

# City of Imperial Beach Climate Action Plan Report

November 15, 2023



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## 1.0 Introduction

The purpose of this document is to provide an update on the status of the Climate Action Plan (CAP) implementation. The CAP requires that the City monitor and report on CAP implementation activities on a biennial basis after an initial report in 2020 and include informal reports to the City Council during the interim years. Due to the impacts related to the unprecedented pandemic, COVID-19, there was a delay in reporting on the CAP implementation. The initial report was completed in 2021 and the subsequent year 2 CAP report was provided in 2022 on a biennial basis in conformance with the timeline outlined in the adopted CAP. During the previous CAP Year 2 Report, the 2020 emissions data was not available. The interim year CAP report amends the CAP Year 2 Report to include the 2020 emissions data and additional implementation efforts made since the previous report.

## 2.0 Background for Climate Action Plan

The Climate Action Plan (CAP) was approved and adopted by Resolution 2019-8054 on July 17, 2019. The CAP is a strategic framework for measuring, planning, and reducing greenhouse gas (GHG) emissions and includes an inventory of existing emissions, sets reduction goals or targets, and identifies analyzed and prioritized mitigation measures to achieve the reduction targets. The purpose of the CAP is to describe how greenhouse gas (GHG) emissions generated in municipal and community-wide activities in the areas of building and community energy use, transportation and land use, waste reduction and diversion, water conservation, and green infrastructure enhancement within the City of Imperial Beach will be reduced in accordance with statewide targets. The statewide targets used for the CAP are derived from the Governor's Executive Order S-3-05 (EO S-3-05) and the Global Warming Solutions Act of 2006 (AB 32). The CAP is not intended currently to be used as a California Environmental Quality Act (CEQA) mitigation document per CEQA Guidelines § 15183.5.

Implementation and monitoring of the CAP is required by the Final Draft of the Updated 2019 General Plan/Local Coastal Program Conservation and Ecotourism Element Policy 4.1.1-P.CE-4, which states, "Adopt and implement a Climate Action Plan (CAP) that is aligned with state requirements for greenhouse gas emission reductions, while achieving local co-benefits." Also, the Conservation and Ecotourism Element Policy 4.1.2-P.CE-5 states: " Monitor implementation of the

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Climate Action Plan (CAP) to ensure its effectiveness over time, and adjust measures as needed to achieve mandated targets." Implementation of the CAP strategies is a reflection of the City's commitment to climate action planning as a process through which it plans for and invests in progressively more aggressive GHG reductions and a more sustainable, adaptable, and resilient community.

Chapter 1 of the CAP contains information about the baseline emissions and reduction strategies. The City's CAP utilizes the 2012 baseline inventory. A GHG inventory identifies the major sources and overall magnitude of GHG emissions in the city using standard modeling methods and protocols. Typical inputs include: electricity consumed, natural gas consumed, vehicles miles traveled, solid waste disposed, wastewater treated and potable and recycled water used. The Chapter shows the baseline emissions and the target emission levels for Imperial Beach.

Chapter 2 of the CAP contains information on the City of Imperial Beach's Climate Action Plan Goals. The areas of focus are transportation, energy and energy efficiency, waste, and carbon sequestration. Additionally, the chapter outlines and describes the purpose of the City's CAP as well as a summary of the legislation and executive actions that were adopted for California's climate protection efforts.

Chapter 3 of the CAP contains detailed information regarding GHG emissions and the methodology used in the emission target selection. The chapter also includes the business as usual emission projections, targets, and information on the local emissions gap.

Chapter 4 of the CAP summarizes the emissions reduction measures for the following categories: on-road transportation, energy emissions, waste emissions, and carbon sequestration.

Chapter 5 of the CAP provides the timeline for CAP monitoring and reporting and details on the projected updates.

The CAP was developed as a part of the overall Resilient Imperial Beach General Plan/Local Coastal Program Update. Technical support was provided by SANDAG through the services of EPIC of the University of San Diego Law School. EPIC continues to work with SANDAG on SANDAG's Regional Climate Planning Framework (ReCAP), which provides regionally consistent approaches, methodologies, and data sources. This data is made available on a biennial basis, which is consistent with the City's reporting schedule. In 2022, the City was unable to include the 2020 GHG emission information in the CAP Year 2 Report due to delays in the data becoming available. The data was made available in 2023, and this report has been revised to include the 2020 emissions data. Of note, due to the impacts related to COVID-19, the 2020 GHG Emissions inventory does not include 2020 on-road transportation data. A discussion related to the COVID-19 impacts on available data has been provided within this report.

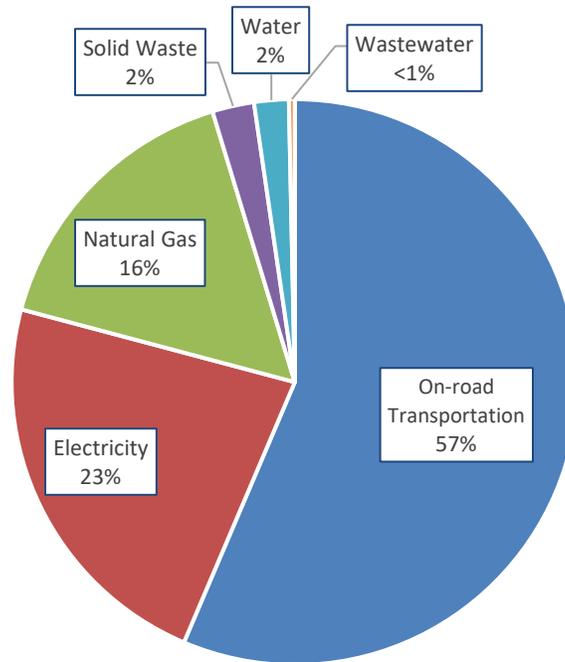
The 2012 inventory consists of 96,400 Metric Tons (MT) of carbon dioxide equivalent (CO<sub>2</sub>e). Figure 1 below shows Imperial Beach 2012 GHG emissions inventory by category and Table 1 shows the emissions projection, reduction targets, and emissions reduction needed to meet emissions reduction targets at the State level. Of the total emissions in 2012, 98 percent are attributed to on-road transportation, electricity, natural gas, and solid waste. The emissions profile is typical of other cities, and therefore, similar to most other CAPs, the City of Imperial Beach's CAP focuses primarily on the GHG emission reduction strategies in these sectors.

To be consistent with AB 32 and SB 32 emissions reduction targets at the State level, the target emission levels for Imperial Beach are set at 4% below the 2012 emissions level by 2020 and 42% below the 2012 emissions level by 2030 (Table 1). These targets are consistent with State targets under AB 32 and SB 32. Emissions reductions that would be needed to meet the long-term goals set in EO S-3-05 are also included; however, the strategies and measures are geared towards achieving reductions through the CAP's 2030 horizon year (Table 2). The 2020 target will be met without the need for any local actions.

As a result, the measures and strategies are only listed with their estimated contribution towards achieving the 2030 CAP target.

Of the 26,300 MT CO<sub>2</sub>e reductions needed to meet the CAP's 2030 target, 6,454 MT CO<sub>2</sub>e are estimated to come from local efforts included in the CAP strategies and measures. This amounts to approximately 25% of total reductions while the other 75%, 19,992 MT CO<sub>2</sub>e, are estimated to result from federal and state actions.

**Figure 1 Imperial Beach 2012 GHG Emissions Inventory by Category**



Percentage may not add to totals due to rounding.  
Energy Policy Initiatives Center, 2018

**Table 1 Emissions Projection, Reduction Targets, and Emissions Reduction Needed**

Year	Business-as-usual Projection (MT CO <sub>2</sub> e)	Target Emission Level (% below baseline)	Target Emission Levels (MT CO <sub>2</sub> e)	Emissions Reduction Needed to Meet Target (MT CO <sub>2</sub> e)
2012	96,400	-	-	-
2020	81,100	-4%	92,700	-11,500
2030	82,200	-42%	55,900	26,300

\*Emissions values are rounded.

\*Energy Policy Initiatives Center, 2018

**Table 2 Measures and Quantified Reductions to meet CAP 2030 GHG Emission Reduction Target**

Emissions Category	Reduction Strategies and Measures	2030		
		MT CO <sub>2</sub> e	% of Local Reductions	
On-Road Transportation	Strategy: Clean and Efficient Transportation			
	T.1	Increase Citywide Electric Vehicle (EV) Charging Stations	751	11%
	T.2	Clean Municipal Fleet	48	1%
	Strategy: Reduce Vehicle Miles Traveled (VMT)			
	T.3	Increase Mass Transit Ridership	687	10%
	T.4	Improve Pedestrian and Bicycle Facilities	342	5%
	T.5	Reduce Municipal Employee VMT	13	<1%
Energy	Strategy: Increase Renewable Electricity			
	E.1	Increase Grid-Supply Renewables	1,204	17%
	E.2	Increase Commercial Solar Photovoltaic (PV)	59	1%
Waste	Strategy: Zero Waste			
	W.1	Divert Waste from Landfill	3,318	51%
Carbon Sequestration	Strategy: Carbon Sequestration			
	S.1	Tree Planting	31	<1%
<b>Total GHG Reductions Needed to Reach 2030 Target</b>		<b>6,454 MT CO<sub>2</sub>e</b>		
<b>Total Potential GHG Reductions from Local Measures</b>		<b>6,454 MT CO<sub>2</sub>e</b>		

\*Percentages are rounded and may not sum.



## 3.0 Emissions Reduction Measures Implementation

The IB CAP adopted targets to reduce emissions 4% below 2012 levels by 2020 and 42% below 2012 levels by 2030 (55,900 MTCO<sub>2</sub>e). As shown in Table 2, each reduction measure includes the estimated GHG reductions, co-benefits, general description and background information, and identified implementation actions. The measures represent actions and issues with direct City influence and are intended to achieve emissions reductions within the community. The Consolidated Measure Implementation Matrix table for the CAP shows the action, description, responsibility and timeline for each of the CAP implementation measures. The matrix has been included as Appendix A.

The strategies and measures are organized under four categories:

- 📌 On-Road Transportation
- 📌 Energy and Energy Efficiency
- 📌 Waste
- 📌 Carbon Sequestration

### **Transportation**

The 2012 inventory identified that 57 percent of the total emissions are generated by on-road transportation. Reducing greenhouse gas emissions from transportation requires a broad range of strategies at a regional, state, and federal level with policies and plans that focus on areas including increasing vehicle efficiency, lowering the carbon content of fuels, and reducing vehicle miles of travel. The areas that the City addressed, considering its limited capacity, were to increase the number of citywide electric vehicle charging stations, creating a clean municipal fleet, increase mass transit ridership, improve the Pedestrian and Bicycle Facilities, and reduce employee VMT (Measures T.1 – T.5).

While on-road transportation emissions data was unavailable for 2020 due to impacts from COVID-19, the City continues to implement the CAP and works to reduce on-road GHG emissions. Staff has made considerable progress in implementing the transportation related measures since the adoption of the CAP in 2019. The City, in collaboration with SANDAG's "Power

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your Drive for Parks” program, installed four new electric vehicle charging stations (EVCS) at Sports Park, and through the collaboration with the Port of San Diego repaired the Blink Charging station on Seacoast Drive. Additionally, the City has identified parking spaces at City Hall that will be future EVCS locations. To enable the ease of EVCS installation once funding becomes available, the City will be installing the necessary conduit for EVCS. City staff is continuing to partner with other agencies and jurisdictions such as SANDAG and the Port as well as monitoring available funding opportunities such as the SANDAG Regional Electric Vehicle Charging Program, which provides grants and regional support for installation of new EVCS, to finance resources to support EVCS installation.



To further the goal of developing a municipal fleet assessment and conversion plan, the City is in the process of engaging with a consultant team to complete an assessment of existing Municipal facilities and the existing Municipal fleet. Once the assessment is completed, the next steps would be to identify funding opportunities for implementation of Municipal Fleet and Facilities electrification.

To facilitate the goal of increasing mass transit ridership, the City has coordinated with SANDAG to ensure that the Regional Transportation Plan included transit investments that would improve transit service and connectivity, and this plan has been adopted. Additionally, the City coordinated with MTS to install new rapid transit stops throughout the City and issued the temporary encroachment permit for the construction of additional transit stops as well as improved bus shelters.

To improve bicycle and pedestrian facilities throughout the city, the City has identified, planned, and implemented a suite of bicycle and pedestrian projects that are expected to be completed by 2030. These projects include the completed projects: Imperial Beach Boulevard (IB Blvd.) Enhancement Project, Border to Bayshore Bike path adjacent to Bayside Landing, the bike path along SR-75, and the painted high visibility green bike paths on Palm Avenue and 15<sup>th</sup> Street. The IB Blvd. enhancement project incorporated green infrastructure, which provided the two-fold benefit of both mitigating the production of GHG emissions and providing extra resilience against the effects of global warming in the City. The project scope included the reconstruction of the bulk of Imperial Beach Boulevard between Seacoast Drive and 14<sup>th</sup> Street, including the narrowing and reallocation of vehicle lanes to promote traffic calming and installation of Class II Bike Lanes, controlled crosswalks with flashing beacons, ADA compliant pedestrian ramps, additional amenities to bus stops, low impact development planters, wider sidewalks, improved aesthetic features along the Tijuana Estuary, and a unified design theme to enhance the user experience. Similar to the completed IB Blvd Enhancement project, the City obtained an Active Transportation Program Grant to make improvements and install bike lanes on 9<sup>th</sup> Street, a Clean California Grant to make improvements on a segment of 10<sup>th</sup> Street, obtained an Active Transportation Program Grant to implement the Palm Avenue Master Plan, obtained an additional Ocean Protection Council Grant and a State Coastal Conservancy Grant to

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develop 100% plans for improving the Bayshore Bikeway. On an ongoing basis, the City assesses all development projects to evaluate the feasibility of Class IV bicycle lanes and to expand the number of bike parking facilities at commercial establishments throughout the City.



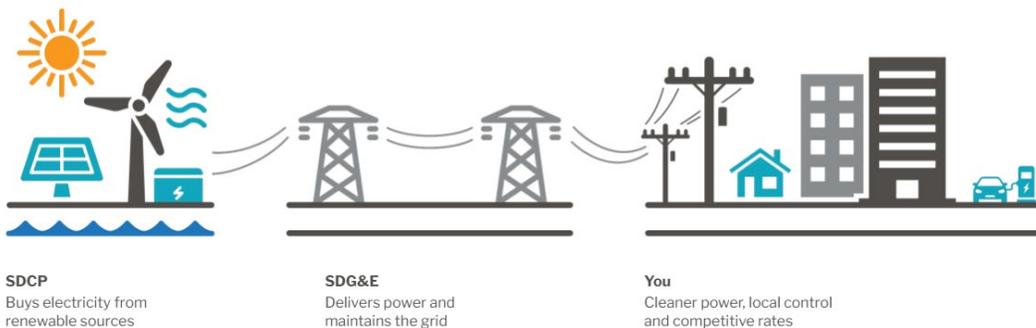
To increase the City’s clean municipal fleet and reduce employee vehicle miles traveled (VMT), the City purchased 70% of the City’s projected electric bicycle fleet to be utilized as City vehicles. Through the utilization of the electric bicycles as the Municipal fleet, the total vehicle miles traveled was reduced by 1,033 miles in 2022. To better understand and analyze data regarding active transportation patterns and needs throughout the City, the City is collecting transportation counts along improved roadways and is exploring partnerships as well as opportunities to participate in programs that further alternative transportation measures such as the now completed Lime Bike program.



**Energy and Energy Efficiency**

The Energy category, consisting of electricity and natural gas emissions resulting from use in buildings, accounts for approximately 39% of the 2012 baseline inventory. As such, the City placed a heavy emphasis on clean and renewable energy (Policies T.1 and T.2). Renewable energy provides both environmental and economic benefits through the generation of energy that produces no greenhouse gas emissions from fossil fuels, reducing air pollution, and reduces the dependence on imported fuels.

In FY 2020, the City in partnership with the cities of Chula Vista, Encinitas, La Mesa, and San Diego established the San Diego Community Power as a non-profit energy provider to establish a local community choice aggregation (CCA) program. San Diego Community Power (SDCP). SDCP provides more local control over Imperial Beach’s energy landscape. In January of 2022, the City of Imperial Beach became the first City to launch this program and make clean energy available to its residents. Furthermore, the City opted in to the “Power 100 Program” to ensure that the City is using clean Municipal Energy.



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The City is currently taking proactive actions towards planning on Municipal Fleet and Facilities electrification by looking in to completing an assessment to determine the needs and potential opportunities for the electrification of the existing Municipal Fleet and Facilities.

**Waste**

Reduction of solid waste and promoting the recycling of materials is a powerful way to save energy and reduce GHG emissions. The City’s current franchise waste hauler is EDCO. The City, EDCO, and local community must be active participants to achieve waste reductions, especially since the included waste reduction measure is anticipated to account for over half of all CAP measure emission reductions to meet the 2030 target. Measure W.1 to divert waste from the landfill is intended to be met through the diversion of commercial organics. On February 19, 2020 the City adopted an ordinance to amend Chapter 8.36 of the Imperial Beach Municipal Code to require mandatory organics recycling. Staff has been collaborating with EDCO in the implementation of a public outreach campaign to increase awareness of existing waste management services and drive behavioral change.



**Carbon Sequestration**

Carbon sequestration is also an important strategy included in the CAP. Compared to the regional average, Imperial Beach has fewer trees and a lower proportion of the City covered by tree canopies. Trees are effective at sequestering GHG emissions and provide a range of additional benefits that include reducing temperature and energy use and improving air and water quality, aesthetics, and general quality of life. Measure S.1 Tree Planting is an ongoing effort. The City planted a total of at or around 300 trees in 2022. The City obtained an additional Cal Fire Grant to partner with the San Diego Urban Corps to plant an additional 400 trees in 2023. Most of the trees that will be planted in 2023 will be planted in the underserved

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areas of the community. For private development, staff continues to emphasize developers to incorporate trees in development projects and has recently adopted an ordinance implementing the requirements of Senate Bill 9 (SB 9). This ordinance requires that a new tree be planted on each newly created lot, created through the provision of the ordinance implementing SB 9. Additionally, the City increased the maintenance budget and has adopted a maintenance schedule for all City trees located within the right of way.



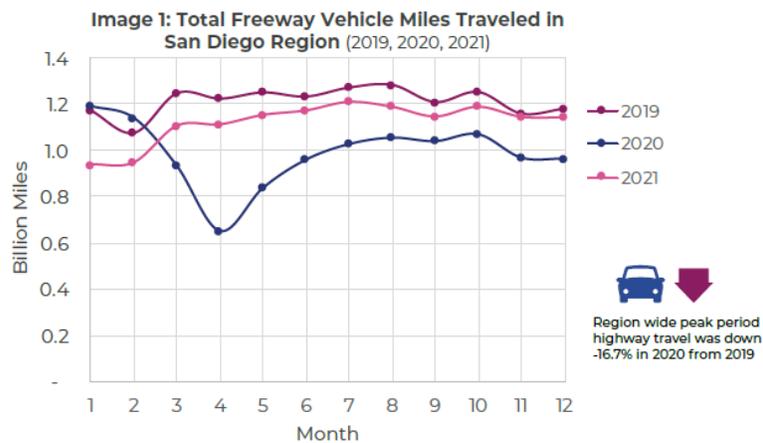
## 4.0 GHG Emissions Inventory

A key component of CAP implementation is the monitoring of actual GHG emissions. To draft the Imperial Beach CAP, technical support was provided by SANDAG through the services of EPIC of the University of San Diego Law School. EPIC provided the baseline emissions for the City of Imperial Beach which were the 2012 GHG emissions. EPIC continues to work with SANDAG on SANDAG’s Regional Climate Planning Framework (ReCAP), which provides regionally consistent approaches, methodologies, and data sources. One of the services offered by SANDAG includes conducting GHG inventories for local jurisdictions. This data is updated on a biennial basis, which is consistent with the City’s reporting schedule. As can be seen from the ReCAP Snapshot 2016 (Attachment 3), ReCAP Snapshot 2018 (Attachment 4), and ReCAP Snapshot 2020 (Attachment 5) the City’s efforts over time to reduce GHG emissions have had a direct impact in reducing the City’s GHG emissions and that the additional work and commitment that the City has made with the CAP adoption and implementation has furthered these reductions. The 2012 inventory consists of 96, MT CO<sub>2e</sub>, the 2016 inventory consists of 81 MT CO<sub>2e</sub>, and the 2018 inventory consists of 79 MT CO<sub>2e</sub>. Due to the impacts of COVID-19 skewing the data related to GHG emissions, the overall emissions were not able to be provided, however, what can be observed year over year on a two year basis, are: reductions in community-wide energy use, an increase in the percentage of waste diverted, a decrease in the wastewater produced, and a decrease in the water used per person, per day. Overall showing areas of progress for GHG emissions reductions and areas of opportunities where the City can focus on for the next CAP update.

### Covid-19 GHG Emissions Data Impacts:

The Covid-19 pandemic impacted our day-to-day activities in 2020. Variations/changes in lifestyles and behaviors caused by the Covid-19 have skewed GHG emissions data in a manner that varies from what would have been typical in previous and/or future years; for example, increased time spent indoors and decreased usage of vehicles.

The 2020 GHG emissions inventory was prepared using the best available data for each emissions category and does not include on-road transportation. The activity data for electricity, natural gas, solid waste, water sectors are based on actual tracked and observed usage for the year and therefore, correctly reflect the changes due to Covid-19. However, for on-road transportation, the activity data is vehicle miles traveled (VMT), a proxy for fuel use. VMT data is derived for each jurisdiction from the SANDAG activity based model (ABM). The most recent SANDAG activity based model, ABM2+, was last calibrated with observed data in 2016 and forecasts 2020 VMT. While transportation historically accounts for the largest share of GHG emissions in an inventory, the VMT forecast does not take into account the impacts of the Covid-19 pandemic and cannot be updated to provide 2020 VMT data for each jurisdiction. In addition, the model cannot be updated for sudden changes in activity in any particular year as it is based on data from a baseline year and projects future years based on land use, population, and housing forecast. Therefore, using the VMT forecast for 2020 with a baseline year of 2016 would be inappropriate as the model cannot reflect the impacts of the pandemic in 2020. Instead, state Caltrans PeMS data provides regional VMT in 2020 from sensors and observations on the freeways which help to estimate the regional change in VMT. Image 1 compares the observed VMT on freeways in the San Diego region for the years 2019, 2020 and 2021. The observed data is only available for freeways and cannot be scaled down to individual jurisdictions which have different configurations of roads. While other sources of data and anecdotal experience show lower VMT in 2020, there is no data for how each jurisdiction’s VMT changed during 2020. The Caltrans PeMS data set shows similar VMT trends in 2021 as in 2019 which suggests that lower VMT in 2020 is likely due to the impacts of the Covid-19 pandemic and may not sustain long term.



Source: PeMS, Caltrans. SANDAG 2020 State of the Commute Report

## 5.0 Summary

From CAP implementation on July 17, 2019, the City has continued to make considerable progress in reducing GHG emissions in Imperial Beach. During the first reporting period, the City exceeded the forecasted 2020 GHG reductions shown in the CAP. During the following reporting periods, staff has continued to address and implement the policies to reduce GHG emissions and coordinate and collaborate with regional partners, such as SANDAG, other local jurisdictions, San Diego Regional Climate Collaborative and SDG&E.

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## Appendix A

### Consolidated Measure Implementation Matrix

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**Appendix D. Consolidated Measure Implementation Matrix**

<b>Consolidated Measure Implementation Matrix</b>					
<b>Emissions Category</b>	<b>Reduction Strategies and Measures</b>	<b>Action</b>	<b>Description</b>	<b>Responsibility</b>	<b>Timeline</b>
On-Road Transportation	Strategy: Clean and Efficient Transportation				
	T.1 Increase Citywide EVCSs	1	Encourage and incentivize EVCSs at new and redeveloped multifamily and commercial developments through the development review process	City	Near-term
		2	Identify a list of priority public facility installation sites on City sites and in collaboration with relevant partner agencies	City	Near-term
		3	Identify and pursue funding and financing resources to support EVCS installation	City	Near- and Mid-term
	T.2 Clean Municipal Fleet	1	Work with CSE's EV Expert to develop a municipal fleet assessment and conversion plan	City	Medium-term
		2	Utilize fleet assessment and conversion plan to decide when to replace vehicles	City	Medium-term
		3	Work with other agencies and jurisdictions to identify potential joint EV procurement options	City	Near-term
	Strategy: Reduce VMT				
	T.3 Increase Mass Transit Ridership	1	Coordinate with San Diego MTS to identify transit connectivity opportunities that improve transit access and mobility	City	Near-term
		2	Work with San Diego MTS to increase awareness of the Rapid 925 and existing bus routes as a means to increase ridership	City	Near-term
		SE.1	Collaborate with SANDAG to ensure that the RTP includes transit investments that improve transit service and connectivity	City	Near-term

Consolidated Measure Implementation Matrix					
Emissions Category	Reduction Strategies and Measures	Action	Description	Responsibility	Timeline
	T.4 Improve Bicycle and Pedestrian Facilities	1	Complete the suite of planned bicycle and pedestrian projects by 2030	City	Medium-term
		2	Evaluate the feasibility of Class IV bicycle lanes in all project review procedures	City	Near-term
		3	Work to expand the number of bike parking facilities at commercial establishments throughout the City	City	Medium-term
		4	Work with scooter and bikeshare and other emerging companies to analyze data and better understand active transportation patterns and needs throughout the City	City	Medium-term
	T.5	1	Purchase 10 electric bicycles	City	Near-term
		2	Track the number of trips and VMT avoided through usage of the bicycles	City	Medium-term
Energy	Strategy: Increase Renewable Electricity				
	E.1 Increase Grid-Supply of Renewable and Zero Carbon Electricity	1	Explore the potential to join a regional CCE through a partnership with other jurisdictions	City	Near-term
		2	Work with identified partnership jurisdictions to conduct a feasibility study and other related research and administrative efforts necessary to establish a CCE	City	Medium-term
		3	Evaluate the need for additional resources to increase to 100% grid-supplied renewable power by 2030	City	Medium-term

Consolidated Measure Implementation Matrix					
Emissions Category	Reduction Strategies and Measures	Action	Description	Responsibility	Timeline
		SE.1	Work with SDG&E to publicize energy efficiency rebates and subsidies to increase the efficiency of Imperial Beach's existing building stock	City	Near-term
		1	Establish requirements or incentives through the development review and approval process to spur installation of commercial solar PV	City	Near-term
		2	Develop a directory of solar PV funding sources, rebates, and incentives, and leverage existing efforts and materials from the CSE, California Solar Initiative, SDG&E, and other organizations.	City	Near-term
		3	Review/revise applicable building, zoning, and other codes/ordinances to encourage the development of solar ready commercial developments.	City	Medium-term
		SE.1	Identify opportunities to install solar PV on public facilities such as municipal buildings, schools, libraries, and parking lots.	City	Medium-term
Waste	Strategy: Reduce Solid Waste				
	W.1 Divert Waste from Landfill	1	Adopt a Zero Waste by 2050 policy	City	Near-term
		2	Work with the City's waste service company and stakeholders to develop a public outreach campaign to increase awareness of existing waste management services and drive behavioral change	City	Medium-term
Carbon Sequestration	Strategy: Carbon Sequestration				
	S.1 Tree Planting	1	Plant 300 trees within City ROW by 2030	City	Medium-term

Consolidated Measure Implementation Matrix					
Emissions Category	Reduction Strategies and Measures	Action	Description	Responsibility	Timeline
		2	Make changes to the City code to require tree planting in new and redeveloped residential and commercial developments	City	Near-term
		SE.1	Identify opportunities to enhance or conserve habitat that would sequester carbon in collaboration with relevant state and federal agencies	City	Medium-term
		SE.2	Identify and pursue funding to develop an Urban Forest Management Plan	City	Medium-term

SE indicates that the action is a Supporting Effort

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## Appendix B

### Consolidated ReCAP Summaries

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# CITY OF IMPERIAL BEACH SNAPSHOT

The ReCAP Snapshot is prepared for the City as a part of the SANDAG Regional Climate Action Planning Framework (ReCAP) to support, but not replace, cities' monitoring greenhouse gas (GHG) emissions and/or climate action plan (CAP) implementation over time. Climate planning activities vary by jurisdiction and are dependent on a variety of factors, such as funding and staff capacity. As the first edition of Snapshots (November 2019), this document will set a baseline for monitoring trends into the future. More information, including a FAQ document and Methods and Data Sources Summary, is available at [www.sandag.org/climate](http://www.sandag.org/climate).

## RECENT ACCOMPLISHMENTS

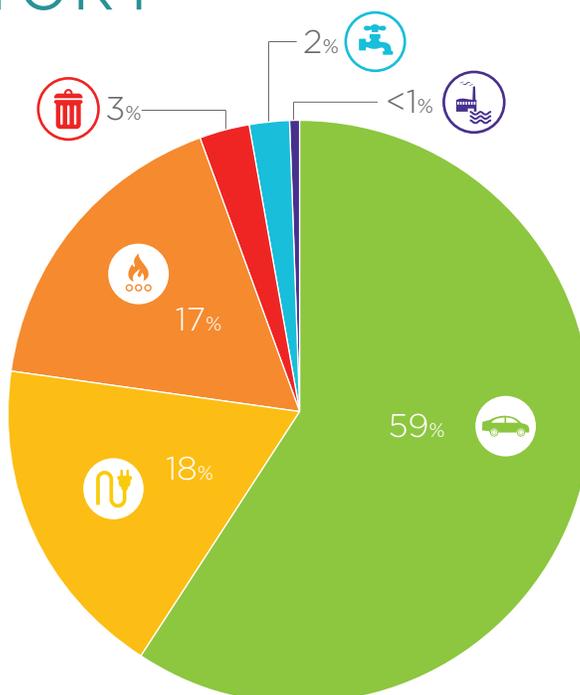
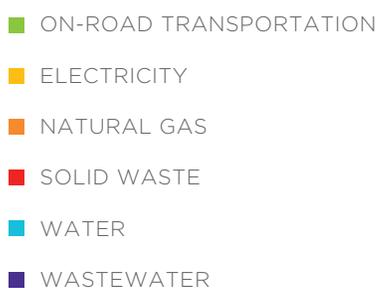
- 1 Completed** sea-level rise study in 2016.
- 2 Installed** energy efficient windows at City Hall in 2017.
- 3 Replaced** existing lighting with light-emitting diode (LED) lighting and occupancy sensors in 2019.
- 4 Received** Coastal Commission grant in 2017 to support Local Coastal Program Update and CAP development.
- 5 Received** a grant to help plant 200 trees.

## GHG INVENTORY\*

\*This GHG inventory is based on 2016 data.

### 81,300 MT CO<sub>2</sub>e

Total GHG emissions estimated for 2016



## JURISDICTION QUICK FACTS

**27,901**  
population in 2016

**4.4**  
square miles

**9,510**  
occupied housing  
units in 2016\*

Current CAP progress:  
**In Progress**

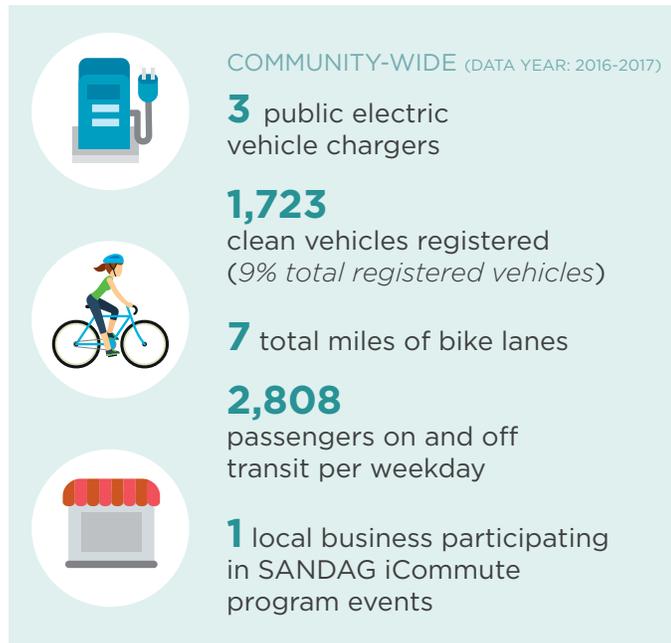
Subregion:  
**South Bay**

\* Occupied housing does not include group quarters.

# ReCAP ACTIVITY DATA FOR THE CITY OF IMPERIAL BEACH

These select activity data represent best available data\* for common GHG reduction activities included in local CAPs across the SANDAG region and may not align precisely to GHG reduction measures and/or the metrics identified within a jurisdiction's CAP. Community-wide activities occur within a jurisdiction's boundaries; municipal activities occur at City-owned facilities. For more information on data sources, the Methods and Data Sources Summary is available at [www.sandag.org/climate](http://www.sandag.org/climate).

## TRANSPORTATION



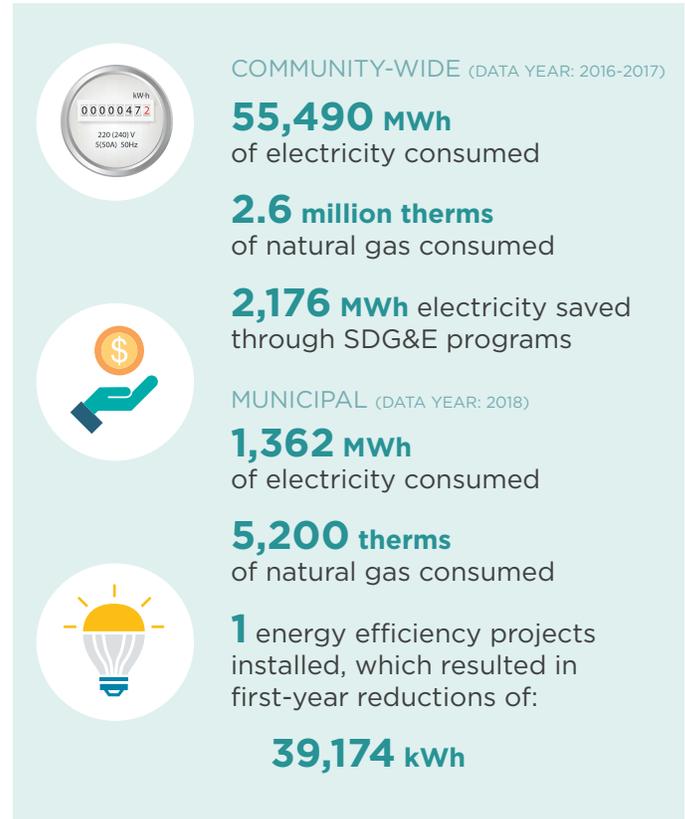
## WATER + WASTEWATER



## SOLID WASTE



## ENERGY EFFICIENCY



## RENEWABLE ENERGY





# CITY OF IMPERIAL BEACH SNAPSHOT

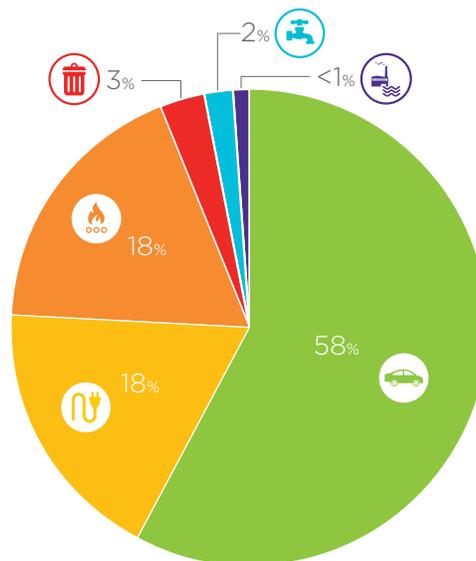
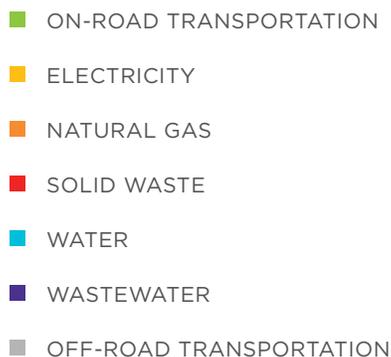
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## GHG INVENTORY\*

\*This GHG inventory is based on best available data, which includes 2016 VMT data for the on-road transportation sector and 2018 data for all other sectors. See below for additional detail.

### 79,300 MT CO<sub>2</sub>e

Total GHG emissions estimated for 2018



## JURISDICTION QUICK FACTS

**27,202**  
population in 2018

**4.4**  
square miles

**9,106**  
occupied housing units in 2018\*

Current CAP progress:  
**Adopted 2019**

Subregion:  
**South Bay**

\*Occupied housing does not include group quarters.

The 2018 GHG emissions inventory was prepared using the best available data for each emissions category. The best available data for vehicle miles traveled (VMT) at this time continues to be estimates for the year 2016, based on the SANDAG Series 14 forecast and ABM2 transportation model. This same VMT dataset was used to prepare the 2016 inventory included in the first edition Snapshots (published in November 2019). As a result, the VMT used in the 2018 GHG emissions inventory is the same as that in the 2016 GHG emissions inventory.

Estimated changes in VMT since 2016 will be reflected in the forthcoming 2020 GHG emissions inventory. For the next ReCAP Snapshots, VMT estimates will be based on the forecast and land use used in the 2021 Regional Plan.

GHG emissions inventories are one tool for use in monitoring CAP implementation. Together, a GHG emissions inventory and activity data reflect CAP implementation progress. Until updated VMT estimates are available, performance of VMT-related CAP measures can be monitored based on activity data.

Additional information about the SANDAG transportation model is included in the [Snapshot FAQ document](#), and further detail about CAP monitoring and reporting can be found in the [ReCAP Technical Appendix VI](#).

# RECAP ACTIVITY DATA FOR THE CITY OF IMPERIAL BEACH

These select activity data represent data for the year 2018 for common GHG reduction activities included in local CAPs across the SANDAG region and may not align precisely to GHG reduction measures and/or the metrics identified within a jurisdiction's CAP. Community-wide activities occur within a jurisdiction's boundaries; municipal activities occur at City-owned facilities. For more information on data sources, the Methods and Data Sources Summary is available at [sandag.org/climate](http://sandag.org/climate).

## TRANSPORTATION



### COMMUNITY-WIDE

**3** public electric vehicle chargers



**1,794** clean vehicles registered  
*(10% of total registered vehicles)*



**8** total miles of bicycle lanes

**3,022** passengers on and off transit per weekday

**1** local business participating in SANDAG iCommute program events

## ENERGY EFFICIENCY



### COMMUNITY-WIDE

**54,675 MWh** of electricity consumed

**2.6 million therms** of natural gas consumed

**2,249 MWh** electricity saved through SDG&E programs



### MUNICIPAL

**1,362 MWh** of electricity consumed

**5,200 therms** of natural gas consumed



Energy efficiency projects have resulted in first year reductions of:

**39,174 kWh**

## WATER + WASTEWATER



### COMMUNITY-WIDE

**121 gallons** water used/person/day

**88 gallons** wastewater produced/person/day

## RENEWABLE ENERGY



### COMMUNITY-WIDE

**43%** renewables in grid electricity supply

**3.1 MW** PV online

## SOLID WASTE



### COMMUNITY-WIDE

**3.0 lbs** waste disposed in landfill/person/day

**63%** waste diverted

## CARBON SEQUESTRATION



### MUNICIPAL

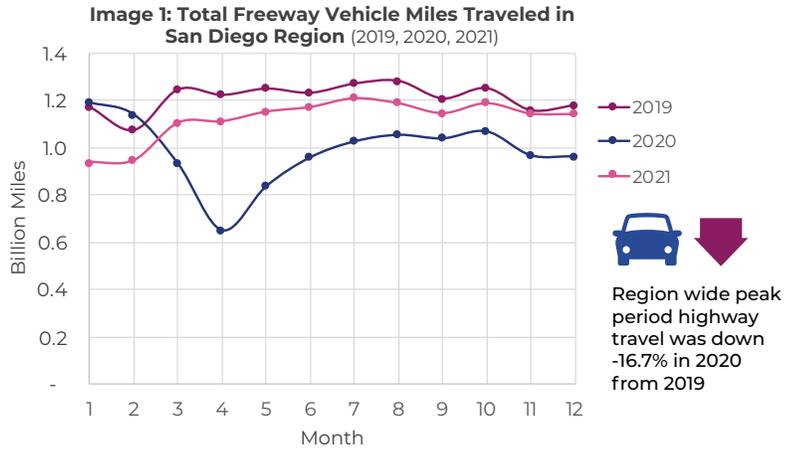
**15** trees planted



# City of Imperial Beach SNAPSHOT



The ReCAP Snapshot is prepared for the City as a part of the SANDAG Regional Climate Action Planning Framework (ReCAP) to support, but not replace, cities' monitoring of greenhouse gas (GHG) emissions and/or climate action plan (CAP) implementation over time. The 2020 Snapshots are unique as the Covid-19 pandemic had impacts on our day-to-day activities in 2020. More information, including a FAQ document is available at [FAQ \(sandag.org\)](https://www.sandag.org).



## 2020 GHG Inventory\*

\*This GHG inventory is based on best available data from 2020 for all listed sectors and excludes on-road transportation

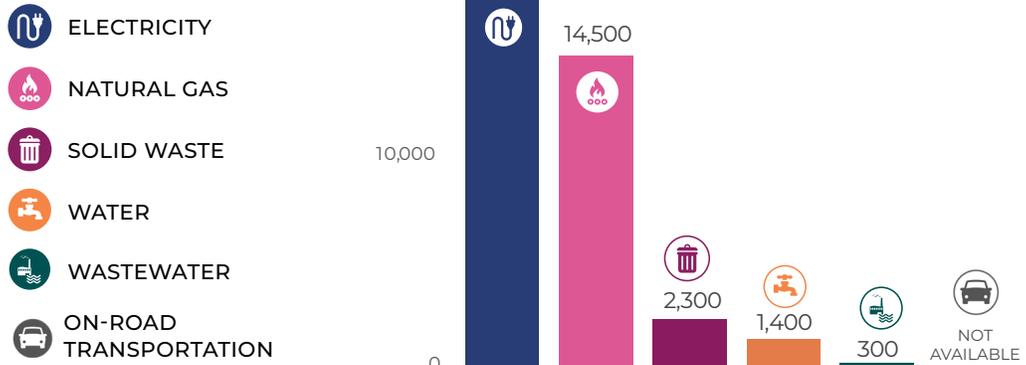


Image 2

### IMPERIAL BEACH QUICK FACTS

**28,055** population in 2020

**4** square miles

**9,646** occupied housing units in 2020

Current CAP progress: **Adopted 2019**

Subregion: **South Bay**

The 2020 GHG emissions inventory was prepared using the best available data for each emissions category and does not include on-road transportation. The activity data for electricity, natural gas, solid waste, and water sectors are based on tracked and observed usage for the year and therefore, correctly reflect the impacts of Covid-19. However, for on-road transportation, the vehicle miles traveled (VMT) data are estimates from the SANDAG activity based model (ABM). The most recent SANDAG activity based model, ABM2+, was last calibrated with observed data from 2016 and forecasts 2020 VMT. While transportation historically accounts for the largest share of GHG emissions in an inventory, the forecasted VMT does not take into account the impacts of the Covid-19 pandemic and cannot be updated to provide 2020 VMT data for each jurisdiction. Caltrans PeMS data provides observed regional VMT on freeways for 2020. Image 1 compares the observed VMT on freeways in the San Diego region for the years 2019, 2020 and 2021. The observed data is only available for freeway and it cannot be scaled down to individual jurisdictions which have different configuration of roads. While other sources of data and anecdotal experience show lower VMT in 2020, there is no data for how each jurisdiction's VMT changed during 2020. The Caltrans PeMS data set shows similar travel trends in 2021 as in 2019 which suggests that lower VMT in 2020 is likely due to the impacts of the Covid-19 pandemic and may not sustain long term.

GHG emissions inventories are one tool to support, but not replace, monitoring of CAP implementation at the local level. Together, a GHG emissions inventory and activity data reflect CAP implementation progress.

# ReCAP Activity Data for the City of Imperial Beach

These select activity data represent data for the year 2020 for common GHG reduction activities included in local CAPs across the SANDAG region and may not align precisely with GHG reduction measures and/or metrics identified within a jurisdiction's CAP. Community-wide activities occur within a jurisdiction's boundaries; municipal activities occur at City-owned facilities. For more information on data sources, the Methods and Data Sources Summary is available at [sandag.org/climate](https://sandag.org/climate).

## Transportation



COMMUNITY-WIDE

**3** public electric vehicle chargers

**1,756** alternative fuel vehicles (9% of total registered vehicles)

**164** zero emission vehicles (1% of total registered vehicles)



**9** total miles of bicycle lanes

**2,146** passengers on and off transit per weekday

**1** local business participating in SANDAG iCommute program events



MUNICIPAL

**1** clean vehicle in fleet

## Water + Wastewater



COMMUNITY-WIDE

**115** gallons of water used/person/day

**73** gallons of wastewater produced/person/day

## Energy Use



COMMUNITY-WIDE

**54,472** MWh of electricity consumed

**2.7** million therms of natural gas consumed

## Renewable Energy



COMMUNITY-WIDE

**31%** renewables in SDG&E electricity supply

**4.6** MW PV Capacity

## Solid Waste



COMMUNITY-WIDE

**2.7** lbs waste disposed in landfill/person/day

**66%** waste diverted

## Carbon Sequestration



MUNICIPAL

**7** trees planted