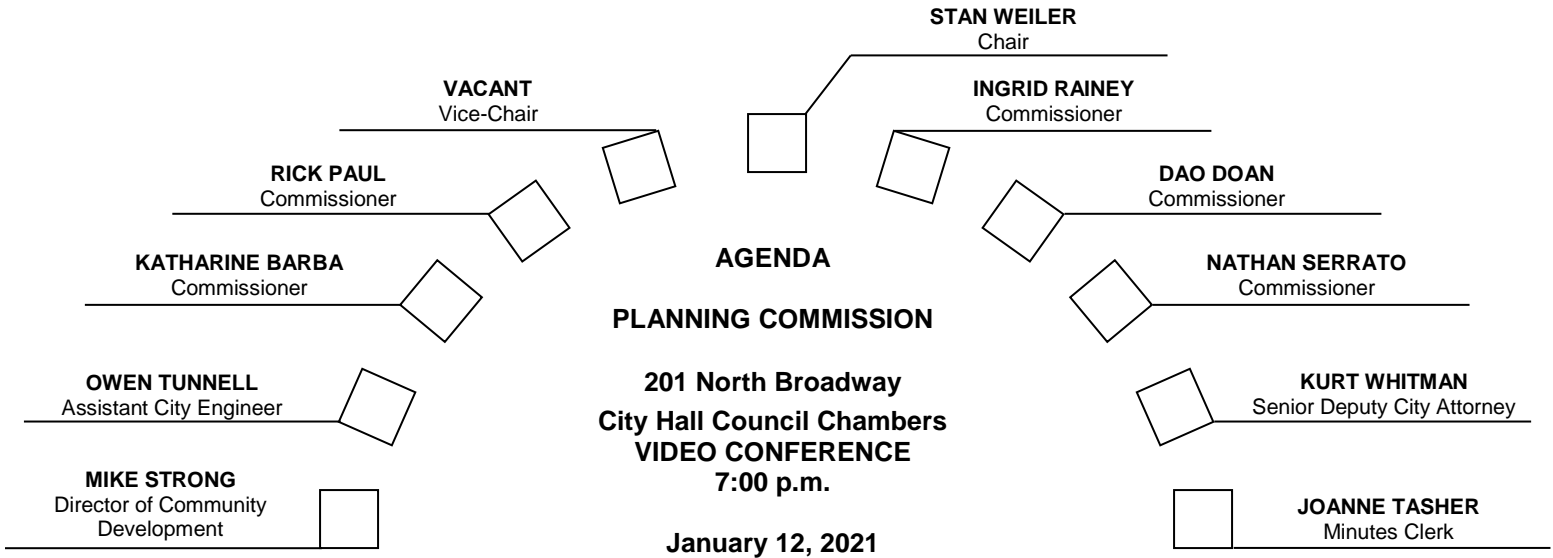


CITY OF ESCONDIDO

Planning Commission and Staff Seating



- A. CALL TO ORDER: 7:00 p.m.
- B. FLAG SALUTE
- C. ROLL CALL:
- D. MINUTES: 12/08/20
- E. SELECTION OF VICE-CHAIR:

The Brown Act provides an opportunity for members of the public to directly address the Planning Commission on any item of interest to the public before or during the Planning Commission's consideration of the item. If you wish to speak regarding an agenda item, please fill out a speaker's slip and give it to the Minutes Clerk who will forward it to the Chair.

Pursuant to Governor Newsom's Executive Orders, including N-25-20 and N-29-20: Certain Brown Act requirements for the holding of a public meeting have been temporarily suspended and members of the Zoning Administrator and staff will participate in this meeting via teleconference. In the interest of reducing the spread of COVID-19, members of the public are encouraged to submit their agenda and non-agenda comments online at the following link <https://www.escondido.org/public-comment-form.aspx>. Council Chambers will be closed, no public allowed.

Public Comment: To submit comments in writing, please do so at the following link: <https://www.escondido.org/public-comment-form.aspx>. If you would like to have the comment read out loud at the meeting (not to exceed three minutes), please write "Read Out Loud" in the subject line. All comments received from the public will be made a part of the record of the meeting. The meeting will be available for viewing via public television on Cox Communications Channel 19 (Escondido only). The meeting will also be live streamed online at the following link: <https://www.escondido.org/> and click on the graphic showing "live stream - meeting in progress".

To watch the archived Planning Commission meeting(s) please visit:
<https://escondido.12milesout.com/presentations/boards-and-commissions-and-state-of-the-city-videos>

Availability of supplemental materials after agenda posting: any supplemental writings or documents provided to the Planning Commission regarding any item on this agenda will be made available for public inspection in the Planning Division located at 201 N. Broadway during normal business hours, or in the Council Chambers while the meeting is in session.

The City of Escondido recognizes its obligation to provide equal access to public services for individuals with disabilities. Please contact the A.D.A. Coordinator, (760) 839-4643 with any requests for reasonable accommodation at least 24 hours prior to the meeting.

The Planning Division is the coordinating division for the Planning Commission. For information, call (760) 839-4671.

F. WRITTEN COMMUNICATIONS:

"Under State law, all items under Written Communications can have no action, and will be referred to the staff for administrative action or scheduled on a subsequent agenda."

1. Future Neighborhood Meetings

G. ORAL COMMUNICATIONS:

"Under State law, all items under Oral Communications can have no action, and may be referred to the staff for administrative action or scheduled on a subsequent agenda."

This is the opportunity for members of the public to address the Commission on any item of business within the jurisdiction of the Commission.

H. PUBLIC HEARINGS:

Please try to limit your testimony to 3 minutes.

None.

I. ITEMS CONTINUED FROM DECEMBER 8, 2020:

1. CLIMATE ACTION PLAN UPDATE – PHG 18-0009:

REQUEST: The Climate Action Plan Update ("CAP Update") consists of a comprehensive update to the 2013 CAP. The CAP update serves as a roadmap for the City to reduce citywide greenhouse gas emissions ("GHG emissions") and builds on the 2013 CAP by updating the GHG emissions inventory with a new baseline year and forecasting emissions, consistent with state legislation and executive orders that are aimed at reducing Statewide GHG emissions. This includes AB 32, which established a target of reducing Statewide GHG levels to 1990 levels by 2020; SB 32, which established a mid-term target of reducing Statewide GHG levels to 40 percent below 1990 levels by 2030; and Executive Order S-3-05, which recommends a longer-term statewide GHG reduction goal of reducing emissions to 80 percent below 1990 levels by 2050. By establishing consistency with state legislation, the CAP Update seeks to streamline future development approvals within the City. The City has also developed a Climate Action Plan Consistency Review Checklist, in conjunction with the CAP Update, to provide a streamlined review process for proposed new development projects that are subject to discretionary review and trigger environmental review pursuant to CEQA. The CAP Update also provides a range of adaptation strategies and measures as an additional component to climate action planning. The City recognizes the importance of building resilience in the community to future climate change—related impacts through climate adaptation. Through "adaptation planning" the City is undertaking a process of identifying climate risks and opportunities, assessing the options to manage these risks and opportunities, and implementing actions to sustain and even improve the community's quality of life. The Planning Commission will be asked to review and consider the project and provide a recommendation to the City Council. The proposal also includes the adoption of the environmental determination prepared for the project.

PROPERTY SIZE AND LOCATION: CityWide

ENVIRONMENTAL STATUS: A Draft Initial Study/Mitigated Negative Declaration (“IS/MND”) was issued for a 30-day public review, beginning on July 1, 2020, and ending July 31, 2020, in conformance with the California Environmental Quality Act (“CEQA”). The IS/MND incorporates mitigation measures that will avoid or mitigate impacts related to cultural/tribal cultural resources to a less than significant level.

APPLICANT: City of Escondido

STAFF RECOMMENDATION: Approval to City Council

COMMISSION ACTION:

PROJECTED COUNCIL HEARING DATE:

J. CURRENT BUSINESS:

Note: Current Business items are those that under state law and local ordinances do not require either public notice or public hearings. Public comments will be limited to a maximum time of three minutes per person.

K. ORAL COMMUNICATIONS:

"Under State law, all items under Oral Communications can have no action and may be referred to staff for administrative action or scheduled on a subsequent agenda."

This is the opportunity for members of the public to address the Commission on any item of business within the jurisdiction of the Commission.

L. PLANNING COMMISSIONERS

M. ADJOURNMENT

CITY OF ESCONDIDO

**ACTION MINUTES OF THE REGULAR MEETING OF THE
ESCONDIDO PLANNING COMMISSION
VIDEO/VIRTUAL CONFERENCE**

December 8, 2020

The meeting of the Escondido Planning Commission was called to order at 7 p.m. by Chair Weiler, in the City Council Chambers, 201 North Broadway, Escondido, California.

Commissioners present: Stan Weiler, Chair; Joe Garcia, Vice-Chair; Katharine Barba, Commissioner; Dao Doan, Commissioner; Rick Paul, Commissioner; Ingrid Rainey, Commissioner; and Nathan Serrato, Commissioner.

Commissioners absent: None.

Staff present: Mike Strong, Director of Community Development; Kurt Whitman, Senior Deputy City Attorney; Owen Tunnell, Assistant City Engineer; Jay Paul Senior Planner; and Joanne Tasher, Minutes Clerk.

MINUTES:

Moved by Commissioner Barba and seconded by Commissioner Serrato to approve the Action Minutes of the November 10, 2020, Planning Commission meeting. Motion carried unanimously (7-0).

WRITTEN COMMUNICATIONS: None.

FUTURE NEIGHBORHOOD MEETINGS: None.

ORAL COMMUNICATIONS: None.

PUBLIC HEARINGS:

1. GENERAL PLAN AMENDMENT, ZONE CHANGE AND CONDITIONAL USE PERMIT – PHG 19-0049 AND ENV 19-0006:

REQUEST: Conditional Use Permit (“CUP”) for the development of a proposed gasoline station/convenience store with concurrent sale of alcoholic beverages (beer and wine). The project consists of a 4,088 square foot convenience store with a 4,284 square foot gas station canopy with eight fuel dispenser pumps that can accommodate up to sixteen fueling stations/vehicles. A General Plan Amendment from Light Industrial (LI) to General Commercial (GC) along with a Zone Change from Light Industrial (M-1) zoning to General Commercial (CG) zoning is required to process the land use development application and allow the consideration of the CUP. The project also includes a request to adopt a Mitigated Negative Declaration in accordance with the California Environmental Quality Act (“CEQA”).

PROPERTY SIZE AND LOCATION: Approximately 1.14-acres generally located at the northwestern corner of W. Mission Avenue and Rock Springs Road, addressed as 900 W. Mission Avenue (APNs 228-220-13-00 and 228-220-43-00).

ENVIRONMENTAL STATUS: A Draft Initial Study/Supplemental Mitigated Negative Declaration “IS/MND” (Planning Case No. ENV 19-0006) was issued for the project in conformance with the California Environmental Quality Act (CEQA). The IS/MND incorporates mitigation measures that will avoid or mitigate impacts related to cultural/tribal resources, geology, noise and traffic to a less than significant level.

STAFF RECOMMENDATION: Approval to City Council

PUBLIC SPEAKERS (SUBMITTED WRITTEN COMMENTS):

None.

COMMISSIONER DISCUSSION:

The Commission discussion primarily focused on the proposed driveway improvements and restrictions on turn movements (restricting left turn out at the Rock Springs Road driveway to reduce traffic north along the roadway); the requirement for the applicant to install a traffic signal at the W. Lincoln

Avenue/Rock Springs Road intersection; and proposed restrictions on alcohol sales.

COMMISSION ACTION:

Motion by Commissioner Rainey seconded by Commissioner Paul to recommend approval to City Council. Motion carried 6-1-0 (Barba voted No, she would prefer a different light industrial use, like a technology or some other type of business, rather than another gas station as the best use of this site.)

ITEMS CONTINUED FROM OCTOBER 27, 2020 and NOVEMBER 10, 2020:

1. CLIMATE ACTION PLAN UPDATE – PHG 18-0009:

REQUEST: The Climate Action Plan Update (“CAP Update”) consists of a comprehensive update to the 2013 CAP. The CAP update serves as a roadmap for the City to reduce citywide greenhouse gas emissions (“GHG emissions”) and builds on the 2013 CAP by updating the GHG emissions inventory with a new baseline year and forecasting emissions, consistent with state legislation and executive orders that are aimed at reducing Statewide GHG emissions. This includes AB 32, which established a target of reducing Statewide GHG levels to 1990 levels by 2020; SB 32, which established a mid-term target of reducing Statewide GHG levels to 40 percent below 1990 levels by 2030; and Executive Order S-3-05, which recommends a longer-term statewide GHG reduction goal of reducing emissions to 80 percent below 1990 levels by 2050. By establishing consistency with state legislation, the CAP Update seeks to streamline future development approvals within the City. The City has also developed a Climate Action Plan Consistency Review Checklist, in conjunction with the CAP Update, to provide a streamlined review process for proposed new development projects that are subject to discretionary review and trigger environmental review pursuant to CEQA. The CAP Update also provides a range of adaptation strategies and measures as an additional component to climate action planning. The City recognizes the importance of building resilience in the community to future climate change—related impacts through climate adaptation. Through “adaptation planning” the City is undertaking a process of identifying climate risks and opportunities, assessing the options to manage these risks and opportunities, and implementing actions to sustain and even improve the community’s quality of life. The Planning Commission will be asked to review and consider the project and

provide a recommendation to the City Council. The proposal also includes the adoption of the environmental determination prepared for the project.

PROPERTY SIZE AND LOCATION: CityWide

ENVIRONMENTAL STATUS: A Draft Initial Study/Mitigated Negative Declaration (“IS/MND”) was issued for 30-day public review, beginning on July 1, 2020, and ending July 31, 2020, in conformance with the California Environmental Quality Act (“CEQA”). The IS/MND incorporates mitigation measures that will avoid or mitigate impacts related to cultural/tribal cultural resources to a less than significant level.

STAFF RECOMMENDATION: Approval to City Council

COMMISSIONER DISCUSSION:

The Commissioners continued and completed the discussion of the Climate Action Plan (CAP).

COMMISSION ACTION:

Motion by Chair Weiler and seconded by Commissioner Paul to postpone the agenda item. Motion carried unanimously (7-0). Pursuant to the approved motion, the discussion of this matter will continue at the next Planning Commission Meeting scheduled for January 12, 2021.

CURRENT BUSINESS:

1. PLANNING COMMISSION BYLAWS:

Review of existing Planning Commission Bylaws and discussion of possible revisions.

COMMISSIONER DISCUSSION:

Information regarding the makeup of the Commission, adding student “Commissioner” with a non-binding vote, changing the meeting start time, processes for email communications with the Commissioners, and adding further detail to the PC Minutes were discussed.

A vote was taken to recommend to the City Council that the makeup of the Planning Commission be amended to include an additional member consisting of a student/youth member having a non-binding vote. Vote 4-3-0 (Doan, Rainey and Chair Weiler voted No due to logistical issues.)

The Commission provided direction to City staff to explore whether it was viable and advisable for Commissioners to have a City of Escondido email address and for City staff to report back on the same.

ORAL COMMUNICATIONS: None.

PLANNING COMMISSIONERS:

This was Vice-Chair Joe Garcia's last Planning Commission meeting. He will be sworn-in as a new Escondido City Council Member on December 9, 2020.

ADJOURNMENT:

Chair Weiler adjourned the meeting at 10:27 p.m.

Mike Strong, Secretary to the
Escondido Planning Commission

Joanne Tasher, Minutes Clerk



PLANNING COMMISSION

Agenda Item No.: I.1
Date: January 12, 2021

PROJECT NUMBER / NAME: PHG 18-0009 / Climate Action Plan Update

REQUEST: Continue discussion and complete the review of the Climate Action Plan Update (“CAP Update”).

LOCATION: Citywide

APPLICANT: City of Escondido

APN / APNS: N/A

PRIMARY

REPRESENTATIVE: Planning Division

GENERAL PLAN / ZONING: N/A

DISCRETIONARY ACTIONS REQUESTED: Adoption of the Climate Action Plan Update, Climate Action Plan Consistency Checklist, and the Final Initial Study/Mitigated Negative Declaration (“IS/MND”).

PREVIOUS ACTIONS: After opening and closing the public hearing on October 27, 2020, the Planning Commission postponed the item to continue the discussion on November 10, 2020. On November 10, 2020, the Planning Commission postponed the item to continue the discussion on December 8, 2020; and on December 8, 2020, the Planning Commission postponed the item to continue the discussion on January 12, 2021.

PROJECT STAFF: Mike Strong, Director of Community Development
mstrong@escondido.org

CEQA RECOMMENDATION: Recommend that the City Council adopt the Final IS/MND.

STAFF RECOMMENDATION: Recommend City Council approval.

REQUESTED ACTION: Approve Planning Commission Resolution No. 2020-16R

CITY COUNCIL HEARING REQUIRED: YES NO

REPORT APPROVALS: Mike Strong, Director of Community Development

A. BACKGROUND:

On October 27, 2020, the Planning Commission conducted a duly noticed public hearing to review and consider the CAP Update. After opening and closing the public hearing on October 27, 2020, the Planning Commission started to review and discuss the proposed strategies, goals, greenhouse gas (“GHG”) emissions reduction targets, City actions, supporting measures, and adaptation strategies. The Planning Commission postponed the item to continue the discussion on November 10, 2020, and on November 10, 2020, postponed the item to continue the discussion on December 8, 2020. On December 8, 2020, the Planning Commission completed its preliminary review and provided direction regarding the design of GHG reduction strategies, after which the Planning Commission again postponed the item to continue the discussion on January 12, 2021. With the Planning Commission’s preliminary review complete, the attached resolution has been revised to reflect the Planning Commission’s requested changes so that the Planning Commission can review such changes and take final action.

The January 12, 2021 staff report and presentation is intended to supplement previous reports and presentations. The full history of and scope of the proposed GHG emission inventory and forecast, analysis and qualification of GHG emissions reduction measures and targets was provided in the October 27, 2020 Planning Commission staff report.

B. ANALYSIS:

The first public review draft CAP Update document was released for public review and comment on June 25, 2020. Public feedback received during the public outreach phase was received and a second draft document was prepared to incorporate those comments. This second draft version was presented to the Planning Commission on October 27, 2020. The Planning Commission conducted its review of the draft CAP over several dates and at the completion of its review, provided general direction on the proposed GHG reduction strategies (summary notes provided in Attachment 1). The January 12, 2021 Planning Commission meeting is a continuation of this discussion, and intended to provide an opportunity for the Planning Commission to finalize its recommendation to the City Council.

At its January 12, 2021 meeting, the Planning Commission will be asked to comment on the final changes. The changes are provided with a draft resolution recommending approval of these documents. Once the Planning Commission approves the resolution, the documents will be forwarded to the City Council for adoption.

C. ENVIRONMENTAL STATUS

A Draft Initial Study/Mitigated Negative Declaration (“IS/MND”) was issued for a 30-day public review, beginning on July 1, 2020 and ending on July 31, 2020, in conformance with the CEQA. Two (2) written comments were received during the public review period. The Final IS/MND incorporates response to comments received during the review period along with mitigation measures that will avoid or reduce potentially significant environmental impacts related

to cultural/tribal cultural resources to a less than significant level. The final IS/MND and technical studies are available as an exhibit to draft Resolution No. 2020-16R.

In 2007, California's lawmakers enacted SB 97, which expressly recognizes the need to analyze GHG emissions as part of the CEQA process. SB 97 required the Governor's Office of Planning and Research ("OPR") to develop recommended amendments to address GHG emissions as an environmental effect. In response to the mandate of SB 97, this CAP has been prepared consistent with the standards of CEQA Guidelines Section 15183.5 ("Qualified Plan"). Pursuant to the Section, the CAP affords development applicants the opportunity to use CEQA streamlining tools for analysis of GHG emissions and related impacts for projects that are consistent with the CAP. Pursuant to CEQA Guidelines Sections 15064(h)(3), 15130(d), and 15183(b), a land use development application's or project's incremental contribution to a cumulative GHG emissions effect may be determined not to be cumulatively considerable if it complies with the requirements of the CAP. As such, new development can contribute its fair-share of GHG reductions by complying with CAP strategies, goals, and actions that were determined to be applicable through the Checklist development process. Attachment 4 provides additional information about the steps for new development projects to demonstrate consistency with the CAP. The actual CAP Consistency Checklist is provided as an attachment to draft Resolution No. 2020-16.

The CAP establishes a screening threshold of 500 MTCO_{2e} per year for new development projects in order to determine if a project would need to demonstrate consistency with the CAP through the Consistency Checklist. Projects that are projected to emit fewer than 500 MTCO_{2e} annually would not make a considerable contribution to the cumulative impact of climate change, and therefore, do not need to demonstrate consistency with the CAP. In most cases, if the project exceeds this threshold, compliance with future implementing CAP ordinances provide the CEQA streamlining path to allow project-specific environmental documents, if eligible, to tier from and/or incorporate by reference the CAP's programmatic review of GHG impacts in their cumulative impact analysis. However, for a proposed project that requests a land use change through a General Plan amendment, master plan/specific plan amendment, and/or zone change, a project-specific GHG emissions analysis will likely be needed as part of the discretionary permit application. If the study reveals the project to be more GHG-intensive as compared to that assumed for the existing land use designation, the project applicant would need to potentially identify additional mitigation measures to offset the increase in GHG emissions resulting from the land use change.

D. CONCLUSION

The Final draft CAP Update, CAP Consistency Checklist, and Final IS/MND provide a fundamental path forward for compliance with various state legislation, advances environmental stewardship with a focus on social equity and environmental justice, and seeks to streamline future development approvals within the City. The Final draft CAP Update, CAP Consistency Checklist, and Final IS/MND require City Council approval. Staff recommends the Planning Commission adopt Resolution 2020-16R, recommending approval of the proposed CAP Update,

PHG 18-0009
January 12, 2021
Planning Commission

as described in this staff report, and as set forth in draft Planning Commission Resolution No. 2020-16. City Council is the final decision-maker for this project.

ATTACHMENTS:

1. Summary of Draft CAP Update Changes
2. Draft Planning Commission Resolution No. 2020-16R

Attachment 1
CAP UPDATE – SUMMARY OF CHANGES
Planning Case No.: PHG 18-0009

OCTOBER 27, 2020 CHANGES

- Measure T-1.3: The proposed language is to require the adoption of an ordinance that requires the installation of EV charging stations in existing, larger commercial developments (consisting of 20 spaces or more). The Planning Commission desired to change the installation requirement in large commercial developments of 100 spaces.
- Measure T-1.4: Clarify that the ordinance should consider incentives to offset participant costs of the measure’s implementation. The details of the incentives would be discussed at the time of ordinance adoption.
- Measure T-2.1: The Planning Commission discussed and suggested no change. However, the Planning Commission wants to express support for accelerating the measure’s implementation.
- Measure T-2.3: strike/delete the measure in its entirety.
- Table 3-3 Supporting Measures: Add “electronic” to the third bullet point, “Medium- and heavy- duty electronic truck sales....” and fix typos.

NOVEMBER 10, 2020 CHANGES

- Measure E.4.1 – Remove point-of-sale measure
- Measure E.4.2 – Remove point-of-sale measure
- Measure C-9-1 – Eliminate the requirement for “on-site tree preservation” from 2023 performance metric.
- Measure C-9.2 – Achieve 35% canopy coverage target in PINs
- Measure C-9.3 – eliminate reference to requirement that 75 percent of annexed land be conserved. Add “open space” in the 2030 and 2035 performance metrics.

DECEMBER 8, 2020 CHANGES

- Add Environmental Commission to oversee and assist with CAP implementation

- Adaptation Measure 2-3, strategies listed in year 2022 implementation – Add language provided by the Community Advisory Group into the first bullet point regarding fuel breaks to areas where they make sense and to not take out important habitat unless the area’s value is critical to protecting structures.
- Adaptation Measure 2-3, strategies listed in year 2022 implementation - Remove the second bullet point regarding fuel modification zones.
- Adaptation Measure 2-3, strategies listed in year 2022 implementation - Remove the third bullet point regarding land use and zoning in very high fire hazard areas.
- Adaptation Measure 2-3, strategies listed in year 2027 implementation – Delete “existing” in the third bullet point
- Change the title of Appendix F from “Methods for Addressing Adaptation, Social Equity, and Environmental Justice in the Escondido Climate Action Plan” to “Methods for Addressing Greenhouse Gas Emissions Reductions and Adaptation, Social Equity, and Environmental Justice in the Escondido Climate Action Plan.”

ADDITIONAL CHANGES INCORPORATED FROM THE CLIMATE ACTION CAMPAIGN LETTER AS REFERENCED ON OCTOBER 27, 2020 AND DECEMBER 8, 2020

- Change the intro to Chapter 3 to adjust the timeline for carbon neutrality from 2088 to 2045 to meet state targets (Executive Order B-55-18).
- Table 3-3 Supporting Measures: Add “Pursue State grants such as the Affordable Housing and Sustainable Communities grants to support affordable housing projects near transit.
- Table 3-4 Supporting Measures: Add: “Pursue opportunities to utilize existing properties adjacent to transit and employment centers to develop housing affordable to very low-income and low-income households.

ATTACHMENT 2

Planning Commission
Hearing Date: October 27, 2020
Effective Date: January 13, 2021

PLANNING COMMISSION RESOLUTION NO. 2020-16R

A RESOLUTION OF THE PLANNING COMMISSION OF
THE CITY OF ESCONDIDO, CALIFORNIA,
RECOMMENDING APPROVAL OF THE UPDATED
CLIMATE ACTION PLAN

APPLICANT: City of Escondido

CASE NO: PHG 18-0009

WHEREAS, the City of Escondido is committed to the long-range goal of protecting the natural environment, increasing sustainability efforts, and improving overall quality of life; and

WHEREAS, carbon dioxide (“CO₂”) and other greenhouse gases released into the atmosphere have a profound effect on the Earth's climate and reducing the potential magnitude of climate change may lower its harmful effects on public health and safety; and

WHEREAS, in 2006, the State of California adopted the Global Warming Act of 2006 (Assembly Bill 32), which created a statewide greenhouse gas (“GHG”) emission requirement and goal to reduce emissions to 1990 levels by 2020; and in 2016, California Senate Bill 32 established a new mid-term greenhouse gas reduction target of 40 percent below 1990 levels by 2030; and

WHEREAS, local actions, whenever taken by cities and counties nationwide, can help provide a collective response and may also provide the benefits of testing and developing model programs, methods, and technologies for achieving GHG emissions reductions; and

WHEREAS, the Climate Action Plan Update (“CAP Update”) includes a revised GHG emissions inventory and forecast, analysis, and qualification of updated GHG emissions reduction measures and targets, clarification to the process for implementation, monitoring and reporting of progress, and meaningful community engagement; and

WHEREAS, the CAP Update includes technical data, target and forecasting, and implementation actions based on regional climate planning and consulting expertise, City staff knowledge, and public input; and

WHEREAS, an Initial Study/Mitigated Negative Declaration (“IS/MND”) was prepared and deems the CAP Update a California Environmental Quality Act (“CEQA”) Qualified CAP; and

WHEREAS, GHG emissions reduction actions contribute to the achievement of many of the City's environmental values and are consistent with the General Plan related environmental policies, including promoting clean and efficient energy use, reducing vehicle miles traveled, promoting active transportation, promoting water conservation, and planning for anticipated future air quality and climate change impacts; and

WHEREAS, mechanisms proposed to reduce GHG emissions will also contribute to the economic vitality of the City through the development and use of clean technologies and the addition of local jobs. Achieving GHG emissions reductions to protect the climate

is important to the City, which relies heavily on the stability of the climate for our environment, economy, and quality of life; and

WHEREAS, the Planning Division did study said request, performed necessary investigations, prepared a written report, and does recommend approval of the Project as depicted in Exhibit "A" (CAP Update) and Exhibit "B" (CAP Consistency Checklist), which are attached hereto and made a part hereof by this reference as though fully set forth herein; and

WHEREAS, on October 27, 2020, the Planning Commission of the City of Escondido did hold a duly noticed public hearing as prescribed by law. At said hearing, this Planning Commission received and considered the reports and recommendation of the Planning Division and gave all persons full opportunity to be heard and to present evidence and testimony respecting said matter. Evidence was submitted to and considered by the Planning Commission, including, without limitation:

- a. Written information including plans, studies, written and graphical information, and other material, submitted as part of the project;
- b. Oral testimony from City staff, interested parties, and the public;
- c. The staff report, dated October 27, 2020, with its attachments as well as City staff's recommendation on the project, which is incorporated herein as though fully set forth herein; and
- d. Additional information submitted during the public hearing; and

WHEREAS, said public hearing before the Planning Commission was conducted in all respects as required by the Escondido Municipal Code and the rules of this Planning Commission; and

WHEREAS, after opening and closing the public hearing on October 27, 2020, the Planning Commission postponed the item to continue the discussion to November 10, 2020 to allow additional time to evaluate public comments and in response to staff's request; and

WHEREAS, on November 10, 2020, the Planning Commission postponed the item to continue the discussion on December 8, 2020; and on December 8, 2020, the Planning Commission postponed the item to continue the discussion on January 12, 2021, prior to making its decision to approve the Project.

NOW, THEREFORE, BE IT RESOLVED by the Planning Commission of the City of Escondido that:

1. The above recitations are true and correct.
2. The IS/MND has been prepared in compliance with all requirements contained in CEQA and the CEQA Guidelines, and therefore, the IS/MND is appropriate for adoption. The CAP Update is a CEQA Qualified CAP and is attached as Exhibit "C."
3. Based on its consideration, the Planning Commission hereby determines that the adoption of the CAP and CAP Consistency Checklist is consistent with the provisions of the General Plan and State law, and is in the public interest.
4. After consideration of all evidence presented, and studies and investigations made by the Planning Commission and on its behalf, the Planning Commission reached a recommendation on the matter as hereinafter set forth.
5. The Planning Commission, therefore, recommends City Council approval of the Project as described in the October 27, 2020 Planning Commission staff

report, as supplemented by the January 12, 2021 Planning Commission staff report, and as attached as Exhibit “A” and Exhibit “B.”

6. Said plan is on file in the Planning Division of the Community Development Department and is available for inspection by anyone interested herein, and said development plan is incorporated herein by this reference, the same as if it were fully set forth herein.

7. The Planning Commission acknowledges that additional changes will likely be made to the CAP to achieve CAP goal setting targets. Furthermore, it may be necessary to adjust the measures or maps described therein as necessary to ensure continued compliance with the various state legislative mandated targets.

BE IT FURTHER RESOLVED that the City will pursue the GHG emission reduction goals and targets identified in the CAP through the implementation of the identified strategies, measures, and actions and by encouraging the community to support CAP goals and targets through various actions, ordinances, policies, incentive-based programs, and education programs. The Planning Commission will utilize its role to promote the implementation of the CAP and support related goals and targets. Should an Environmental Commission not be established by the City Council, or not be timely formed to assist with aspects of CAP implementation, the Planning Commission will instead work with City staff to help monitor and report progress towards meeting GHG emission reduction goals and targets identified in the CAP.

This Climate Action Plan (“CAP”) provides a comprehensive roadmap to address the challenges of climate change in the City of Escondido (“City”). While climate change is a global issue, it impacts communities on a local scale. It is the responsibility of all members of society, including local governments, to reduce greenhouse gas (“GHG”) emissions in their communities. Acting on climate change means both reducing GHG emissions from activities within the city and helping the community adapt to climate change and improve its resilience over the long term. The City has dedicated resources and partnered with the San Diego Association of Governments (“SANDAG”) to create this CAP to achieve GHG reductions and address climate change at the local level. In an effort to combat climate change, this CAP sets GHG reduction targets and proposes achievable, locally-based strategies to reduce GHG emissions from both municipal and community activities.

Scientific evidence shows that the Earth’s climate is experiencing a warming trend as a result of increasing GHGs in the atmosphere. Increasing average temperatures are also causing changes in the climate, including disrupted ocean currents, increased extreme weather events, and changes in precipitation patterns, etc. This phenomenon is known as global climate change. As California continues to experience

This CAP aims to address climate change by reducing GHG emissions from activities within the city, and by identifying threats and strategies for adapting to adverse environmental conditions caused by climate change.

historic trends of rising average temperatures, extreme weather events and storms, and higher sea levels, there is evidence that the effects of global climate change are already occurring and that reductions in GHG emissions are needed to prevent the most catastrophic effects of climate change.

The State has taken several steps to reduce GHG emissions and respond to the threat of global climate change. In 2006, the California Global Warming Solutions Act (Assembly Bill [“AB”] 32) established the state’s first target to reduce GHG emissions, which set a goal of lowering emissions to 1990 levels by 2020. In 2016, Governor Brown signed Senate Bill (“SB”) 32 into law, which established a new mid-term GHG reduction target of 40 percent below 1990 levels by 2030, aligned with leading international governments, such as the European Union. The 2030 target set under SB 32 places California on a trajectory towards meeting its longer-term goal, which is to bring emissions down to 80 percent below 1990 levels by 2050. According to the California Air Resources Board (“CARB”), the State has been making steady progress in reducing statewide emissions and has met its 2020 target. Many climate experts believe that eventually a reduction of greater than 80 percent will be required to achieve climate stabilization.

Over the last decade, the City has taken several steps to begin addressing climate change and achieving reductions in GHG emissions, both in the City’s operations as well as the broader community. The City adopted its most recent CAP in 2013 (“2013 CAP”). The 2013 CAP detailed the City’s first communitywide GHG inventories for 2005 and 2010, which provided baseline emissions data from which future GHG emissions were estimated and reduction measures were developed.

This CAP provides an update to the inventories, projections, and GHG reduction measures identified in the 2013 CAP.



Source: City of Escondido

Key Components of Climate Action Planning

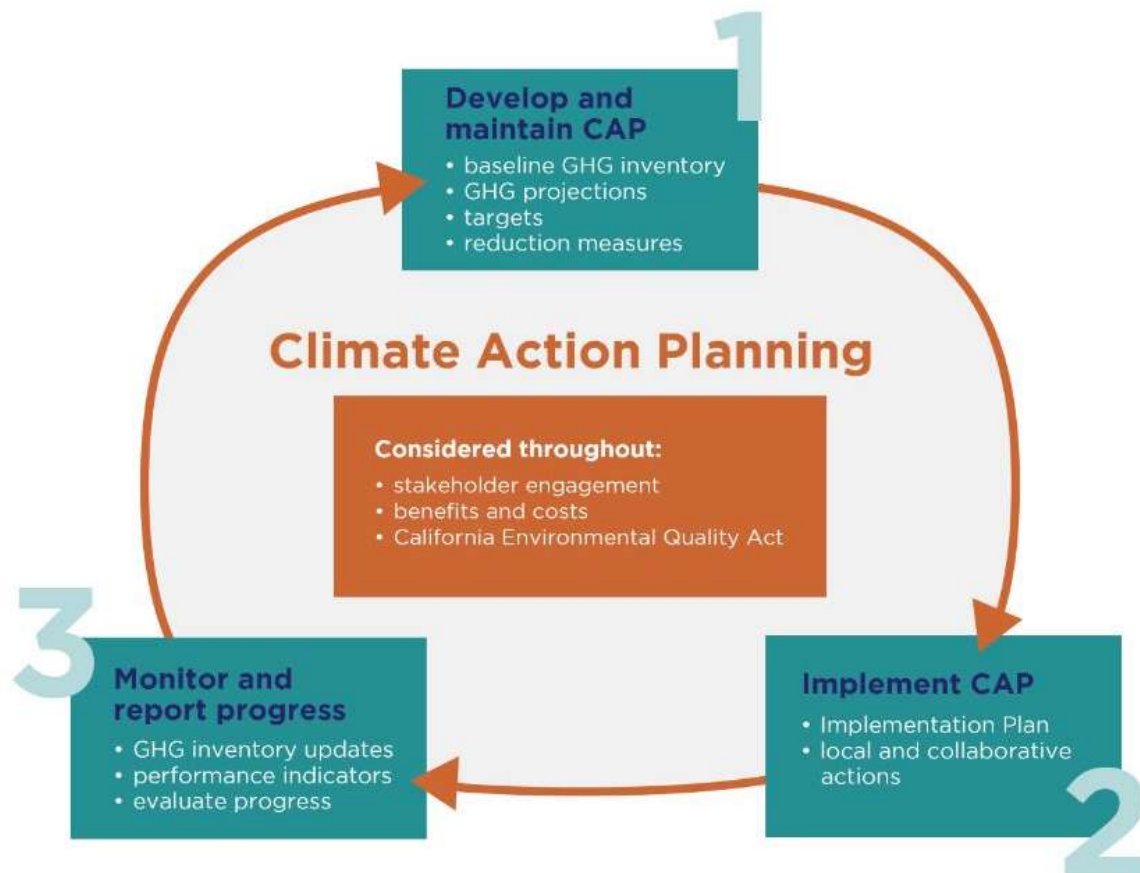
Three essential steps to the climate action planning process include:

Step 1: Develop and Maintain a CAP, which includes preparing baseline emissions estimates and projections and developing reduction targets and strategies.

Step 2: Implement the CAP through local measures.

Step 3: Monitor and Report Progress on CAP implementation and identify improvements or adjustments that can be made to the plan in the future.

Adoption of this CAP marks the beginning of an iterative process of maintaining, implementing, monitoring, and updating the CAP. Over time, the City will continue to repeat the iterative process by updating this CAP as new technologies, legislative actions, information, and inventories become available. The key components of the climate action planning process are summarized below and shown graphically in **Figure ES-1**.



Source: SANDAG 2018.

Figure ES-1

The Climate Action Planning Process

Step 1: CAP Development

Development of the CAP consists of setting a baseline inventory of communitywide GHG emissions, projecting GHG emissions for future years, setting GHG reduction targets, and identifying strategies and measures the City will implement to achieve these reduction targets.

Baseline GHG Inventory

A baseline GHG inventory provides a snapshot of the emissions associated with a community's GHG producing activities in a single year. For this CAP, a baseline GHG emissions inventory was prepared for 2012, consistent with the base year used for SANDAG's Series 13 Regional Growth Forecast. It was estimated that the City generated 943,000 metric tons of carbon dioxide equivalent ("MTCO₂e") in 2012. The two largest sources of GHG emissions were from on-road transportation (e.g., on-road vehicular gasoline and diesel consumption) and energy sources (e.g., electricity and natural gas consumption in buildings) accounting for 53 percent and 39 percent, respectively. Baseline inventories also provide the emissions levels from which to forecast emissions and set emissions reduction targets based on state goals. The City's baseline emissions inventory, forecasted emissions, and reduction targets are further discussed in [Chapter 2](#).

In 2012, the City's total GHG emissions of 943,000 MTCO₂e were produced across the following emissions categories:

- 53% from on-road transportation
- 39% from energy (electricity and natural gas consumption)
- 3% from off-road transportation
- 3% from solid waste
- 2% from water and wastewater

Citywide Emissions Projections

Citywide emissions projections were modeled based on a continuation of current trends in activity, population, and job growth. The business-as-usual ("BAU") condition provides estimates of future citywide emissions based on existing growth trends assuming no additional actions would be taken to reduce GHG emissions. Based on trend data, the City would experience a decrease in emissions through 2020 under BAU conditions to 12 percent below 2012 baseline levels. This decrease is primarily due to the City's implementation of the 2013 CAP and State and federal actions that have resulted in GHG reductions locally. Citywide emissions under BAU conditions would steadily rise after 2020 through 2035 but would not exceed 2012 baseline levels.

State and federal actions that are planned to take place in the future would further reduce the City's projected emissions when applied across the various GHG emissions categories. This projection, with the application of state and federal legislative actions that would reduce local GHG emissions, is referred to as the Legislatively-Adjusted BAU condition. With legislative reductions applied, the City's emissions would be 16 percent below 2012 baseline levels in 2020, 36 percent below 2012 baseline levels in 2030, and 39 percent below 2012 baseline levels in 2035 with legislative actions.



Source: City of Escondido

[Table ES-1](#) provides a summary of both BAU and Legislatively-Adjusted BAU project emissions for 2020, 2030, and 2035.

Projection	2012 Baseline Emissions (MTCO ₂ e)	2020		2030		2035	
		Total Emissions (MTCO ₂ e)	Change from 2012 Baseline (%)	Total Emissions (MTCO ₂ e)	Change from 2012 Baseline (%)	Total Emissions (MTCO ₂ e)	Change from 2012 Baseline (%)
BAU	943,000	831,000	-12	833,000	-12	841,000	-11
Legislatively- Adjusted BAU	--	789,000	-16	608,000	-36	578,000	-39
Reduction Targets	--	907,000	-4	547,000	-42	456,000	-52.5

Notes: BAU = business-as-usual; GHG = greenhouse gas; MTCO₂e = metric tons of carbon dioxide equivalent
Source: EPIC 2018, EPIC 2020.

Reduction Targets

This CAP's reduction targets were established using a communitywide mass emissions approach as recommended by CARB. These targets, to be achieved through implementation of this CAP, are to reduce citywide GHG emissions to four percent below 2012 levels by 2020, 42 percent below 2012 levels by 2030, and 52.5 percent below 2012 levels by 2035. A summary of the projections and targets is shown in **Table ES-1**. The methodologies used for calculating each projection and City reduction targets are further discussed in **Chapter 2**.

Reduction Strategies and Measures

The City would meet its 2020 emissions reduction target under BAU conditions, based on existing activities and trends. However, to meet the City's 2030 and 2035 reduction targets, additional actions beyond those implemented at the State and federal level are required. To meet the City's 2030 and 2035 targets, this CAP identifies strategies and measures to reduce GHG emissions citywide from a variety of emissions categories. In total, the City has identified nine strategies for reducing citywide GHG emissions, listed below in **Table ES-2**.

Strategy	Description
Strategy 1	Increase the Use of Zero-Emission or Alternative Fuel Vehicles
Strategy 2	Reduce Fossil Fuel Use
Strategy 3	Reduce Vehicle Miles Traveled
Strategy 4	Increase Building Energy Efficiency
Strategy 5	Increase Renewable and Zero-Carbon Energy
Strategy 6	Increase Water Efficiency
Strategy 7	Diversify Local Water Supply
Strategy 8	Reduce and Recycle Solid Waste
Strategy 9	Carbon Sequestration and Land Conservation

Source: EPIC 2020.

Under each of the nine strategies are detailed measures to help reduce GHG emissions citywide. The City will implement 31 total measures to achieve emission reductions from five emissions categories: transportation, energy (electricity and natural gas consumption), water and wastewater, solid waste, and carbon sequestration. The emissions categories identified in this CAP are consistent with the presentation of emissions categories defined through SANDAG’s Regional Climate Action Planning Framework (“ReCAP”). Measures were developed based on a review of the measures included in the 2013 CAP, community input, existing and future planning efforts in the City, potential co-benefits, and feasibility of implementation. Each measure provides direct and measurable emissions reductions through implementation of specific programs, policies, or projects. **Table ES-3** provides a list of five measures in this CAP from which the City would receive the greatest GHG reduction benefits.

Implementation of all GHG reduction measures would result in a reduction of approximately 105,000 MTCO_{2e} in 2030 and 115,000 MTCO_{2e} in 2035.

Measure	Description
Measure E-5.3	The City will develop or join a program to further increase grid-supply renewables and zero carbon electricity to 100 percent of the City’s electricity supply, reducing citywide emissions by 29,486 MTCO _{2e} in 2035.
Measure S-8.1	The City will work with its franchise waste hauler to prepare a waste diversion plan that achieves an 85 percent waste diversion rate, reducing citywide emissions by 25,535 MTCO _{2e} in 2035.
Measure T-3.8	The City will work with MTS and NCTD to increase transit ridership through increased service frequency and development located near transit stations, reducing citywide emissions by 11,447 MTCO _{2e} by 2035.
Measure T-3.9	The City will develop a service population-based threshold for VMT to apply to new development project to support the reduction in citywide VMT, reducing citywide emissions by 11,075 MTCO _{2e} by 2035.
Measure T-2.3	The City will adopt an ordinance by 2023 to require new development to use electric-powered or alternatively fueled construction equipment in development project, reducing citywide emissions by 9,032 MTCO _{2e} by 2035.

Notes: MTS = Metropolitan Transit System; MTCO_{2e} = metric tons of carbon dioxide equivalent; NCTD = North County Transit District; VMT = vehicle miles traveled
 Source: EPIC 2020.

Step 2: Implementation

Implementation of the CAP plays a crucial role in how the City will meet its GHG emission reduction targets. Implementation of the CAP will require investments, long-term commitments, and widespread community participation. Ongoing partnerships between community residents, businesses, property owners, the City, and other agencies and organizations in the region are essential for successful implementation. On a communitywide level, individuals and businesses can play an important role in reducing GHG emissions by changing habits to produce less waste or use alternative modes of transportation.

As new development is proposed in the city, it will be required to incorporate more sustainable design features to reduce project GHG emissions. Consistent with the California Environmental Quality Act (“CEQA”) Guidelines Section 15183.5, this qualified CAP will allow for CEQA streamlining through a CAP Consistency Review Checklist (“Checklist”). The CAP Checklist contains GHG reduction measures applicable to development projects that are required to be implemented on a project-by-project basis. Further details on City implementation strategies are provided in **Chapter 4**.

Step 3: Monitoring

Ongoing management, oversight, and collaboration is required to support the implementation of the CAP. Similar to implementation of the CAP, monitoring is an important part of ensuring the success of the CAP in achieving the City's 2030 and 2035 reduction targets. The City will monitor progress towards the 2030 and 2035 targets through partnerships with SANDAG and other local jurisdictions in developing local GHG inventory updates every two years. City staff will provide annual updates to the City Council and Planning Commissions on CAP implementation and efforts. Just as this CAP serves as an update to the City's 2013 CAP, the City will update this CAP in the future to ensure strategies and measures remain implementable and feasible, adjusting measures based on changing conditions or demands, and incorporating new technologies not considered in previous CAPs. **Chapter 4** provides a detailed description of the City's monitoring efforts to ensure reduction targets and goals are met.



Source: City of Escondido

Adaptation Measures

The climate action planning process is primarily focused on addressing the causes of climate change and identifying measures to reduce GHG emissions and limit additional impacts on the climate system (i.e. the five spheres that comprise Earth's climate). Though many CAPs recognize that climate change is already taking place, the interactions between climate change, human health, and equitable climate solutions are not always addressed. As an additional component to climate action planning, the City recognizes the importance of building resilience in the community to future climate change—related impacts through climate adaptation. Climate adaptation refers to adjusting individual and societal behaviors, systems, and infrastructure to reduce the impact climate change impacts like heat waves, worsening air quality, and flooding have on infrastructure, services, and the well-being of the community. These impacts would not affect all persons in the community equally and certain climate change effects would impact certain vulnerable populations more than others. A broader examination of social equity and environmental justice through climate adaptation planning assists in the development of more sustainable public policies that address climate change at the community level. Therefore, this CAP includes measures to improve the city's resilience to potential environmental risks and hazards that will be exacerbated by climate change, while seeking equitable climate change adaptation solutions for all residents, businesses, and other community members. Measures are organized to reduce climate change impacts associated with increased temperatures, increased frequency of extreme weather events and heat waves, changes in precipitation patterns and water availability, increased likelihood of flooding, and increased wildfire risk. Included within each adaptation strategy are programs and policies to support climate adaptation and resiliency, with a focus on specific vulnerabilities and impacts that have the potential to affect the community's populations, functions, and structures. The City will implement the measures in **Table ES-4** to adapt to the impacts of climate change. A detailed discussion of the City's climate vulnerabilities and adaptation strategies is included in **Chapter 5**.

While the City works to reduce GHG emissions, climate change impacts are already occurring. To ensure equitable response for all residents, the City will implement adaptation measures to address current climate change impacts at the local level.

Table ES-4 Climate Adaptation Measures

Measure	Description
Measure A-1.1	Fully anticipate, plan for, and mitigate the risks of climate change and seize the opportunities associated with the social and environmental change.
Measure A-1.2	Make sure that everyone is given the opportunity to be prepared for the current and future risks that are exacerbated by climate impacts.
Measure A-1.3	Hardwire social equity and environmental justice into new programs and projects.
Measure A-1.4	Develop working relationships with other agencies and continue to analyze climate impacts.
Measure A-2.1	Make sure that everyone has equitable access to full, healthy lives.
Measure A-2.2	Create “climate safe and decent” housing options.
Measure A-2.3	Build capacity for adaptive neighborhoods.
Measure A-2.4	Build a sustainable and resilient transportation network.

Source: City of Escondido, 2020.

To be effective, this CAP includes a roadmap for implementing new policies, programs, incentives, and requirements shortly after adoption, as well as longer term actions that the City would implement following additional research and examination, in line with the City’s ongoing CAP monitoring and evaluation of new technologies. In addition to addressing challenges faced by the City in reducing GHG emissions and adapting to climate change, the CAP will enable the City to continue to be on the forefront of sustainable planning. For the City, the goal of sustainable planning will be to meet the needs of the present without compromising the future. Through addressing both communitywide GHG reduction and adaptation together, the City has been able to consider how actions can synergistically produce multiple co-benefits, such as addressing existing environmental health disparities while improving quality of life and health for all residents.

CAP Organization

This CAP is organized into five chapters. **Chapter 1** provides an introduction to climate action planning, the need for a CAP to address local GHG emissions, and the framework for CAP development. **Chapter 2** summarizes the City’s baseline GHG emissions, estimates GHG emission forecasts for target years, and sets citywide GHG reduction targets. **Chapter 3** includes a description of strategies and measures the City will take to reduce local GHG emissions and describes the supporting actions and co-benefits of each strategy. **Chapter 4** provides an outline for how the City will implement these reduction strategies and measures and includes guidelines for monitoring and updating the CAP. **Chapter 5** evaluates the City’s vulnerability to climate change and strategies the City is and will be implementing to adapt to climate change impacts.



Chapter 1

INTRODUCTION

Climate Action Plans (“CAPs”) serve as comprehensive roadmaps that outline specific activities a community will take to reduce greenhouse gas (“GHG”) emissions and potential impacts of climate change.

The City’s CAP was developed for the following purposes:

- Build on the City’s previous CAP, adopted in 2013.
- Create an updated GHG emissions inventory of citywide activities.
- Identify reduction targets consistent with state goals.
- Set strategies and measures for sustainable activities and development in the City.
- Streamline CEQA review for projects consistent with CAP goals.

There are many “natural” factors (e.g. volcanic eruptions and solar variations) and “anthropogenic” (human-induced) factors (e.g. emissions from vehicles) that contribute to climate change. Climate fluctuations have always been a part of Earth’s history, which is evident in geological records. However, the rapid rate and the magnitude of climate change occurring now cannot be explained by only natural factors - seasons are shifting, average temperatures are increasing, precipitation levels are changing, and sea levels are rising. These changes have the potential to adversely affect human health and safety, economic prosperity, provision of basic services, and the availability of natural resources. While global climate change is happening worldwide, local efforts to reduce human-induced GHG emissions and build resilience

in the face of adverse climate change effects can make a difference. Local action on climate change cannot be addressed insularly by one agency or community, but requires active and ongoing partnerships between residents, businesses, the City of Escondido (“City”), and other agencies and organizations in the region. By beginning to plan now and engaging in more sustainable practices, communities will be better suited to adapt to climate change and increase resiliency for the future.

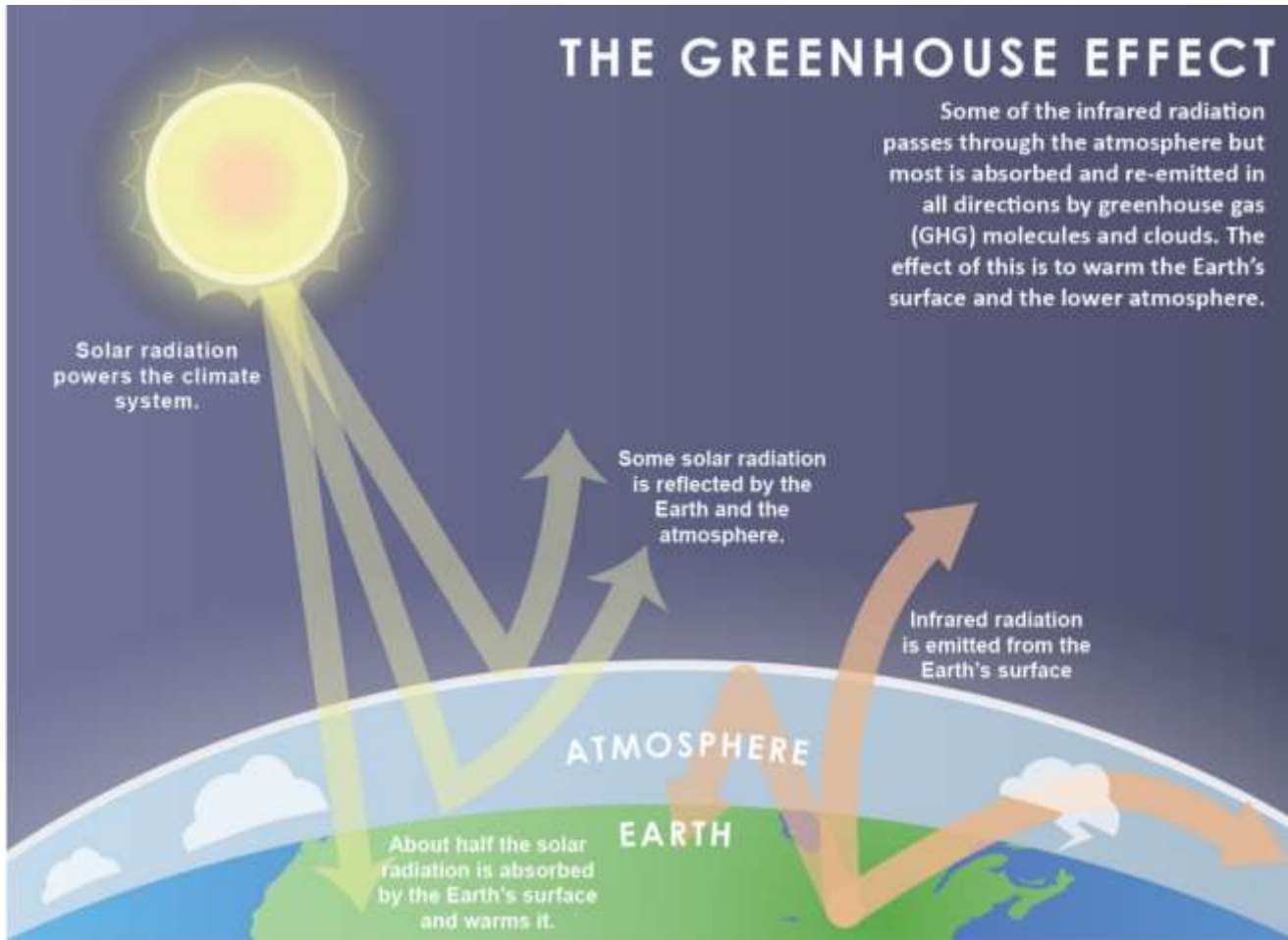
The City is committed to providing a livable, sustainable, equitable, and economically vibrant community. In developing a CAP, jurisdictions evaluate the volume of GHGs emitted during a baseline year (2012 for this CAP) and determine the amount of emissions that need to be reduced to achieve statewide GHG reduction targets. At a local scale, individuals and businesses in the City can work towards reducing their carbon footprint by changing habits to consume less energy, generate less waste through recycling and composting, conserving water, using sustainable transportation modes, and promoting carbon sequestration. Through successful implementation and administration of the CAP, the actions in this document would strengthen the City’s economy, improve risk management, clean the environment, and improve the health and wellness of residents.



Source: City of Escondido

1.1 Introduction to Climate Change Science

The greenhouse effect, as outlined below in **Figure 1-1**, results from a collection of atmospheric gases called GHGs that insulate the Earth and help regulate its temperature. These gases, consisting of mainly water vapor, carbon dioxide (“CO₂”), methane (“CH₄”), nitrous oxide (“N₂O”), ozone (“O₃”), and chlorofluorocarbons (“CFCs”) all act as effective global insulators, reflecting Earth’s visible light and infrared radiation to keep temperatures on Earth conducive to life as we know it. The greenhouse effect is essential for the planet to support life when not exacerbated.



Source: Ascent Environmental 2019.

Figure 1-1

The Greenhouse Effect

In recent decades, human activities (e.g., burning of fossil fuels for transportation and energy, increasing rates of deforestation and development) have contributed to an elevated concentration of GHGs in the atmosphere. Human-caused (i.e., anthropogenic) emissions of GHGs above natural ambient concentrations are responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the Earth's climate, known as global climate change, or global warming. There is strong scientific consensus that it is "extremely likely" that most of the changes in the world's climate during the last 50 years are a result of anthropogenic (i.e. human caused) GHG emissions (IPCC 2014). Global climate change, in turn, is the driver behind changes in precipitation patterns, shrinking polar ice caps, an increase in sea level, and other impacts to biological resources and humans.

Global climate change may lead to rising temperatures and changes in precipitation patterns impacting average temperatures and water supply at the local level.

Short-lived climate pollutants ("SLCPs"), which are GHGs that remain in the atmosphere for a much shorter period than long-lived climate pollutants (e.g., CO₂ and N₂O), are also powerful climate forcers that have an outsized impact on climate change in the near term. Despite their relatively shorter atmospheric lifespan, their relative potency in terms of how they heat the atmosphere (i.e., global warming potential ["GWP"]) can be tens, hundreds, or even thousands of times greater than that of CO₂. SLCPs include CH₄; fluorinated gases ("F-gases"), including hydrofluorocarbons ("HFCs"), perfluorocarbons ("PFCs"), and sulfur hexafluoride ("SF₆"); and black carbon.

Climate change is a global problem that can lead to significant fluctuations in regional climates. It is the driver behind rising average temperatures and changes in precipitation patterns globally, resulting in increased extreme heat events, reduced water supplies, and extended droughts. This CAP represents an important step in acknowledging global climate change effects on the city. The document is organized into five chapters. **Chapter 2** summarizes the City’s GHG emissions that are contributing to climate change. **Chapter 3** includes a description of strategies and measures the City will take to reduce local GHG emissions. **Chapter 4** provides an outline for how the City will implement these reduction strategies and includes guidelines for monitoring and updating the CAP. **Chapter 5** provides strategies the City is and will be implement to adapt to climate change impacts and ensure all populations in the city prepared for future changes in climate patterns.



Source: City of Escondido

1.2 Regulatory Framework

In response to the increase in human-caused GHG emissions and the threat of global climate change, the federal and State governments have already taken several steps to both reduce GHG emissions and adapt to climate change. The following section provides a summary of the policies which provide context for this CAP.

1.2.1 Federal and State Regulations

In 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05, which directed California to reduce GHG emissions to 1990 levels by 2020, and to 80 percent below 1990 levels by 2050. A year later, in 2006, the Global Warming Solutions Act (Assembly Bill [“AB”] 32) was passed, establishing regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions. AB 32 put a cap on GHG emissions, setting a target of reducing GHG emissions to 1990 levels by 2020. As part of its implementation of AB 32 and Executive Order S-3-05, the California Air Resources Board (“CARB”) developed a Scoping Plan in 2008. The Scoping Plan, along with its Update in 2014, described the approach California will take to reduce GHGs to achieve the 2020 reduction target. California is currently on track to meet or exceed the AB 32 current target of reducing GHG emissions to 1990 levels by 2020.

As directed by AB 32, SB 32, and Executive Orders B-30-15 and S-3-05, the state aims to reduce annual GHG emissions to:

- 1990 levels by 2020;
- 40 percent below 1990 levels by 2030; and
- 80 percent below 1990 levels by 2050.

On April 20, 2015, Governor Edmund G. Brown Jr. signed Executive Order B-30-15, establishing a new GHG emissions reduction target of 40 percent below 1990 levels by 2030. This target aligns with those of leading international governments such as the 28-nation European Union which adopted the same target in October 2014. Executive Order B-30-15 also directed CARB to update the AB 32 Scoping Plan

to reflect the path to achieving the 2030 target. In September 2016, Governor Brown also signed Senate Bill (“SB”) 32, which codified into statute the mid-term 2030 target established by Executive Order B-30-15. The new 2030 GHG emissions reduction target places California on a trajectory towards meeting the goal of reducing statewide emissions to 80 percent below 1990 levels by 2050.

In November 2017, CARB published the 2017 Climate Change Scoping Plan (“2017 Scoping Plan”), which lays out the framework for achieving the 2030 reductions as established in Executive Order B-30-15 and SB 32. The 2017 Scoping Plan identifies GHG reductions by emissions sector to achieve a statewide emissions level that is 40 percent below 1990 levels by 2030.

In addition to legislation setting statewide GHG reduction targets, SB 375, signed by Governor Schwarzenegger in 2008, better aligned regional transportation planning efforts, regional GHG emissions reduction targets, and land use and housing allocations. SB 375 requires Metropolitan Planning Organizations (“MPOs”) to adopt a Sustainable Communities Strategy (“SCS”) or Alternative Planning Strategy, showing prescribed land use allocations in each MPO’s Regional Transportation Plan (“RTP”). CARB, in consultation with the MPOs, provides each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in their respective regions for 2020 and 2035.

To effectively address the challenges that a changing climate will bring, the State also prepared the 2009 California Climate Adaptation Strategy, which highlights climate risks and outlines possible solutions that can be implemented throughout the State. This Strategy was updated in both 2014 and 2018, and is now known as Safeguarding California. In 2015, the State also developed the Safeguarding California Implementation Action Plans.

Other relevant federal and State regulations relevant to the CAP are identified below in **Table 1-1**:

Table 1-1 Relevant Federal and State Regulations		
Federal	Federal Clean Air Act (“CAA”)	The CAA, enacted in 1975 and most recently amended in 1990, regulates air emissions from stationary and mobile sources to protect public health and regulate hazardous air pollutants. In 2007, the U.S. Supreme Court ruled that carbon dioxide (“CO ₂ ”) is an air pollutant as defined under the CAA, and the U.S. Environmental Protection Agency has the authority to regulate emissions of GHGs.
Federal	Corporate Average Fuel Economy (“CAFE”) Standards ¹	The federal CAFE Standards specify the fuel economy of certain vehicle classes in the U.S.
Federal	Fuel Efficiency Standards for Medium- and Heavy-Duty Vehicles	Establishes fuel economy standards for medium- and heavy-duty engines and vehicles.
State	SB 97	The State Office of Planning and Research prepared and the Natural Resources Agency adopted amendments to the California Environmental Quality Act (“CEQA”) Guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions. Effective as of March 2010, the revisions to the CEQA Environmental Checklist Form (Appendix G) and the Energy Conservation Appendix (Appendix F) provide a framework to address global climate change impacts in the CEQA process; state CEQA Guidelines Section 15064.4 was also added to provide an approach to assess impacts from GHGs.
State	Executive Order S-21-09	Executive Order S-21-09 directed CARB, under its AB 32 authority, to adopt a regulation by July 31, 2010 that sets a 33 percent renewable energy target as established by Executive Order S-14-08.
State	Executive Order S-01-07	Executive Order S-01-07 set forth a low carbon fuel standard for California, whereby the carbon intensity of California’s transportation fuels is to be reduced by at least 10 percent by 2020.

State	California Building Efficiency Standards Title 24 Part 6	The California Code of Regulations Title 24 Part 6: California’s Energy Efficiency Standards for Residential and Nonresidential Buildings are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods.
State	AB 1493	AB 1493 (Pavley) required, signed into law in 2002, required CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light-duty trucks.
State	AB 197	AB 197 (Garcia), signed into law in 2016, creates a legislative committee to oversee CARB and requires CARB to take specific actions when adopting plans and regulations pursuant to SB 32 related to disadvantaged communities, identification of specific information regarding reduction measures, and information regarding existing GHGs at the local level.
State	SB 350	SB 350, signed into law in 2015, requires the state to set GHG emission reduction targets for the load serving entities through Integrated Resource Planning. SB 350 requires an increase in the Renewables Portfolio Standard to 50 percent by 2030 and doubling energy savings in electricity and natural gas end uses.
State	Advanced Clean Cars Program ¹	In January 2012, CARB approved the Advanced Clean Cars program, which combines the control of GHG emissions and criteria air pollutants, as well as requirements for greater numbers of zero-emission vehicles, into a single package of standards for vehicle model years 2017 through 2025.
State	SB X1-2	SB X1-2 of 2011 requires all California utilities to generate 33 percent of their electricity from renewables by 2020. SB X1-2 mandates that renewables supplied to the California grid from sources within, or directly proximate to, California make up at least 50 percent of the total renewable energy for the 2011-2013 compliance period, at least 65 percent for the 2014-2016 compliance period, and at least 75 percent for 2016 and beyond.
State	SB 100	SB 100, signed into law in 2018, provides an update to SB X1-2 and requires California’s renewable energy and zero-carbon resources supply 100 percent of electric retail sales to end-use customers and 100 percent of electricity procured to serve state agencies by 2045.

Notes:

¹ In September 2019, the U.S. EPA issued the final rule for Part 1 of the Safer Affordable Fuel-Efficient Vehicle Rule (SAFE Rule). Part 2 of the SAFE Rule, expected issuance in mid-2020, will set revised federal CAFE standards and replace California’s Advanced Clean Cars program. During the preparation of this CAP, these new standards have not taken effect.

California Environmental Quality Act Streamlining

The California Environmental Quality Act (“CEQA”) is a statute that requires local agencies to identify significant environmental impacts of their actions and avoid or mitigate those impacts, if feasible. In 2007, California’s lawmakers enacted SB 97, which expressly recognizes the need to analyze GHG emissions as part of the CEQA process. SB 97 required the Governor’s Office of Planning and Research (“OPR”) to develop recommended amendments to address GHG emissions as an environmental effect. In response to the mandate of SB 97,

Projects that are consistent with the strategies and measures provided in this CAP and the City’s General Plan can avail streamlining benefits in addressing potential project impacts related to climate change.

the CEQA Guidelines (Section 15183.5) establish standards for the content and approval process of plans to reduce GHGs.

This CAP has been prepared consistent with the standards of CEQA Guidelines Section 15183.5 (“Qualified Plan”). Pursuant to the Section, the CAP affords development applicants the opportunity to use CEQA streamlining tools for analysis of GHG emissions and related impacts for projects that are consistent with the CAP. Details on how projects can achieve consistency with the CAP are provided in a separate *Guidance for Demonstrating Consistency with the City of Escondido Climate Action Plan for Discretionary Projects Subject to CEQA*, prepared by Ascent Environmental in 2020.

1.2.2 San Diego Association of Governments

The San Diego Association of Governments (“SANDAG”) is the MPO for the San Diego region. At the regional level, SANDAG has identified land use, transportation, and related policy measures that can reduce GHGs from passenger cars and light-duty trucks as part of the *San Diego Forward: The Regional Plan* (“Regional Plan”) in compliance with SB 375. The Regional Plan, adopted by SANDAG in October 2015, integrates the RTP and SCS.

SANDAG is currently working with local jurisdictions to help identify opportunities to save and reduce GHGs related to local operations through the Roadmap Program. Since 2010, the Roadmap Program has provided member agencies with voluntary, no-cost energy assessments known as “Energy Roadmaps”. Each Energy Roadmap provides strategies unique to each local government, to reduce energy use in municipal operations and in the community. The Roadmap Program is primarily funded through a Local Government Partnership with San Diego Gas & Electric (“SDG&E”). In 2016, the Roadmap Program was expanded to include climate planning.

City and SANDAG staff have worked collaboratively in developing this CAP to ensure that measures are consistent with SANDAG’s Regional Climate Action Planning Framework (“ReCAP”) and will reduce GHG emissions locally, while assisting the region in achieving its climate goals.

In March 2012, the City approved the City of Escondido Energy Roadmap (“City’s Energy Roadmap”), which identifies ways to save energy in government operations and in the community, that would result in municipal cost savings and benefits to the environment. The City’s Energy Roadmap includes wide-ranging, cost-effective opportunities to save electricity, natural gas, and transportation fuels, and was used as a resource for implementing goals and policies laid out in the City’s General Plan and the 2013 CAP. The Energy Roadmap identifies ways the City could improve energy efficiency through government operations and within the community through the following eight measures:

- Save energy in City buildings and facilities
- Demonstrate emerging energy technologies
- Green the City vehicle fleet
- Develop employee knowledge of energy efficiency
- Promote commuter benefits to employees
- Leverage planning and development authority
- Market energy programs to local residents, schools, and businesses
- Support green jobs and workforce training

1.2.3 San Diego County

San Diego County Office of Emergency Services

The County of San Diego Office of Emergency Services (“OES”) has the primary responsibility for preparedness and response activities and addresses disasters and emergency situations within the unincorporated area of San Diego County. The OES serves as staff to the Unified Disaster Council, the governing body of the Unified San Diego County Emergency Services Organization. Emergency response and preparedness plans include the Operational Area Emergency Response Plan and the San Diego County Multi-Jurisdictional Hazard Mitigation Plan. These plans provide for regionwide coordination during hazard events and identify processes and staff needs for which the City would apply to respond to an emergency.

Multi-Jurisdictional Hazard Mitigation Plan

The City of Escondido Hazard Mitigation Plan was prepared by OES as part of the Multi-Jurisdictional Hazard Mitigation Plan (“MHMP”). The purpose of the plan is to inform residents of the natural and manmade hazards that threaten the city’s public health, safety, and welfare and provide solutions to help mitigate vulnerabilities to future disasters. Though the MHMP does not directly address climate change, it provides adaptation measures for cities to implement to reduce the impacts of hazards that would be exacerbated by climate change. According to the MHMP, the most destructive hazards to the City include wildland fire, earthquakes, hazardous materials, flooding and dam failure, and terrorism or other anthropogenic hazards. The MHMP sets forth a variety of objectives and actions based on a set of broad goals including: (1) promoting disaster-resistant future development; (2) increasing public understanding and support for effective hazard mitigation; (3) building support of local capacity and commitment to become less vulnerable to hazards; (4) enhancing hazard mitigation coordination and communication with federal, State, local and tribal governments; and (5) reducing the possibility of damage and losses to existing assets, particularly people, critical facilities or infrastructure, and County-owned facilities, due to dam failure, earthquake, coastal storm, erosion, tsunami, landslides, floods, structural fire/wildfire, and manmade hazards.



Source: City of Escondido

San Diego County Department of Environmental Health

The San Diego County Department of Environmental Health (“DEH”) protects public health and safeguards environmental quality, informs the public to increase environmental awareness, and implements and enforces local, state, and federal environmental laws. DEH regulates the following: retail food safety; public housing; public swimming pools; small drinking water systems; mobile-home parks; on-site wastewater systems; recreational water; aboveground/underground storage tank and cleanup oversight; and the disposal of medical and hazardous materials and waste. In all development projects, specifically those related to water, wastewater, and solid waste systems, the City coordinates with DEH to ensure activities meet public health and safety requirements.

San Diego County Site Assessment and Mitigation Program

DEH maintains the Site Assessment and Mitigation (“SAM”) list of contaminated sites that have previously or are currently undergoing environmental investigations and/or remedial actions. The San Diego County SAM Program’s primary purpose is to protect human health, water resources, and the environment within San Diego County by providing oversight of assessments and cleanups in accordance with the California Health and Safety Code and the California Code of Regulations. The SAM’s Voluntary Assistance Program (“VAP”) also provides staff consultation, project oversight, and technical or environmental report evaluation and concurrence (when appropriate) on projects pertaining to properties contaminated with hazardous substances. As the City implements new development and redevelopment projects, and develops plans to restore natural systems, it will coordinate with DEH to address existing site contamination issues to improve public health.

1.2.4 City of Escondido

General Plan

The City’s General Plan, most recently updated in May 2012, guides the City’s future growth through a series of goals and policies. The General Plan discusses the City’s vision in the following areas: Economic Prosperity, Growth Management, Land Use and Community Form, Housing, Community Health and Services, Community Protection, Mobility and Infrastructure, and Resource Conservation. Multiple elements of the City’s General Plan include goals and policies that would be supported by the implementation of this CAP. Below is a summary of the GHG-related goals and policies from these elements. The relationship between General Plan policies and CAP measures is included in [Appendix C](#).



Source: City of Escondido

Land Use and Community Form

The Land Use and Community Form element guides citizens, planners, and decision makers on the desired growth pattern, development, and change in the community. The goals of the element emphasize the City’s role in being an urban center, while promoting sustainable and economically viable development. Land Use and Community Form policies related to GHGs include promoting compact infill development to increase walkability and alternative modes of transportation; preserving open space; and creating new and maintaining existing recreational opportunities.

Mobility and Infrastructure

The Mobility and Infrastructure element provides goals and policies for the efficient movement of residents, goods, and services and developing and maintaining safe and reliable infrastructure. This element includes transportation goals and policies to develop a sustainable transportation system through enhanced safety, complete streets, and an



Source: City of Escondido

interconnected pedestrian and multimodal transportation system. This element also promotes sustainable and efficient utilities by encouraging water conservation efforts, increasing water supply and supply diversity, reducing and managing waste disposal, and increasing energy efficiency to reduce the subsequent demand of a growing City.

Housing

The Housing element assesses housing needs in the City and provides goals and policies addressing the development of new housing and the improvement of existing housing supply. Goals and policies provided in the element guide encourage sustainable housing development that improve public health and housing affordability. The City's goals and policies emphasize the need to incorporate affordability for balanced jobs-to-housing growth while incorporating efficient urban form to promote accessibility.

Community Health and Services

The Community Health and Services element addresses how the quality and condition of the built environment affects resident's public health. GHG-related goals and policies in this element are directed towards increasing public health by increasing access to healthier foods through community gardens, creating walkable neighborhoods, and providing access to medical facilities. Additional efforts to reduce GHGs include reducing energy and water use in landscaping and developing and maintaining open space areas.

Resource Conservation

The Resource Conservation element guides the City to improve air, water, and natural resources through the expansion of a City trail system and conservation of open space areas. The element provides guidance for new development to be consistent with air quality standards and reduce GHG emissions through use of efficient construction equipment, promotion of efficient land use development patterns, use of clean and efficient alternative modes of transportation, and carbon sequestration.

Measures in this CAP can improve economic prosperity through:

- the creation of local "green jobs,"
- improved building efficiency reducing cooling and heating costs, and
- reduced water consumption resulting in lower costs to transport water.

Economic Prosperity

The Economic Prosperity element provides guidance on maintaining a sustainable local economy that provides a jobs-to-housing balance. In this element the City establishes efforts to work with local service providers to provide infrastructure that supports technologically advanced and "green" businesses and reduces commute distances by providing employment near housing.

Environmental Quality Regulations

The City's Environmental Quality Regulations ("EQR") were established in the City's Municipal Code Chapter 33, Article 47 to provide guidelines on implementing CEQA for developments within the City. The EQR established screening thresholds to evaluate if additional analysis is required to determine whether a project would result in significant impacts under CEQA. City standards related to the CAP are provided in Division 1, Section 33-924 for air quality, GHG emissions, and water and wastewater. The EQR outlines criteria for CEQA projects regarding consistency with the City's Public Facilities Master Plans and General Plan.

2013 Climate Action Plan

In December 2013, the City approved the 2013 CAP to reduce GHG emissions from City government operations and community activities and to support achievement of statewide reduction targets. The 2013 CAP provided an update to the City's previous emissions inventory. The previous inventory, with a baseline year of 2005, was updated based on revised methodology and updated data. Along with this revised 2005 inventory, the 2013 CAP included an inventory with a baseline year of 2010 from which citywide emissions were projected for the years 2020 and 2035, consistent with the City's General Plan horizon years. The 2005 inventory and 2010 baseline emissions level included activities that took place in the City transportation, energy use, area sources, water and wastewater, solid waste, and construction categories. In line with AB 32, the 2013 CAP established a reduction target to reduce emissions to 1990 levels by 2020. Based on methodologies provided by CARB, the City developed a local target, consistent with the State target and based on the 2005 inventory, to reduce emissions to 15 percent below 2005 levels by 2020.



Source: City of Escondido

The City has been implementing the measures identified in the 2013 CAP since its adoption through utilizing screening tables during development project review and conducting GHG inventory updates. The City has retained completed screening tables for development projects to maintain records of the types and levels of implementation of measures. City staff have continuously monitored the implementation of these measures, and have coordinated with SANDAG to provide updated GHG inventories. As shown in **Table 2-3** of **Chapter 2**, the actions to date have reduced GHG emissions in the City to an estimated 789,000 metric tons of carbon dioxide equivalent (“MTCO_{2e}”) and is nearly missing the targets adopted in the 2013 CAP. (The 2020 emissions target in 2013 was 788,176 MTCO_{2e}).

Master and Specific Plans

Downtown Specific Plan

In August 2013, the City adopted the Escondido Downtown Specific Plan (“DSP”). The DSP provides a comprehensive strategy to transition to a more urbanized city center while ensuring that its unique character is upheld and enhanced. The DSP includes nine strategic goals that promote a balanced variety of uses, design techniques, and pedestrian features. The DSP provides land use changes and goals that encourage mixed-use development, pedestrian friendly design, and increased use of alternative transportation modes.

The City's Downtown Specific Plan envisions development in the city center to provide for safer streets, wider sidewalks, and access to transit. This vision would assist the City in reducing GHG emissions by increasing walkability and reducing the need for vehicular travel to access destinations.

South Center City Specific Plan

Revised in August 2018, the South Centre City Specific Plan (“SCCSP”) promotes improved public health, safety, sustainability, and economic prosperity in the South Centre City area. The SCCSP identifies changes in land use patterns in the area to allow for greater opportunities for strategic growth for both residents and business owners. Sustainability efforts of the SCCSP include supporting implementation of the City’s CAP and the protecting water resources through conservation.

Bicycle Master Plan

The City’s Bicycle Master Plan, adopted in October 2012, is a policy document that identifies existing circulation patterns for bicyclists, problem areas, and safety concerns. The plan identifies potential efforts the City should undertake to create an interconnected network of bicycle facilities within the city. The Bicycle Master Plan includes bikeway design standards based on California Department of Transportation (“Caltrans”) recommendations, conceptual designs for bicycle paths and trails, maps of existing and proposed bicycle facilities, a phasing plan for improvements, potential funding sources, and an implementation plan. Areas of improvement include establishing a multi-modal network by connecting mass transit and bikeways through the development of complete streets. Implementation of the plan will reduce the need for automobile travel and improve air quality and public health.

Master Plan for Parks, Trails, and Open Space

Updated in September 1999, the City of Escondido Master Plan for Parks, Trails, and Open Space sets forth a comprehensive plan to develop an integrated open space and trail system. The plan acknowledges that development is likely to occur within the City and provides policy direction on how to develop land more efficiently while maintaining and increasing open space. Specific planning efforts provided in the plan include increasing outdoor recreational activities, preservation of biodiversity, discouraging sprawl, and improving quality of life.



Source: City of Escondido

City Municipal Code and Ordinances

Historical Resources Ordinance

Article 40 of the City’s Municipal Code establishes it as unlawful to tear down, demolish, construct, alter, remove or relocate any historical resource. A Certificate of Appropriateness is required for any new construction, and/or alteration that would affect the exterior appearance of an historical resource listed on the local register or located within an historical overlay district. Additional permits, as well as review by the planning commission, may also be required. Improvements and alterations to properties listed on the Escondido Historic Sites Survey outside a historical overlay district are also subject to staff administrative review to ensure that improvements and alterations do not preclude future listing in the local register. Further, Article 40 requires that all repairs, alterations, constructions, restorations or changes in use of applicable historical resources shall conform to the requirements of the state Historical Building Code and the Secretary of the Interior’s Standards for Rehabilitation. Demolitions to such resources would require a permit acquired in accordance with Article 40.

Mature and Protected Tree Ordinance

The City's Mature and Protected Tree ordinance establishes regulations and standards for the preservation, protection, and selected removal of mature and protected trees to conserve the City's tree cover. A City-issued permit is required before clearing, pruning, or destroying vegetation and before any encroachments by construction activities that disturb the root system. Issuance of a vegetation removal permit requires the submittal of a tree survey and, as applicable, a tree protection and/or replacement mitigation plan. Tree protection, removal, and replacement standards are outlined in the City's General Plan and the City's Municipal Code. As directed under the City's General Plan, any oak tree species and other mature trees are considered a significant aesthetic and ecological resource deserving protection within the boundaries of the city.

Urban trees provide benefits to everyone in the City. In addition to improving community character and reducing the urban heat island effect, trees play an important role in reducing local GHG emissions by "sequestering" carbon dioxide.

Local Emergency Code

Chapter 7 of the City's Municipal Code provides plans for the protection of persons and property within the City in the event of an emergency. It also discusses coordination of the emergency functions of the City with all other public agencies, corporations, organizations, and affected private persons. The code includes the forming of the City of Escondido Disaster Council, which is for the development of the City's Emergency Action Plan for City employees. The Emergency Action Plan identifies effective mobilization strategies for all City resources, both public and private, to meet any condition constituting a local emergency, state of emergency, or state of war emergency, and to defines the organizational framework, powers and duties, services, and emergency organization staff.

Weed and Rubbish Abatement Program

The City's Municipal Code, Chapter 11, Article 2, Division 2, establishes the Weed and Rubbish Abatement Program. The purpose of this ordinance is to allow property owners to eliminate public nuisance created by weeds, rubbish and refuse on or around their property, and defines the threshold at which weeds and rubbish are considered a fire hazard.

Wastewater, Stormwater, and Related Matters

Chapter 22 of the Municipal Code establishes regulations related to stormwater management and discharge control, harmful waters and wastes, sewer service charges, private sewage disposal systems, sewer connection fees, sewer-connection laterals, and industrial wastewater. The purpose of the stormwater management and discharge control regulations (Article 2) is to:

- Ensure the health, safety, and general welfare of the citizens of the City by controlling non-stormwater discharges to the stormwater conveyance system;
- Eliminate discharges to the stormwater conveyance system from spills, dumping, or disposal of solid or liquid waste other than stormwater; and
- Prevent, eliminate, or reduce pollutants in urban stormwater discharges to the maximum extent practicable.

Article 5 of Chapter 22 requires all subsurface sewage disposal units and systems to be designed, placed, and maintained in accordance with the rules and regulations of the County of San Diego. The County of San Diego DEH is the primary agency charged with regulating the design, construction, and maintenance of

septic tanks, leach lines, seepage pits, and alternative on-site wastewater treatment systems throughout the county through a delegation from the San Diego Regional Water Quality Control Board.

Article 8 sets industrial water regulations to provide for the maximum possible beneficial public use of the City's wastewater collection and treatment facilities. This article includes regulations and permit requirements governing nonresidential discharges, sets policies to provide for equitable distribution of the City's costs, and defines procedures for complying with requirements placed upon the City by other regulatory agencies.

Street and Sidewalks Code

Chapter 23 of the Municipal Code establishes street and sidewalk standards. This chapter defines standards for:

- public dedication of rights-of-way;
- arrangement for relocation of public utility facilities within sidewalks or streets;
- issuance of building permits for construction in setback areas and rights-of-way; and
- locating pumps, tanks, and fire hydrants within sidewalks, streets, or rights-of-way.

Grading and Erosion Control Ordinance

Article 55 of the City's Municipal Code establishes the grading and erosion control regulations for the City. The article ensures that development occurs in a manner that protects:

- the natural and topographic character and identity of the environment;
- visual integrity of hillsides and ridgelines;
- sensitive species and unique geologic/geographic features; and
- the health, safety, and welfare of the public.

Article 55 regulates grading on private and public property and provides standards and design criteria to control stormwater and erosion during construction activities. The ordinance sets forth rules and regulations to: control excavation, grading, earthwork construction (including fills and embankments), and development on hillsides and along ridgelines; establishes the administrative procedures for the issuance of permits; and provides for approval of plans and inspection of grading construction in compliance with stormwater management requirements.

Waste and Water Plans and Programs

Recycling and Waste Reduction

The City provides multiple programs and partnerships aimed at diverting waste from landfills. Some of these programs include resident and business recycling education, "how to" composting workshops, Christmas tree recycling, and local waste clean-ups. State-advised waste reduction programs adopted by the City include AB 341, requiring commercial and multi-family units to have recycling services, and AB 1826, requiring businesses that generate organic waste to provide organic waste recycling.

Though solid waste is only a small fraction of the City's total GHG emissions, residents and business owners can significantly reduce individual contributions to these emissions by recycling and composting waste instead of sending it to a landfill.

Water Conservation Plan

The City's Water Conservation Plan, most recently updated in 2015, establishes priorities and restrictions during various levels of water shortages, including up to greater than 40 percent reduction in water use. The City's Water Conservation Plan sets forth the following objectives:

- To prevent water supply shortages through aggressive and effective water management programs such as water conservation, water education, and use restrictions and penalties.
- To minimize the impact of a water supply shortage on the City's population and economy.
- To provide first for public health and fire protection and other essential services, then to provide for the economic health of the City, and then to provide for other uses of water.
- To ensure that water users who have implemented exemplary conservation practices during normal-year hydrology and wet-year hydrology are not disadvantaged by the plan during shortages, a "lifeline allowance" will be established by the City Council to reflect the minimum amount necessary to sustain an average household.

The City's Water Conservation Plan includes measures that continuously apply to reduce citywide water consumption, and additional measures that take effect during water shortage conditions. The plan identifies four stages of drought conditions that are set by the City Council in accordance with drought response levels determined by the San Diego County Water Authority.

Water Reclamation Plan

Municipal Code Chapter 31, Article 6 establishes the policy that recycled water shall be used within the jurisdiction wherever its use is economically justified; financially and technically feasible; and consistent with legal requirements and with preservation of the environment and of public health, safety, and welfare. As appropriate, Article 6 designates the City to mandate construction of recycled water distribution systems or other facilities in new and existing developments for current or future recycled water use as a condition of any development approval or continued water service if future reclamation facilities could adequately serve the development.

Urban Water Management Plan

In 1983, the State Legislature enacted the Urban Water Management Planning Act (California Water Code Sections 10610–10656), which requires specified urban water suppliers within California to prepare an Urban Water Management Plan ("UWMP") and update it every five years. Urban water suppliers also must prepare such plans, pursuant to the Urban Water Management Planning Act, to be eligible for State funding and drought assistance. The City most recently updated its UWMP in 2015 using the best available data. The 2015 UWMP includes policies and projects from various divisions of the City's Utilities department and addresses the City's water supply sources, including recycled water, groundwater, surface water, water conservation activities, and projected water demands. The 2015 UWMP presents a comparison of projected water supplies to water demands during normal years, single dry water-years, and multiple dry water-years; provides the framework for long-term water planning within the City; and helps to support regional long-term planning.

1.3 Purpose and Objectives of a Climate Action Plan

The purpose of this CAP is to set future targets for the City to reduce GHG emissions, identify strategies and measures to achieve these targets, develop a framework to successfully implement these measures and monitor progress towards the reduction targets, and identify measures the City can take to adapt to future climate change impacts.

The purpose of this CAP is to reduce GHG emissions locally and adapt to climate change.

The City's 2013 CAP was adopted to support goals, policies, and actions presented in the City's General Plan. The 2013 CAP provided the City with recommended policies and actions that would assist in meeting state and federal reduction targets for GHG emissions, an implementation timeline, and a strategy for tracking and reporting progress towards reduction goals. An example of GHG emissions reducing actions adopted as a component of the 2013 CAP can be found in the City's Bicycle Master Plan.

Emission source categories evaluated in the 2013 CAP have been modified for this CAP to be consistent with the regional emissions categories identified in SANDAG's Regional Climate Action Planning Framework ("ReCAP"). The 2012 baseline year GHG emissions inventory reported in this CAP covers communitywide emissions sources in electricity, natural gas, on-road transportation, off-road transportation, solid waste, water, and wastewater. This CAP also provides communitywide GHG emission reduction targets, to be achieved through local measures implemented by public agencies, businesses, and residents.

The strategies and measures identified in this CAP were developed to meet the City's reduction targets and incorporate input from community members on important actions the City should take to combat climate change.

This CAP provides a comprehensive update to the City's 2013 CAP. Through the preparation of this CAP, the City has established a baseline emissions inventory year of 2012, consistent with best available regional data.

In order to reduce emissions and meet statewide targets, the CAP has established local reduction targets consistent with CARB's 2017 Scoping Plan. To support the achievement of statewide GHG reduction targets and reduce emissions locally, the CAP sets the following emission reductions targets using 2012 levels as a reference point:

- 4 percent below 2012 levels by 2020;
- 42 percent below 2012 levels by 2030; and,
- 52.5 percent below 2012 levels by 2035.

The CAP provides a summary of baseline GHG emissions and the potential growth in these emissions over time. A summary of the City's emissions inventory, emissions projections, and methodology for setting GHG reduction targets is discussed further in [Chapter 2](#). The strategies and measures that the City will implement to achieve these targets is discussed in [Chapter 3](#).

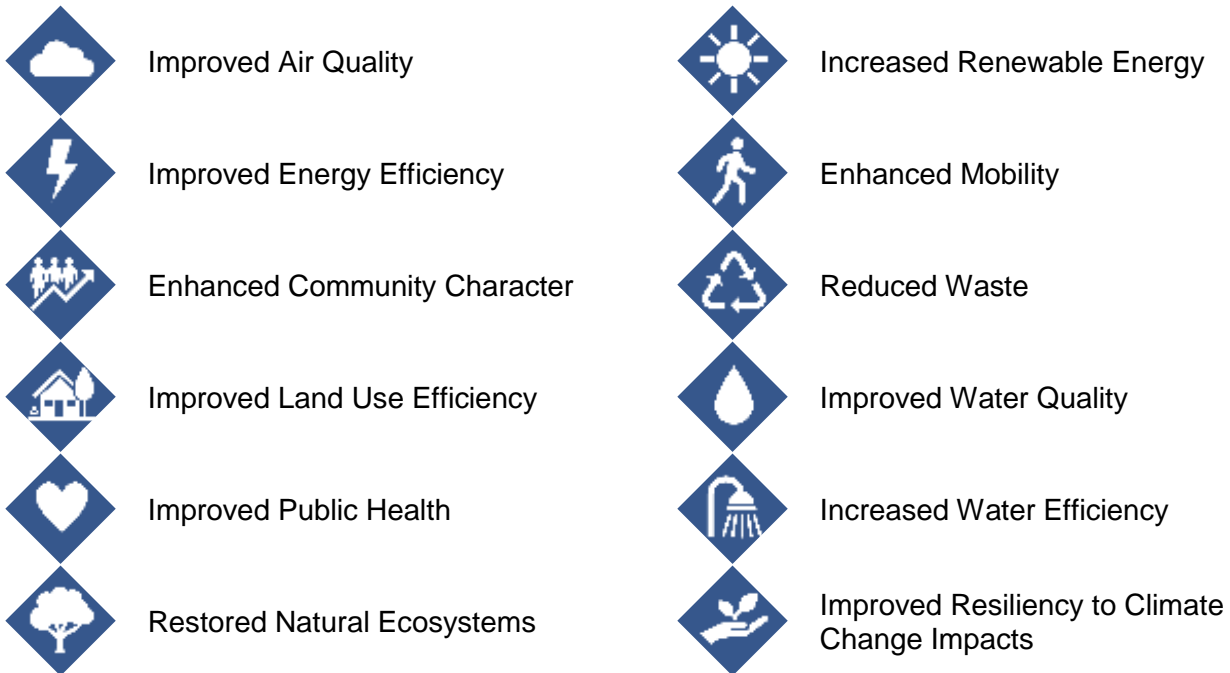
As part of CAP implementation, each strategy and measure should be continually assessed and monitored. Reporting on the status of implementation of these strategies, periodic updates to the GHG emissions inventory, and other monitoring activities will help ensure that the CAP is making progress towards the identified targets. More information on administering, implementing, and monitoring the CAP is included in [Chapter 4](#).

Climate change impacts are already occurring and projected to continue even as the City implements strategies and measures to reduce local GHG emissions. Climate change impacts have the potential for

a wide variety of impacts such as increased average temperatures, increased frequency of extreme weather events, and increased intensity of precipitation. The strategies the City will implement to adapt to climate change impacts are included in **Chapter 5**; however, it is important to note that the GHG emissions reduction measures listed in **Chapter 3** also identify ways to adapt to climate change. By including new cross-cutting priorities in both emissions reductions and adaptation to advance social equity and environmental justice, the chapter(s) also evaluates the ability of the City to build community capacity, address historical under-investment, and mitigate the disproportionate harm faced by the most vulnerable populations.

1.4 Co-Benefits

While the actions and supporting measures included in the CAP are generally geared towards reducing GHG emissions, many will also result in environmental or economic “co-benefits.” Environmental co-benefits include improvements to air quality, water supply, or biological resources, and improved public health outcomes. The strategies identified in **Chapter 3** of this CAP would provide a range of co-benefits within the city and region. Co-benefits associated with strategies in this CAP include:



In addition to these co-benefits, this CAP would provide other benefits to the City. This CAP allows the City to identify and implement GHG reduction strategies that are most advantageous to the City, while also promoting economic competitiveness. The CAP also demonstrates that the City is aligned with State targets for reducing GHG emissions and is consistent with the projections to meet reduction targets consistent with current mandates.

1.5 Community Action and Public Involvement

Community Action

At the local scale, individuals and businesses play an important role in combating climate change. By changing habits to reduce energy consumption, produce less waste, conserve water, and drive less, individuals and businesses can work towards reducing their carbon footprint. The combination of these small, individual efforts can lead to better outcomes for the environment and the community.

Effective and long-term climate action and resiliency in the City can only be achieved through efforts that continue to change the way individuals interact with the environment. This CAP serves as a resource to support long-term sustainability efforts and to ensure measure implementation and benefits are inclusive for all City residents.

Individual actions can play a big role in reducing local GHG emissions. Examples include, but are not limited to:

- Recycling and composting waste
- Driving less
- Conserving water
- Purchasing and consuming local products

Community Outreach Plan

The City was committed to hosting community outreach and engagement events providing residents, stakeholders, interested parties, and other agencies and/or individuals with the opportunity to participate in the climate action planning process in two phases. The goals of CAP outreach were to: (1) raise awareness of this CAP's development; (2) inform the public and other organizations about the CAP; (3) provide opportunities for input at the various steps of CAP development; and (4) provide opportunities to influence decision-making.

In preparation of the CAP, the City has prioritized public engagement and outreach to ensure that the CAP provides feasible, equitable, and implementable measures. To engage residents, businesses, and nonprofits, the City intended to follow outreach best practices by:

- Harnessing the networks and reach of existing community organizations such as local school districts, CAFE, Escondido Education COMPACT, and the Escondido Bike/Walk Committee;
- Going to where the people are (e.g., tables at community events or reserved time during existing Home Owner's Association ("HOA") and Neighborhood Association meetings);
- Creating multiple levels and forms of engagement; and
- Crafting creative methods to elicit input.

Through implementation of these best practices, the City developed a series of tools to help engage different parties, such as notification lists, CEQA notices, a dedicated project website, electronic mail notifications, press releases, and handouts. Additional outreach initiatives included establishing a CAP workgroup with City staff, hosting community workshops to engage the public in the planning process, hosting mobile community workshops at public events, informing Planning Commission and City Council through informational meetings, and scheduling Planning Commission and City Council public hearings.



Source: City of Escondido

Summary of Phase 1 Outreach

During the first phase of public involvement, there was a two-month public engagement period, and the City hosted multiple community outreach and engagement events to provide opportunities for residents, business owners, workers, and interested parties to participate in the climate action planning process. Throughout the ongoing outreach process, the City offered online engagement opportunities for all interested parties to provide feedback through surveys if unable to attend an outreach event. A summary of the hosted community outreach event is provided in **Table 1-2**. Other, less formalized, outreach events and activities were also conducted. A detailed summary of community input and involvement in the climate action planning process is included in **Appendix D**. In addition, a public committee was formed to discuss adaptation and social equity issues in the CAP.

Table 1-2 Community Engagement Event Summary

Meeting Date	Location
May 8, 2018	Planning Commission presentation
June 20, 2018	City Council presentation
July 10, 2018	Planning Commission presentation
July 12, 2018	Presentation to Traffic Commission
July 19, 2018	Presentation to Historic Preservation Commission
July 26, 2018	Neighborhood Leadership Group Meeting
July 30, 2018	Public Workshop
August 28, 2018	Planning Commission presentation
October 25, 2018	Neighborhood Leadership Group Meeting

Notes: City = City of Escondido; SDG&E = San Diego Gas & Electric
Source: City of Escondido 2018

Workshop Summary

As a culmination of the CAP public engagement period, the City hosted a public workshop on July 30, 2018 at City Hall. The workshop was designed to inform residents, businesses, and community members about the CAP and gather community input on proposed CAP measures and climate change issues. Input was provided through a “dot” or “tally” exercise where attendees placed green sticker dots on measures they generally supported and red sticker dots on measures they generally did not support. Additional feedback was provided in written form through the “CAP Passport”, through which attendees provided additional details for measures they generally supported or did not support, and asked additional questions about measures that were not clear. In total, nearly 50 people provided input at this workshop, and additional responses to the CAP Passport were gathered online. The comments provided at the workshop and online were incorporated into this CAP. Examples of the station boards presented at this workshop and the CAP Passport are provided in **Appendix D**.



Source: City of Escondido

Summary of Phase 2 Outreach

After a far-reaching public outreach effort in 2018, significant progress was made to develop the draft CAP content. During the second phase of public outreach, the City focused more continuing to engage the public to both share how the public feedback provided in the first phase of outreach was used to develop the draft CAP; and to gain additional input. Phase 2 began on June 24, 2020, with the release of the draft CAP. Input on the draft CAP was solicited from the general public and stakeholders, mostly building off of previous efforts and existing networks. Detailed input was also provided by the Escondido Environmental Community Advisory Group. City staff also facilitated eight informational work sessions with the Planning Commission to integrate the commission directly into the steps of the decision making process and broaden project awareness and additional participation opportunities. After all input on the draft CAP was collected, reviewed, and considered, City staff made modifications to incorporate many of the comments. A revised draft CAP was prepared and circulated for additional public review and comment, with this step being advertised as an early release document prior to initiating the decision-making process. Phase 2 also consisted of formal public hearings with the Planning Commission and City Council.



Chapter 2 GREENHOUSE GAS EMISSIONS INVENTORY, PROJECTIONS, AND TARGETS

This chapter summarizes the City of Escondido’s (“City’s”) accounting of greenhouse gas (“GHG”) emissions from activities within the community and provides an introduction to the primary steps in developing a Climate Action Plan (“CAP”). The climate action planning process is composed of four main steps: identifying and estimating primary sources and annual levels of GHG emissions for a baseline year (i.e. baseline inventory); estimating likely trends and emissions projections in the absence of reduction measures (i.e. projections); setting emissions reduction goals over time to reduce contributions to climate change effects locally (i.e. targets); and determining actions the City can take to reduce emissions from communitywide activities to meet the reduction targets (i.e. reduction strategies and measures).

2.1 Purpose of the GHG Emissions Inventory

An emissions inventory provides a snapshot of the major sources of emissions in a single year, while also providing a baseline used to project emission trends. This inventory is used to inform what local actions are needed to reduce GHG emissions and to develop reduction targets that are consistent with State mandates. The GHG emissions inventory serves as the foundation for strategies and measures outlined in this CAP that the City will implement to reduce GHG emissions to meet its targets.

Assembly Bill (“AB”) 32, Senate Bill (“SB”) 32, and Executive Orders B-30-15 and S-3-05 set GHG emissions reduction goals for the State by using 1990 levels as a baseline year. Due to the absence of 1990 emissions data at the city level, an inventory was prepared for a 2012 baseline year, which represents the best available data. The 2012 baseline year included in this CAP was prepared consistent with the California Air Resource Board’s (“CARB’s”) guidance and the baseline year as the San Diego Association of Government’s (“SANDAG’s”) Series 13 Regional Growth Forecast.

The GHG emissions inventory baseline is used to:

- Identify major sources and quantities of GHG emissions from community activities;
- Provide an emissions baseline for forecasting and determining necessary reduction targets; and,
- Set a baseline to develop, evaluate, and implement strategies to meet reduction targets.

The City’s GHG inventory also provides a framework to track communitywide emissions over time, as the City will prepare updated GHG emissions inventories after the CAP is adopted. The City’s previous CAP, adopted in 2013, included a 2010 baseline. The 2012 inventory provides an update to the 2010 inventory and is included in [Appendix A](#). As part of future CAP updates and as data becomes available for more recent years, the City will prepare updated emissions inventories. These updated inventories can be compared to the 2012 inventory to track the City’s progress in CAP implementation.

2.2 GHG Inventory

A baseline inventory provides detailed accounting of the sources and quantities of GHG emissions generated from activities within the city. The inventory provides an estimate of communitywide emissions for a defined set of gases that contribute to climate change. The three primary GHGs quantified include: carbon dioxide (“CO₂”), methane (“CH₄”), and nitrous oxide (“N₂O”). Emissions of these gases are converted to a comparable unit by multiplying each non-CO₂ gas by their global warming potential (“GWP”), reporting emissions in terms of carbon dioxide equivalent (“CO₂e”). This conversion allows consideration of all gases in comparable terms and makes it easier to communicate how various sources and types of GHG emissions contribute to global climate change. A metric ton of CO₂e (“MTCO₂e”) is the standard measurement of the amount of GHG emissions produced and released into the atmosphere.

2013 CAP GHG Inventory

The *City of Escondido Climate Action Plan*, adopted in 2013 (“2013 CAP”), included a baseline inventory using 2010 communitywide and municipal activities. The 2010 inventory built on and reflected changes in methodology from a 2005 inventory, prepared prior to development of the 2013 CAP. The 2013 CAP set a target to reduce emissions to 15 percent below 2005 levels by 2020, to be consistent with the previous emissions inventory preparation and State requirements at the time.

This CAP provides an update to the previous GHG emissions inventories. The previous inventory prepared was for baseline year 2010. This CAP includes a baseline inventory for 2012, based on the most up-to-date inventory methodology.

The 2010 baseline inventory in the 2013 CAP estimated citywide emissions in six categories: transportation (i.e. on-road vehicles); energy (i.e. electricity consumption and natural gas combustion); area sources (i.e. landscaping and wood burning); water (i.e. potable water conveyance and wastewater treatment); waste management (i.e. transfer of solid waste and decomposition at landfills); and construction. This baseline inventory was used to project future citywide emissions in 2020, the year for which the City’s reduction target was set, and 2035, representing the buildout year of the City’s General Plan. The GHG reduction measures identified in the 2013 CAP were estimated to reduce citywide GHG emissions by approximately 207,000 MTCO₂e in 2030, to 15 percent below 2005 emissions.

2020 CAP GHG Inventory

As described in the 2013 CAP, the City is committed to updating its GHG emissions inventory periodically to reflect changes in methodology and technology, and to set additional reduction targets based on updated State requirements. A 2012 baseline GHG emissions inventory was prepared for this CAP, for which the best available regionwide data was available.

The 2012 GHG inventory updates the emissions categories identified in the 2013 CAP to be consistent with SANDAG’s Regional Climate Action Planning Framework (“ReCAP”) and State guidance. The emissions categories identified in this CAP are: on-road transportation, electricity, natural gas, off-road transportation, solid waste, and water and wastewater. **Table 2-1** provides a description of emissions associated with each category (organized in order of total contribution to citywide GHG emissions) and the relationship between the categories identified in this CAP and categories defined in the 2013 CAP.



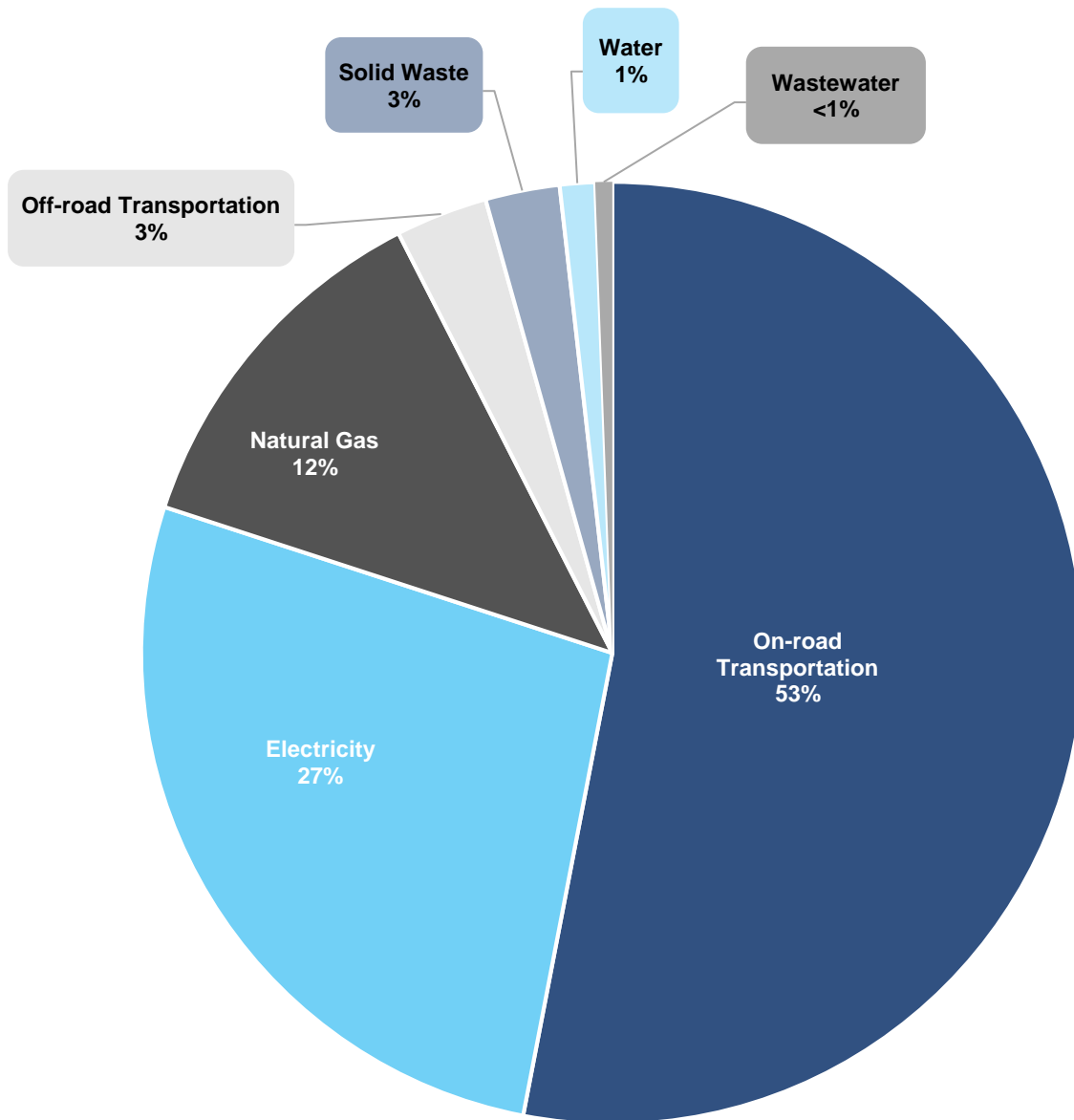
Source: City of Escondido

Emissions Category	Description	Relation to 2013 CAP Emissions Categories
On-Road Transportation	On-road transportation emissions associated with gasoline and diesel consumption from motor vehicles on local and regional roadways.	On-road vehicles account for all emissions in the 2013 CAP “Transportation” category.
Electricity	Building energy use emissions associated with electricity use in residential and non-residential buildings.	Electricity was included as a subcategory of “Energy” emissions.
Natural Gas	Building energy use emissions associated with combustion of natural gas in residential and non-residential buildings.	Natural gas was included as a subcategory of “Energy” emissions.
Solid Waste	Waste emissions associated with waste generated by residents and businesses of the city and disposal of mixed and organic waste in landfills.	No change from the “Solid Waste” category.
Off-Road Transportation	Off-road transportation emissions associated with gasoline and diesel fuel use from recreational vehicles, construction equipment, and residential and commercial equipment.	“Construction” emissions, a separate category in the 2013 CAP, are included in this off-road transportation category.
Water	Emissions associated with the water supplied, conveyed, treated, and distributed to residents and businesses within the city.	Water was included as a subcategory of “Water and Wastewater” emissions.
Wastewater	Wastewater treatment fugitive and process emissions consisting of GHGs from combustion of anaerobic digester gas and operational fossil fuels.	Wastewater was included as a subcategory of “Water and Wastewater” emissions.

Notes: City = City of Escondido; GHG = Greenhouse Gas
 Source: EPIC 2018

The 2012 GHG inventory, prepared by the University of San Diego’s Energy Policy Initiatives Center (“EPIC”), estimated that community activities within the City generated approximately 943,000 MTCO₂e in 2012. Emissions from on-road transportation account for the greatest contribution to citywide emissions. This category, which includes emissions from vehicular gasoline and diesel consumption, was calculated based on estimated vehicle miles traveled (“VMT”) for vehicles traveling within and to/from the city and accounted for approximately 53 percent of citywide emissions in 2012. Electricity and natural gas emissions, collectively referred to as the “energy” category, are the second largest contributors with 27 and 12 percent of total emissions in 2012, respectively. Emissions from off-road transportation, solid waste, water, and wastewater each accounted for no greater than three percent of the city’s 2012 baseline emissions. The City’s 2012 baseline emissions by category are shown in **Figure 2-1**.

Citywide activities in 2012 generated approximately 943,000 MTCO₂e. This is equal the weight of nearly 350 million rainbow trout caught at Dixon Lake.



Source: EPIC 2018.

Figure 2-1 City of Escondido 2012 GHG Emissions

Additional details related to the specific emission categories, data sources, assumptions, and methodologies can be found in **Appendix A**. A summary of the City’s estimated emissions in 2012 by category is provided in **Table 2-2**.

Emissions Category	MTCO₂e	Percent (%)
On-road Transportation	498,000	53
Electricity	256,000	27
Natural Gas	118,000	12
Off-road Transportation	30,000	3
Solid Waste	24,000	3
Water	11,000	1
Wastewater	6,000	<1
Total	943,000	100

Notes: Columns may not add to totals due to rounding.
MTCO₂e = metric tons of carbon dioxide equivalent
Source: EPIC 2018.

The City’s emissions in 2012, 943,000 MTCO₂e, are equivalent to combusting over 106 million gallons of gasoline, or the total combustion from 200,000 passenger vehicles driving continuously for one year. It would require approximately 1.2 million acres of U.S. forests to sequester the MTCO₂e emitted in the city in one year (U.S. EPA 2020).

2.3 Emissions Projections

GHG emissions projections provide an estimate of future levels based on a continuation of current trends in activity, while also accounting for known regulatory actions by federal and State agencies (i.e., “legislative” actions) that can reduce emissions in the future. GHG emissions projections provide insights into the scale of local reductions needed to achieve GHG emission reduction targets.

This CAP uses two projections, referred to as the “business-as-usual” (“BAU”) and Legislatively-Adjusted BAU scenarios. Both the BAU and Legislatively-Adjusted BAU assume that population, employment, and transportation activity will grow over time, consistent with estimates in the SANDAG Regional Growth



Source: City of Escondido

Forecast. The BAU projection is based on a continuation of current trends in activity, assuming that no additional efforts or legislative actions beyond what have already been adopted will be made to reduce GHG emissions in the future.

Legislatively-Adjusted BAU projections provide a reduction from BAU projections, accounting for federal and State actions that are expected to take place in the future.

Details on how the projections were developed and the activity data used to forecast emissions in each emissions category can be found in [Appendices A and B](#).

Demographic Trends

GHG emission projections were estimated for 2020, 2030, and 2035 using city-specific demographic and transportation activity projections. The SANDAG Series 13 Regional Growth Forecast was used to estimate transportation activity in the City in the form of VMT. At the time of developing and estimating emissions forecasts, the SANDAG Series 13 Regional Growth Forecast represents the best population, employment, and VMT forecasts available at the city-level, based on 2012 baseline data.

In general, the City is anticipated to experience modest growth by 2020, 2030, and 2035. Based on the data used by EPIC, the City's population is expected to increase by 13 percent by 2020, 17 percent by 2030, and 18 percent by 2035, compared to the 2012 baseline levels. Furthermore, employment is expected to increase by 9 percent by 2020, 14 percent by 2030, and 18 percent by 2035 from 2012 levels. The BAU emissions projections assume activities within the city would continue producing GHG emissions at a similar rate and that these projected demographic trends would continue. Further details on the underlying data used for emissions projections can be found in [Appendix A](#).



Source: City of Escondido

Business-as-Usual Projections

Comprehensive GHG emissions projections are developed under a BAU scenario, which assumes the continuation of conventional behaviors without the inclusion of any additional efforts or legislative actions beyond what has already been adopted at the time of the baseline year (i.e., 2012). Therefore, federal, State, and local policies, programs, and regulations designed to take effect in future years, as well as the associated GHG reductions, are not considered.

Citywide GHG emissions projections in 2020 indicate that the City has an overall reduction in annual GHG emissions since 2012, as shown in [Table 2-3](#). This observed decrease in BAU emissions is likely due to a combination of State and local actions that result in fewer emissions, including use of improved regionwide renewable energy portfolios, decreased residential and commercial water usage, improved vehicle standards and turnover of vehicle fleets, and implementation of the 2013 CAP. The City's GHG emissions would slowly increase under BAU conditions from 2020 until 2035, as a result of growth in population and employment.

Business-as-usual projections assume City operations, residents, and businesses would continue operating and acting as they do today. These projections do not account for any changes in existing activities that would reduce GHG emissions.

Legislatively-Adjusted Reductions

The Legislatively-Adjusted BAU scenario accounts for a variety of approved legislative actions that will further reduce BAU emissions from the City by: 1) estimating the impacts of these actions on the various GHG emissions categories in the CAP; and 2) adjusting emissions levels accordingly. While these projections include federal and State actions, they do not include local government actions, such as the implementation of measures identified in this CAP. The legislative actions applied to estimate this scenario include:



Source: City of Escondido

- **Federal and State Vehicle Efficiency Standards:** Federal and State agencies have set tailpipe emissions standards through 2025 (in place at the time emissions projections were prepared in 2018), including the California Zero Emissions Vehicle Program.¹
- **California Renewables Portfolio Standards:** Utilities operating in California are required to meet power mix targets to include increasing percentages of renewable energy. As required by the State’s Renewables Portfolio Standard (“RPS”), San Diego Gas & Electric’s (“SDG&E’s”) power mix would include at least 60 percent renewables by 2030.
- **California Energy Efficiency Programs:** The California Public Utilities Commission (“CPUC”) sets energy efficiency targets for utilities companies in the state, including SDG&E. Utilities achieve these targets through, but are not limited to, rebate programs and updates to codes and standards.
- **California Solar Policies and Programs:** The State has several policies and programs to encourage customer-owned, behind-the-meter photovoltaics (“PV”), including the California Solar Initiative, New Solar Home Partnership, Net Energy Metering, and updated Building Efficiency Standards.

The Legislatively-Adjusted BAU emissions, presented in **Table 2-3**, include all legislative actions provided above. With the application of these legislative actions in the city, the projected citywide emissions would continue to decrease through 2035. Based on these projections, the City’s emissions would be 16 percent below 2012 levels in 2020, 36 percent below 2012 levels in 2030, and 39 percent below 2012 levels in 2035.

Legislative actions account for federal and State regulations that will primarily result in GHG reductions in the transportation and energy sectors.

¹ In November 2019, the U.S. EPA issued the final rule for Part 1 of the Safer Affordable Fuel-Efficient Vehicle Rule (“SAFE Rule”). Part 2 of the SAFE Rule was finalized in March 2020 and sets revised federal Corporate Average Fuel Efficiency standards to replace California’s Advanced Clean Cars program. During the preparation of this CAP, these new standards have not taken effect.

Table 2-3 City of Escondido Emissions Projections (MTCO_{2e})

Emissions Category	2012	2020		2030		2035	
		BAU	Legislatively -Adjusted BAU	BAU	Legislatively -Adjusted BAU	BAU	Legislatively -Adjusted BAU
On-road Transportation	498,000	445,000	430,000	425,000	337,000	427,000	323,000
Electricity	256,000	187,000	163,000	196,000	61,000	199,000	42,000
Natural Gas	118,000	126,000	123,000	131,000	129,000	133,000	131,000
Off-road Transportation	24,000	26,000	26,000	32,000	32,000	33,000	33,000
Solid Waste	30,000	30,000	30,000	31,000	31,000	31,000	31,000
Water	11,000	11,000	11,000	12,000	11,000	12,000	12,000
Wastewater	6,000	6,000	6,000	6,000	6,000	6,000	6,000
Total	943,000	831,000	789,000	833,000	608,000	841,000	578,000
<i>Percent change from 2012</i>	-	-12%	-16%	-12%	-36%	-11%	-39%

Notes: Columns may not add to totals due to rounding.

BAU = business as usual; GHG = greenhouse gas emissions; MTCO_{2e} = metric tons of carbon dioxide equivalent

Source: EPIC 2018, EPIC 2020.

In August 2019, the U.S. Environmental Protection Agency (“EPA”) and National Highway Traffic Safety Administration (“NHTSA”) jointly published a notice of proposed rulemaking for Part One of the Safer Affordable Fuel-Efficient Vehicle Rule (“SAFE Rule”). The SAFE Rule proposed new and amended CO₂, Corporate Average Fuel Economy (“CAFE”), and GHG emissions standards for passenger cars and light trucks. Further, Part One of this rule proposed to withdraw the State of California’s waiver, afforded under the Clean Air Act (“CAA”) to set GHG and zero-emission vehicle (“ZEV”) standards separate from the federal government. Part One of the SAFE Rule became effective in November 2019. CARB has provided adjustment factors for pollutants, including NO₂, PM₁₀ and PM_{2.5}, and CO, from light-duty vehicle exhaust to account for Part One of the SAFE Rule. However, corresponding adjustment factors for GHG emissions are not available at this time. In March 2020, EPA and NHTSA announced Part Two of the SAFE Rule, which would set amended fuel economy and CO₂ standards for passenger cars and light trucks for model years 2021-2026. Part Two would become effective 60 days after publication in the Federal Register. The impact of Parts One and Two of the SAFE Rule on GHG emissions factors in California has not been quantified by CARB in the Emissions Factor model (“EMFAC”) or related modeling tools. These modeling tools would need to be amended, or corresponding adjustment factors published, to quantitatively assess the impact on City GHG emissions. Therefore, the quantitative methodology used to project Legislatively-Adjusted BAU emissions in this CAP does not include the impact of the SAFE Rule. At the time of this writing, the methodology represents current guidance and best available data from CARB. As more information becomes available from regulatory agencies, the City will continue to monitor the impact of the SAFE Rule, as discussed further in [Chapter 4](#).

2.4 Reduction Targets

This CAP focuses on reducing emissions by 2020 and 2030 to be consistent with the legislative State targets, and reducing emissions by 2035 to demonstrate the recommended trajectory to meet the State’s 2050 goal. CARB’s *California’s 2017 Climate Change Scoping Plan* (“2017 Scoping Plan”) provides a pathway to achieving State targets as directed in AB 32, SB 32, and Executive Orders B-30-15 and S-3-

05. These targets are consistent with prevailing climate science and the state’s role in stabilizing global warming below dangerous thresholds. These goals aim to reduce statewide emissions to:

- 1990 levels by 2020;
- 40 percent below 1990 levels by 2030; and
- 80 percent below 1990 levels by 2050.

To determine an equivalent reduction target at the local level, the 2017 Scoping Plan recommends communitywide GHG reduction goals for local climate action plans that will help the State achieve its 2030 target and 2050 goal (80 percent below 1990 levels). CARB recommends that local governments evaluate and adopt robust and quantitative locally-appropriate goals that align with the State’s sustainable development objectives. Estimating equivalent reductions needed from the 2012 GHG inventory, the City will aim to reduce emissions to:

- 4 percent below 2012 levels by 2020;
- 42 percent below 2012 levels by 2030; and
- 52.5 percent below 2012 levels by 2035.

The City’s 2020 goal to reduce emissions to four percent below 2012 levels is equivalent to 907,000 MTCO_{2e} per year. As shown previously in [Table 2-3](#), the City’s projected BAU emissions in 2020 would be below this target level. Achievement of this target is largely the result of existing State measures and the City’s implementation of the 2013 CAP.

To meet reduction targets, the City will need to reduce emissions to:

- 907,000 MTCO_{2e} in 2020
- 547,000 MTCO_{2e} in 2030
- 456,000 MTCO_{2e} in 2035.

The City’s 2030 target is based on State requirements and requires emissions to be reduced to 547,000 MTCO_{2e} in 2030. The City has set its 2035 target based upon the trajectory necessary to meet the statewide 2050 goal and requires citywide emissions to be reduced to 456,000 MTCO_{2e} in 2035. A summary of the method used to develop these targets is provided in [Appendix B](#).

2.5 Local Emissions Gap

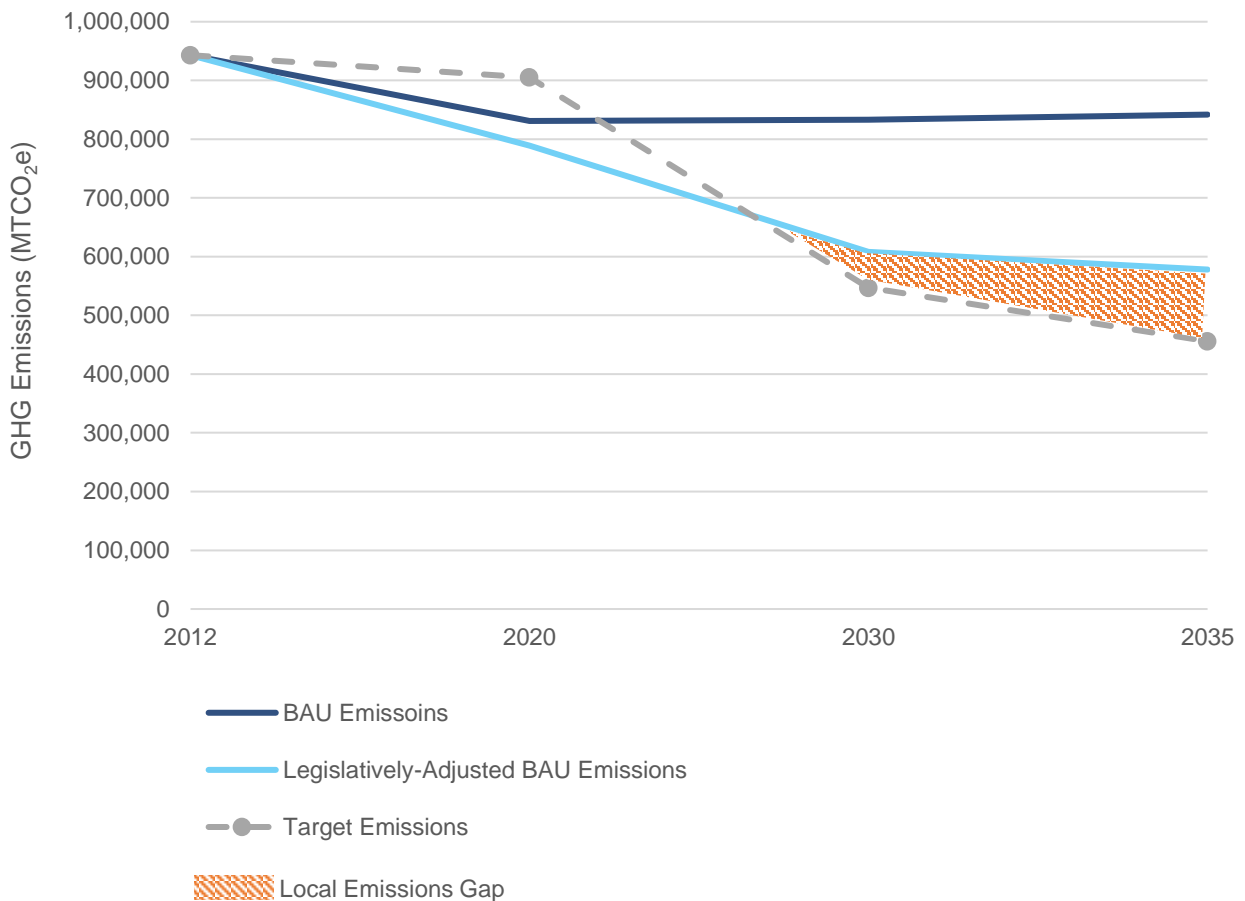
While existing activities would be adequate to meet the City’s 2020 target, these activities, along with federal and State legislative actions, would not meet the City’s 2030 and 2035 GHG reduction targets. As shown in [Figure 2-2](#), with the Legislatively-Adjusted BAU, the City’s 2030 emissions under were estimated to be 608,000 MTCO_{2e}, or approximately 61,000 MTCO_{2e} higher than the City’s 2030 target. The City’s 2035 emissions under the Legislatively-Adjusted BAU were estimated to be 578,000 MTCO_{2e}, or approximately 114,000 MTCO_{2e} higher than the City’s 2035 target. This additional reduction is referred to as the “local emissions gap.” To close this gap, the City would need to implement actions that would reduce approximately 61,000 MTCO_{2e} in 2030 and 114,000 MTCO_{2e} in 2035. A detailed description of the calculations and estimates for these emissions projections, targets, and reductions is provided in [Appendix B](#).

California’s GHG reduction targets have been legislatively adopted for 2030 and 2035, while the 2050 goal is expressed in an executive order. While it is important to create a long-term emissions reduction goal, it would be speculative to demonstrate achievement of a goal for 2050 with the information known today. CARB’s Scoping Plan Update focuses on meeting the 2030 reduction target, as directed in SB 32. Therefore, the CAP aligns with the State in proposing measures to meet the 2030 target, and has set a 2035 target based upon the trajectory for meeting the State’s 2050 reductions. As climate change science and policy continues to advance, the City will be able to apply new reductions toward meeting a long-term 2050 GHG emissions reduction goal in future CAP updates, as outlined in **Chapter 4**. Over the coming decades, GHG reductions may come from:

This CAP identifies strategies and measures that would reduce citywide GHG emissions by at least:

- [placeholder] MTCO_{2e} by 2030, and
- [placeholder] MTCO_{2e}/ by 2035

- new innovations and technologies likely to become available in the future
- new methods to quantify measures that are currently unquantifiable
- new State and federal regulations that further reduce emissions in categories currently addressed primarily by local actions and supporting measures.



Source: EPIC 2020.

Figure 2-2 City of Escondido GHG Emissions Forecasts and Targets

It is important to note that should state and federal laws in effect or planned to reduce GHG emissions be reversed, fail to pass, or be incorrectly implemented, then those planned reductions in GHG emissions

will not occur or at the same extent as intended. For example, the City of Escondido would not achieve the same total GHG emissions reductions from state or federal intervention.

It should also be noted that residents, businesses, and organizations make choices daily that produce GHG emissions that may be beyond the influence of the City and the CAP. While the measures identified in the CAP are focused on the City's GHG emissions inventory, individual residents or businesses should not feel limited to measures outlined in the CAP; members of the community can make a number of climate-friendly choices, such as buying locally-grown foods and locally-manufactured products. These actions are not specifically listed in the CAP but further reduce energy use and the local carbon footprint and contribute to helping reverse climate change trends on a global scale.



Chapter 3

GREENHOUSE GAS REDUCTION STRATEGIES AND MEASURES

This chapter outlines strategies and specific measures to be implemented by the City of Escondido (“City”) to achieve its greenhouse gas (“GHG”) reduction targets over the coming decades. As a complement to legislative actions taken by the State and federal governments, each strategy and measure focuses on local actions developed to reduce emissions and close the City’s local emissions gap. The City envisions carbon neutrality by 2045, however this is not set forth herein as a CAP GHG emissions target.

The strategies and measures included in this Climate Action Plan (“CAP”) focus on actions taken to reduce GHG emissions at City-managed facilities, at new and existing developments, and through City-led planning activities. Implementation of these strategies and measures will depend on participation of and partnerships with and among residents, businesses, and other organizations. In addition, the CAP includes a focus to address social equity in the implementation of the measures. The strategies and measures identified in this CAP build on the measures included in the City’s previous CAP, adopted in 2013, and policies and programs included in the City’s General Plan.

The local strategies and measures were developed to reduce approximately 104,521 MTCO_{2e} in 2030 and 121,582 MTCO_{2e} in 2035.

Though the primary purpose of these strategies and measures is to reduce GHG emissions, they will also result in additional co-benefits. These co-benefits, briefly discussed in [Chapter 1](#), include benefits beyond GHG reductions that would occur through implementation, such as improved environmental quality, improved health outcomes, enhanced community character, address historic underinvestment, and improved resilience to climate change impacts. An overarching goal and co-benefit through investment strategies in the plan is to enable local job opportunities. Implementation of the strategies and measures in this chapter would be adequate to meet the City’s reduction targets in 2030 and 2035. However, since the City is already experiencing the effects of climate change, this CAP includes multiple measures to adapt to climate change impacts, discussed in [Chapter 5](#).

3.1 Greenhouse Gas Reduction Strategies

GHG reduction strategies are essential to the climate action planning process, as they lay the framework for meeting GHG emission reduction targets. The GHG reduction strategies outlined in this CAP utilize 2012 as the baseline year for measure implementation and progress. As discussed in [Chapter 2](#), the City is anticipated to meet its 2020 reduction target under business-as-usual (“BAU”) conditions. As the City continues to grow under a BAU scenario and State and federal legislative actions take effect, the City’s emissions would decrease over time but would not be adequate to meet the 2030 or 2035 reduction targets. It is the responsibility of the City to develop local GHG reduction strategies to further reduce citywide GHG emissions to meet these targets.



Source: City of Escondido

The strategies and measures proposed in this CAP provide a pathway beyond State and federal legislative actions for new and existing development and activities in the City to reduce GHG emissions and meet the City’s 2030 and 2035 targets. Implementation of these strategies and measures proposed demonstrate progress towards supporting the State’s 2050 GHG emissions reduction goal.

In developing the strategies and measures in this CAP, City staff reviewed the measures included in the 2013 CAP, identified the potential for future projects in the City, and gathered input from residents, business owners, community organizations, and the Environmental Community Advisory Group. Successful measures from the 2013 CAP were incorporated into the strategies and measures proposed in this CAP. As discussed in [Chapter 2](#), the emissions categories included in this CAP are consistent those outlined in the San Diego Association of Government’s (“SANDAG’s”) Regional Climate Action Planning Framework (“ReCAP”). A summary of the relationship between the measures included in this CAP and those included in the 2013 CAP is provided in [Appendix C](#). A majority of the 2013 CAP measures were incorporated into new measures in this CAP.

The City hosted public workshops for residents, business owners, and community leaders where they were able to provide input and feedback on proposed measures. Input from these workshops was used to further define measures and identify measure goals. These outreach efforts are briefly described in [Chapter 1](#) and discussed in further detail in [Appendix D](#).

The City values social equity and environmental justice for vulnerable communities in investment strategies that will reduce GHG emissions and assure co-benefits for residents in low-income and vulnerable neighborhoods. The CAP prioritizes investment, enforceable goals, and specific actions related to energy efficiency, clean energy, restoration, urban greening, community gardens, shade trees, transit, etc. to promote neighborhood improvement, social equity, and environmental justice.

3.2 Greenhouse Gas Emissions Reduction Summary

If community emissions in the City were to continue to grow under BAU conditions, the City is anticipated to generate 833,000 metric tons of carbon dioxide equivalent (“MTCO₂e”) in 2030 and 842,000 MTCO₂e in 2035. While State and federal actions would further reduce emissions in 2030 and 2035, the City would still need to reduce emissions by 61,000 MTCO₂e in 2030 and 114,000 MTCO₂e in 2035 to meet its reduction targets. [Table 3-1](#) shows the GHG reductions attributable to legislative actions and the measures in this CAP, as well as how anticipated reductions would help the City meet its 2030 and 2035 reduction targets. Further description of the methodology and calculations used to estimate emissions is provided in [Appendix B](#).

Emissions Projection/Category	2030 Emissions (MTCO₂e)	2035 Emissions (MTCO₂e)
BAU Emissions Projection	833,000	842,000
Reductions from Federal and State Actions	235,000	272,000
Legislatively-Adjusted BAU Emissions Projection (BAU Projection – Federal and State Action Reductions)	598,000	570,000
Target Emissions	547,000	456,000
Total Reductions from CAP Measures	[placeholder]	[placeholder]
Reductions from CAP Transportation Measures	31,000	54,000
Reductions from CAP Energy Measures	[placeholder]	[placeholder]
Reductions from CAP Water Measures	4,000	4,000
Reductions from CAP Waste Measures	23,000	27,000
Reductions from CAP Carbon Sequestration and Land Conservation Measures	1,000	1,000

City Emissions with CAP (Legislatively-Adjusted BAU – CAP Reductions)

[placeholder]

[placeholder]

Notes: Numbers are rounded to the nearest thousand; values and totals may not equal the values summed in other tables or figures. BAU = business as usual; CAP = Climate Action Plan; City = City of Escondido; MTCO₂e = metric tons of carbon dioxide equivalent Source: EPIC 2020.

3.3 Reduction Strategies and Measures

In order to close the gap between the City’s Legislatively-Adjusted BAU emissions projections and the 2030 and 2035 emission reduction targets, the CAP proposes nine GHG reduction strategies with 31 GHG emission reduction measures, developed based on a combination of factors, including:

The City will reduce GHG emissions through implementation of 31 GHG-reducing measures, organized under nine reduction strategies.

- the feasibility of the measure to be implemented by the City;
- existing policies, actions, or programs that can be expanded;
- proposed policies and plans yet to be adopted;
- feedback from community members and other stakeholders; and
- review of measures included in the 2013 CAP.

Each reduction strategy consists of measures, target year, performance metrics, and GHG reduction potential. Strategies also include supporting actions that will assist in achieving each strategy’s performance metric(s) but are not quantifiable and, therefore, not applied towards meeting the City’s GHG reduction targets. These terms are further defined below, and additional GHG reduction calculation details are included in **Appendix B**.

Strategy: A strategy is a high-level plan the City will implement to achieve GHG reductions in each category of the GHG inventory. Each category may have one or more associated strategies. This CAP includes nine overall strategies.

Measure: A measure is a program, policy, or project the City will implement that will cause a direct and measurable reduction in GHG emissions.



Source: City of Escondido

Performance Metric: Each measure has a performance metric that serves as the goal by which achievement will be measured in target years. Performance metrics identified in this CAP provide timeframes for implementation of specific activities and identify target years for implementation to track progress towards measure implementation.

GHG Reduction Potential: The GHG reduction potential represents the estimated reduction in GHG emissions from a specific measure, if its performance metric is met. All GHG reduction potential values are shown in terms of MTCO₂e reduced in the 2030 and 2035 target years, selected based on State reduction goals and the City’s General Plan horizon. Because the City

is anticipated to achieve its 2020 target under BAU conditions, the GHG reduction potential is presented only for 2030 and 2035. Most, but not all, performance metrics have an associated GHG reduction potential. Certain performance metric activities would not directly result in GHG reductions in that year but may facilitate implementation of an action that reduces GHGs in target years.

Supporting Actions: Supporting actions are additional activities that are currently occurring or will occur within the community that may support implementation of the identified strategy and measures.

Co-Benefits: Co-benefits are the additional beneficial outcomes that would occur through the implementation of a GHG reduction strategy. Co-benefits associated with the implementation of the CAP strategies include: improved air quality, improved energy efficiency, enhanced community character, improved land use efficiency, improved public health, improved natural ecosystems, increased renewable energy, enhanced mobility, reduced waste, improved water quality, improved water efficiency, and improved resiliency to climate change impacts.

Where applicable, GHG reduction measures will be targeted and prioritized for funding and implementation in priority investment neighborhoods. These are measures that will improve quality of life, housing stock, health, and quality of life for residents in vulnerable neighborhoods. The priority neighborhoods are those which have been recommended in **Appendix F** based on a ranking in CalEnviroScreen which considers multiple factors in ranking risk and vulnerability. Furthermore, the goal is for the City to facilitate, wherever/however possible, equitable access to the green economy, especially for communities traditionally left out of those opportunities. This seeks to be done through local hiring, minority outreach and training programs, education and outreach to communities of concern, supplier diversity on CAP implementation projects, etc.

Transportation Emissions Category

Transportation is a significant contributor to GHG emissions in the City, accounting for 53 percent of total emissions in 2012. Transportation emissions include emissions from both internal combustion engines of on-road (e.g., passenger vehicles) and off-road (e.g., construction equipment, residential and commercial equipment, and recreational vehicles) sources. Improvements in State and federal vehicle fuel efficiency standards will contribute to reducing transportation emissions by requiring the development of cleaner vehicle fleets. At the local level, the State relies on cities to implement strategies that would reduce the frequency or distance of vehicle travel, reduce the amount of fossil fuels used, and/or reduce the use of internal combustion vehicles by shifting to electric vehicles or alternative modes of transportation (e.g., transit, bicycling). The strategies that will be implemented at the local level include increasing zero-emission or alternative fuel vehicle use, increasing transportation system efficiency for existing and future travel patterns, and increasing the use of alternative travel modes.

Strategy 1: Increase the Use of Zero-Emission or Alternative Fuel Vehicles

This strategy would achieve GHG emissions reductions by reducing the use of gasoline or diesel-powered vehicles and equipment and transitioning to electric or zero-emissions vehicles for residents, workers, and the City’s municipal fleet. Reductions from this strategy would occur through municipal projects and development requirements, and partnerships with local businesses and developers. The four measures included under this strategy are estimated to reduce the City’s emissions by approximately 4,000 MTCO_{2e} in 2030 and 7,000 MTCO_{2e} in 2035. **Table 3-2** provides the measures, performance metrics, and supporting actions associated with this strategy.



Table 3-2 Increase the Use of Zero-Emission or Alternative Fuel Vehicles

Measure T-1.1: Transition to a Clean and More Fuel-Efficient Municipal Fleet.

Increase the number of PHEVs in the City’s municipal vehicle fleet and install EV charging stations at the City’s Police and Fire Headquarters to support the vehicle charging needs of current City-owned EVs and PHEVs, and future PHEVs.

Target Year	Performance Metric	GHG Reduction Potential (MTCO _{2e})
2021	Adopt a procurement policy for converting all municipal vehicle fleet to EVs and PHEV’s.	-
2030	Add 11 new EVs and PHEVs to the City fleet by 2030.	33
	Install 30 EV Charging stations at the Police and Fire Headquarters by 2030.	
2035	Maintain 30 EV charging stations and 11 EVs and PHEVs in the municipal fleet in 2035.	33

Measure T-1.2: Install Electric Vehicle Charging Stations at Park and Ride Lots.

Install Level 2 or better EV charging stations at Park and Ride lots in the City that are available to ride-share commuters and/or transit riders.

Target Year	Performance Metric	GHG Reduction Potential (MTCO _{2e})
2030	Install 181 EV charging stations in Park and Ride lots by 2030.	463
2035	Install 281 EV charging stations in Park and Ride lots by 2035.	737

Measure T-1.3: Adopt an Ordinance to Require Electric Vehicle Charging Stations in Developments.

Adopt an ordinance, effective in 2023, that requires Level 2 or better EV charging stations to be installed in a minimum of 10 percent of total parking spaces provided in new multi-family and new and existing commercial developments.

Target Year	Performance Metric	GHG Reduction Potential (MTCO _{2e})
2022	Adopt an ordinance requiring EV charging station installation in new multi-family and new commercial developments.	-

Year	Measure	GHG Reduction Potential (MTCO _{2e})
2023	Adopt an ordinance that requires the installation of EV charging stations in existing, larger commercial developments (consisting of 100 spaces or more).	-
2025	Establish a “Clean Energy Equity Plan” to improve equitable access to clean and sustainable energy in priority investment neighborhoods (“PINs”) to increase EV ownership, EV car-sharing, installation of EV chargers in existing multi-family projects, etc.	-
2030	Install 531 EV charging stations in multi-family and commercial developments by 2030.	3,513
2035	Install 802 EV charging stations in multi-family and commercial developments by 2035.	5,732

Measure T-1.4: Require Electric Vehicle Charging Stations at New Model Home Developments.

Adopt an ordinance, effective in 2021, requiring new developments to encourage EV charging station installation in new homes by:

- Installing at least one EV charging station (wall mount or pedestal) in new single-family model homes and multi-family model homes with private garages (e.g. townhouse);
- Including EV charging stations as an add-on option at no cost to new homebuyers in new home subdivisions; and
- Working with the City to waive permitting and installation fees for EV charging stations in these subdivisions.

The City should consider alternatives to offset participant costs of the measure’s implementation. The detail and scope of the incentives should be discussed at the time of the ordinance’s adoption.

Target Year	Performance Metric	GHG Reduction Potential (MTCO _{2e})
2021	Adopt an ordinance requiring EV charging station installation in new single-family homes and townhouses.	-
2030	Install 200 EV charging stations in new single-family homes and townhouses by 2030.	339
2035	Install 300 EV charging stations in new single-family homes and townhouses by 2035.	520

Supporting Actions:

- Identify and secure funding (e.g., through the San Diego Regional Clean Cities Coalition, CARB, CEC, and/or CSE) to purchase/lease low- and zero-emissions fleet vehicles and equipment.
- Identify grants and incentives and educate developers about how to take advantage of available programs.

Notes: CARB = California Air Resources Board; CEC = California Energy Commission; City = City of Escondido; CSE = Center for Sustainable Energy; EV = electric vehicle; GHG = greenhouse gas; MTCO_{2e} = metric tons of carbon dioxide equivalent; PHEV = Plug-in hybrid electric vehicle

Source: EPIC 2020.

Strategy 2: Reduce Fossil Fuel Use

Fossil fuel use can be reduced by developing an efficient transportation network that improves traffic flow and by increasing the use of alternative fueled construction equipment. Under this strategy, GHG emissions reductions would be achieved through interagency collaboration to install transportation network improvements in City rights-of-way and working with fleet suppliers to phase out less fuel-efficient equipment. The three measures under this strategy would reduce the City’s GHG emissions from fossil fuel use by approximately 6,000 MTCO₂e in 2030 and 11,000 MTCO₂e in 2035. **Table 3-3** provides the framework for this strategy and the supporting actions that promote more fuel-efficient driving approaches.



Table 3-3 Reduce Fossil Fuel Use

Measure T-2.1: Synchronize Traffic Signals.

Synchronize traffic signals at City-maintained intersections to reduce vehicle fuel use through more efficient vehicle movement and reduced idling.

Target Year	Performance Metric	GHG Reduction Potential (MTCO ₂ e)
2030	Synchronize traffic signals at 23 City-maintained intersections by 2030.	289
2035	Synchronize traffic signals at 35 City-maintained intersections by 2035.	408

Measure T-2.2: Install Roundabouts.

Install roundabouts at City-maintained intersections to reduce vehicle fuel use by improving vehicle movement efficiency.

Target Year	Performance Metric	GHG Reduction Potential (MTCO ₂ e)
2025	Establish a policy that requires the study of roundabouts at intersections with lower average daily trips, whereby the feasibility of roundabouts are evaluated for all new intersections and for existing intersections where where capacity or safety problems have been identified.	-
2030	Install roundabouts at eight City-maintained intersections by 2030.	811
2035	Install roundabouts at 12 City-maintained intersections by 2035.	1,145

Supporting Actions:

- Conduct educational campaigns to promote fuel-efficient driving (“eco-driving”) practices, such as reduced idling, slower driving speeds, gentle acceleration, and proper tire inflation.
- Update the City’s General Plan Mobility and Infrastructure Element to support network build-out and improved traffic flow.
- Medium- and heavy-duty electronic truck sales and usage is expected to increase starting in 2024, consistent with the 2020 Advanced Clean Truck Rule mandated by the California Air Resource Board (“CARB”). To support this rule, the City should adopt an ordinance to establish requirements for large truck EV charging stations and work with businesses to increase station access to support the mandate.

Table 3-3 Reduce Fossil Fuel Use

Notes: City = City of Escondido; GHG = greenhouse gas; MTCO_{2e} = metric tons of carbon dioxide equivalent
 Source: EPIC 2020.

Strategy 3: Reduce Vehicle Miles Traveled

In addition to using cleaner fuels, reductions can be achieved by reducing the amount individuals drive. This strategy would achieve GHG emission reductions by reducing the amount of vehicle trips and vehicle miles traveled (“VMT”). To reduce VMT, this strategy aims to increase the use of alternative transportation modes (e.g., transit, bicycling); reduce vehicle trips associated with new developments through transportation demand management (“TDM”) programs and transit-oriented and/or supportive policies and programs; and increase connectivity between major commercial, retail, and residential areas in the City.

The nine measures provided under this strategy require the collaboration from local and regional agencies, residents, and businesses. Reducing VMT provides the most GHG emission reductions under the transportation category, and the implementation of this strategy would reduce emissions 20,000 MTCO_{2e} in 2030 and 32,000 MTCO_{2e} in 2035. **Table 3-4** provides the details of the measures, performance metrics, and supporting actions under this strategy to reduce citywide VMT.

Strategy 3 Co-Benefits



Table 3-4 Reduce Vehicle Miles Traveled

Measure T-3.1: Participate in the San Diego Association of Governments’ iCommute Vanpool Program.

Promote and encourage businesses to participate in SANDAG’s iCommute Vanpool Program.

Target Year	Performance Metric	GHG Reduction Potential (MTCO _{2e})
2030	Maintain a minimum of 36 SANDAG vanpools annually that start or end in the City in 2030.	837
2035	Maintain a minimum of 36 SANDAG vanpools annually that start or end in the City in 2035.	787

Measure T-3.2: Improve Pedestrian Infrastructure in Priority Areas.

Develop an Active Transportation Plan that includes:

- A citywide Pedestrian Master Plan;
- An update to the City’s Trail Master Plan;
- A Safe Routes to School Plan;
- A Safe Routes to Transit Plan; and
- Identified “priority areas” for pedestrian infrastructure improvements in the City, such as priority investment neighborhoods (“PINs”).

Install new or improve¹ existing pedestrian infrastructure in priority areas (e.g., downtown employment centers, near transit stations, social equity areas, etc.).

Target Year	Performance Metric	GHG Reduction Potential (MTCO _{2e})
2023	Develop and adopt an Active Transportation Plan that includes a Pedestrian Master Plan, Trails Master Plan, Safe Routes to School Plan, and Safe Routes to Transit Plan.	-
2030	Install or improve at least 5.8 miles of sidewalk in priority areas.	44
2035	Install or improve at least 8.3 miles of sidewalk in priority areas.	59

Measure T-3.3: Implement Safe Routes to School Program at Escondido Union School District.

Develop a Safe Routes to School Plan for inclusion in the City’s Active Transportation Plan, continue to work with EUSD to implement the Safe Routes to School Program to increase the number of students walking and riding bicycles to and from school, and complete infrastructure improvement projects, such as:

- Installing new sidewalks;
- Installing intersection and crosswalk signals and high visibility crosswalk upgrades;
- Retrofitting signals to include countdown pedestrian indications at crossings;
- Identifying and implementing other similar projects near schools within the City; and
- Work with NCTD and School Districts for free youth transit passes and electronic school buses.

Target Year	Performance Metric	GHG Reduction Potential (MTCO _{2e})
2023	Develop and adopt an Active Transportation Plan that includes a Safe Routes to School Plan.	-
2030	Increase the percent of students walking to school in the EUSD to 27 percent in 2030.	60

¹ Pedestrian infrastructure improvements as defined in the *Methods for Estimating Greenhouse Gas Emissions Reductions in the Escondido Climate Action Plan* include sidewalk improvements (i.e. sidewalk widenings, repair and maintenance programs, and ADA retrofits) and intersection improvements (raised pedestrian crossings, intersection “neck-downs,” pedestrian islands, and pedestrian signals).

Table 3-4 Reduce Vehicle Miles Traveled

	Increase the percent of students bicycling to school in the EUSD to 2.3 percent in 2030.	
2035	Increase the percent of students walking to school in the EUSD to 30 percent in 2035.	82
	Increase the percent of students bicycling to school in the EUSD to 2.5 percent in 2035.	

Measure T-3.4: Develop a Citywide Transportation Demand Management Plan.

Adopt a TDM ordinance, effective in 2022, that requires new non-residential developments and existing businesses in the downtown employment center to develop and implement TDM programs and policies. At a minimum, the TDM ordinance will require new non-residential developments and existing businesses to:

- Provide “end-of-trip” facilities for bicycle commuters (i.e. bicycle parking spaces, showers, lockers);
- Provide discounted monthly NCTD transit passes or transit subsidies;
- Provide informational material to employees for carpool and vanpool ride-matching services;
- Implement parking cash-out policies; and
- Develop alternate workplace, telecommuting, and/or alternate work schedule programs.

Target Year	Performance Metric	GHG Reduction Potential (MTCO _{2e})
2021	Adopt a TDM ordinance, effective in 2022.	-
2023	Develop and implement a wayfinding program with signage and information systems to facilitate walking, biking, and efficient driving and parking	-
2030	Increase bicycle commute mode share to 2.0 percent citywide and 3.5 percent in the downtown employment center in 2030.	533
	Increase transit commute mode share to 4.5 percent citywide and 7.5 percent in the downtown employment center in 2030.	
	Increase carpool commute mode share to 17.0 percent citywide and 15.5 percent in the downtown employment center in 2030.	
2035	Increase bicycle commute mode share to 2.5 percent citywide and 4.0 percent in the downtown employment center in 2035.	820
	Increase transit commute mode share to 5.0 percent citywide and 8.0 percent in the downtown employment center in 2035.	
	Increase carpool commute mode share to 17.0 percent citywide and 16.0 percent in the downtown employment center in 2035.	

Measure T-3.5: Update Bicycle Master Plan.

Update the City’s Bicycle Master Plan and install new or improve existing Class II or better bicycle lanes.

Target Year	Performance Metric	GHG Reduction Potential (MTCO _{2e})
2023	Develop an Active Transportation Plan that includes an update to the City’s Bicycle Master Plan.	-
2024	Develop and implement a citywide bike rack policy.	-
2025	Complete construction of the Class I Escondido Creek Bike Path, funded through Prop 68, to facilitate a larger network of active transportation access points and opportunities.	-

Table 3-4 Reduce Vehicle Miles Traveled

2025	Develop and implement a program to incentivize City employees commuting to work by bike or other modes of alternative transport as a model for other local employers.	-
2030	Install at least 19 miles of new Class II or better bicycle lanes by 2030.	231
2035	Install at least 30 miles of new Class II or better bicycle lanes by 2035.	335

Measure T-3.6: Increase Transit Commuters Among New Downtown Residents.

Increase the number of commuters using transit from new residential developments in the Downtown Specific Plan area by:

- Implementing smart growth policies consistent with the Downtown Specific Plan ²;
- Making sure that new development reinforces sustainable land use practices to better connect land use access and mobility options (e.g. develop design policies, standards, or guidelines for transit-oriented development; allow more flexibility for high-density, transit-oriented developments; and/or adjust parking standards or other related incentives for projects adjacent to transit serving areas);
- Supporting affordable housing projects and/or ways to incorporate a mix of affordability levels in new projects;
- Coordinating SANDAG’s Five Big Moves of the Regional Transportation Plan and NCTD’s Land Use Mobility Plan Update and integrate regional projects and implementation into local transportation opportunities;
- Requiring projects to provide six-month transit passes to new residents if proposing any reduction in parking over 15 percent of required amount;
- Developing a Safe Routes to Transit Plan;
- Implementing projects identified through this the Safe Routes to Transit Plan; and
- Requiring projects to monitor transit use by new residents for the first six months of operation and present monitoring results to the City.

Target Year	Performance Metric	GHG Reduction Potential (MTCO₂e)
2023	Develop an Active Transportation Plan that includes a Safe Routes to Transit Plan.	-
2024	Develop a downtown parking study and feasibility study to look into multi-level, public/private parking lot(s) and convert surplus city-owned lots to facilitate redevelopment.	-
2030	Increase the proportion of commuters using transit and living in new residential developments within the Downtown Specific Plan and East Valley area from five percent to eight percent by 2030.	84
2035	Increase the proportion of commuters using transit and living in new residential developments within the Downtown Specific Plan and East Valley area to 10 percent by 2035.	177

Measure T-3.7: Develop an Intra-City Shuttle Program.

Assess the feasibility of and implement an intra-city shuttle system that includes:

- Two or more routes;
- Specifically designed to increase land use access and mobility within the Downtown Specific Plan, East Valley area, and/or South Centre City Specific Plan, as well as other priority investment neighborhoods (“PINs”);
- Electric shuttle service or clean energy operations;
- Connections between activity centers within the city;
- Routes that do not directly overlap existing transit service routes; and
- High-frequency service (headways of 10-minutes or less) during peak commute periods.

² Smart Growth Principles, Guidelines and Standards as defined in Section III.A.1 of the City’s [Downtown Specific Plan](#).

Table 3-4 Reduce Vehicle Miles Traveled

Target Year	Performance Metric	GHG Reduction Potential (MTCO ₂ e)
2030	Complete a feasibility study that demonstrates the intra-city shuttle system would reduce interal trips seven percent by 2030 and 10 percent by 2035.	4,463
	Operate two or more shuttle routes with 10-minute headways during commute hours in 2030.	
2035	Operate two or more shuttle routes with 10-minute headways during commute hours in 2035.	6,540

Measure T-3.8: Increase Transit Ridership.

Increase the total number of regional commuters living or working in the City using transit by working with MTS and NCTD to:

- Prioritize funding for affordable, safe, and clean energy transit in priority investment neighborhoods (“PINs”);
- Increase service frequency to the city; and
- Increase transit-friendly land uses (i.e., residential and office) near transit stations.

Target Year	Performance Metric	GHG Reduction Potential (MTCO ₂ e)
2030	Increase internal-external/external-internal ³ commute transit mode share of four percent by 2030.	7,829
2035	Increase internal-external/external-internal commute transit mode share of eight percent by 2035.	17,099

Measure T-3.9: Develop and Implement a Service Population-Based Vehicle Miles Traveled Threshold.

Develop a service population-based threshold for VMT to apply to new projects to reduce citywide VMT. This threshold would require new projects to demonstrate that project VMT would support a reduction in citywide VMT.

Target Year	Performance Metric	GHG Reduction Potential (MTCO ₂ e)
2030	Reduce citywide VMT to 1.8 percent below projected 2030 VMT levels in 2030.	5,829
2035	Reduce citywide VMT to 3.5 percent below projected 2035 VMT levels in 2035.	11,075

Supporting Actions:

- Participate in and promote annual regional commute trip reduction events.
- Incorporate multi-modal improvements into pavement resurfacing, restriping, and signalization operations where the safety and convenience of users can be improved within the scope of work.
- Continue to pursue public and private funding to expand and link the City's bicycle and pedestrian network in accordance with both the General Plan Mobility and Infrastructure Element and Trails Master Plans.
- Pursue opportunities to utilize existing properties adjacent to transit and employment centers to develop housing affordable to very low-income and low-income households.
- Establish policies, standards, or guidelines for new projects to meet or exceed build-out projections and accommodate service population levels that facilitate actual VMT reductions citywide. Strategies may include smart growth incentives, additional density bonuses, and/or established minimum residential density requirements and required commercial floor area ratios.

³ Internal-external commute trips are defined as trips occurring during commute hours that originate in the city and end outside of the city. External-internal commute trips are defined as trips occurring during commute hours that originate outside of the city and end in the city.

Table 3-4 Reduce Vehicle Miles Traveled

- Pursue State grants, such as the Affordable Housing and Sustainable Communities Grant, to support affordable housing projects near transit.

Notes: City = City of Escondido; EUSD = Escondido Union School District; GHG = greenhouse gas; MTCO_{2e} = metric tons of carbon dioxide equivalent; MTS = Metropolitan Transit System; NCTD = North County Transit District; SANDAG = San Diego Association of Governments; TDM = Transportation Demand Management; VMT = vehicle miles traveled
Source: EPIC 2020.

Energy Emissions Category

Emissions in the energy category are generated through residential and non-residential electricity and natural gas use. Electricity and natural gas accounted for 27 percent and 12 percent of the City’s 2012 emissions inventory, respectively. With a combined emissions contribution of 39 percent, the energy category is the second largest contributor to overall City emissions. Legislative reductions from State energy efficiency and renewable energy programs will contribute to reducing emissions by increasing the amount of utility supplied renewable energy and improving energy efficiency of new buildings. At the local level, GHG emissions reductions would be achieved by improving energy efficiency of existing buildings and improving energy efficiency of new developments beyond State requirements. GHG reductions would also occur from increasing the amount of renewable energy generated locally while reducing the amount of non-renewable energy consumed. Initiatives directed under the energy category rely on efforts by local utilities, organizations, and agencies, with participation from the community.

Strategy 4: Increase Building Energy Efficiency

While State legislative actions provide reductions related to building energy efficiency, additional reductions are achievable by adopting local measures. This strategy aims to reduce emissions by reducing energy consumed by residential and business consumers and in municipal facilities through increased energy efficiency in existing homes and businesses and new projects. The four measures under this strategy would reduce the City’s emissions by approximately 1,000 MTCO_{2e} in 2030 and 1,000 MTCO_{2e} in 2035. **Table 3-5** outlines the framework to increase building energy efficiency under this strategy and the supporting actions that provide additional potential reductions and funding opportunities.



Table 3-5 Increase Building Energy Efficiency

Measure E-4.1: Require New Residential Developments to Install Alternately-Fueled Water Heaters.

Adopt an ordinance, effective in 2023, requiring all new single-family and multi-family residential projects and significant remodels to install electric heat pump water heaters.

Target Year	Performance Metric	GHG Reduction Potential (MTCO _{2e})

Table 3-5 Increase Building Energy Efficiency

2022	Adopt an ordinance requiring the installation of alternatively-fueled water heaters effective in 2023 in new developments and significant remodels.	-
2025	Establish incentives for landlords and homeowners to upgrade to electric heat pump water heaters.	-
2030	Approve 995 new residential units served by electric heat pump water heaters by 2030.	629
2035	Approve 1,276 new residential units served by electric heat pump water heaters by 2035.	822

Measure E-4.2: Require New Multi-Family Residential Developments to Install Electric Cooking Appliances.

Adopt an ordinance, effective in 2023, requiring all new multi-family residential units and significant remodels to install only electric cooking appliances.

Target Year	Performance Metric	GHG Reduction Potential (MTCO _{2e})
2022	Adopt an ordinance, effective in 2023, requiring the installation of electric cooking appliances.	-
2025	Establish incentives for landlords and homeowners to upgrade to electric cooking appliances.	-
2030	Install 955 new electric cooking appliances.	143
2035	Install 1,142 new electric cooking appliances.	172

Measure E-4.3: Reduce Electricity Use in Streetlights.

Retrofit City-owned HPS streetlights with LED streetlights, starting in 2021.

Target Year	Performance Metric	GHG Reduction Potential (MTCO _{2e})
2030	Retrofit 300 existing HPS streetlights with LEDs by 2030.	3
2035	Retrofit 450 existing HPS streetlights with LEDs by 2035.	3

Measure E-4.4: Require Non-Residential Alterations and Additions to Install Alternative-Fuel Water Heaters.

Adopt an ordinance, effective in 2023, requiring all non-residential alterations and additions with a permit value of \$200,000 or more to install electric heat pump water heaters.

Target Year	Performance Metric	GHG Reduction Potential (MTCO _{2e})
2030	Require the installation of electric heat pump water heaters for a minimum alteration and addition area of 1.08 million sq. ft. of non-residential buildings by 2030.	160
2035	Require the installation of electric heat pump water heaters for a minimum alteration and addition area of 1.755 million sq. ft. of non-residential buildings by 2035.	263

Supporting Actions:

- Encourage energy efficiency improvements through rebates or incentives.
- Evaluate municipal facilities and operations for additional energy savings opportunities through SANDAG’s Roadmap Program.
- Promote the the SDG&E Energy Savings Assistance Program for weatherization improvements.
- Evaluate the feasibility of a local home retrofit program and utilize the Clean Energy Equity Plan for reinvestment in priority investment neighborhoods (“PINS”), focusing on the oldest housing stock.

Table 3-5 Increase Building Energy Efficiency

Notes: City = City of Escondido; GHG = greenhouse gas; HPS = high pressure sodium; LED = light-emitting diode; MTCO₂e = metric tons of carbon dioxide equivalent; SANDAG = San Diego Association of Governments; sq. ft. = square feet
 Source: EPIC 2020.

Strategy 5: Increase Renewable and Zero-Carbon Energy

GHG emissions reductions would be achieved through implementation of this strategy by reducing the amount of electricity generated from fossil fuels and transitioning to cleaner energy sources such as renewables. Installing more renewable energy systems will provide a reliable local energy supply that is a more sustainable source of electricity. Under this strategy, the City would increase renewable energy locally at municipal and commercial developments and would assess the feasibility of participating in a community choice aggregation (“CCA”) program. The four measures included under this strategy would reduce City emissions by approximately 45,000 MTCO₂e in 2030 and 34,000 MTCO₂e in 2035. **Table 3-6** provides details on this strategy and the supporting actions currently in process at municipal renewable facilities.



Table 3-6 Increase Renewable and Zero Carbon Energy

Measure E-5.1: Increase Renewable Energy Generated at Municipal Facilities

Increase on-site renewable generation at municipal facilities and parking lots by installing PV systems.

Target Year	Performance Metric	GHG Reduction Potential (MTCO ₂ e)
2030	Install at least 0.8 MW of PV at municipal facilities and parking lots by 2030.	292
2035	Install at least 2.0 MW of PV at municipal facilities and parking lots by 2035.	745

Measure E-5.2: Require New Commercial Developments to Achieve Zero Net Energy.

Adopt an ordinance, effective in 2023, requiring all new commercial developments to achieve zero net energy.

Target Year	Performance Metric	GHG Reduction Potential (MTCO ₂ e)
2022	Adopt a Zero Net Energy ordinance effective in 2023.	-
2030	Approve at least 970,200 sq. ft. of new office and retail space that achieve zero net energy by 2030.	1,618
2035	Approve at least 1,576,575 sq. ft. of new office and retail space that achieve zero net energy by 2035.	2,668

Measure E-5.3: Increase Grid-Supply Renewable and/or Zero-Carbon Electricity.

Join or develop a program to increase grid-supply renewables and zero-carbon electricity to 100 percent.

Table 3-6 Increase Renewable and Zero Carbon Energy

Target Year	Performance Metric	GHG Reduction Potential (MTCO ₂ e)
2021	Complete a CCA/CCE feasibility study.	-
2025	Establish a “Clean Energy Equity Plan” to support low-income residents and small organizations to purchase or obtain renewable energy. Program to include specific goals for local and decentralized renewable energy, rental and homeowner programs and/or system incentives, creation of local green jobs, and local hiring requirements, etc.	
2028	Complete a micro-grid feasibility study with the goal to encourage clean energy development and access in priority investment neighborhoods (“PINs”).	-
2030	Achieve 100 percent renewable and zero-carbon electricity supply in 2030.	42,134
2035	Achieve 100 percent renewable and zero-carbon electricity supply in 2035.	29,486

Measure E-5.4: Increase Renewable Electricity Generated at School Sites.

Support the EUSD’s efforts to install PV systems on school sites within the City.

Target Year	Performance Metric	GHG Reduction Potential (MTCO ₂ e)
2030	Install 2.6 MW behind-the-meter PV at school sites by 2030.	947
2035	Install 2.6 MW behind-the-meter PV at school sites by 2035.	965

Supporting Actions:

- Support the efforts at the Hale Avenue Resource Recovery Facility to create renewable electricity and heat for municipal operations.

Notes: CCA = Community Choice Aggregation; CCE = Community Choice Energy; City = City of Escondido; EUSD = Escondido Union School District; GHG = greenhouse gas; MTCO₂e = metric tons of carbon dioxide equivalent; MW = megawatt PV = photovoltaic; sq. ft. = square feet
Source: EPIC 2020.

Water and Wastewater Emissions Category

Energy consumed to supply, deliver, and treat water and wastewater results in the generation of GHG emissions. Although emissions from water and wastewater contribute approximately two percent of the City’s total emissions in 2012, actions taken by residents and from municipal activities can significantly reduce citywide emissions in this sector. Reducing water use leads to a more reliable water supply that may help the City adapt to climate change impacts.

Strategy 6: Increase Water Efficiency

The measures under this strategy reduce the amount of water consumption for landscaping in both residential and municipal land uses. Reducing the amount of water used would reduce the energy needed to supply, treat, and deliver water and the GHG emissions associated with those processes. The two measures under this strategy would reduce the City’s emissions by an estimated 50 MTCO₂e in 2030 and 80 MTCO₂e in 2035. **Table 3-7** outlines the framework for this strategy.

Strategy 6 Co-Benefits



Table 3-7 Increase Water Efficiency

Measure W-6.1: Reduce Municipal Landscape Water Consumption.

Reduce water consumption at City Parks and in the City’s LMD by:

- Installing smart irrigation controllers and water efficient rotator nozzles in the City’s LMD;
- Requiring all new/replacement irrigation controllers installed at City parks to be smart controllers and/or use install new rotor nozzles; and
- Institutionalize leak detection protocols.

Target Year	Performance Metric	GHG Reduction Potential (MTCO ₂ e)
2030	Reduce water use at City Parks and in the City’s LMD by 84 acre-feet in 2030.	45
2035	Reduce water use at City Parks and in the City’s LMD by 118 acre-feet in 2035.	64

Measure W-6.2: Reduce Landscape Water Consumption in Developments.

Adopt an ordinance, effective in 2022, that reduces water consumed for landscaping at new single-family and townhome model developments, as well as commercial development, by:

- Requiring all single-family and townhouse model homes to be fully equipped with greywater systems and rain barrels (or other rainwater capture systems); and
- Requiring model home developers to offer greywater systems and rain barrels (or other rainwater capture systems) as an add-on option.
- Create water use budgets for new commercial developments (or other similar program) that requires or incentivizes pop-up rotor nozzles, pressure management, leak detection, etc.

Target Year	Performance Metric	GHG Reduction Potential (MTCO ₂ e)
2021	Adopt an updated landscape ordinance effective 2022.	-
2030	Approve the development of 130 new single-family homes or townhouses with greywater systems and rain barrels by 2030.	8
2035	Approve the development of 195 new single-family homes or townhouses with greywater systems and rain barrels by 2035.	12

Supporting Actions:

- Encourage water use efficiency improvements through rebates and incentives.
- Continue to support turf conversion or conservation practices and offset costs of landscape conversion to drought tolerant, native or California-friendly plants.

Notes: City = City of Escondido; GHG = greenhouse gas; LMD = Landscape Maintenance District; MTCO₂e = metric tons of carbon dioxide equivalent

Source: EPIC 2020.

Strategy 7: Diversify Local Water Supply

As described under the previous strategy, GHG emissions associated with the water category are from the upstream energy use of supplying, treating, and delivering water. By increasing the City’s local water supply, the energy required to transport water throughout the City would be reduced. Under this strategy, the City plans to install a Membrane Filtration/Reverse Osmosis (“MFRO”) Facility to produce a high-quality water supply for agricultural purposes and reduce the reliance on water imported from outside of the city. The one measure under this strategy would reduce the City’s GHG emissions by approximately 3,000 MTCO_{2e} in 2030 and 4,000 MTCO_{2e} in 2035. **Table 3-8** provides details of the measure under this strategy and the supporting actions for additional water conservation efforts.



Table 3-8 Diversify Local Water Supply

Measure W-7.1: Develop a Local Water Supply for Agricultural Water Use.

Construct and operate a new MFRO facility to produce high-quality water supply for local agricultural uses.

Target Year	Performance Metric	GHG Reduction Potential (MTCO _{2e})
2030	Supply 6,721 acre-feet of water to agricultural customers from the MFRO facility in 2030.	3,541
2035	Supply 6,721 acre-feet of water to agricultural customers from the MFRO facility in 2035.	3,571

Supporting Actions:

- Maintain local water supply through water conservation efforts.

Notes: City = City of Escondido; GHG = greenhouse gas; MFRO = Membrane Filtration/Reverse Osmosis; MTCO_{2e} = metric tons of carbon dioxide equivalent
 Source: EPIC 2020.

Solid Waste Emissions Category

GHG emissions associated with the disposal of solid waste are generated from the decomposition and off-gassing of material in landfills. To reduce GHG emissions, the City can work with regional agencies to reduce the amount of solid waste disposed of at landfills by implementing programs that increase recycling and composting. Emissions generated by solid waste contributed approximately three percent of citywide emissions in 2012. Through collaboration with local agencies and waste haulers, and changes in residents’ and business owners’ behaviors, reductions in solid waste can be achieved.

Strategy 8: Reduce and Recycle Solid Waste

Ways to reduce GHG emissions associated with solid waste disposal involve material recycling or organic material composting. Increased recycling and composting locally can lead to additional benefits, such as increased products created from locally recycled material and fertilizer, and organic waste covering for local agricultural use. Under this strategy, the City would increase the amount of waste diverted away from landfills. Implementation of this strategy would reduce GHG emissions by approximately 24,000 MTCO_{2e} in 2030 and 26,000 MTCO_{2e} in 2035. **Table 3-9**



provides the framework for solid waste diversion and the supporting actions to develop partnerships and recycle waste generated at construction sites.

Table 3-9 Reduce and Recycle Solid Waste

Measure S-8.1: Increase Citywide Waste Diversion.

Increase citywide waste diversion by:

- Working with the City’s franchise waste hauler to prepare a waste diversion plan that identifies steps toward achieving the 2035 waste diversion goal;
- Adopting and implementing an organic waste recycling program to support regional efforts that includes a food scrap composting program and fully permitted community compost facilities; and
- Adopting a composting and waste diversion ordinance, effective in 2023, to support at-home management of food waste.

Target Year	Performance Metric	GHG Reduction Potential (MTCO _{2e})
2021	Adopt and implement an organic waste recycling program	-
2023	Adopt a composting and waste diversion ordinance	-
2023	Work with the franchise waste hauler and other partners to assess the infrastructure needed to support composting and waste diversion goals. Develop a Zero Waste Plan to support zero waste programs; prioritize community education to priority investment neighborhoods (“PINs”); and start building the necessary infrastructure for diverting waste and processing anaerobic digester waste.	-
2030	Achieve 80 percent citywide waste diversion in 2030.	23,588
2035	Achieve 90 percent citywide waste diversion in 2035.	27,405

Supporting Actions:

- Explore opportunities with franchise waste hauler and other local business organizations to develop and encourage participation in commercial food scrap collection program.
- Continue to participate in regional waste diversion discussions and monitor mandatory participation levels in other area construction and demolition waste diversion ordinances.

Notes: City = City of Escondido; GHG = greenhouse gas; MTCO_{2e} = metric tons of carbon dioxide equivalent
 Source: EPIC 2020.

Natural Systems

Maintaining tree cover and areas of vegetation is essential for the natural carbon cycle and for sustaining life. Through photosynthesis, plants convert carbon dioxide from the atmosphere into oxygen and carbon-based matter. This process of removing atmospheric carbon dioxide through natural processes is referred to as carbon sequestration. Communities can increase the amount of carbon sequestered locally by expanding the urban forest canopy and protecting natural systems to reduce communitywide GHG emissions.

Strategy 9: Carbon Sequestration and Land Conservation

Increasing tree cover and preserving land for agriculture or open space in an urban area is a strategy to sequester carbon locally and reduce citywide GHG emissions. The measures under this strategy focus on implementing programs to increase the number of trees planted at new developments and in public areas. The City will incentivize efficient land development practices by permitting additional development density for projects that also commit to conserve open space and agriculture lands. Implementation of the carbon sequestration and land conservation measures would reduce City emissions by approximately 700 MTCO_{2e} in 2030 and 1,000 MTCO_{2e} in 2035. **Table 3-10** provides details on this strategy and supporting actions that incentivize tree planting and vegetation management programs.



Table 3-10 Carbon Sequestration and Land Conservation

Measure C-9-1: Enforce Landscape Tree Requirements at New Developments.

Adopt an updated landscape ordinance, effective in 2022, to increase the number of new trees planted at new developments by requiring:

- Non-residential developments to plant a minimum of one non-invasive and drought tolerant tree for every four parking spaces; and
- New single-family and multi-family residential developments to plant a minimum of one non-invasive and drought tolerant tree per unit, or pay an in-lieu fee so that the tree(s) can be planted elsewhere.

Target Year	Performance Metric	GHG Reduction Potential (MTCO _{2e})
2021	Adopt an updated landscape ordinance and in-lieu tree planting program to fund new tree plantings such as an in-lieu program to offset trees plantings on highly constrained sites.	-
2023	Amend the updated landscape ordinance establish requirements for street and median trees and requirements for tree health (e.g. inspection, enforcement, and maintenance requirements).	-
2030	Plant and maintain 2,802 new trees at new developments by 2030.	183
2035	Plant and maintain 4,076 new trees at new developments by 2035.	239

Measure C-9.2: Develop a Citywide Urban Forestry Program.

Table 3-10 Carbon Sequestration and Land Conservation

Develop, adopt, and implement an Urban Forestry Program to plant new trees and track tree planting and maintenance in public areas (i.e. City facilities, public parks, and public rights-of-way), including standards to right-size trees to minimize pruning and support hydrozoning techniques.

Target Year	Performance Metric	GHG Reduction Potential (MTCO _{2e})
2021	Pursue grant funding opportunities to fund the development of an Urban Forestry Program.	-
2025	Adopt an Urban Forestry Program with the goal of having one tree per resident in year 2088, which includes the following: <ul style="list-style-type: none"> ▪ Complete an assessment of existing conditions and calculate canopy coverage percentage for the City and for priority investment neighborhoods (“PINs”). ▪ Establish a tree planting and replacement program to achieve coverage of at least 25 percent in residential areas and 15 percent in commercial and industrial areas. ▪ Develop an urban heat island reduction program that includes an urban forest program or plan for priority investment neighborhoods (“PINs”) that achieves a tree planting coverage of at least 35 percent. Expand and focus tree plantings in low-canopy neighborhoods and neighborhoods at a higher risk of adverse outcomes of urban heat island effects. ▪ Encourage urban agriculture through edible landscapes within some publicly accessible areas. 	-
2030	Plant and maintain 1,010 new trees in public areas by 2030.	36
2035	Plant and maintain 1,347 new trees in public areas by 2035.	48

Measure C-9.3: Develop an Agricultural Land and Open Space Conservation Program.

Develop programs and policies that would conserve agricultural land and/or open space, including:

- Consider various agricultural land and open space conservation strategies that allow developers to preserve lands and/or increase residential development density in smart growth infill areas by removing development potential of lands;
- Target stream restoration programs and riparian restoration strategies for carbon sequestration, natural heat relief, water quality improvements, and/or wildlife habitat mitigation;
- Adopting a Community Gardening Ordinance, effective in 2023;
- Adopting a Williamson Act incentive program, effective in 2023, to encourage the continuation of agricultural operations; and
- Adopting an Open Space Conservation program, effective in 2023, that policies for the loss of key natural habitat areas by increasing goals and metrics for “avoided conversion.”

Target Year	Performance Metric	GHG Reduction Potential (MTCO _{2e})
2023	Adopt a Williamson Act Incentive Program.	-
2023	Adopt a Community Gardening Ordinance.	-
2023	Adopt an Open Space Conservation Program.	-

Year	Measure	Value
2025	Update the Jurisdictional Runoff Management Plan to develop stream and riparian restoration program strategies and work to naturalize and/or protect creek watershed areas.	-
2030	Remove the development potential for at least 257 residential units on agricultural lands and open space areas by 2030.	515
2035	Remove the development potential for at least 400 residential units on agricultural lands and open space areas by 2035.	762

Supporting Actions:

- Continue turf management practices which specify the top-dressing of compost to increase carbon sequestration at City parks.
- Help identify incentives and programs for “carbon farming” or agricultural best practices to reduce GHG emissions and protect Escondido agriculture such as the State Office of Environmental Farming and Innovation, or California Department of Food and Agriculture’s Health Soils Program, etc.
- Partner with SANDAG, other agencies, and North San Diego County cities for funding or acquisition and management of lands conserved for habitat protection and/or agricultural use.
- Collaborate with CSE and SDG&E in developing shade tree give-away program or other incentives to encourage planting of shade trees for existing residential and non-residential sites.
- Incentivize tree planting on private property by giving away tree seedlings during Arbor Day or other events.

Notes: City = City of Escondido; CSE = Center for Sustainable Energy; GHG = greenhouse gas; MTCO₂e = metric tons of carbon dioxide equivalent; SDG&E = San Diego Gas and Electric; VMT = vehicle miles traveled
 Source: EPIC 2020.

Updates to Previous CAP Measures

This CAP was developed to update the goals of and build upon the General Plan policies related to climate change and reducing GHGs, and measures identified in the City’s previously adopted 2013 CAP. As discussed in **Chapter 1**, the City’s 2013 CAP includes GHG reduction measures that reduce emissions from government operations, energy, transportation, area sources, water, solid waste, and construction categories. The measures that were developed for this CAP were derived from a review of the measures included in the 2013 CAP and organized using guidance from SANDAG’s ReCAP. Several measures from the 2013 CAP were updated and included in this CAP. Similarly, the measures in this CAP were developed to be consistent with related General Plan policies. A summary of the relationship between the measures in this CAP, measures included in the 2013 CAP, and General Plan policies is provided in **Appendix C**.



This chapter outlines how the City of Escondido (“City”) will implement and monitor the Climate Action Plan (“CAP”) strategies and measures over time to reduce greenhouse gases (“GHGs”). To achieve the GHG emissions reductions described in **Chapter 3**, strategies and measures must be reviewed, maintained, and implemented in a consistent manner to successfully serve the CAP’s purpose.

Detailed steps for implementation were created as part of the City’s previous CAP, prepared in 2013 (“2013 CAP”). The information presented in this chapter serves as an update to the implementation steps identified in the 2013 CAP and provides a framework for the City to monitor strategy and measure implementation.

Successful implementation of this CAP will require ongoing monitoring and review to ensure measures are effective. City staff will identify the feasibility of each measure’s implementation and will monitor implementation progress in meeting the City’s GHG reduction targets.

Implementing this CAP will involve the City Council, Planning Commission, a full time Sustainability or Climate Coordinator to lead planning and coordination across City departments, the establishment of a new Climate Commission, and coordination with other boards and commissions. The Climate Commission will include representative stakeholders and experts to provide ongoing program support and guidance, identification of potential funding sources, facilitate partnerships, and monitor implementation. The City will need to collaborate with the San Diego Association of Governments (“SANDAG”), the County of San Diego, other public and private agencies, and adjacent cities to implement strategies and measures requiring regional collaboration. The limited resources annually available to the City do not allow every strategy and measure to be funded and implemented simultaneously. The CAP’s effective implementation will require a process to prioritize its strategies and measures periodically. Further, the City will develop an early strategy for implementing the CAP in a manner that promotes social equity and environmental justice.

Implementation of measures identified in this CAP would meet the City’s GHG reduction targets based on the analysis presented. As the City implements these measures, it will continue to examine additional efforts that could be taken to further reduce citywide GHG emissions. Such additional efforts may include the City’s exploration of and participation in a regional offset program or fund, or creation of an Escondido climate action fund to continue investment in mitigation and adaptation measures. A regional offset program or local climate action fund would provide new developments proposed in the City the opportunity to reduce their GHG emissions beyond feasible onsite actions. The program would consist of a fund or a list of GHG-reducing projects that new developments would be permitted to buy into to receive “credit” for emissions reductions from associated projects. Local climate action fund projects could include solar panel installation on existing buildings, electric vehicle purchasing for large vehicle or bus fleets, or energy retrofits for existing homes. Any “credits” generated through such a program would need to be additional to the strategies and measures identified in the CAP, or quantified GHG reductions identified in and associated with other regulatory programs or actions. This CAP does not rely on implementation of an offset program to meet GHG reduction targets.

4.1 Implementation Strategy

The implementation strategy presented in this chapter would ensure that the overall direction set forth in the CAP is translated into City and community actions. The purpose of this implementation strategy is to describe the specific actions the City will require of new developments, and will undertake itself, or will pursue via ordinance and/or funding source to achieve communitywide reductions in GHG emissions. Continuous management, oversight, and staffing is required for the implementation of the GHG reduction measures. Ensuring that measures translate to on-the-ground results and reductions in GHG emissions

is critical to the success of the CAP. Success of the City's CAP and GHG emissions reduction measures will depend on the participation of City departments, residents, and businesses.

This CAP's implementation strategy identifies which measures require the most significant effort to implement and require the earliest implementation to achieve the GHG reductions identified in this CAP.

To achieve GHG reduction targets, an implementation strategy is required to determine the priority of the strategies described in **Chapter 3**. Priorities are determined by a variety of factors, including effectiveness or measures in reduction GHG emissions, impact on priority investment neighborhoods ("PINs"), staff resources needed, required level of

department/agency collaboration, and timeframe of implementation. To continue successful implementation of the CAP strategies, the City will further expand on this initial examination once implementation has begun. Implementation of this CAP will be achieved through two primary efforts: environmental review for new developments and City-led implementation activities.

4.1.1. New Development Environmental Review

The California Environmental Quality Act ("CEQA") requires lead agencies to identify significant environmental impacts of their actions and to avoid or mitigate those impacts, if feasible. Most proposals for physical developments are subject to the provisions of CEQA. The City has adopted local Environmental Quality Regulations that set thresholds for determining significance. As part of the development of this CAP, the City has updated these thresholds for determining significance for impacts related to GHG emissions. This CAP meets the criteria identified in Section 15183.5 of the CEQA Guidelines and, therefore, is considered a "qualified" CAP and may be used for the specific purpose of streamlining the analysis of GHG emissions for subsequent projects. The methodology for determining these thresholds is included in **Appendix C**.

CEQA Streamlining

New developments that are consistent with growth projections and applicable GHG reduction measures of the CAP are eligible for streamlining under the CEQA, per the provisions of the State's CEQA Guidelines Section 15183.5. Under these provisions, a project that is subject to discretionary review and is consistent with the City's General Plan growth projections can show consistency with applicable GHG reduction measures in a CAP, and the level of analysis for the project required under CEQA can be streamlined. Furthermore, a project's incremental contribution to cumulative GHG emissions may be determined not to be cumulatively considerable. The City has established a GHG screening threshold (set at 500 metric tons carbon dioxide equivalent ["MTCO_{2e}"] per year) for new development projects to determine if a project would need to demonstrate consistency with the CAP through the Checklist (**Appendix E**). New development projects that are consistent with the General Plan and are expected to generate fewer than 500 MTCO_{2e} annually would not have a cumulative impact and would not be required to provide additional analysis.

New development projects that are expected to generate greater than 500 MTCO_{2e} annually, but are consistent with the General Plan land use designation and zoning, may be determined to have a less than significant cumulative impact if they are determined to be consistent with the CAP. A project's consistency with the CAP will be determined through the CAP Consistency Review Checklist ("Checklist"). The Checklist contains GHG reduction measures applicable to development projects that are required to be implemented on a project-by-project basis to ensure that the specific emission targets identified in the CAP are achieved. New development projects will need to incorporate all potential applicable CAP measures to demonstrate consistency with the CAP. **Table 4.1** provides a summary of

the CAP measures included in the Checklist as well as the new development types to which they are applicable.

Measure		Applicability
T-1.3	Adopt an Ordinance to Require EV Charging Stations at New Developments	New multi-family and commercial developments
T-1.4	Require EV Charging Stations at New Model Home Developments	New single-family homes and townhouses
T-3.2	Improve Pedestrian Infrastructure in Priority Areas	All new developments in priority areas
T-3.4	Develop a Citywide TDM Ordinance	New non-residential developments
T-3.5	Update Bicycle Master Plan	All new developments that also propose/require roadway improvements ¹
T-3.6	Increase Transit Commuters Among New Downtown Residents	New residential developments within the Downtown Specific Plan area
E-4.1	Require New Residential Developments to Install Alternately-Fueled Water Haters	New residential developments
E-4.2	Require New Multi-Family Residential Developments to Install Electric Cooking Appliances	New multi-family residential developments
E-5.2	Require New Commercial Developments to Achieve ZNE	New office and retail developments
W-6.2	Reduce Landscape Water Consumption at New Model Home Developments	New single-family homes and townhouses
C-9.1	Enforce Landscape Tree Requirements at New Developments	All new developments

Notes: CAP = Climate Action Plan; EV = electric vehicle; TDM = transportation demand management; ZNE = zero net energy
¹ Further detail regarding measure applicability to new developments are provided in the *Climate Action Plan Consistency Review Checklist*.
 Source: Ascent Environmental 2020.

New development projects that are not consistent with General Plan land use designations and zoning would be required to develop a project-specific GHG analysis. The requirements of this analysis would be determined by the Director of Community Development and confirmed by the decision-making authority on a project-by-project basis. As the CAP is updated, the Checklist may also be updated to incorporate new GHG reduction techniques or to comply with later amendments to the CAP and/or local, State, or federal laws and/or regulations. By incorporating applicable GHG reduction measures in the Checklist into project designs or conditions of approval, the City will ensure that new development is consistent with applicable GHG reduction measures in the CAP and will contribute its “fair share” in achieving the identified GHG reduction targets.

4.1.2. City-Led Implementation Activities

The City will implement strategies and measures of the CAP through several types of programs and activities that can be grouped into categories. The categories identified for implementation activities include: Municipal Operations; New Ordinances and Code Updates; Planning; Partnerships; and Education and Outreach. While each measure identified in the CAP would fall into one of these categories, some measures overlap and belong to more than one category. For example, increasing citywide waste diversion (**Measure S-8.1**) first requires partnerships with existing waste haulers to ensure solid waste is handled appropriately, but would also require education to inform residents on proper solid waste sorting and reduction strategies. Detailed descriptions of each category are provided below.

Several CAP measures will require the City to develop and implement new ordinances, update the City's code, and collaborate with other local or regional agencies to achieve GHG reductions.

Municipal Operations: Certain measures included in this CAP require specific City actions to update and make municipal operations more efficient. Examples include increasing the amount of renewable energy generated at municipal facilities (**Measure E-5.1**) and increasing the efficiency of streetlights (**Measure E-4.3**). These measures would be implemented by the City and would reduce emissions specifically related to municipal operations.

New Ordinances and Code Updates: Several measures in the CAP would be implemented through new ordinances or amended regulations adopted by the City. Examples of measures that require municipal approval include requiring new developments to install electric vehicle ("EV") charging stations (**Measure T-1.3**) and requiring new residential developments to install alternatively-fueled water heaters (**Measure E-4.1**). New ordinances will ensure that the City requirements are in place to achieve the objectives of the CAP.

Planning: Measures that are more programmatic in nature require visioning and a larger planning effort to realize GHG reductions. Examples of implementation or development of planning documents or programs include an update to the City's Bicycle Master Plan (**Measure T-3.4**) and an Urban Forestry Program (**Measure C-9.2**).

Financing and Incentives: Identifying mechanisms for funding and allocating resources will help ensure that the CAP is successfully implemented. Strategies and measures identified in the CAP would be implemented by community residents, business owners, and developers with opportunities and incentives to contribute to citywide GHG reductions. Promoting financing and incentive programs, like SANDAG's iCommute program (**Measure T-3.1**), increases the participation in achieving citywide reduction goals.

Partnerships: Interagency coordination and partnerships with other organizations are critical to ensuring implementation of certain measures. This includes collaboration with SANDAG on developing an intra-city shuttle program (**Measure T-3.7**) and implementation of a Safe Routes to School Program with the Escondido Unified School District (**Measure T-3.3**). Other measures include collaboration with other government agencies, transportation agencies, and waste haulers in the region.

Education and Outreach: Educational efforts about the objectives of the CAP will help create support for the CAP and involve the community in its implementation. Informing residents and business owners about the co-benefits of GHG reduction measures would encourage participation and awareness of the goals of the CAP. A priority will be on neighborhoods with

higher impact rankings in the Social and Health Index Map and designated as priority investment neighborhoods (“PINs”).

4.1.3. Implementation Timeframe

The timeframe over which strategies are implemented varies between both short-term (i.e. within a couple years) and long-term (i.e. within several years). These implementation timeframes were developed consistent with the implementation efforts identified in the 2013 CAP. Continuation of similar implementation definitions between CAPs assists in comparing the implementation efforts required for various measures over time. Prioritization of the measures is based on the timeframe over which measures can be implemented. Certain measures should be prioritized early because they require more effort and take longer to implement. Assigning such measures a higher implementation priority would allow the City to allocate resources appropriately. Generally, timeframes associated with each measure can be categorized as follows:

- **Ongoing:** Implementation is already occurring
- **Short-term:** Implementation will occur within the next three years
- **Mid-term:** Implementation will occur within approximately four to ten years

In general, all measures included in this CAP will require initial implementation actions to occur within the first few years after CAP adoption. Following initial short- or mid-term implementation actions, implementation of projects, programs, and plans will require ongoing management, communication, monitoring, and administration. The implementation timeframes provided in the implementation strategy matrix (**Table 4-3**) reflect the timeframe during which initial implementation of a measure would occur and if ongoing implementation is required.

4.1.4. Implementation Effort

Levels of effort required to implement measures are based on cost and ease of implementation and effectiveness in reduction GHG emissions. The implementation effort of each CAP measure is based on a scale of low, medium, or high. Consideration of staff implementation costs and the overall feasibility of implementation is needed to guide CAP measure prioritization. Staff implementation costs are based

While implementation of some measures can be achieved by existing staff, others will require the City to assign staff from various departments to assist with measure implementation or coordinate with staff from other agencies.

on the anticipated levels of resources, staffing, and timeframe required to implement each measure. Implementation costs are not intended to represent the relative costs of compliance for residents and businesses, but rather focuses on the City’s relative costs to facilitate program development and implementation. Ease of implementation is based on whether there are already existing programs that are related, coordination between different departments or agencies, and a comparison between existing and proposed strategies.

Sample criteria used to define the implementation efforts for each measure are shown in **Table 4-2**. It is possible for a measure to have a mix of implementation effort levels (i.e. have low staff implementation costs and high ease of implementation). In addition, the City will reflect in the prioritization of the measures to achieve the reductions. These measures will be ranked higher in the matrix.

Table 4-2 Implementation Effort Sample Criteria

Implementation Effort Level	Staff Implementation Costs	Ease of Implementation
Low	<ul style="list-style-type: none"> Requires limited resources of current staff Existing staff can implement but will require reprioritization of workload 	<ul style="list-style-type: none"> Existing programs in place to support implementation Limited external and internal coordination required Limited revisions to policy or code
Medium	<ul style="list-style-type: none"> Requires staff resources beyond current capacity Requires new part-time staff or contracts to implement 	<ul style="list-style-type: none"> Requires external and internal coordination Involves policy or code revisions The amount of funding needed for implementation is known and it can be acquired
High	<ul style="list-style-type: none"> Requires extensive staff resources Requires a significant number of new staff or contracts to implement 	<ul style="list-style-type: none"> Requires revisions to the General Plan or development of new policies, programs, or codes Requires robust outreach programs to residents and businesses Requires regional cooperation Requires securing long-term funding

Source: Ascent Environmental 2020.

4.1.5. Implementation Strategy Matrix

The implementation strategy matrix, outlined below in **Table 4-3**, provides a summary of the initial prioritization and categorization of the CAP’s strategies and measures. The matrix includes an implementation activity type, responsible department or agency, implementation timeframe, level of implementation cost, effectiveness in GHG emissions reductions, and ease of implementation for each measure. Following adoption of the CAP, this implementation strategy matrix will serve as initial guidance for City staff. Future updates to the CAP will require the matrix to be adjusted according to feasibility and legislative requirements. Key staff in each department or agency will facilitate and oversee measure implementation, allocate staff resources, and secure funding, as needed.



Source: City of Escondido

Following approval of this CAP, the City will begin examining the actions that required to implement CAP measures. Additional implementation steps for each measure will build upon the implementation costs included in this CAP and further develop the information presented in this chapter. The specific steps required to implement each CAP strategy will serve as a reference document for City staff to identify implementation tasks, timelines, and responsible departments. Through the implementation process, City staff may need to revisit identified implementation steps to reflect adjusted timeframes, changes in budget availability, or development of new technologies.

Table 4-3 Implementation Strategy Matrix						
Measure	Title	Category	Responsible Department/ Agency	Implementation Timeframe	Staff Implementation Costs	Ease of Implementation
Strategy 1: Increase Use of Zero-Emission or Alternative Fuel Vehicles						
T-1.1	Transition to a Clean and More Fuel-Efficient Municipal Vehicle Fleet.	Municipal Operations	PW	Mid-Term	Low	Low
T-1.2	Install EV Charging Stations at Park and Ride Lots.	Planning	CD; PW	Short-Term	Medium	Medium
T-1.3	Adopt an Ordinance to Require EV Charging Stations at New Developments.	New Ordinances and Code Updates	CD; PW	Short-Term	Low	Medium
T-1.4	Require EV Charging Stations at New Model Home Developments.	New Ordinances and Code Updates	CD	Mid-Term	Low	Medium
Strategy 2: Reduce Fossil Fuel Use						
T-2.1	Synchronize Traffic Signals.	Municipal Operations	PW	Ongoing	Low	Medium
T-2.2	Install Roundabouts.	Planning	CD	Ongoing	Medium	Medium
Strategy 3: Reduce Vehicle Miles Traveled						
T-3.1	Participate in the SANDAG iCommute Vanpool Program.	Partnerships	CM; CD	Ongoing	Low	Low
T-3.2	Improve Pedestrian Infrastructure in Priority Areas.	Planning	CD	Ongoing	Low	Low
T-3.3	Implement the Safe Routes to School Program.	Education and Outreach	CD; EUSD	Ongoing	Low	Low
T-3.4	Develop a Citywide TDM Plan.	Planning	CD	Short-Term	Medium	Medium
T-3.5	Update Bicycle Master Plan.	Planning	CD	Ongoing	Medium	Medium
T-3.6	Increase Transit Commuters Among New Downtown Residents.	Education and Outreach	CD	Ongoing	Low	Low
T-3.7	Develop an Intra-City Shuttle Program.	Planning; Partnerships	CD; PW	Mid-Term	High	Medium
T-3.8	Increase Transit Ridership.	Planning; Partnerships	CD; SANDAG	Mid- to Long-Term	Medium	Medium

Table 4-3 Implementation Strategy Matrix						
Measure	Title	Category	Responsible Department/ Agency	Implementation Timeframe	Staff Implementation Costs	Ease of Implementation
T-3.9	Develop and Implement a Service Population-Based VMT Threshold.	Planning	CD	Short-Term	Low	Low
Strategy 4: Increase Building Energy Efficiency						
E-4.1	Require New Residential Developments to Install Alternatively-Fueled Water Heaters.	New Ordinances and Code Updates	CD	Short-Term	Low	Low
E-4.2	Require New Multi-Family Residential Developments to Install Electric Cooking Appliances.	New Ordinances and Code Updates	CD	Short-Term	Low	Low
E-4.3	Reduce Electricity Use in Streetlights.	Municipal Operations	PW	Ongoing	Low	Medium
E-4.4	Require Non-Residential Alterations and Additions to Install Alternative-Fuel Water Heaters.	New Ordinances and Code Updates	CD	Short-Term	Low	Low
Strategy 5: Increase Renewable and Zero Carbon Energy						
E-5.1	Increase Renewable Energy Generated at Municipal Facilities	Municipal Operations	ES; PW	Ongoing	Low	Medium
E-5.2	Require New Commercial Developments to Achieve ZNE.	New Ordinances and Code Updates	CD	Ongoing	Medium	High
E-5.3	Increase Grid-Supply Renewable and/or Zero-Carbon Electricity.	Financing and Incentives; Partnerships; Education and Outreach	CD; CM	Ongoing	Medium	High
E-5.4	Increase Renewable Electricity Generated at School Sites.	Partnerships	EUSD	Ongoing	Medium	High
Strategy 6: Increase Water Efficiency						
W-6.1	Reduce Municipal Landscape Water Consumption.	Municipal Operations	ES; PW	Ongoing	Low	Medium
W-6.2	Reduce Landscape Water Consumption in Developments.	Planning	CD	Ongoing	Low	Low

Table 4-3 Implementation Strategy Matrix						
Measure	Title	Category	Responsible Department/ Agency	Implementation Timeframe	Staff Implementation Costs	Ease of Implementation
Strategy 7: Diversify Local Water Supply						
W-7.1	Develop a Local Water Supply for Agricultural Water Use.	Planning	CD; ES; U	Mid-Term	Medium	High
Strategy 8: Reduce and Recycle Solid Waste						
S-8.1	Increase Citywide Waste Diversion.	Partnerships; Education and Outreach	CD; PW; U	Mid-Term	Medium	High
Strategy 9: Carbon Sequestration						
C-9.1	Enforce Landscape Tree Requirements at New Developments.	New Ordinances and Code Updates; Education and Outreach	CD; PW	Short-Term	Low	Medium
C-9.2	Develop a Citywide Urban Forestry Program.	Planning	CD; PW	Short-Term	Low	Medium
C-9.3	Develop an Agricultural Land and Open Space Conservation Program.	Planning	CD	Mid-Term	Medium	Low
Notes: CD = Community Development Department; CM = City Manager’s Office; ES = Engineering Services; EUSD = Escondido Unified School District; EV = electric vehicle; PW = Public Works Department; SANDAG = San Diego Association of Governments; TDM = transportation demand management; U = Utilities Department; VMT = vehicle miles traveled; ZNE = zero net energy Source: Ascent Environmental 2020.						

4.2 Monitoring and Updates

Implementation of the CAP will require routine updates and maintenance if it is to remain relevant and effective. City staff will need to evaluate and monitor CAP performance and make alterations or amendments if modifications are needed to help achieve the proposed reduction targets. This will include conducting periodic GHG emissions inventory updates and analyzing measure performance.

Inventory Updates

Upon CAP adoption, the City will begin implementing GHG reduction measures, tracking implementation efforts, and applying the CAP Checklist for CEQA streamlining. City staff will annually present summaries of CAP progress to City Council and Planning Commission on achievements to date and provide transparency and promote engagement with the public after CAP adoption. Through the climate planning services offered via its Roadmap Program, SANDAG will assist the City in developing updated GHG emissions inventories every two years. These inventories will be developed using the same methodology provided in this CAP to estimate citywide emissions and will be used to track the City's overall progress in reducing GHG emissions.

Monitoring Reports

City staff will prepare an annual monitoring report that provides updates on CAP implementation progress, GHG reductions achieved to date, and other important milestones in the CAP implementation process. As technologies and markets change and the City implements the measures in the CAP, these reports will be used to track progress and identify measures that need to be improved, adjusted, or removed. The report will also serve to inform City Council, Planning Commission, and the general public about implementation progress on measures, as well as overall progress towards the City's GHG reduction targets.

Full implementation of the GHG reduction measures in this CAP will require City staff to further evaluate the cost, effectiveness, and benefits of each individual measure. Evaluating CAP measure performance entails monitoring the level of community participation, costs, and potential barriers to implementation, as well as actual reductions in fuel consumption, vehicle miles traveled, energy usage, water usage, landfilled waste, or other activities that result in GHG emissions reductions. This evaluation of measure effectiveness in reducing local GHG emissions will assist the City when it updates this CAP to maintain successful measures and reevaluate or replace under-performing ones.

CAP Update

The City will prepare a CAP update every five years, beginning in 2026. CAP updates would reflect the findings and recommendations of the monitoring reports and inventory updates. Future CAP updates would be necessary to account for any new State or federal legislation that may affect the CAP, and to focus on GHG reduction strategies that may have been difficult to implement previously due to a lack of appropriate technologies or high upfront implementation costs.

Figure 4-1 outlines the CAP implementation and monitoring schedule.

Implementation and Monitoring Schedule	
2020	<p>CAP Adopted City Council adopts plan and staff begins to implement CAP measures.</p> <p>Initial Set-up Staff performs initial start-up tasks and develops tools and methodologies for tracking implementation efforts and achievements. Staff will begin administering the CAP Checklist for environmental review of applicable projects.</p> <p>Climate Commission Established The City should establish a formal advisory group early in the implementation period to help provide ongoing program support and guidance, identify potential funding sources and partnerships, and monitor implementation.</p>
2020 & 2022	<p>Update GHG Emissions Inventory In coordination with SANDAG, the City will receive an updated 2018 GHG inventory in 2020. If funding is available, SANDAG will continue to provide updated GHG inventories every two years. However, if funding is not available, City staff will work on the development of an updated emissions inventory for the year 2020, to be published by 2022.</p>
2021 - 2025	<p>Monitoring Reports City staff will prepare an annual monitoring report and present the report to City Council and Planning Commission. Each monitoring report will identify CAP implementation efforts to date, assess the CAP's performance in achieving targets, and set implementation milestones for the following year.</p>
2025	<p>Measure Review and CAP Review Based on findings from the monitoring report and inventory updates, City staff will review the performance of each individual measure, evaluate the effectiveness of maintaining existing measures into the future, and identify new technologies and methodologies that did not exist at the time of CAP adoption.</p>
2026	<p>CAP Update Through the review of CAP measures and monitoring, the City</p>

Source: Ascent Environmental. 2020.

Figure 4-1 Climate Action Plan Implementation and Monitoring Schedule

4.3 Ongoing Engagement

Continued engagement and participation from the community is critical for implementation of the CAP. This includes individual residents and business, community organizations, developers, property owners, other local and regional government agencies, and others. While this CAP focuses on measures in which the City has a role, many of the measures require partnerships, collaboration, and active engagement. Specific measures, such as increasing transit ridership (**Measure T-3.8**) or increasing citywide waste diversion, (**Measure S-8.1**) require the public to adopt new daily habits that reduce GHG emissions.

The City is also committed to educating the public about the important role individuals play in combating climate change. Effective and long-term climate action and resilience in the City can only be achieved

Most measures will require ongoing public input to achieve maximum GHG reductions. Measures aimed at reducing waste generation, transitioning to alternative modes of transportation, and developing/Updating plans will require public input and support.

through efforts that continue to change the way individuals interact with the environment. The creation of Climate Ambassadors or other such programs to educate residents in priority areas is a key strategy for achieving equity on the CAP implementation. Many of the measures in **Chapter 3** are focused on increasing community awareness and participation in existing programs or connecting the

community with new information, tools, funding, or resources to take action. Thus, this CAP serves as a resource that supports community-based action.

4.4 Funding Sources

Implementation of GHG reduction measures to increase energy efficiency and reduce the use of non-renewable resources will result in substantial cost-savings for the City and its residents in the long term. The City will incur initial start-up, ongoing administration, staffing, and enforcement costs. The City will be proactive in seeking cost-effective implementation and strategic funding opportunities and developing partnerships to share costs. All measures with potential for significant costs will be brought to City Council for consideration and approval.

To reduce the cost burden of implementation, a variety of funding sources are available to the City. A preliminary summary of funding and financing options are summarized in **Table 4-4**; however, these funding sources and programs are subject to change over time. As the CAP is updated and monitored, the City will need to reevaluate its overall costs and funding sources available. Leveraging funding opportunities would facilitate successful implementation of the GHG reduction measures.

The State’s Climate Change Funding Wizard website provides updates for funding available to cities, residents, and businesses for projects and activities that reduce GHG emissions and improve local resiliency.

Table 4-4 Potential Funding Sources to Support Greenhouse Gas Reduction Measures	
Funding Source	Description
For City Operations	
California Department of Resources Recycling and Recovery (“CalRecycle”)	CalRecycle grant programs allow jurisdictions to assist public and private entities in management of waste streams. Incorporated cities and counties in California are eligible for funds. Program funds are intended to: <ul style="list-style-type: none"> Reduce, reuse, and recycle all waste. Encourage development of recycled-content products and markets.

Table 4-4 Potential Funding Sources to Support Greenhouse Gas Reduction Measures	
Funding Source	Description
	<ul style="list-style-type: none"> Protect public health and safety and foster environmental sustainability.
California Air Resources Board (“CARB”)	<p>CARB offers several grants, incentives, and credit programs to reduce on-road and off-road transportation emissions. Residents, businesses, and fleet operators can receive funds or incentives depending on the program. The following programs can be utilized to fund local measures:</p> <ul style="list-style-type: none"> Air Quality Improvement Program (Assembly Bill [“AB”] 118); Loan Incentives Program; and California Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project
Transportation-Related Federal and State Funding	<p>For funding measures related to transit, bicycle, or pedestrian improvements, the following funding sources from the Southern California Association of Governments (“SCAG”) may be utilized:</p> <ul style="list-style-type: none"> Sustainability Planning Grant Program; Fixed Guide Way Capital Investment Grants; Job Access and Reverse Commute and New Freedom Programs; and Enhanced Mobility of Seniors & Individuals with Disabilities
New Development Impact Fees	<p>These types of fees may have some potential to provide funding for proposed programs and projects, but such fees are best implemented when the real estate market and overall regional economic conditions are strong.</p>
General Obligation Bond	<p>A general obligation bond is a form of long-term borrowing and could be utilized to fund municipal improvements.</p>
Other Funding Mechanisms for Implementation	<p>Grants may be available from the Strategic Growth Council (“SGC”) or the State Department of Conservation (“DOC”) to fund sustainable community planning, natural resource conservation, and development, and adoption.</p>
For Community Operations	
San Diego Gas & Electric (“SDG&E”)	<p>SDG&E is one of the utilities participating in the Go Solar initiative. A variety of rebates are available for existing and new homes. Photovoltaics, thermal technologies, and solar hot water projects are eligible. Single-family homes, commercial development, and affordable housing are eligible.</p>
Property-Assessed Clean Energy (“PACE”)	<p>The PACE finance program is intended to finance energy and water improvements within a home or business through a land-secured loan, and funds are repaid through property assessments. Municipalities are authorized to designate areas where property owners can enter into contractual assessments to receive long-term, low-interest loans for energy and water efficiency improvements, and renewable energy installation on their property. Financing is repaid through property tax bills. SANDAG has implemented the Home Energy Renovation Opportunity (“HERO”; a PACE program) in San Diego County to assist residents in financing residential energy efficiency and solar retrofits.</p>
Clean Vehicle Rebate Project	<p>Individual, fleet operators, local government entities, and businesses can apply for rebates for purchases of plug-in electric hybrids (“PHEVs”), battery electric vehicles (“BEVs”), fuel-cell electric vehicles (“FCEVs”), and other non-highway, motorcycle and commercial BEVs.</p>
Energy Upgrade California	<p>Program is intended for home energy upgrades. Funded by the American Recovery and Reinvestment Act, California utility ratepayers, and private contributions. Utilities administer the program, offering homeowners the choice of one of two upgrade packages—basic or advanced. Homeowners are connected to home energy professionals and can receive up to \$4,000 back on an upgrade through the local utility. Rebates, incentives, and financing are available.</p>

Funding Source	Description
Federal Tax Credits for Energy Efficiency	Tax credits for energy efficiency can be promoted to residents.
Energy Efficient Mortgages (“EEM”)	An EEM is a mortgage that credits a home’s energy efficiency in the mortgage itself. Residents can finance energy saving measures as part of a single mortgage. To verify a home’s energy efficiency, an EEM typically requires a home energy rating of the house by a home energy rater before financing is approved. EEMs typically are used to purchase a new home that is already energy efficient, such as an ENERGY STAR® qualified home.
Private Funding	Private equity can be used to finance energy improvements, with returns realized as future cost savings. Rent increases can fund retrofits in commercial buildings. Net energy cost savings can fund retrofits in households. Power Purchase Agreements (“PPA”) involve a private company that purchases, installs, and maintains a renewable energy technology through a contract that typically lasts 15 years. After 15 years, the company would uninstall the technology or sign a new contract. On-Bill Financing (“OBF”) can be promoted to businesses for energy-efficiency retrofits. Funding from OBF is a no-interest loan that is paid back through the monthly utility bill. Lighting, refrigeration, heating, ventilation, and air conditioning, and light-emitting diode streetlights are all eligible projects.
Community Choice Aggregation (“CCA”) Revenue	Revenue generated by a local CCA program may be used to fund or incentivize GHG reduction measures.
Housing Rehabilitation Loan Programs	Critical Home Repair Program through Habitat for Humanity provides home improvements for low-income homeowners to improve home efficiency, safety, and accessibility. The U.S. Department of Housing and Urban Development (“HUD”) Community Development Block Grant (“CDBG”) program provides communities with resources to address redevelopment needs, specifically for home rehabilitation. HUD also administers the HOME program, providing grants to improve affordable housing opportunities and conditions.
U.S. Department of Energy (“DOE”)	The Weatherization Assistance Program reduces energy costs for low-income households by increasing the energy efficiency of their homes, while ensuring their health and safety. It is the nation’s largest whole-house energy efficiency program. The program has created an industry, producing new jobs and technologies, all the while helping the most vulnerable families.
Department of Food and Agriculture	The Healthy Soils Program stems from the California Healthy Soils Initiative, a collaboration of state agencies and departments to promote the development of healthy soils on California’s farmlands and ranchlands. The Healthy Soils Incentives Program provides financial assistance for implementation of conservation management that improve soil health, sequester carbon and reduce GHG emissions. The Healthy Soils Demonstration Projects showcase California farmers and rancher’s implementation of Healthy Soils Practices.
California Public Utilities Commission	The Solar on Multifamily Affordable Housing (“SOMAH”) program provides financial incentives for installing photovoltaic (“PV”) energy systems on multifamily affordable housing in California. The program will deliver clean power and credits on energy bills to hundreds of thousands of the state’s affordable housing residents. SOMAH’s unique, community-based approach ensures long-term, direct financial benefits for low-income households, helps catalyze the market for solar on multifamily housing and creates jobs, job training for local tenants, and tenant protections..

Table 4-4 Potential Funding Sources to Support Greenhouse Gas Reduction Measures

Funding Source	Description
California Department of Community Services and Development	California’s Low-Income Weatherization Program (“LIWP”) provides low-income households with solar photovoltaic (“PV”) systems and energy efficiency upgrades at no cost to residents. The program plays an important role in ensuring that all Californians have the opportunity to benefit from California’s Climate Investments and services. LIWP funds energy efficiency upgrades and solar for low-income single-family homes and multifamily affordable housing. These upgrades improve the livability of housing and contribute to the health of communities through improved air quality. They also help lower operating costs for affordable housing administrators, helping to preserve valuable below-market housing for low-income families.
CAL Fire	Through the California Climate Investments (“CCI”) Urban & Community Forestry Grant Program, CAL FIRE works to optimize the benefits of trees and related vegetation through multiple-objective projects as specified in the California Urban Forestry Act of 1978 (Public Resources Code 4799.06-4799.12). These projects result in a net GHG benefit, and provide environmental services and cost-effective solutions to the needs of urban communities and local agencies. Co-benefits of the projects include increased water supply, clean air and water, reduced energy use, flood and storm water management, recreation, urban revitalization, improved public health, and producing useful products such as bio-fuel, clean energy, and high quality wood.
General Funding and Staff Capacity	
CivicSpark Program	Supports sustainability-focused research, planning, and implementation projects throughout California by providing public agencies and other organizations with capacity building support and community engagement. This program provides volunteer engagement through AmeriCorps fellows to provide added staff capacity for eleven months
California Climate Investments (“CCI”)	CCI is the statewide initiative that provides funds from the Cap-and-Trade program for GHG reducing projects and programs. Funds can support a variety of projects including affordable housing, renewable energy, public transportation, zero-emission vehicles, environmental restoration, sustainable agriculture, recycling, and more. Numerous State programs listed above are funded by CCI; however, the program continues to evolve and is updated by the State periodically to include new or modified programs.

Source: Ascent Environmental 2020



Chapter 5 CLIMATE ADAPTATION

This chapter summarizes climate change-related impacts that may affect the City of Escondido (“City”) in the future and evaluates how these impacts would potentially affect the community’s population, functions, and structures. Following identification of potential climate change—related impacts, this chapter outlines key strategies for improving community resiliency and adaptation, and addresses and provides equitable resilience and hazard mitigation for everyone in the community. The City is committed to ensuring socially equitable climate change outcomes by building on GHG emissions reduction strategies and through the implementation of adaptation strategies and measures.

5.1 Introduction

Long-term climate trends are not dependent on any single extreme event. A single large storm event or even a single wet or dry year may just be a normal fluctuation in atmospheric conditions. However, continuing changes that are sustained year after year can be attributed to a climate change. While there is general consensus that global climate change is occurring, there is less certainty as to the timing and potential consequences of climate change, particularly at the local level. Based on a climate system that is no longer staying within a stationary range of extremes, weather-related emergencies and climate hazards are expected to increase (Hay 2016). Our changing climate can affect every aspect of the local, natural environment – and each of these impacts often causes chain-reaction changes that affect people, places, resources, and other aspect of the ecosystem. If we hope to limit the negative impacts of climate change in Escondido, we must assess the range of possibilities, likelihoods, and consequences of climate risk and explore strategies for their prevention.

“Adaptation planning” is a process of identifying climate risks and opportunities, assessing the options to manage those risks and opportunities, and implementing actions to sustain and even improve the quality of life.

This chapter of the Climate Action Plan (“CAP”) provides a range of adaptation strategies and measures that the City can implement to be better prepared for and adapt to climate change. Through “adaptation planning” the City is undertaking a process of identifying climate risks and opportunities, assessing the options to manage these risks and opportunities, and implementing actions to sustain and even improve the community’s quality of life. However, this CAP is about much more than climate change. Rather than being indifferent to the reality that groups are situated differently relative to their exposure to pollution and access to resources and opportunity, our vision for a climate-positive future starts when we address existing disparities and advance more equitable outcomes. Not only will the City adapt and become more resilient to unavoidable impacts from climate change, the City will also position itself for a more positive future – one that addresses social equity and environmental justice to help mitigate the disproportionate harm faced by certain groups and classes in the city. This CAP has established a series of cross-cutting priorities to build thriving and resilient neighborhoods for all. Because the climate will keep changing over time, and our responses change with it, the adaptation strategies and measures identified in this chapter will be continuously monitored and updated by the City.

Section 5.4, *Adaptation Measures and Next Steps*, outlines the strategies and measures the City will implement to adapt to climate change, as well as the next steps in this implementation process. These strategies, measures, and next steps will be continually reviewed and refined over time to address changing climate impacts and understanding of adaptation. The City’s adaptation approach outlined within this chapter is based upon best available science, currently known adaptation practices, and a snapshot understanding of the city’s existing vulnerabilities. Additional background information on the methodology used to develop the adaptation measures is included in [Appendix F](#). In the future, the City

will reevaluate the feasibility and necessity of adaptation options as appropriate, continuing to use best available data, with reference to current State adaptation planning guidance.

5.2 Vulnerability Assessment

In the San Diego region, as well as throughout California, climate change is already affecting and will continue to affect the physical environment. It is the responsibility of all to prepare for increased temperatures, more frequent extreme weather events, and changes in precipitation patterns. Because impacts of climate change vary by location and other social and economic characteristics, it is important to specifically identify the projected severity of these impacts on the city and the surrounding area. Consideration of how the City can respond effectively to mitigate that risk, or how the City can and should respond to increasing future risk would make the community more prepared for projected climate impacts.

The goal of this section is to increase the understanding of the vulnerabilities associated with what is projected to happen in Escondido and encourage consideration of these impacts without creating further vulnerabilities or liabilities. The direct, or primary, changes analyzed for the city include increased temperatures, increased frequency of extreme weather events, and increased intensity and frequency of precipitation. Secondary impacts, which can occur because of one or more primary changes, are also assessed and include increased risk for wildfire, flooding, and landslides.



Source: City of Escondido

To begin assessing potential climate change impacts over time, Cal-Adapt (a climate change scenario-planning tool developed by the California Energy Commission [“CEC”] and the University of California Berkeley Geospatial Innovation Facility) was used. To address the uncertainty in future emissions of greenhouse gases (“GHGs”), Cal-Adapt uses Representative Concentration Pathways (“RCPs”), which encapsulate different possible future GHG emissions scenarios; a “medium” RCP emissions scenario that models a future where communities attempt to reduce GHG emissions and a business as usual (“BAU”) RCP scenario. The BAU emissions scenario predicts GHG emissions will continue to rise over the 21st century. The medium GHG emissions scenario predicts GHG emissions will level off in the middle of the 21st century (approximately 2040) and decrease to lower than 1990 levels by the end of the century (CAL ADAPT 2020). In consideration of “vulnerabilities” and the possible range of GHG emissions scenarios, it is important to assess how future GHG emissions and climate change conditions might impact populations differently. A significant health risk associated with climate change is exacerbation of health risks especially for communities with existing higher cumulative pollution exposures. Cumulative impacts are exposures and public health or environmental effects from all sources of pollution in a geographic area. Cumulative impacts also take into account groups of people that are especially sensitive to pollution’s effects, such as young children and people with asthma, etc.; and socioeconomic factors, such as poverty, race and ethnicity, and education. In particular, air pollution worsens as temperatures rise, stressing both the heart and lungs. A growing body of research into pollution and climate change is finding that minorities bear a disproportionate share of risks. Heat-island effects coupled with pollution sources are most likely to impact communities of color. The GHG emissions contributing to climate

change are linked with increased hospitalizations and deaths from cardiovascular disease and are connected with more asthma attacks and other respiratory problems (Scientific American 2019).

An important tool in assessing risks associated with pollution exposure and community vulnerabilities is the Office of Environmental Health Hazard Assessments statewide database, CalEnviroScreen. This model, which is periodically updated, identifies communities that are most affected by many sources of pollution, and where people are often especially vulnerable to pollution's effects. CalEnviroScreen uses environmental, health, and socioeconomic information to produce scores for every census tract in the state. Inclusion of CalEnviroScreen data (incorporated and reproduced fully as the Social Equity and Health Index Map in **Appendix F**) is part of the City's determination of vulnerable neighborhoods needing additional focus and priority.

5.2.1. Increased Temperatures

Temperature affects the smallest details of our daily life. It influences how you dress to stay comfortable, whether you enjoy outside activities, stay inside, or retreat to safer areas during weather-related emergencies and climate hazard events. It also has been found to affect the living organisms in various ways, including the physiology, behavior, growth, and distribution of plants and animals. Increases in average temperatures can have many impacts on the environment. For example, temperature plays an important part in the life cycle of insects. Many insects die during the colder winter months, but if temperature increases by just a couple of degrees, some of these insects would persist. This could lead to an increase in the insect population or a change in insect breeding habits, which could be devastating to farming practices and/or the agricultural crop industry and forest health. In addition, increased air temperatures can result in stagnant air masses, which could retain pollution from vehicles and industry for extended periods of time and would increase the frequency and intensity of conditions conducive to smog formation. A June 2020 study reported links to climate change and harm to newborn and unborn children. The study found a relationship with heat or air pollution linked to birth outcomes such as preterm births, birth weights, and stillbirths (NY Times 2020). Children and the elderly are particularly vulnerable to respiratory, cardiovascular, and heat-related illnesses exacerbated by increased average temperatures, especially in areas already exposed to higher burdens of indoor and outdoor air pollution. Furthermore, numerous research studies have shown that indoor air temperature and circulation can impact one's level of productivity, as well as one's ability to learn, concentrate and remember important information (Schneider 2016). Warmer lakes, rivers, and streams threaten aquatic species by disrupting reproductive cycles, displacing cold-water species, through acidification, and/or creating dead zones in deep lakes. Warmer air temperatures may put inland communities at risk by expanding dry areas and their propensity to fuel wildfires.

Some areas of the city will also experience heat island effects. An urban heat island or a heat island effect is an urban or built-up area that is significantly warmer than its surrounding rural areas despite having similar climate systems. The temperature difference is usually due to human activities and from the modification of land surfaces. The temperature difference is usually larger at night than during the day and is most apparent when winds are weak. The City developed a mapping tool to identify at-risk areas. The 2020 Heat Vulnerability Map is provided in **Appendix F** and is referenced in Section 5.4, *Adaptation Measures and Next Steps*.



Source: City of Escondido

The greenhouse effect, described in **Chapter 1**, has already begun to heat the atmosphere beyond normal levels and will continue to do so over the next century, even if the City's emission reduction targets are met. From 1900 to 2000, the average global daily maximum temperature increased approximately 1.0 degrees Fahrenheit ("°F") (Nature 2019). Within the last 20 years, the average global temperature has increased by an additional 1.0 °F. Using Cal-Adapt, it was predicted there would be an average temperature increase of 3.0 to 10.0°F by 2099 worldwide (CAL ADAPT 2020). It is important to note that the tipping point to many of the aforementioned climatic changes is an increase of 1.0 to 2.0°F. Although future climate-risks depend on the rate and duration of the "warming," in the aggregate they are expected to be irreversible or irrecoverable if temperatures exceed 2.7°F (IPCC 2018). Using baseline observed temperatures in the city from 1960 to 2000, the collective projections from Cal-Adapt show an average maximum temperature increase of 3.9 to 4.9°F by 2050, and 5.4 to 9.6°F by 2099, depending on a range of GHG emissions scenarios.

5.2.2. Extreme Weather Events

Extreme weather events include extreme heat and storms. Extreme heat events generally include extreme heat days and heat waves. Extreme heat days are days in which the temperature is significantly greater than the historic average temperature and can be further exacerbated when combined with high relative humidity. Heat waves can occur when high daily temperatures persist for several days and if nighttime temperatures do not drop significantly enough to reduce nighttime cooling. Extreme heat events can further exacerbate the threat of wildfire by increasing the drying of vegetation. The frequency of extreme heat days, heat waves, and warm nights are a threat because they induce injury, illness, and death from the resulting heat waves and wildfires. Heat stroke and dehydration can occur during extreme heat and hazardous weather can cause injuries and, in some cases, death. Warmer climates have increased levels of harmful air pollutants, such as ground-level ozone, which can damage lung tissue, inflame airways, impair respiratory health, and aggravate lung diseases, which are amplified during extreme weather events. Extreme weather events also impact the transmission of food, water, and animal-borne diseases. Prolonged drought in dry areas can lead to property and infrastructure damage. Power outage, road surface deterioration, railroad track buckling, and bridge damage are some of the types of resource or asset failures that have occurred during extreme weather events.

Extreme weather events include extreme heat, heat waves, and extreme storms. These events can be extremely harmful to human populations, especially vulnerable populations, such as low-income communities and children.

Disruptions in daily life caused by property and infrastructure damage can mean lost work and school days and harm commercial trade. Extreme weather-related health risks also reduce productivity, such as when extreme heat curtails construction, or when more potent allergens and more air pollution lead to lost work and school days.

Cal-Adapt loosely defines extreme heat days at or above the 98th percentile daily maximum temperature for a given area based on observed historical climate data. For the city, an extreme heat day is a day in which the average temperature is greater than 97.1°F, and historical observations show an average of five extreme heat days per year from 1961 to 2000. The frequency of extreme heat days are projected to increase as average temperature increases, rising to 15 to 20 extreme heat days per year by 2050, and 21 to 40 extreme heat days per year by 2100 (CAL ADAPT 2020). Warm nights, defined by the 98th percentile daily minimum temperature, are project to increase as well. For the city, a warm night is a night during which average temperature is greater than 66.4°F. Historical observations show an average of five warm nights per year from 1961 to 2000, and projections show an average of 25 to 37 extreme heat nights by 2050, and 36 to 91 extreme heat nights by 2100 (CAL ADAPT 2020).



Source: City of Escondido

While the world is experiencing an overall warming trend, more significant changes are occurring in winter months beyond temperature — snowfall and large storms depend on moisture in the atmosphere, which is increasing as a result of climate change. Snowy weather patterns depend on the large-scale flow of the atmosphere, which is changing, too. A phenomenon, called “winter temperature dipole”, is shifting winter weather patterns. This phenomenon yields a severe temperature contrast between eastern and western North America, where cold periods in the winter have been increasing in their frequency, as arctic air is pushed into areas further south than where it has historically flowed. Many extreme temperature conditions that redistribute heat and produce some combination of clouds, precipitation, and wind are becoming more common. These atmospheric conditions will affect snowstorms, derechos, hailstorms, rainstorms, blizzards, low-pressure systems, lightning storms, hurricanes, typhoons, and twisters. Scientific studies indicate that extreme weather events, like large storms, are likely to become more frequent and/or more intense with climate change. Tropical storm activity in the Atlantic Ocean, the Caribbean, and the Gulf of Mexico has increased during the past 20 years (Earth Observatory 2020). Storm intensity is closely related to variations in sea surface temperature in the tropical Atlantic. Although Escondido is unlikely to experience snowstorms and derechos, climate change may result in changes to the atmospheric processes that could result in increased frequency of damaging winds, hailstorms, rainstorms, lightning storms, and hurricanes or other tropical storm systems.

5.2.3. Frequency and Intensity of Precipitation

Both the amount and distribution of precipitation are likely to change over the coming years. Southern California already experiences highly variable precipitation patterns, and climate change will further increase this volatility. The range of precipitation extremes will likely expand, resulting in fewer wet days and more dry days. More intense rainstorms could occur, distributing precipitation over a smaller window of time, followed by longer periods of minimal precipitation or drought.

The city is anticipated to experience more frequent extreme precipitation events and greater variability in the amount of rainfall from year to year.

The Cal-Adapt projections do not show a significant increase or decrease in the average annual precipitation for Escondido, which is observed to be 15.3 inches per year using the 1961 to 2000 baseline. However, as a result of increased climate variability, annual averages may not best represent the climate change-related impacts that would occur. For example, the average annual precipitation in Escondido from 1996 to 1999 was 15.3 inches, which is equal to the observed baseline average (CAL ADAPT 2020). The recorded precipitation for those years were 13.1, 14.0, 27.4, and 6.8 inches, respectively (CAL ADAPT 2020). Thus, while the average precipitation for those years suggests normalcy, the recorded rainfall for each year suggests the city is experiencing significant precipitation variability. The Cal-Adapt projections show yearly precipitation highs of 40 inches and lows of two to three inches, highlighting the variability and uncertainty of the projections on a year to year basis.

Extreme precipitation events can delay planting and harvesting, cause power outages, reduce transportation system efficiency, delay air travel, induce soil erosion and mudslides, and otherwise make it difficult for people to go about their daily business. The expansion of flood-prone areas, flood plains, and inundation zones could put more people and property at risk within the city. Higher year-to-year variability can change overall water availability, even if the yearly average does not change significantly over time. Wetter years will see a higher proportion of water lost to runoff, along with higher risk of flooding. Drier years will increase water demand, while also losing more to evaporation. Overall, these factors will lead to less water capture by constructed and natural environments, depleting the local water supply. It could also lead to more water entering the lakes from the surrounding watershed, bringing with it pesticides and invasive species.

5.2.4. Wildfire Risk

Wildfires in open, wildland areas typically display a range of fire behavior and fire characteristics that depend on factors such as vegetation fuel, terrain, types of past management, stage of succession after previous fires or other disturbances, and climate and weather patterns (including prevailing wind factors). Fire regimes (i.e. the general pattern of natural wildfire occurrence in a particular geography) may also be affected by terrain features and slope exposure. The city's environment consists of a broad mixture of urban settings, semi-urban settings, rural areas, and open space areas characterized by shrubs, native trees, and high fire fuel areas with steep topography. During the dry months, the wildfire risk in these open, vegetated areas can increase when exacerbated by occasional Santa Ana winds and high temperatures. Additionally, extreme weather conditions, such as high temperature, low humidity, and/or winds of extraordinary force, may cause an ordinary, localized fire to expand into one that is more intense and difficult to contain. Currently, about 43,388 homes within Escondido are located in the Fire Regime II & IV; this includes the wildland-urban interface, which is characterized by zones of transition between wildland and developed areas and often include heavy fuel

Wildfire occurrence would be exacerbated by climate change impacts including increased frequency of droughts, extreme heat days, and heat waves

loads that increase wildfire risk (City of Escondido 2018). The potential loss of these homes is valued at over 12 billion dollars. The City also has 426 critical facilities and infrastructure assets in these areas. The potential exposure of these assets is valued at over 1.9 billion dollars (City of Escondido 2018).

Increased temperatures and changes in precipitation patterns associated with climate change are expected to increase the risk of wildfire. Cal-Adapt's Wildfire Tool is a useful modeling tool to help predict the potential amount of area at risk of burning through the year 2100. According to Cal-Adapt's Wildfire Tool, because of the City's diverse environment, the amount of area at risk of burning will increase anywhere from 1.5 to 28.3 percent (based on different location attributes) (CAL ADAPT 2020). Even though areas with greater population are inherently more vulnerable than areas with less population, it is anticipated that fire behaviors and fire characteristics in urban areas are different than more fire prone, open space areas. Based on CalAdapt's Wildfire Tool, an increase in burn rates is most likely to occur within the eastern portions of the city, which include much of the unincorporated and open space lands.

The California Department of Forestry and Fire Protection ("CAL FIRE"), in collaboration with the City, has developed the City's Fire Hazard Severity Zone Map identifying Very High Fire Hazard Severity Zones that are included in the City's Local Responsibility Area ("LRA") (See Appendix F). The map identifies areas in the City included in the different fire hazard areas. Due to topography and vegetation, properties located within and surrounding the Very High Fire Hazard Severity Zones have increased risks of wildfires and associated hazards than that of most areas within the city.



Source: City of Escondido

In addition to increased threats to human safety, the increased frequency of wildfire results in the release of harmful air pollutants into the atmosphere, which dissipate and can affect the respiratory health of residents across a broad geographical scope. Particulate matter (soot and smoke), carbon monoxide, nitrogen oxides, and other pollutants are emitted during the burning of vegetation, and can cause acute (short-term) and chronic (long-term) cardiovascular and respiratory illness, especially those suffering from pre-existing cardiovascular or respiratory conditions. The issue may be even more complicated with an increased burden in specific, vulnerable populations such as the elderly, children, homeless, minorities and non-English speaking populations, and agricultural and outdoor workers. The complex interplay between social and economic factors that these groups and classes experience cause them to generally be more susceptible to certain systemic illnesses because of a lack of targeted health care policies and/or lack of access to adequate health care.

5.2.5. Flooding and Landslides

Several factors determine the severity of floods, including rainfall intensity and duration. Along with reductions in the amount of snowpack and accelerated snowmelt, scientists project greater storm intensity. Climate change is predicted to vary the frequency, intensity, and duration of extreme storm events, such as sustained periods of heavy precipitation and increased rainfall intensity during precipitation, resulting in more direct runoff. Flash floods occur when a large amount of rain falls over a short period of time. The city's flooding potential will also be exacerbated when experiencing atmospheric rivers, or narrow streams of warm, concentrated precipitation, often resulting in considerable rainfall over a short period of time. Under higher emissions scenarios, the intensity and magnitude of atmospheric rivers are expected to become more severe, resulting in increased regional and localized flooding. With the added potential increases in the frequency and intensity of wildfires due to climate change, there is potential for more floods following wildfires, which will increase sediment loads and impact water quality. Floodwaters during storm events can interact with sources of pollution and distribute hazardous pollutants locally and regionally. The resulting water contamination may lead to human health impacts, as well as degradation of ecosystems.



Source: City of Escondido

Currently, the city experiences localized flooding in several areas during heavy rainfall and extreme weather events. Historically, the city has experienced property-related losses and damage because of localized flooding. As variability in precipitation frequency and intensity occurs, what is currently considered a 100-year flood may occur more often than projected, further increasing the risk of flooding to communities already located in these areas. Currently, there are 1,399 homes in the city located within the 100-year floodplain mapped areas. As these floodplain maps are updated and revised to account for increased flooding as a result of climate change, it is anticipated more homes in the city would be located within these areas of risk. The potential exposure or loss of residential buildings currently located within the 100-year floodplain is valued at \$393,819,000 (City of Escondido 2018). During flooding events, infrastructure (e.g., roadways, power lines) may be damaged, resulting in disruptions to communications, energy transmission, public services, and transportation systems. There are 37 critical facilities and City assets within the 100-year floodplain, with an asset value of \$43,352,000 (City of Escondido 2018). Flood events can also cause considerable property damage from extended exposure to water, and structural damage from erosion and mudslides. There are approximately 76 homes at high risk and 22 homes at moderate risk, with a potential exposure or loss value of \$27,587,000 (City of Escondido 2018). A snapshot assessment of potential home threat exposure is provided in the City's 2018 Multi-Jurisdictional Hazard Plan, with tabular excerpts provided in [Appendix F](#).

5.3 Social Equity and Environmental Justice

Environmental issues are almost always rooted in economic and social issues. In fact, climate change is a direct product of extended environmental and social policies. An ironic, yet unfortunate, aspect of climate change is that the individual, businesses, agencies, or organizations most responsible for

This City's vision of climate justice is where solutions begin with addressing the needs of those who are most vulnerable to climate change and/or experiencing disparate outcomes.

causing climate change are often the ones that are the least affected by it. The world's richest households, businesses, and industries generate more than half of the GHG emissions and the poorest half contribute just 10 percent of all emissions (The Guardian 2015). Even though all residents and businesses will all be affected by a changing climate, they will be impacted in different ways. The interactions between climate change and health are numerous. Not only will climate change have significant health impacts, but how we prepare to, mitigate, and adapt to our changing climate will also influence human health. Preparing and responding to climate change is a powerful opportunity to improve the health of Escondido's residents. To do this, the City will need to determine the scope and extent of existing social and economic vulnerabilities and disparities and identify ways to make the community less susceptible to, or able to cope with, the adverse effects of climate change.

Social equity, as a term, is more than just the fair, just, and equitable distribution of public services and implementation of public policy; it also means understanding and giving people what they need to enjoy full and healthy lives. If properly incorporated into planning efforts, social equity ensures traditionally disadvantaged and under-represented groups equally experience the positive outcomes of these planning efforts. This involves being inclusive of both dominant and marginalized groups, and ensuring that the benefit to one does not result in the detriment to the other. Planning for equity does not stifle growth or impede development. Instead, it expands opportunities to all members of a community and builds local resiliency.

This City's vision of climate justice is where solutions begin with addressing the needs of those who are most vulnerable to climate change and/or experiencing disparate outcomes. This CAP proposes a concrete approach for addressing social equity in implementation. Using the map and analysis discussed below, the City will prioritize neighborhoods with a 50 percent ranking in the State Office of Environmental Health Hazard Assessment ("OEHHA") CalEnviroScreen for priority investments and early implementation of focused measures to support social equity and environmental justice. By focusing efforts on vulnerable neighborhoods and populations, the City will provide equitable protection from environmental hazards and burdens. Climate adaptation planning efforts must involve all social groups and classes in the development and implementation of environmental policies, and ensure equitable benefits to all community members from projects funded and directed by the City (a snapshot assessment of Escondido's unique socio-economic profile is provided in [Appendix F](#)).



Source: City of Escondido

5.3.1. Social Equity and Health Index Map

Climate adaptation measures should not be implemented without consideration of wider social equity and environmental justice concerns. Understanding these vulnerability factors and the populations affected is critical for crafting climate change adaptation measures. Although disaster impacts can vary from hazard to hazard, vulnerability indicators – or measurable variables – allow for the quantification and comparison of climate risk within cities, counties, or sub-regions. The City created a mapping tool, called a Social Equity and Healthy Index Map to use data from the State OEHHA CalEnviroScreen to designate priority investment neighborhoods ("PINs") to measure the degree to which climate change would impact different geographical areas and to evaluate levels of access to opportunity within a census tract. The data-backed mapping tool created a heat map of related risk factors. All indicators fall into one of five

broader categories: housing, mobility, economic, environmental, community characteristics, and health. The overlap of these risk factors highlight areas of greater cumulative risk that should be prioritized when implementing corresponding adaptation strategies. As a result, a significant majority of the adaptation actions include implementation steps that will require the City to prioritize these actions in areas of highest need. The 2020 Social Equity and Healthy Index Map is provided in [Appendix F](#) and is referenced in Section 5.4, *Adaptation Measures and Next Steps*.

5.4 Adaptation Measures and Next Steps

The CAP provides evidence-based measures to reduce GHG emissions and preventative measures to address the negative outcomes of climate change. In implementing the measures listed in this section, this CAP also outlines how the City will adapt and improve its resilience to existing and future climate change impacts. As documented in this chapter and [Appendix F](#), the City’s sensitivity and vulnerability to climate change is influenced by diverse demographic and socio-economic factors. The City will strive to achieve climate justice (the concept that no group of people should disproportionately bear the burden of climate impacts or the health costs of adaptation) by addressing these factors. The City’s most vulnerable communities will be considered as a priority for investments in adaptation to assure near-term co-benefits of improved quality of life while contributing to GHG reduction targets. As this is the beginning of the City’s process of developing its adaptation strategies and measures, many early initiatives are exploratory in nature and aim to identify potential changes or actions to respond to the impacts of concern. The City will begin responding to climate change impacts through the initiation of two climate adaptation strategies.

Strategy A-1: Become a “Climate Smart” Leader

Table 5-1 Strategy A-1: Become a “Climate Smart” Leader

Measure A-1.1: Fully anticipate, plan for, and mitigate the risks of climate change and seize the opportunities associated with the social and environmental change.

Recognize climate impact variables as a risk in how the City manages programs, projects, and infrastructure.

Target Year	Adaptation Action
2020	Annually monitor climate change research and best practices to improve the understanding of local climate change, weather-related emergencies and climate hazards, and to support climate change preparation efforts in local, state, and federal partners.
2023	Adopt established methods for projecting the lifecycle carbon emissions of land use and transportation investments and begin to prioritize projects that have the greatest potential to sustain future changes and changing weather-related emergencies and climate hazards.
2023	Assess climate impacts in the 2023 MJHMP update, incorporate social equity and environmental justice concepts to the extent practicable, and develop system wide approach to prepare for and respond to changing weather-related emergencies and climate hazard events.
2024	Complete planning and establish priorities for plantings, materials, and infrastructure specifications that will be resilient to climate change hazards and be cost-effective over the lifetime of the asset in infrastructure design.
2025	Update the “2020 Escondido Climate Adaptation Study”.

Table 5-1 Strategy A-1: Become a “Climate Smart” Leader

Measure A-1.2: Make sure that everyone is given the opportunity to be prepared for the current and future risks that are exacerbated by climate impacts.

Develop and build capacity for a transparent and inclusive education and outreach processes and design a decision-making framework to achieve equitable access and other climate health-related goals.

Target Year	Adaptation Action
2020	Designate point of contact(s) to establish and maintain staff ability and capacity to ensure effective implementation and equitable outcomes of climate action efforts. Initiate interdepartmental education and planning with City staff to motivate and seek opportunities for creative partnerships to jumpstart priority actions.
2022	Identify and create collaborative partnerships with community-based organizations including vulnerable populations to broaden and diversify community engagement, and to support community-based initiatives that align with climate action planning priorities.
2023	Partner with interested organizations to develop a climate change adaptation public outreach and education program. Engage typically underrepresented vulnerable populations by creating neighborhood climate ambassador liaisons (“Climate Ambassadors”). Climate Ambassadors can conduct outreach and secure commitment in priority investment neighborhoods (“PINs”) to support climate actions, initiate major initiatives, and coordinate investments, etc.
2025	<p>Provide quality information and/or “how-to” resources for local climate adaptation using interactive approaches that may include competition, feedback, and recognition. Activities may include:</p> <ul style="list-style-type: none"> ▪ Provide free technical assistance to businesses. ▪ Develop working groups with workforce development and training organizations to integrate green jobs into existing work. ▪ Develop and implement a local green business program to provide recognition for business achievements. ▪ Partner with business groups to conduct Fix-It Fairs or participate in street-fairs by engaging under-served businesses in learning about sector opportunities ▪ Hold regular workshops with building contractors on green building best practices.
2026	<p>Minimize health issues and disparities caused by weather-related emergencies and climate hazard events (such as extreme heat days), especially for populations most vulnerable to these impacts, by improving the preparation for and response from health, community service, public safety, and emergency staff, resources, and/or services. Actions may include:</p> <ul style="list-style-type: none"> ▪ Leverage partnerships and support organizations to provide assistance to vulnerable populations in high fire hazard areas. ▪ Advertise outdoor worker protection measures, including heat safety and employment security. ▪ Develop a cool zone plan in consultation with resident, business, and community groups and provide updates in conspicuous locations online and on social media when cool zones are activated. ▪ Educate homeowners and tenants of multi-family housing about weatherization projects and the cost savings gained from energy efficient homes through training programs. ▪ Develop evacuation assistance plans and advertise their availability to vulnerable populations in hazard areas and be prepared to implement these plans as part of climate hazard-related emergency operations. ▪ Utilize citywide publication and social media to reach a broad audience to advertise preparedness, risks of potential climate hazard events, and/or implementation status of these measures.

Measure A-1.3: Hardwire social equity and environmental justice into new programs and projects.

Focus planning and intervention programs in priority investment neighborhoods (“PINs”) that currently experience social or environmental injustice and/or bear a disproportionate burden of potential public health impacts.

Target Year	Adaptation Action
2020	Develop a specific strategy or plan to redress social equity disparities by prioritizing and targeting CAP implementation projects into the most vulnerable areas as defined by the “2020 Social Equity and Health Index Map”.
2020	Maximize mitigation benefits locally by prioritizing Escondido community specific (i.e. local) mitigation for GHG emissions and biological impacts/habitat loss. If no local mitigation credits or mitigation opportunities are available, allow project applicants to seek out regional solutions first. If no regional solutions are available then State solutions, with a preference to proximity.
2023	Consider establishing equity considerations for recreation/parks programming, planning, engineering, and public works projects, such as: <ul style="list-style-type: none"> ▪ Does the proposed action generate burdens either directly or indirectly to vulnerable populations? If yes, are there opportunities to avoid, minimize, or reduce those impacts? ▪ Can the benefits of the proposed action be targeted in ways to reduce vulnerable population disparities? ▪ Are the benefits of the proposed action broadly accessible to residents or businesses of vulnerable populations?

Measure A-1.4: Develop working relationships with other agencies and continue to analyze climate impacts.

Establish working groups and collaborate with regional and State agencies and groups to promote becoming “Climate Smart” and promote complementary adaptation strategy development.

Target Year	Adaptation Action
2020	Work with SANDAG and NCTD to make the regional transportation network more resilient, incorporate consideration of climate impacts as part of infrastructure planning and development, and prioritize transportation investments that have the capacity to adapt to climate change, while promoting social equity and environmental justice.
2022	Work with law enforcement, CAL FIRE, City of San Marcos, County of San Diego, City of Vista, and City of Poway to ensure updates for wildfire hazard maps and reduce risk from high fire hazard areas. <ul style="list-style-type: none"> ▪ Model future climate conditions to identify at-risk areas. ▪ Develop effective response mechanisms and evacuation scenarios. ▪ Identify areas within General Plan planning area where future development should be avoided, reconsidered, or mitigated, due to fire hazards.

Notes: CAL FIRE = California Department of Forestry and Fire Protection; City = City of Escondido; GHG = greenhouse gas; MJHMP = Multi-Jurisdictional Hazard Mitigation Plan; NCTD = North County Transit District; SANDAG = San Diego Association of Governments

Source: City of Escondido 2020.

Strategy A-2: Build Thriving and Resilient Neighborhoods

Table 5-2 Strategy A-2: Build Thriving and Resilient Neighborhoods

Measure A-2.1: Make sure that everyone has equitable access to healthy environments in which to live, work, and play.

Recognize the importance of the ecosystem in improving personal, environmental, and economic health

Target Year	Adaptation Action
2022	Identify and create collaborative partnerships with community-based organizations (e.g. San Diego Food System Alliance, California Food Link, San Diego New Farmers Guild, etc.) to develop equitable programmatic resources to increase the production and consumption of home grown and locally sourced food by supporting farmers’ markets; expanding community gardens on public and private lands; and other forms of urban agriculture to: <ul style="list-style-type: none"> ▪ Support more resilient local agriculture on school campuses and at other public institutions or assembly spaces (e.g. church grounds, etc.) to help mitigate climate change and adapt to its impacts. ▪ Facilitate “Farm-to-School” programs for small farm-based businesses. ▪ Create local food maps and food distribution plans to preserve the affordability of local and sustainable food systems to ensure food security, nutrition, and public health. ▪ Support existing programs and/or create new programs to reduce investment risk and facilitate sustainable farming practices to connect more people to more local, farm-fresh foods.
2022	Establish partnerships with local businesses and groups to provide educational opportunities for residents to gain skills in organic gardening, fruit production, composting, food preservation, and cooking healthy foods.
2023	Review and update heat response plans to: <ul style="list-style-type: none"> ▪ Coordinate operations of readily accessible cooling centers. ▪ Recommend potential ways for property managers and homeowners’ associations to implement Cool Zones. ▪ Develop an “early warning system” and response plans that alert residents, businesses, and community members, especially those most vulnerable to heat, when projected heat conditions exceed 100 degrees.
2024	Develop incentives to increase the planting of fruit trees in appropriate areas on private property.
2024	Use regulatory and voluntary tools to increase access to neighborhood parks, passive parklands, parklets, and/or pop-up recreation programs to increase parkland coverage and/or expand equitable access to recreational opportunities.
2025	Consider ways to improve equitable access to clean and sustainable energy. This could include the creation of a Clean Energy Equity Plan to support low-income residents and small organizations to purchase or obtain renewable energy. Also develop a program to engage with the Solar on Multi-Family Housing Program (“SOMAH”) to support local green job training.

Measure A-2.2: Create “climate safe and decent” housing options.

Support more comfortable and resilient homes and buildings to proactively adapt to changing weather-related emergencies and climate hazard events.

Target Year	Adaptation Action
2020	Increase the use of public and private roofs for rooftop gardens. Provide education on how private property owners can use rooftop gardens as an eco-friendly alternative to: bring greenery into a sterile space, provide a place to relax

Table 5-2 Strategy A-2: Build Thriving and Resilient Neighborhoods

	or grow food, delay stormwater runoff, and cool the building to reduce energy consumption. Expand green roof installations through outreach and incentives, such as the Stormwater Credit Fee.
2023	Update the building code to require new private buildings to have operable windows, providing choice levels of light, and wall-to-wall ventilation.
2023	Update the building code to mandate the installation of cool roofs on all new and retrofitted roofs on multi-family projects.
2025	Pursue a green jobs plan component to the Clean Energy Equity Plan.
2027	Develop and implement a mitigation plan for power outages, which may include the following: <ul style="list-style-type: none"> ▪ Adopt an ordinance that requires new senior housing or large care facilities to install air conditioning in all units and on-site home energy batteries and energy storage. The ordinance shall also require conversion projects to provide adequate on-site temperature-controlled spaces in indoor common areas, if any. ▪ Adopt an ordinance that requires new affordable housing projects to install air conditioning in all units. Require affordable rehabilitation projects or other conversions to provide adequate on-site temperature-controlled spaces in indoor common areas, if any.
2028	Consider ways to reduce reliance on centralized sources for energy including: <ul style="list-style-type: none"> ▪ Facilitate access to local, decentralized renewable energy by incorporating renewable energy projects into CCA or other community-wide renewable programs. ▪ Complete a micro-grid feasibility study and begin implementation.

Measure A-2.3: Build capacity for adaptive neighborhoods.

Reduce risks and impacts from increased temperatures, exacerbated air pollution risks, drought conditions, and precipitation variability in the areas around homes and businesses.

Target Year	Adaptation Action
2022	Utilize the “2020 High Fire Hazard Map” to better manage the risk of wildfires as a result of drier summers, especially in areas where homes are next to natural open space areas: <ul style="list-style-type: none"> ▪ Enforce statutory standards for provision of defensible space inhibiting wildfire spread on private properties, and implement brush clearing and fuel breaks to manage the potential spread of wildfire. Fuel breaks should be implemented in areas where they make sense with efforts to avoid or minimize impact to important habitat unless it is necessary to protect structures. Evaluate other ways to reduce risks in and around wildland-urban interface areas that are rated as high fire hazard areas, such as improving the quality and plant palette around wildfire prone areas, and/or other ways to reduce risks in and around high fire hazard areas. ▪ Partner with SANDAG, other agencies, and North San Diego County cities for funding or acquisition and management of lands conserved for habitat protection and/or agricultural use. ▪ Develop opportunities to transfer development rights from very high fire hazard areas to less at-risk areas (e.g. urban infill areas, etc.) and/or seek other regulatory ways to incentivize land conservation or open space preservation. ▪ When analyzing new residential projects in very high fire hazard areas, incorporate evacuation route planning into the analysis. Evaluate brush fire spread and wildland fire behavior characteristics that utilize a 60 mph prevailing wind factor at a minimum, or higher wind speeds, if documented, as necessary.
2024	Adopt plant palettes in the Landscape Ordinance to withstand drought conditions and promote plant-type resilience (in street and park trees, green roofs, etc.). Adopt a new tree code in the Landscape Ordinance that considers tree

	selections so that tree plantings are known to perform well in the general climate conditions, are climate resilient trees, and will increase canopy or vegetative cover. As part of the next CAP update, monitor tree canopy changes due to development and determine if policy and rule changes are needed.
2024	Utilize the “2020 Heat Vulnerability Map” to identify at-risk areas and help inform decisions and priorities about implementing ways to cool the urban environment. When evaluating programs, projects, and infrastructure in at risk areas and priority investment neighborhoods (“PINs”), prioritize efforts that decrease the urban heat island effect, especially in areas with populations most vulnerable to heat, through strategies like revegetation, tree preservation, new plantings, depaving and porous pavement, green infrastructure, and site specific development design.
2025	Coordinate a more integrated approach to flood or water-surge event planning and consider new innovative ways to adapt to climate impacts, including the following: <ul style="list-style-type: none"> ▪ Update the Jurisdictional Runoff Management Plan to develop stream and riparian restoration program strategies and work to naturalize and/or protect creek watershed areas. ▪ Implement a program that systematically identify areas with underserved storm drains and secure funding for their upsizing. ▪ Increase resilience of natural systems by keeping natural resources areas and establish a fund to acquire or protect land in particularly vulnerable areas.
2027	Develop, adopt, and implement integrated plans for mitigating climate impacts in wildland-urban interface areas that include, but are not limited to the following: <ul style="list-style-type: none"> ▪ Collaborate with agencies managing public lands to identify, develop, or maintain corridors and linkages between undeveloped areas. ▪ Use purchase of development rights or conservation easements to protect climate-vulnerable habitats. ▪ Develop, adopt, and implement integrated plans for mitigating wildfire impacts in the wildland-urban interface. ▪ Assess the financing capabilities and implementation feasibility of the Multiple Habitat Conservation Plan (“MHCP”) or open space management.

Measure A-2.4: Build a sustainable and resilient transportation network.

Align the transportation system improvements with quality of life and enable a variety environmentally friendly choices that feature green infrastructure and have the capacity to adapt to climate impacts.

Target Year	Adaptation Action
2023	Work with NCTD to build more bus shelter amenities to help prevent health effects from long sun exposure and incentivize usage of public transportation.
2024	Evaluate and pursue stable funding sources and financing strategies to accelerate and sustain natural and green infrastructure within the public right-of-way.
2025	Conduct walk audits around prioritized schools, transit boarding areas, and parks to encourage Safe Routes to Schools, Transit, and Parks.
2026	Give greater weight to investing in improvements to transportation infrastructure that are projected to be affected by multiple climate changes and/or build in flexible options that can adapt to changing conditions.

Notes: CCA = community choice aggregation; City = City of Escondido; NCTD = North County Transit District; mph = miles per hour
 Source: City of Escondido 2020.



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EXHIBIT B



Climate Action Plan Consistency Review Checklist

Project # _____

Introduction

The City of Escondido (“City”) adopted an updated Climate Action Plan (“CAP”) in [Insert Date of CAP Adoption] by Resolution No. [Insert number]. The CAP outlines strategies and measures that the City will undertake to achieve its proportional share of State greenhouse gas (“GHG”) emissions reduction targets. The CAP’s strategies and measures are designed to reduce GHG emissions for build-out under the General Plan. The CAP does so by (1) calculating a baseline GHG emissions level as of 2012; and (2) estimating future GHG emissions under a business as usual standard; and (3) implementing state mandated GHG reduction targets. Measures to reduce GHG emissions for projects with land use consistent with the City’s General Plan are found in the CAP.

Analysis of GHG emissions and potential climate change impacts from new development is required under CEQA. The purpose of the CAP Consistency Checklist (“Checklist”) is to provide a streamlined review process for proposed development projects that trigger environmental review pursuant to the California Environmental Quality Act (“CEQA”).

The City’s CAP is a qualified GHG emissions reduction plan in accordance with State CEQA Guidelines Section 15183.5. Pursuant to CEQA Guidelines Sections 15064(h)(3), 15130(d), and 15183(b), a project’s incremental contribution to a cumulative GHG emissions effect may be determined not to be cumulatively considerable if it complies with the requirements of a CAP. Projects that are consistent with the General Plan and implement applicable CAP GHG reduction measures may incorporate by reference the CAP’s cumulative GHG analysis. Conversely, projects that are consistent with the General Plan, but do not implement CAP GHG reduction measures, as well as General Plan Amendments and Annexations that increase emissions beyond CAP projections — will require a project-level GHG analysis.

The purpose of this Checklist is to implement GHG reduction measures from the CAP and determine if development would demonstrate consistency with the CAP’s assumptions for implementation. Projects that are consistent with the CAP, as determined through the use of this Checklist, may rely on the CAP for the cumulative impact analysis of GHG emissions. Projects that are not consistent with the CAP must prepare a comprehensive project-specific analysis of GHG emissions, including quantification of existing and projected GHG emissions, incorporation of the measures in this Checklist to the extent applicable, and demonstration of consistency with a VMT threshold currently in development by the City. Cumulative GHG impacts could be significant for any project that is not consistent with the CAP.

This Checklist may be updated periodically to incorporate new GHG reduction techniques, include reference to or requirements of new ordinances adopted by the City, or to comply with later amendments to the CAP or local, State, or federal law. Comprehensive updates to this Checklist will be coordinated with each CAP update. Administrative updates to the Checklist may occur regularly, as

necessary for the purpose of keeping the Checklist up-to-date and implementable. Updates to the CAP Checklist associated with an update to the City's CAP would require City Council approval and shall comply with CEQA.

Applicability and Procedures

This Checklist is required only for discretionary projects¹ that are subject to and not exempt from CEQA. Projects that are exempt from CEQA are deemed to be consistent with the City's CAP, and no further review is necessary, with the exception of a Class 32 "In-Fill Development Projects" categorical exemption (State CEQA Guidelines Section 15332), for which projects are required to demonstrate consistency with the CAP through this Checklist.

General procedures for Checklist compliance and review are described below. Specific guidance is also provided under each of the questions under Steps 1 and 2 of the Checklist.

- The City's Community Development Department reviews development applications relative to environmental review requirements under Article 47 of the Escondido Zoning Code. These environmental quality regulations implement CEQA and State CEQA Guidelines by applying the provisions and procedures contained in CEQA to development projects proposed within the City.
- The project proponent or applicant must demonstrate if the project request is CAP compliant to the satisfaction of the Director of Community Development. In doing so, the project proponent or applicant must provide written documentation to demonstrate the applicability of the Checklist; and provide substantial evidence that demonstrates how the proposed project would implement each applicable Checklist requirement described herein.
- If a question in the Checklist is deemed not applicable (N/A) to a project, written documentation and substantial evidence supporting that conclusion shall be provided to the satisfaction of the Director of Community Development.
- Development projects requiring discretionary review that cannot demonstrate consistency with the CAP using this Checklist shall prepare a separate, project-level GHG analysis as part of the CEQA document prepared for the project and may be required to prepare an Environment Impact Report ("EIR").
- The specific applicable requirements outlined in the Checklist shall be required as conditions of project approval for CAP compliant projects with streamlined GHG emissions assessments.

¹ In this context, a project is any action that meets the definition of a "Project" in Section 15378 of the State CEQA Guidelines.

Application Information

Contact Information

Project No. and Name: _____

Property Address and APN: _____

Applicant Name and Co.: _____

Contact Phone: _____ Contact Email: _____

Was a consultant retained to complete this checklist? Yes No
If Yes, complete the following:

Consultant Name: _____ Contact Phone: _____

Company Name: _____ Contact Email: _____

Project Information

1. What is the size of the project site (acres)? _____

2. Identify all applicable proposed land uses:

Residential (indicate # of single-family dwelling units): _____

Residential (indicate # of multi-family dwelling units): _____

Commercial (indicate total square footage): _____

Industrial (indicate total square footage): _____

Other (describe use and indicate size): _____

3. Provide a description of the project proposed. This description should match the basic project description used for the CEQA document. The description may be attached to the Checklist if there are space constraints.

Step 1: Land Use Consistency

The first step in this section evaluates a project's GHG emissions consistent with the City's *Guidance to Demonstrating Consistency with the City of Escondido Climate Action Plan for Discretionary Projects Subject to CEQA* (Guidance Document). A summary of the process for determining the required level of analysis for these projects is provided in Figure 1, "Require Level of Analysis Flowchart," provided in the Guidance Document.

The CAP contains in-City GHG projections for 2020, 2030, and 2035. Measures to reduce GHG emissions for projects with land use consistent with the General Plan are found in the CAP. If any one of these calculations is erroneous, the CAP fails to accomplish this purpose. Therefore, the first step of this checklist is to determine if the project's anticipated growth would have been included in the CAP's business-as-usual land use and activity projections. This section allows the City to determine a project's consistency with the land use assumptions used in the CAP. Projects that are consistent with the General Plan may incorporate by reference the CAP's cumulative GHG analysis.

For projects that are determined to be consistent with CAP projections, the next step is to identify if the project would be estimated to emit fewer than 500 metric tons of carbon dioxide equivalent (MTCO_{2e}) annually. If found to emit fewer than 500 MTCO_{2e}, a project would not contribute considerably to cumulative climate change impacts as stated in the City's Guidance Document. Therefore, these projects would be considered consistent with the CAP.

Additionally, at the time of this CAP Checklist preparation, the City is in the process of developing screening thresholds for vehicle miles traveled (VMT) consistent with State legislation. . Thus, projects that would be below both the GHG and VMT screening level thresholds would not be anticipated to result in cumulative GHG impacts and conflict with the City's ability to achieve its GHG reduction targets.

Step 1: Land Use Consistency		
Checklist Item (Check the appropriate box and provide an explanation and supporting documentation for your answer)	Yes	No
<p>1. Is the proposed project consistent with the City’s existing General Plan land use designation?</p> <p>If “Yes”, proceed to Question 3 of Step 1.</p> <p>If “No”, proceed to Question 2 of Step 1.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p>2. If the proposed project is not consistent with the existing General Plan land use designation, does the project include a General Plan Amendment that would generate GHG emissions equal to or less than estimated emissions generated under the existing designation?</p> <p>If “Yes”, provide estimated project emissions under both existing and proposed designation(s) for comparison and proceed to Question 3 of Step 1.</p> <p>If “No”, the project’s GHG impact is potentially significant, and a GHG analysis must be prepared in accordance with the City’s Guidance Document and applicable CEQA Guidelines. The project would not be eligible for GHG streamlining provisions of the CAP. The project must incorporate each of the measures identified in Step 2 to mitigate cumulative GHG emissions impacts unless a measure is determined to be infeasible in accordance with CEQA Guidelines Section 15091. Proceed and complete a project specific GHG analysis, and Step 2 of the Checklist.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p>3. The size and type of projects listed below would emit fewer than 500 MTCO_{2e} per year. Based on this threshold, does the proposed project exceed these characteristics?</p> <ul style="list-style-type: none"> ▪ <u>Single-Family Housing</u>²: 36 dwelling units ▪ <u>Multi-Family Housing</u>: 55 dwelling units ▪ <u>Office</u>: 43,000 square feet ▪ <u>Commercial Space</u>: 20,000 square feet ▪ <u>Regional Shopping Center</u>: 18,000 square feet ▪ <u>Restaurant</u>: 6,500 square feet ▪ <u>General Light Industrial</u>: 58,000 square feet ▪ <u>Warehouse (Unrefrigerated)</u>: 233,000 square feet ▪ <u>Warehouse (Refrigerated)</u>: 62,000 square feet ▪ <u>Mixed-Use</u>: See the City’s Guidance Document³ for methods to estimate mixed-use development thresholds ▪ <u>Other</u>: For project types not listed in this section the need for GHG analysis and mitigation will be made on a project-specific basis, considering the 500 MTCO_{2e} per year screening threshold. <p>If “Yes”, proceed to Question 2 of Step 1.</p> <p>If “No”, in accordance with the City’s CAP screening criteria, the project’s GHG impact is less than significant and is not subject to the measures of the CAP.</p>	<input type="checkbox"/>	<input type="checkbox"/>

² Single-Family Housing developments are defined as single-family detached homes on individual lots. All other residential use types (e.g. single-family attached, condo/townhouse, apartment) should be considered “Multi-Family Housing” for the purposes of comparing a project to the screening thresholds.

³ Guidance for Demonstrating Consistency with the City of Escondido Climate Action Plan for discretionary Projects Subject to CEQA, available at [\[INSERT LINK TO THRESHOLDS MEMO WHEN PUBLISHED\]](#)

Step 2: CAP Measures Consistency

The second step of CAP consistency review is to evaluate a project’s consistency with the applicable strategies and measures of the CAP. Each Checklist item is associated with specific GHG reduction measures in the City’s CAP.

Step 2: CAP Measures Consistency

Checklist Item (Check the appropriate box and provide an explanation for your answer. Please use additional sheets if necessary)	Yes	No	N/A
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Parking and Transportation Demand Management

1. Electric Vehicle Charging Stations (Measures T-1.3 & T-1.4)

All Projects: Will the project install electric vehicle charging stations (EVCSs) consistent with the following requirements:

- Comply with the most recently updated version of the California Building Energy Efficiency Standards (Title 24, Part 6)?
- For multi-family residential and commercial (i.e. office and retail commercial) projects, will the project install electric vehicle charging stations at a minimum of 10 percent of the total parking spaces provided?
- For single-family residential projects, will the project install at least one EVCS in each new single-family home?

Check “N/A” only if the project is not proposing any parking; or if the project does not propose any construction activities.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Please substantiate how the project satisfies question 2:

2. Pedestrian Infrastructure (Measure T-3.2)

All Projects: If the following conditions are met, would the project pay its fair-share contribution or fully install pedestrian infrastructure improvements?

- The project frontage is located along a roadway for which pedestrian improvements are identified in the City’s Street Design Manual, Pedestrian Master Plan, Trail Master Plan, or Safe Routes to School and Transit Plans;
- The proposed project would include site design amenities with pedestrian access points from the existing, identified roadway; and,
- The identified pedestrian improvements have not yet been installed. Or if they have been installed, the infrastructure is being redesigned, upgraded, and/or maintained to promote universal access.

Check “N/A” only if the project does not propose any construction activities.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Please substantiate how the project satisfies question 3:

Step 2: CAP Measures Consistency

Checklist Item <small>(Check the appropriate box and provide an explanation for your answer. Please use additional sheets if necessary)</small>	Yes	No	N/A
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<p>3. Transportation Demand Management and Transit (Measures T-3.4 and T-3.6)</p> <p><u>Single-Family Projects:</u> N/A</p> <p><u>Multi-Family Residential Projects:</u> If the project is located in the Downtown Specific Plan area and is proposing a reduction in over 15 percent of the required amount of on-site vehicular parking, would the project implement the following policies or programs?</p> <ul style="list-style-type: none"> The project would provide six-month transit passes to new residents; The project establishes strong connections in site design to promote convenient access and transit orientation; and, The project would monitor transit use by new residents for the first six months of project operations. <p><u>Non-Residential Projects:</u> If the project is located within the Downtown Specific Plan, South Centre City Specific Plan, or East Valley Parkway Specific Plan, will the project implement Transportation Demand Management (TDM) program that includes, at a minimum:</p> <ul style="list-style-type: none"> “End-of-trip” facilities for bicycle commuters (e.g. bicycle parking spaces, showers, lockers); Discounted monthly North County Transit District (NCTD) passes or transit subsidies; Informational material (provided to each employee or tenant) for carpool and vanpool ride-matching services; and Parking cash-out policies. <p>Check “N/A” only if the project is a single-family residential project; if the project is multi-family or non-residential but not located within the aforementioned specific plans; or if the project does not propose any construction activities..</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Please substantiate how the project satisfies question 4:

Step 2: CAP Measures Consistency

Checklist Item (Check the appropriate box and provide an explanation for your answer. Please use additional sheets if necessary)	Yes	No	N/A
<p>4. Bicycle Infrastructure (Measure T-3.5)</p> <p><u>All Projects:</u> If the following conditions are met, would the project pay its fair-share contribution to bicycle infrastructure improvements?</p> <ul style="list-style-type: none"> <input type="checkbox"/> Intersection or roadway improvements are proposed as part of the project; and <input type="checkbox"/> The City’s Bicycle Master Plan for identifies bicycle infrastructure improvements at any intersection(s) or roadway segment(s) that would be impacted as part of the project. <p>Check “N/A” if the intersection or roadway improvements required are fully in place to the satisfaction of the Director of Community Development; or if the project does not propose any construction activities.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please substantiate how the project satisfies question 5:

Building Energy Use and Efficiency

<p>5. Alternately Fueled Water Heaters (Measures E-4.1 and E-4.4)</p> <p><u>Residential Projects:</u> If the project is a new single-family or multi-family residential development, will the project install electric heat pump water heaters?</p> <p><u>Non-Residential Projects:</u> If the project is non-residential, will the project install electric heat pump water heaters?</p> <p>Check “N/A” only if the project is non-residential and has an alteration and addition with a permit value of \$200,000 or less; or if the project does not propose any construction activities.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Please substantiate how the project satisfies question 7:

Step 2: CAP Measures Consistency

Checklist Item (Check the appropriate box and provide an explanation for your answer. Please use additional sheets if necessary)	Yes	No	N/A
<p>6. Electric Cooking Appliances (Measure E-4.2)</p> <p><u>Single-Family Residential Projects:</u> N/A</p> <p><u>Multi-Family Residential Projects:</u> If the project is a new multi-family residential development, will the project install only electric cooking appliances?</p> <p style="text-align: center;"><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p> <p><u>Non-Residential Projects:</u> N/A</p> <p>Check "N/A" only if the project is a single-family residential or non-residential project, or if the project does not propose any construction activities.</p>			

Please substantiate how the project satisfies question 8:

<p>7. Zero Net Energy (Measure E-5.2)</p> <p><u>Residential Projects:</u> N/A</p> <p><u>Commercial Projects:</u> If the project is a new commercial retail or office development, would the project achieve zero net energy (i.e. the total amount of energy used on-site is equal to the amount of renewable energy created on-site) and comply with the most recently updated California Building Energy Efficiency Standards (Title 24, Part 6)?</p> <p style="text-align: center;"><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p> <p>Check "N/A" only if the project is a residential or project, or if the project does not propose any construction activities.</p>			
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Please substantiate how the project satisfies question 9:

Step 2: CAP Measures Consistency

Checklist Item (Check the appropriate box and provide an explanation for your answer. Please use additional sheets if necessary)	Yes	No	N/A
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Landscaping and Land Conservation

8. Landscape Water Consumption (Measure W-6.2)

Single-Family Residential Projects: If the project is proposing a single-family or townhome model home development, would the project:

- Fully equip all model homes with greywater systems and rain barrels (or other rainwater capture systems); and,
- Offer greywater systems and rain barrels (or other rainwater capture systems) as an add-on option for new homes.

Non-Residential Projects: N/A

Check "N/A" if the project is not a single-family or townhome model home development; or if the project does not propose any construction activities.

Please substantiate how the project satisfies question 10:

9. Tree Planting (Measure C-9.1)

All Projects: Would the project plant trees consistent with the following requirements?

- Would the project plant a minimum of one tree for every four new parking spaces and/or demonstrate 50% canopy coverage?

Residential Projects: In addition to the planting requirements above for all projects, would the project be consistent with the following requirement?

- Would the project plant a minimum of one tree per dwelling unit or pay an in-lieu fee?

Check "N/A" only if the project is not proposing any landscaping; or if the City's landscape ordinance would not apply to the project.

Please substantiate how the project satisfies question 11:

EXHIBIT “C”
FINAL IS/MND, RESPONSE TO COMMENTS, AND MMRP

Planning Case No.: PHG 18-0009

The following links have been provided to review the documents electronically.

- Draft Initial Study and Mitigated Negative Declaration

<https://www.escondido.org/Data/Sites/1/media/PDFs/Planning/ClimateActionPlan/CAPUpdate/ISMND/EscondidoCAPIS06.19.20.pdf>

- Final Errata, Response to Comments, and MMRP

<https://www.escondido.org/Data/Sites/1/media/PDFs/Planning/ClimateActionPlan/CAPUpdate/ISMND/EscondidoCAPRTCMemoMMRP.pdf>

A hardcopy of the Exhibit is available for review in the Office of the Planning Division during normal business hours. To obtain a copy, please contact the City Clerk at (760) 839-4617 or Planning Division at (760) 839-4671.