emissions Forecast

Forecasting future GHG emissions allows the City to understand how emissions are expected to increase or decrease in the future. Major changes in growth or land uses may affect how to best plan to reduce emissions in the future. GHG emissions are forecast using two scenarios: a Business-as-Usual (BAU) scenario and an Adjusted BAU (ABAU) scenario. The BAU scenario describes emissions based on projected growth in population and employment and does not consider policies that would reduce emissions in the future (that is, the policies and related efficiency levels in place in 2019 are assumed to remain constant through 2045). The City’s projected growth is estimated using data from the AMBAG’s adopted growth forecasts for Carmel By-The-Sea, which provides the City’s demographic growth indicators for the years 2030 and 2045. The growth rates for households, population, and employment were estimated based on the available data and used to estimate the growth in households, population, and employment into the year 2045. Table D shows the growth projections used to develop the emissions forecasts.

Table D: Growth Indicators for 2020, 2030, and 2045

Sector	Demographic Indicator	2020	2030	2020–2030 CAGR ¹ Percent	2045	2020–2045 CAGR Percent
Residential Energy	Households	3,437	3,442	0.0002	3,459	0.0064
Commercial/Industrial Energy	Jobs	3,556	3,674	0.0033	3,915	0.0040
N/A ²	Population	3,949	3,954	0.0001	3,984	0.0035
VMT, Solid Waste and Wastewater	Service Population (Population + Jobs)	7,515	7,628	0.0015	7,899	0.0020

Source: AMBAG, 2022 Regional Growth Forecast

¹ CAGR = Compound annual growth rate.

² Not applicable. Population data are shown for informational purposes but are not used for forecasting any sector.

The Adjusted BAU scenario describes emissions based on projected growth and considers policies that will achieve GHG reductions in the future. By evaluating the two scenarios, the City can evaluate the effect that existing policies may have on future emissions and determine which local measures would provide additional reductions.

Two future years are forecast for each scenario: 2030 and 2045. The 2030 forecast year is consistent with the goals identified in the Senate Bill (SB) 32, and the corresponding Scoping Plan, which identifies Statewide GHG reduction targets for 2030.

The 2030 BAU emissions are estimated to be 29,445MTCO₂e. By 2045, emissions are estimated to decrease to 27,471MT CO₂e. Table E shows the BAU emissions for different sectors. Table D shows a positive compounded annual growth rate (CAGR) of 0.0001 to 0.0033, which is extremely modest growth. Table E BAU shows a modest reduction in GHG emissions (a modest negative percent change). This modest reduction of emissions within the BAU forecasts is due to changes over time as people purchase newer automobiles and appliances. The BAU forecasts include 2019 levels of efficiency and as older vehicles and appliances are replaced, efficiencies of the new vehicles and appliances are an improvement compared to the older versions.

Table E: Business As Usual (BAU) Forecast Emissions

Sector	2019 (MT CO ₂ e)	2020 (MT CO ₂ e)	Percent Change 2019– 2020	2030 (MT CO ₂ e)	Percent Change 2019– 2030	2045 (MT CO ₂ e)	Percent Change 2019– 2045
On-road							
Transportation							
Scope 1:	14,173	14,117	-0.4%	13,316	-5%	12,582	-11%
Scope 3:	15,115	15,055		14,201		13,418	
Electricity							
Residential	63	63	-0.6%	60	-5%	56	-11%
Commercial	92	91		87		82	
Natural Gas							
Residential	8,138	8,122	-0.2	7,759	-4%	7,239	-11%
Commercial	5,250	5,193		4,961		4,628	
Solid Waste	3,178	3,175	-0.09	3,033	4%	2,830	-11%
Wastewater	68	62	-0.1	59	-5%	55	-12%
Total (Scope 1)	30,962	30,824		29,445		27,471	
Total (Scope 3)	46,076	45,878	-0.04	43,646	-5%	40,889	-11%

Source: LSA 2021

MT CO₂e = metric tons carbon dioxide equivalent

The City's ABAU emissions are estimated to be 30,287 MT CO₂e in 2020, 23,013 MT CO₂e in 2030, and 19,013 MT CO₂e in 2045. Table F shows the change in emissions from 2018 to 2045 under the ABAU scenario. Due to the stringent State regulations related to transportation (vehicle efficiency and low carbon fuel standards) and energy sectors (renewable energy portfolio standard and requirements for a portion of the natural gas supply to be renewable natural gas), emissions are expected to decrease significantly over time.

Table F: Community Adjusted Business As Usual (ABAU) Forecast Emissions

Sector	2019 (MT CO ₂ e)	2020 (MT CO ₂ e)	Percent Change (2019–2020)	2030 (MT CO ₂ e)	Percent Change (2019–2030)	2045 (MT CO ₂ e)	Percent Change (2019–2045)
Transportation							
Scope 1							
Scope 3	14,173	13,679	-3.5%	10,407	-26.6%	8,708	-38.6%
	15,115	14,646		11,105		9,285	
Electricity							
Residential	63	61	-3.0%	47	-25.4%	39	-38.1%
Commercial	92	89		68		57	
Natural Gas							
Residential	8,138	8,122	-0.2%	6,138	-24.6%	5,010	-38.4%
Commercial	5,250	5,193		3,935		3,203	
Solid Waste	3,178	3,077	-3.0%	2,372	-25.4%	1,958	-38.3%
Wastewater	68	66	-2.9%	46	-32.4%	38	-44.1%
Total (Scope 1)	30,962	30,287	-2.2%	23,013	-25.7%	19,013	-38.6%
Total (Scope 3)	46,076	44,933		34,118		28,298	

Source: LSA forecasts for the City Of Carmel By-The-Sea, 2021.
MT CO₂e = metric tons carbon dioxide equivalent

3.1 Reduction Targets

3.1.1 Statewide GHG Reduction Goals

The State has set goals for reducing statewide GHG emissions by 2030 and 2045 through Assembly Bill (AB) 32, Senate Bill (SB) 32, SB 100, and Executive Order (EO)-B-55-18. The State has also provided guidance to local jurisdictions as “essential partners” in achieving the State’s goals by identifying a 2030 GHG emissions target 40 percent below 1990 levels. Additionally, continued reduction goals should be implemented beyond the 2030 target to keep the State on a path toward Statewide climate neutrality by 2045.

3.1.2 Community Targets

In Carmel-by-the-Sea, the State’s target of 40 percent below 1990 levels by 2030 amounts to a reduction of 12,174 metric tons of CO₂ equivalent in annual emissions by 2030 compared to the BAU forecast (see Table G).

Under the ABAU scenario, Carmel-by-the-Sea would need to reduce its emissions by 5,742 MT CO₂e by 2030 to meet the State target. The City needs to implement additional strategies and measures to adhere to these State GHG reduction goals.

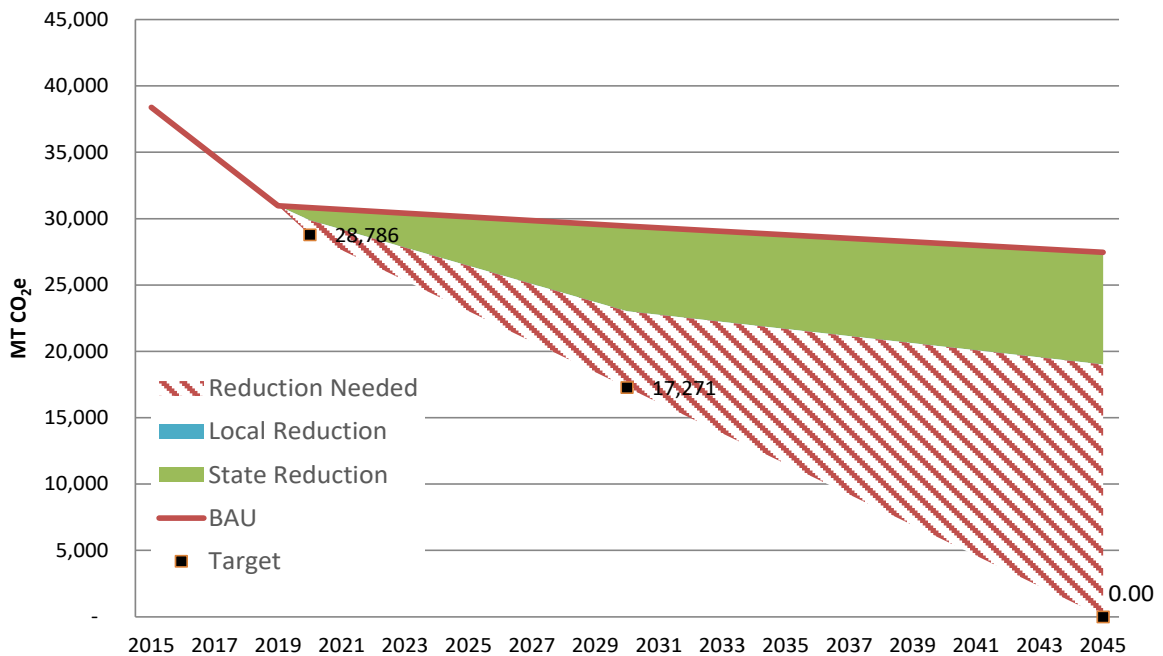
Table G: GHG Reduction Targets By Year

Sector	1990	2019	2030	2045
BAU Emissions (MT CO ₂ e)	28,786 ¹	30,962	29,445	27,471
ABAU Emissions (MT CO ₂ e)	N/A	N/A	23,013	19,013
State-Aligned Target	N/A	N/A	40% below 1990 levels of emissions	Carbon Neutral
State-Aligned Emissions Goal (MT CO ₂ e)	N/A	N/A	17,271	0
Reductions from ABAU needed to meet the State-Aligned Target (MT CO ₂ e)	N/A	N/A	5,742	19,013

Source: Compiled by LSA 2022
 MT CO₂e = metric tons carbon dioxide equivalent
 N/A = Not Applicable
¹ 1990 levels of emissions approximated as 25 percent below the updated 2018 inventory of GHG emissions

Figure 4 depicts the BAU and ABAU forecasts, reduction targets, and additional GHG emission reductions required to meet the reduction targets.

City of Carmel-By-The-Sea, 2015 - 2045



ABAU: adjusted business as usual
 BAU: business as usual
 MT CO₂e = metric tons of carbon dioxide equivalent

Figure 4: Community Emissions Inventory, Forecasts, and Targets

Attachment 2

Carmel By-The-Sea Community Reduction Measures (Revision 2, 2/10/2022)

Goal	Measure	Action	Responsibility/ action needed for implementation	2030 GHG Reductions Achieved (MT CO2e)		GHG Reduction Potential	Timing (Phased Implementation)	Notes	
				No Enhancing	With Enhancing*				
Goal 1. Increase Energy Efficiency in Existing Residential									
	Measure 1.1	Energy Efficiency Training, Education, and Recognition in the Residential Sector Actions Post links on website and/or social media and provide materials at public events Promote an annual energy efficiency fair Promote an energy efficiency resource center Invite building inspectors to hold trainings semi-annually on energy efficiency and Title 24 requirements		The actions taken by the City can increase participation levels of other measures.	1.7	1.7	Supporting Measure	Years 1-3	A variety of studies were used to determine low to high rates possible (up to 85% in participation rates of Measure 1.4 if all of these actions are taken).
	Measure 1.2	Increase Community Participation in Existing Energy Efficiency Programs Actions Partner with AMBAG and Central Coast Community Energy (3CE) for outreach events			1.7	1.7	Low	Years 2-4	CPUC EESStats data provides reductions achieved in utility programs. Reductions for the City were based on per-capita reductions.
	Measure 1.3	Home Energy Evaluations Actions Promote and provide energy audits with 3CE		The actions taken by the City and COG can increase participation levels of other measures.			Supporting Measure	Years 1-3	Similar to Measure 1.1, this measure augments participation level assumptions for Measure 1.4 up to 75% if all of these actions are taken. Assumptions used a variety of studies evaluating the effectiveness of the actions described.
	Measure 1.4	Residential Home Energy Renovations Actions Enhance enforcement of Title 24 compliance Promote existing home energy renovation programs Promote participation in green building programs, such as Leadership in Energy and Environmental Design (LEED) and Energy Upgrade California Promote financing programs for home upgrades, such as Home Energy Renovation Opportunity (HERO) and Property Assessed Clean Energy (PACE) Streamline online permitting to facilitate retrofits Initiate a Green Citizen Program for residents that initiate home renovations that include electrification of their home, improve energy efficiency and install an e charger or use an NEV. Provide incentives to homeowners to convert to all electric homes Require home renovations/room additions that encompass 70 percent of the home to convert to all electric homes.			1,217.5	1,294.6	Medium-High	Years 2-4	Energy renovations would be focused on total existing houses, pre-1980 houses or annual housing sales. Participation rate is based on CSI data, except for HERO which is assumed 1% per year of homeowners.
Goal 2. Increase Energy Efficiency in New Residential									
	Measure 2.1	Exceed Energy Efficiency Standards Actions Educate City staff and developers on future Title 24 updates and new energy efficiency opportunities for new residential development Promote Tier 1 and Tier 2 green building ratings such as LEED, Build It Green, or Energy Star® certified buildings Streamline online permitting to facilitate new energy efficiency opportunities Require new residential buildings to be all electric homes			0.01	0.01	Medium-High	Years 1-3	Participation can be up to 100% depending on the number of actions and knowledge of staff, aggressiveness of promotion. Assumed per unit energy savings 14%.
Goal 3. Increase Energy Efficiency in Existing Commercial Units									
	Measure 3.1	Energy Efficiency Training, Education, and Recognition in Commercial Sector Actions Post links on website and/or social media and provide materials at public events Promote an annual energy efficiency fair Promote a resource center Invite building inspectors to hold trainings semi-annually on energy efficiency and Title 24		The actions taken by the City may increase participation levels of other programs by up to 85%			Supporting Measure	Years 1-3	A variety of studies were used to determine low to high rates possible (up to 85% in participation rates of Measure 3.4 if all of these actions are taken).
	Measure 3.2	Increase Business Participation in Existing Energy Efficiency Programs Actions Partner with AMBAG and 3CE for outreach events			69.4	69	Medium	Years 1-3	Assumption based on CPUC EESStats data. Participation rate is 62%.
	Measure 3.3	Non-Residential Building Energy Audits Actions Promote and provide energy audits with 3CE		The actions taken by the City and COG can increase participation levels of other measures.			Supporting Measure	Years 1-3	Participation rate is determined by the permit process since renovations require permits from the City, and by renovation/additions proposed. Buildings that were benchmarked consistently reduced energy use by an average of 2.4% per year according to EPA's study. Participation levels assumed to be 31% of total businesses.

* With Enhancing = increased participation resulting in greater reductions when combined with Supporting Measures such as education and outreach.

Attachment 2

Goal	Measure	Action	Responsibility/ action needed for implementation	2030 GHG Reductions Achieved (MT CO2e)	GHG Reduction Potential	Timing (Phased Implementation)	Notes
	Measure 3.4	Non-Residential Building Retrofits		1,206.2	1,666		
		Actions Enhance enforcement of Title 24 compliance Promote existing non-residential building retrofits programs Promote green building programs, such as California Solar Initiative Promote financing programs such as PACE Provide incentives to business owners to convert to all electric buildings Streamline online permitting to facilitate retrofits Initiate a Green Business Certification Program for businesses that follow the California Green Business Program: (www.greenbusinessca.org) Require commercial building retrofits/expansion that encompass 70 percent or more of the existing building area to convert to all electric building unless the business can show a need for natural gas (restaurants, pottery kilns, etc..)			Medium-High	Years 3-5	Market participation is based on Residential Rates for same programs. Assumes base size of 10,000 sf per participating building. Assume average kW capacity installed in the PG&E Region on a small commercial projects is 5.66 kW. Assumes an average renovation rate of 2 percent of commercial land uses, with a max renovation rate of 5 percent of commercial land uses.
Goal 4.	Measure 4.1	Exceed Energy Efficiency Standards		0	0		
		Actions Educate City staff and developers on future Title 24 updates and additional energy efficiency opportunities for new non-residential development Promote Tier 1 and Tier 2 Green Building Ratings such as LEED, Build It Green, or Energy Star® certified buildings Streamline online permitting to facilitate new energy efficiency permits Create an energy award program for zero-net-energy businesses Require new commercial buildings to be all electric with exemptions for restaurants or other uses that can demonstrate a need for nat. gas.			Medium-High	Years 2-4	Assumed per unit energy savings 14% to meet Title 24 and 10% to exceed Title 24. Participation rate is 100% if all the actions under this measure are taken.
Goal 5.	Measure 5.1	Water Efficiency through Continued Implementation of SB X7-7		2.9	3		
		Actions Post links on website or social media and provide materials at public events Require low-irrigation landscaping			Medium	Years 1-3	Percentage volume reduction assumes half of water used is for outdoor use, and that measures would result in a 20% reduction in outdoor water use, for an overall 10% reduction in water consumption for participating households. For water used for landscape, assumed 90% of water consumed by residential uses and 50% of residential consumption is for landscaping. Assumed 0.7% scaled measure performance based on 100% participation from residents and would result in a 20% reductions per capita.
	Measure 5.2	Exceed Water Efficiency Standards		-	-		
		Actions Conduct direct outreach to HOA, businesses, and other community groups Allow recycled water for commercial, industrial and multi-family residential landscaping Allow grey water for community uses Promote rainwater harvesting rebates and demonstrations			Low-Medium	Years 3-5	Up to 100% of outdoor water GHG emissions if outdoor water use is replaced completely with grey water. Assumed 5 rain events per year, 100 gallon capacity onsite, and emptied between rain events.
Goal 6.	Measure 6.1	Tree Planting for Shading and Energy Saving		-	-		
		Actions Maintain the health of the Urban Forest tree canopy in the City Continue to work with the Friends of the Carmel Forest and the community to facilitate Urban Forest maintenance. Update the City's Urban Forest Management Plan to include tree planting guidelines to promote tree health and maintain a healthy urban forest canopy.			Low	Years 1-3	Assumed for 8,000 mature trees performance level equals 1,696 MT CO2e reduction from energy savings and 779 MT CO2e sequestration benefit. Assumed 2.5% reduction in cooling load for residential and nonresidential land uses due to reduced urban temperatures.
	Measure 6.2	Light-Reflecting Surfaces for Energy Saving		0.0	0		
		Actions Revise Existing Ordinance to allow more cool roof options on the residential, commercial, industrial or office buildings where feasible Promote Cool pavements in the City where feasible			Medium	Years 3-5	Assumed 5.02 kWh per square meters nationwide energy savings for increased Albedo. Energy Savings is assumed to be 20% of the lighting energy, calculated as energy per person.
Goal 7.	Measure 7.1	Alternative Transportation Options		563	563		
		Actions Work with AMBAG to remove barriers to alternative transportation such as exploring ways to provide a pedestrian bridge over the highway Explore the feasibility of increasing the land use density in downtown during the next General Plan Land Use Element Update. Identify and promote within the hotels and visitors center existing shuttle services between Carmel and the airports Work with Monterey Airport and AMBAG to explore feasibility of electric shuttle between Monterey Airport and City destinations			Low-Medium	Years 2-10	CAPCOA Quantifying Greenhouse Gas Mitigation suggests 0.01-0.2% annual VMT reduction through creating urban non-motorized zones.
	Measure 7.2	Develop Bicycle Master Plan to Create Safe Bike Routes around the City		10	10		
		Actions Develop customized bike routes to improve bike transit Provide signage, reduce speed limits as necessary, and develop safety education programs on "sharing the roads" with bikes.			Low-Medium	Years 3-5	Participation rate is based on increase in Pedestrian Environment Factor, and high end is based on maximum reduction amount for pedestrian or bike factor. Assume reduction amount set at half of the market penetration trips.

* With Enhancing = increased participation resulting in greater reductions when combined with Supporting Measures such as education and outreach.

Attachment 2

Goal	Measure	Action	Responsibility/ action needed for implementation	2030 GHG Reductions Achieved (MT CO2e)	GHG Reduction Potential	Timing (Phased Implementation)	Notes
	Measure 7.3	Ride-Sharing and Bike-to-Work Programs within Businesses		-	-	Low-Medium	Experience indicates that ridesharing programs typically attract 5-15% of commute trips if they offer only information and encouragement, and 10-30% if they also offer financial incentives such as parking cash out or vanpool subsidies.
	Actions	Promote ride-sharing and facilitate air district incentives for ride-sharing Provide reserved preferential parking spaces for ride-sharing, carpooling, and ultra-low or zero-emission vehicles Require businesses of a certain size to provide facilities such as bike racks and showers				Years 1-3	
	Measure 7.4	Electrify the Fleet		1,511	1,538	High	
Actions	Promote electrical vehicle incentive programs at outreach meetings Promote neighborhood electric vehicles (NEV) Apply for grants to install e-chargers at public facilities Work with community groups and businesses to install additional e-chargers Provide priority parking at hotels for electric vehicles and provide e-chargers Provide priority parking for bus tours that use electric buses Initiate a Green Visitor Program that awards tourists that use electric vehicles, carbon credits for air miles, and adheres to the sustainability practices while visiting. Require or incentivize major commercial building expansions/remodels to install e-chargers			Years 3-5	Market penetration is from Victoria Transport Policy Institute, which is the participation rate of 5-15% and enhancing rate of 10-25%. Reduction amount assumes all of market penetration VMT is switched to alternative Travel.		
Measure 7.5	Initiate Origin/Destination Transportation Model				Years 3-5		
	Actions	Develop an Origin Destination Transportation Model focused on Carmel-by-the-Sea using the AMBAG Regional Model as a base. Update the CAP with new Vehicle Miles Traveled data once Origin Destination Transportation Model is completed.					
Goal 8.	Decrease GHG Emissions through Reducing Solid Waste Generation						
	Measure 8.1	Reduce Waste to Landfills		1,500	1,500	Low-Medium	Reduction is from enhanced enforcement for AB 341 and SB1383, Mandatory Commercial Recycling, which is 60% recycling, composting or sources reduction. 5 GHG reduction from reduced waste is calculated from CalRecycle's WARM model.
	Actions	Promote zero waste events, use of reusables rather than recyclable materials, and buy local to reduce waste. Require waste hauler to pick up organic waste in compliance with SB 1383 Promote home composting and community gardens within the community. Educate the community on proper use of the city-provided grey/green/blue containers			Years 1-3		
Goal 9.	Decrease GHG Emissions through Increasing Clean Energy Use						
	Measure 9.1	Promote Clean Energy		364	364	Medium	Reduction focuses on rooftop PV solar installations, which will modestly reduce GHG emissions, but provide better resiliency by developing individual microgrids when combined with energy storage systems.
	Actions	Promote clean energy incentives to the community Incentivize solar panels installation on existing residential buildings Require or incentivize solar panels installation on major commercial building expansion/retrofits and commercial parking lots Promote energy storage systems installation with solar panels			Years 3-5		
	Measure 9.2	Continue Participation with 3CE to increase the Renewable Generation Portfolio of Electricity in Carmel		-	-	Medium-High	Reduction mainly comes from participation in Community Choice Aggregation with continued 3CE participation. The City could opt for the 100% Renewable Option and promote the same within the community. Clean energy percentage is decided by existing programs. The program is opt-out basis, and the anticipated average opt-out rate is estimated to be within a range from 3-5%, so the participation rate is 95-97%.
	Action	Promote 3CE's 100% renewable energy options in the City by encouraging residents and businesses to participate in the program			Years 1-3		
* With Enhancing = increased participation resulting in greater reductions when combined with Supporting Measures such as education and outreach.							
Total				6,446	7,010		

City of Carmel-By The-Sea Community Energy Reduction Measures

FIGURE 1: Local Energy Reduction Quantification by Goal (2030)

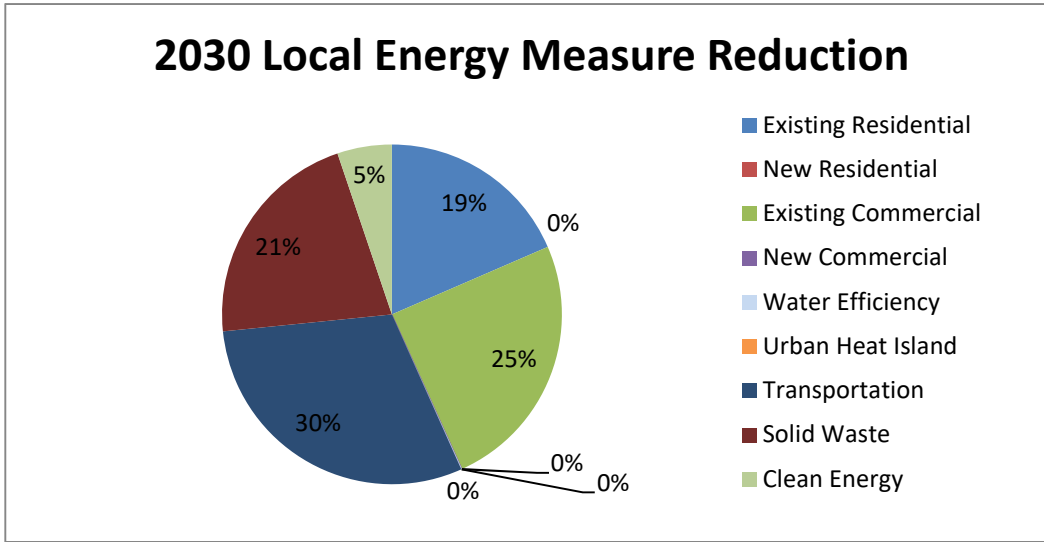


FIGURE 2: Local Energy Reduction Quantification by Goal (2030)

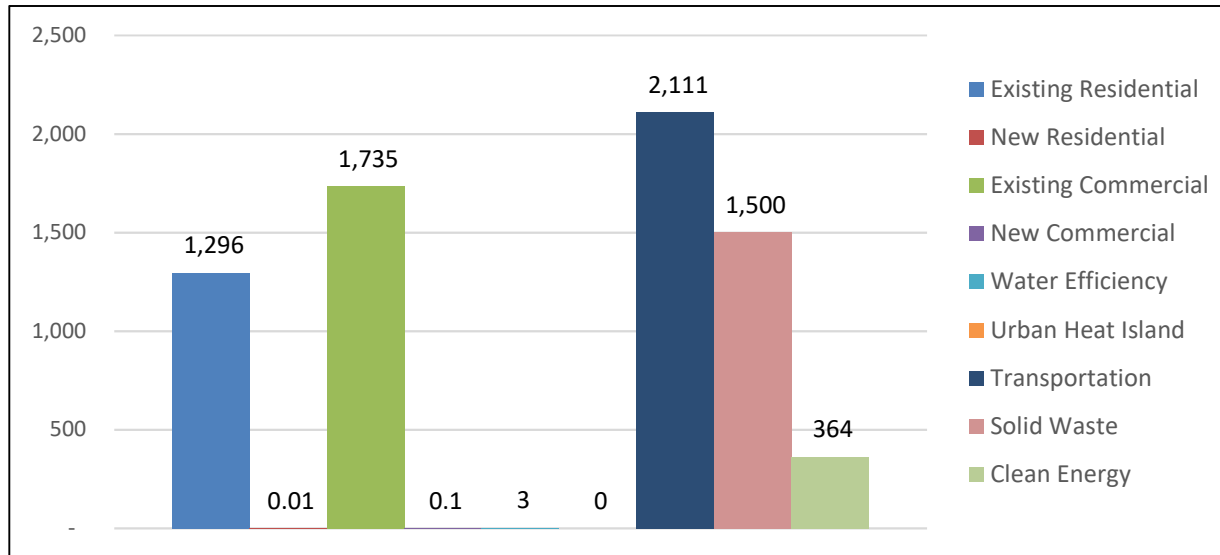
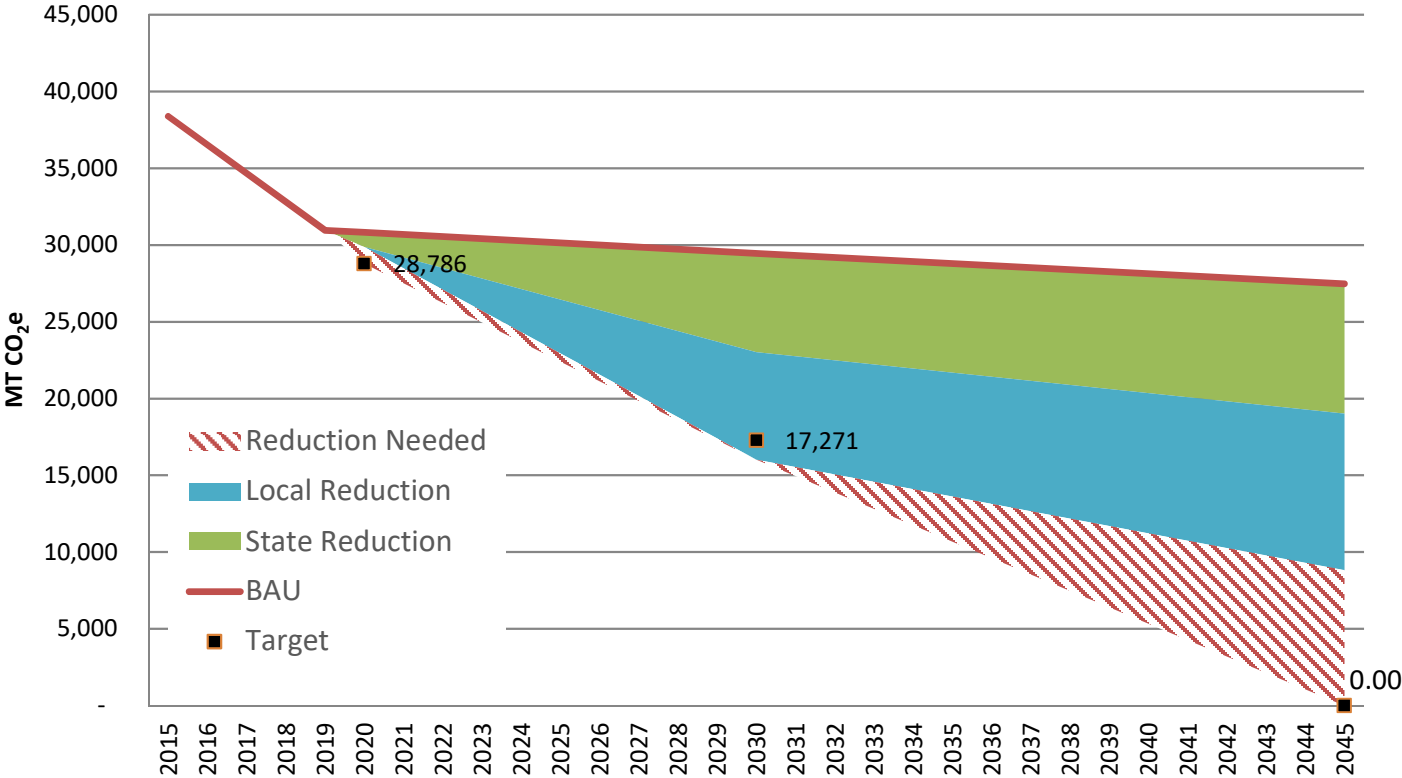


FIGURE 3: Existing and Forecasted Emissions with Local Reduction Measures

City of Carmel-By-The-Sea, 2015 - 2045





CITY OF CARMEL-BY-THE-SEA

Climate Committee

Staff Report

February 17, 2022
ORDERS OF BUSINESS

TO: Climate Committee Members

SUBMITTED BY: Agnes Martelet, Environmental Compliance Manager

SUBJECT: Receive a Project Status Update and Discuss Community Outreach

RECOMMENDATION:

Receive a project status update and discuss community outreach next steps.

BACKGROUND/SUMMARY:

Staff will provide a project status update, including information on work completed to date and upcoming reviews of the Committee's work products at the Planning Commission, Forest & Beach Commission, and City Council (see updated Work Plans for the Climate Adaptation Plan and Climate Action Plan in Attachment 1).

Climate Committee members should discuss public outreach next steps on the draft Climate Action and Adaptation Plans to complete this project. Thereafter, the future of the Climate Committee will be discussed in the next agenda topic. The List of Community Organizations and Regional Partners to Engage is included in Attachment 2 for reference.

FISCAL IMPACT:

N/A

ATTACHMENTS:

Attachment 1: Updated Climate Adaptation and Action Work Plans

Attachment 2: Community Organizations and Regional Partners to Engage (September 2021)

Climate Adaptation Plan

WORK PLAN - UPDATE

February 17, 2022

Attachment 1

Project Phase	Tasks	Suggested Lead(s)	Done?	Timeline																							
				Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	
Phase I - Project Definition and Initiation																											
	Assemble project team	Council	✓																								
	Identify desired project outcomes (mission)	Committee	✓																								
	Define priority hazards, assets, and resilience goals	Council	✓																								
	Define data source(s) and reliability, and data gaps for priority hazards & assets	Staff	✓																								
	Identify & make contact with community organizations to engage with for information sharing and coordination	Committee	✓																								
	Identify & make contact with regional partners to engage with for information and coordination	Committee	✓																								
	Identify sources of support & timing of support where applicable (e.g. grants)	Staff	✓																								
	Council Update on priority hazards, assets, and partners	Staff	✓																								
Phase II - Assess Vulnerability																											
	Describe historical hazard events, impacts, and identified vulnerabilities	Committee / staff	✓																								
	Finalize list of climate effects of most concern, and assets and populations that will be susceptible to them	Council / Committee	✓																								
	Adaptive capacity and existing resources: develop matrix of existing community resources and policies that provide adaptation capacity	Staff	✓																								
	Develop Vulnerability Scores for potential impacts and adaptive capacity	Staff / Committee	✓																								
	Council Update on Vulnerability Scoring	Staff	✓																								
	Engagement and Outreach to gather feedback on local vulnerabilities and strengths, community priorities and ideas for adaptation	Committee / Staff	✓																								
Phase III - Define Adaptation Strategies																											
	Confirm project outcomes and resilience goals	Committee	✓																								
	Review community ideas for adaptation and examples from other jurisdictions	Consultant	✓																								
	Assemble draft adaptation strategies	Consultant	✓																								
	Review and prioritize strategies	Committee	✓																								
	Council Review of Prioritized Strategies	Council																									
	Engagement and Outreach: Public workshop to develop and gather feedback on proposed strategies	Committee / Consultant	✓																								
Phase IV - Adaptation Plan																											
	Assemble a Climate Adaptation Plan	Consultant																									
	Climate Committee review of the Adaptation Plan	Committee																									
	Engagement and Outreach: gather feedback on the Adaptation Plan	Committee																									
	Planning and Forest & Beach Commissions Review	Staff																									
	Council Review	Council																									
	Final Edits based on Public Feedback	Consultant / staff																									
	Council Adoption	Council																									

★ = public review meeting other than regular Climate Committee meeting

Climate Adaptation Plan

WORK PLAN - UPDATE

February 17, 2022

Project Phase	Tasks	Suggested Lead(s)	Done?													
				Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22
Phase I - Project Definition and Initiation																
	Assemble project team	Council	✓													
	Identify desired project outcomes (mission)	Committee	✓													
	Define priority hazards, assets, and resilience goals	Council	✓													
	Define data source(s) and reliability, and data gaps for priority hazards & assets	Staff	✓													
	<i>Identify & make contact with community organizations to engage with for information sharing and coordination</i>	Committee	✓													
	<i>Identify & make contact with regional partners to engage with for information and coordination</i>	Committee	✓													
	Identify sources of support & timing of support where applicable (e.g. grants)	Staff	✓													
	<i>Council Update on priority hazards, assets, and partners</i>	Staff	✓													
Phase II - Assess Vulnerability																
	<i>Describe historical hazard events, impacts, and identified vulnerabilities</i>	Committee / staff	✓													
	Finalize list of climate effects of most concern, and assets and populations that will be susceptible to them	Council / Committee	✓													
	<i>Adaptive capacity and existing resources: develop matrix of existing community resources and policies that provide adaptation capacity</i>	Staff	✓													
	Develop Vulnerability Scores for potential impacts and adaptive capacity	Staff / Committee	✓													
	Council Update on Vulnerability Scoring	Staff	✓													
	<i>Engagement and Outreach to gather feedback on local vulnerabilities and strengths, community priorities and ideas for adaptation</i>	Committee / Staff	✓													
Phase III - Define Adaptation Strategies																
	Confirm project outcomes and resilience goals	Committee	✓													
	Review community ideas for adaptation and examples from other jurisdictions	Consultant	✓													
	Assemble draft adaptation strategies	Consultant	✓													
	Review and prioritize strategies	Committee	✓													
	Council Review of Prioritized Strategies	Council														
	<i>Engagement and Outreach: Public workshop to develop and gather feedback on proposed strategies</i>	Committee / Consultant	✓				★									
Phase IV - Adaptation Plan																
	Assemble a Climate Adaptation Plan	Consultant														
	Climate Committee review of the Adaptation Plan	Committee														
	<i>Engagement and Outreach: gather feedback on the Adaptation Plan</i>	Committee														
	Planning and Forest & Beach Commissions Review	Staff														
	Council Review	Council														
	Final Edits based on Public Feedback	Consultant / staff														
	Council Adoption	Council														★

★ = public review meeting other than regular Climate Committee meeting

**Climate Action Plan
WORK PLAN**

February 17, 2022 Update

Project Phase	Tasks	Suggested Lead(s)	Done?														
				Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22
Phase I - Project Definition and Initiation																	
	Create a Climate Action Plan Advisory Committee	Council	✓														
	Identify desired project outcomes (mission)	Committee	✓														
	Education: Background on GHG Inventory	Staff	✓														
	Education: Climate Action Planning Guidance	Staff	✓														
	Work Plan & Discuss the Scope of the Plan	Staff	✓														
	Identify & make contact with community organizations to engage with for information sharing and coordination	Committee	✓														
**	Identify & make contact with regional partners to engage with for information and coordination	Council	✓														
**	Identify sources of support & timing of support where applicable (e.g. grants)	Staff	✓														
**	Identify opportunities for community workshops and educational outreach (continuous)	Council/Committee															
**	Council Update on Phase I progress	Staff	✓														
Phase II (Option A) - Baseline Assessments & Target Adoption (Community Only)																	
	Establish/Adopt Community Inventory Baseline (2015, 2018) - <i>AMBAG to deliver community Inventory (Date TBD)</i>	Committee	✓														
	Identify Goals and GHG Emissions Reduction Targets	Consultant / Committee	✓														
	Estimate trends through an emissions forecast	Consultant	✓														
**	Council Update on Inventories and Forecasting	Staff															
	Community workshop	Council/Committ	✓					★									
Phase III - Develop Climate Action Plan																	
	Identify Greenhouse Gas Emissions Reduction Strategies	Consultant / Committee	✓														
	Review and prioritize strategies	Consultant / Committee	✓														
	Conduct Analysis and Assemble Plan Strategies	Consultant															
	Create Implementation Framework and Timeline	Consultant / Staff															
	Gather feedback on proposed strategies & implementation timeline	Committee															
	Planning and Forest & Beach Commissions Review of Draft Plan	Staff													★		
	Council Review of Draft Plan	Council													★		
Phase IV - Action Plan Implementation & Adoption																	
**	Assemble Climate Action Plan Report	Staff															
**	Review and Finalize Report	Staff															
**	Council Review and Adoption of the Plan	Council															★

** shared task with Adaptation Plan

denotes task completed after consultant was hired

★ = Public review meeting other than regular Climate Committee meeting

Community Organizations and Regional Partners to Engage

City of Carmel-by-the-Sea Climate Project

September 16, 2021

	ORGANIZATION	Topic (s)	Contact Persons	Committee Lead	Previously Contacted?	Contact for Strategy Outreach?
	Utilities					
1*	Carmel Area Wastewater District	Sewer system Wastewater Treatment Facility	Barbara Buikema, Daryl Lauer	Jeff Baron, Agnes Martelet	Y	<send draft report>
2	Central Coast Community Energy (was Monterey Bay Community Power)	Energy supply	Dan Bertoldi J.R. Killigrew	Evan Kort, Agnes Martelet	Y	<send intro letter soon; combine with CCCE, CC, MPWMD>
3	Cal Am	Water supply		Michael LePage		
4	Monterey Peninsula Water Management District	Water supply	Stephanie Locke	Michael LePage	Y	<send intro letter soon; combine with CCCE, CC, MPWMD>
5	GreenWaste Recovery	Waste management and recycling	Jim Moresco	Carrie Theis, Agnes Martelet		<send draft report>
6	Monterey Regional Waste Management District	Waste management and recycling	Tim Flanagan	Carrie Theis	Y	<send draft report>
7	PG&E	Energy supply	Jeana Arnold Teri Vetere	Carrie Theis, Jeff Baron	Y	<send draft report>

	ORGANIZATION	Topic (s)	Contact Persons	Committee Lead	Previously Contacted?	Contact for Strategy Outreach?
Professional Organizations						
1	California AIA	Built environment resilience	Libby Barnes	John Hill	Y	<send draft report> then solicit recs.
2	Chamber of Commerce	Local business, tourism	Jenny McMurdo	Carrie Theis	Y	On agenda for presentation to board at retreat in November.
3	Monterey County Association of Realtors	Sea Level Rise Wildfire risk	Scott Dick, Ben Beasley	Scott Lonergan, LaNette Zimmerman	Y	Keep informed re. progress in interested areas (point of sale mandates, disclosure requirements, etc.) then make plans as needed.
4	Visit Carmel	Visitors / local business	Amy Herzog	Carrie Theis	Y	Presenting climate change concept to Visit Carmel at their October meeting on October 14 th .
5	Sunset Center	Resilience	Beth Bowman (chair Wayne Moon)	LaNette Zimmerman		<send intro letter soon; combine with CCCE, CC, MPWMD>

	ORGANIZATION	Topic (s)	Contact Persons	Committee Lead	Previously Contacted?	Contact for Strategy Outreach?
	Local Community Groups					
1	Carmel Residents Association	Community resilience Climate action	Fred Bologna Nancy Twomey	Jeff Baron	Y	Meeting on September 23. More TBA.
2	Carmel Rotary Club	Community resilience Climate action	Susan Prest	Carrie Theis, Jeff Baron	Y	Announcement before the workshop. Meeting after the workshop.
3	Carmel Lions Club	Community resilience Climate action	Heidi Mozingo	Carrie Theis		In process of reaching out to Heidi. Possible workshop.
4	Friends of Carmel Forest	Urban forest	Ramie Allard	Scott Lonergan		<send draft report> (not much to do here other than ensure public process for draft forestry report)
5	Friends of MTNP	Wildfire risk Sensitive habitats	Karen Ferlito Greg D'Ambrosio	Scott Lonergan	Y	Email outreach strategy currently; on the lookout for areas of interest and/or further outreach.
6	Del Monte Forest Conservancy	Wildfire risk		Scott Lonergan	Y	Scott to reach out to determine DMFC efforts in this area.
7	Landwatch	Transportation, housing	Mike DeLapa	Jeff Baron	Y	X
8	Sustainable Carmel	Climate action	Ellen Gannon	Agnes Martelet		Try to reengage
9	Church auxiliaries	Community resilience		LaNette Zimmerman	Y	<send intro letter soon; combine with CCCE, CC, MPWMD> Possible shelter etc.
10	Heritage Society	Community resilience	Karl Iverson	Michael LePage		X
11	Carmel Women's Club	Community resilience Climate action	Nancy Twomey	Jeff Baron		X

	ORGANIZATION	Topic (s)	Contact Persons	Committee Lead	Previously Contacted?	Contact for Strategy Outreach?
	City Departments					
1	Police	Emergency preparedness Transportation	Brian Uhler	Agnes Martelet	Y	<send draft report> then start to reach out in earnest
2	Fire	Emergency preparedness	Carmyn Priew	John Hill	Y	<send draft report> then start to reach out in earnest
3	Forestry Division (PW)	Urban forest Sensitive habitats	Sara Davis	Agnes Martelet	Y	<send draft report> then start to reach out in earnest
4	Public Works	Storm Drain Master Plan	Bob Harary	Agnes Martelet	Y	<send draft report> then start to reach out in earnest
5	Library	Historic events	Katie O'Connell	Evan Kort	Y	

	ORGANIZATION	Topic (s)	Contact Persons	Committee Lead	Contacted?	Contact for Strategy Outreach?
City Commissions						
1	Forest & Beach Commission	Sea Level Rise Urban forest Sensitive habitats Climate action	Sara Davis	Scott Loneragan	Y	Meeting announcement at 11/11/2021 meeting. Add commissioners to email distribution list. TBD
2	Planning Commission	Built environment resilience Climate action	Brandon Swanson	Michael LePage		Meeting announcement at 11/10/2021 meeting. Add commissioners to email distribution list. X
3	City Traffic Safety Committee	Transportation	Bob Harary	Agnes Martelet	Y	<send draft report> then start to reach out in earnest

	ORGANIZATION	Topic (s)	Contact Persons	Committee Lead	Contacted?	Contact for Strategy Outreach?
Federal / State / Regional Agencies						
1	AMBAG	Climate Action Transportation	Amaury Berteaud	Agnes Martelet	Y	Constant outreach underway.
2	USGS	Sea Level Rise	Patrick Barnard	Agnes Martelet	Y	<remove>
3	CalFire	Wildfire risk and resilience Urban forest management	John Reynolds	John Hill	Y	<send draft report> then solicit recs.
4	CA Department of Insurance	Wildfire risk / home insurability	Ricardo Laura	John Hill	Y	<remove>
5	Fire Safe Council for Monterey County	Michael Emmett		John Hill	Y	
6	California Coastal Commission	Sea Level Rise		Jeff Baron, Agnes Martelet		<send intro letter soon; combine with CCCE, CC, MPWMD>
7	IRWMP Group	Water supply Watershed / storm water projects		Michael LePage		
8	Monterey County (OES)	Resilience planning	Kelsey Scanlon	Agnes Martelet	Y	Already involved. Potential partner. Keep well informed.
9	Monterey County	Sustainability Climate Action	Ashley Paulsworth	Agnes Martelet	Y	Already involved.
10	Monterey Bay National Marine Sanctuary (NOAA)	Marine Sanctuary impacts Carmel Beach	Karen Grimmer	Agnes Martelet	Y	<send intro letter soon; combine with CCCE, CC, MPWMD>
11	Transportation Agency of Monterey County	Transportation		Jeff Baron		<send intro letter soon; combine with CCCE, CC, MPWMD>
12	MST	Transportation		Jeff Baron		<send intro letter soon; combine with CCCE, CC, MPWMD>
13	US Navy / Coast Guard	Coastal impacts		Carrie Theis		<send report>

	ORGANIZATION	Topic (s)	Contact Persons	Committee Lead	Contacted?	Contact for Strategy Outreach?
	Educational Groups					
1	Carmel High School Environmental Club	Internships Climate Action partnership / Green Schools	Ellen Gannon	LaNette Zimmerman Scott Lonergan	Y	Brainstorm educational outreach strategies.
2	Stevenson, York, Santa Catalina	Climate Action partnership / Green Schools		LaNette Zimmerman Scott Lonergan	Y	
3	Youth Center	Climate Action partnership / Green Schools		LaNette Zimmerman, Scott Lonergan		
4	CSUMB	Internships Climate Action partnership / Green Schools		LaNette Zimmerman, Scott Lonergan	Y	
5	MPCC	Internships Climate Action partnership / Green Schools		LaNette Zimmerman, Scott Lonergan		
6	MIISS	Climate Action partnership / Green Schools		LaNette Zimmerman, Scott Lonergan	Y	
7	NPS	Climate Action partnership / Green Schools	Ann E. Rondeau (ret.) (pao@nps.edu)	LaNette Zimmerman, Scott Lonergan		

	ORGANIZATION	Topic (s)	Contact Persons	Committee Lead	Contacted?	Contact for Strategy Outreach?
Regional Non-Profit Organizations						
1	Monterey Bay Aquarium	Marine Sanctuary impacts Climate Action Support		Carrie Theis		<send report, then have conversation>
2	Ecology Action	Climate Action Support	Kirsten Liske	Agnes Martelet		<presentation at 10/21 Climate Committee mtg>
Other Stakeholders						
1	Pebble Beach Company	Emergency response routes, Fire danger (also see their response re. Bluffs / Seawalls / Beach Regional transportation)	Mike Niccum	Carrie Theis		Carrie to contact soon; work on common points of interest.
2	Principals Involved in 1983 response; authors of the CBTS Shoreline Management Plan	Bluffs / Seawalls / Beach	Greg D'Ambrosio (past Assistant City Administrator); David Shonman (Coastal Biologist)	Evan Kort, Scott Lonergan	Y	
3	Cities with similar challenges (e.g. PG, Monterey, Seaside, Pacifica, Del Mar, Malibu)			Jeff Baron, Carrie Theis		Start looking at other reports. Ask consultants ASAP for list of cities that are most relevant.



CITY OF CARMEL-BY-THE-SEA

Climate Committee

Staff Report

February 17, 2022
ORDERS OF BUSINESS

TO:	Climate Committee Members
SUBMITTED BY:	Jeff Baron, Council Member
SUBJECT:	Discuss the Future of the Climate Committee and Climate Change Planning in Carmel

RECOMMENDATION:

Discuss the future of the Climate Committee and climate change planning in Carmel.

BACKGROUND/SUMMARY:

As the development of Climate Adaptation and Action Plans is nearing completion, there are several questions that the Climate Committee should consider related to long-term and medium-term adaptation and action planning and implementation.

I. Long-term Planning and Implementation Considerations

A. Should the City continue climate change planning beyond the completion of the Climate Adaptation and Action Plans? If so, what should this process look like?

Elements may involve (1) revisions of the Climate Action Plan and Adaptation Plan documents every few years; (2) suggestions to the council on CIP projects, (3) other elements?

B. Where should the oversight of this process reside? Options could include:

- Forest and Beach Commission
- Planning Commission
- A new, permanent climate change commission
- City Council

Factors to consider in this discussion include the amount of work involved for staff, as well as the existing workload of either commission or the council.

II. Medium-term Planning and Implementation Considerations

Due to lack of funding, the current adaptation plan does not include a close analysis of sea level rise; however, it recommends the completion of an engineering study to determine a long-term action plan for the protection of the City's coastal resources. There is \$150,000 tentatively included in the 5-year Capital Improvement Plan for Fiscal Year 2022-2023 to complete this study; however, this funding has not been allocated by the City Council for the upcoming Fiscal Year.

A. How should we ensure that this work is completed, including associated recommendations?

B. Who will do it?

C. Should this project be implemented in the usual manner with other Public Works Capital Improvement projects?

D. Should this committee be maintained for another year, with less frequent meetings, perhaps with different members to review the coastal analysis and recommendations? Or should this task be handed to another commission, or the council?

FISCAL IMPACT:

N/A

ATTACHMENTS: