Part CHULA VISTA **CLIMATE ACTION PLAN APPENDIX A - Implementation Actions**

Chula Vista Climate Action Plan: Appendix A

Objectives, Strategies & Implementation Actions (Last updated 9/27/17)

In conjunction with the City's updated 2017 Climate Action Plan, this appendix provides a more detailed look into the specific actions that the City will take to address the City Council adopted Climate Change Working Group (CCWG) recommendations. This appendix provides more detailed descriptions into the CAP implementation process, including the department leading each action, a time frame for its expected completion (or start if ongoing) and its most recent funding status. Each objective also lists the annual reduction in GHG MT CO₂^e that each objective is expected to provide in 2020 and 2035.

Funding status description:

Funded - actions that have already been funded
Ongoing - actions that continue going forward and have secured funding
Identified - future actions that have an identified funding source
Grants / Partners - actions to be funded through grants or partnerships
Needed - funding source still needs to be identified

Lead department abbreviations:

DSD - Development Services Department

DSD – NS - Development Services Department Neighborhood Services

ED - Economic Development Department

ED - Cons. – Economic Development Department, Conservation Section

ED - ES – Economic Development Department Environmental Services Section

Eng - Engineering & Capital Improvement Department

PW- Ops – Public Work Department Operation Section

WATER CONSERVATION & REUSE

Objective 1.1 – Water Education & Enforcement

Performance Metric: Directly engage 8% of households on water conservation per year

2020 MT CO₂^e GHG Reductions: 37 2035 MT CO₂^e GHG Reductions: 43

Strategy 1. Expand education and enforcement targeting landscape water waste.

| Imp | lementation Actions | Funding | Timeframe | Lead |
|-----|--|------------|------------------------|------------|
| А | Offer free water evaluations and technical assistance through NatureScape & Home Upgrade, Carbon Downgrade programs | Funded | Ongoing | ED - Cons. |
| В | Prohibit all landscape irrigation runoff including incidental discharges | Funded | Completed Q4 - 2015 | PW-Ops |
| С | Promote a hotline to identify water wasters and to target outreach | Identified | Q3 - 2018 | ED - Cons. |
| D | Develop escalating enforcement policy (up to possible fine) for homes that repeatedly waste water through irrigation run off | Funded | Completed Q4 - 2015 | PW-Ops |
| Е | Create outdoor signage at City facilities to showcase efficient landscape designs | Grants | Q1 - 2019 | ED - Cons. |
| F | Work with water districts to create mobile display(s) showcasing water conservation and re-use options | Funded | Completed Q4 - 2015 | ED - Cons. |

Objective 1.2 – Water Efficiency Upgrades

Performance Metric: Retrofit 1,000 homes per year with water-efficient devices (including landscaping)

2020 MT C0₂^e GHG Reductions: 6,240 2035 MT C0₂^e GHG Reductions: 14,261

Strategy 1. Update the City's landscaping regulations to promote more water-wise designs.

| lmp | olementation Actions | Funding | Timeframe | Lead |
|-----|---|---------|------------------------|------|
| Α | Update ordinances to establish best practices and water "budgets" for landscape designs | Funded | Completed | DSD |
| В | Update Landscape Water Conservation Ordinance to increase efficiency (by at least 20%) | Funded | Completed Q4 - 2015 | DSD |

| | Revise Water Conservation Plan Guidelines and | | Completed | |
|---|---|--------|------------------------|-----|
| С | Landscape Manual to match new landscape | Funded | Completed Q4 - 2015 | DSD |
| | requirements | | Q4 - 2013 | |

| Stra | ategy 2. Require water-savings retrofits in existing build | lings at a spe | cific point in t | ime. |
|------|---|----------------|----------------------|------------|
| Imp | plementation Actions | Funding | Timeframe | Lead |
| А | Require free water evaluations for businesses as part of licensing process | Funded | Ongoing | ED - Cons. |
| В | Include free retrofit evaluations in Home Upgrade, Carbon Downgrade program | Funded | Ongoing | ED - Cons. |
| С | In consultation with community stakeholders (such as Realtors) offer additional Property Assessed Clean Energy (PACE) programs to help finance water retrofits in community | Funded | Ongoing Q4 – 2015 | ED - Cons. |
| D | Evaluate implementation of 3.3.3D to evaluate possibilities of adding water conservation measures or information | Identified | Q2 - 2018 | DSD |

| Objective 1.3 – Water Reuse Plan & System Installations | | | |
|---|--|--|--|
| Performance Metric: Install 3,750 water reuse systems citywide by 2020 (6,000 by 2035) | | | |
| 2020 MT CO ₂ ^e GHG Reductions: 6,080 2035 MT CO ₂ ^e GHG Reductions: 9,728 | | | |

| Str | Strategy 1. Develop a Water Reuse Framework for storm water, graywater, and onsite water reclamation. | | | | |
|-----|--|---------------------|------------------------|------------|--|
| Imp | plementation Actions | Funding | Timeframe | Lead | |
| А | Complete a Water Reuse Framework to identify opportunities and barriers | Funded | Completed Q4 - 2016 | ED - Cons. | |
| В | Develop permitting guidance, in partnership with local water districts, for simple water reuse technologies | Needed | Q2 - 2018 | ED - Cons. | |
| С | Develop promotional guidance that minimizes cross contamination risk for indoor recycled water use in commercial buildings | Grants/ Partners | Q2 - 2018 | ED - Cons. | |

| Str | ategy 2. Facilitate simple graywater systems for Laundr | y-to-Landsca | pe applicatior | is. |
|-----|--|--------------|------------------------|------------|
| Imp | plementation Actions | Funding | Timeframe | Lead |
| Α | Develop a graywater educational guide to help ensure proper installation and use | Funded | Completed | ED - Cons. |
| В | Require single-family homes/duplexes to include simple graywater pre-plumbing | Funded | Completed | DSD |
| С | Host workshops and promote incentives for simple graywater systems | Funded | Ongoing | ED - Cons. |
| D | Work with water districts to create mobile display(s) showcasing water conservation and re-use options | Funded | Completed Q2 - 2015 | ED - Cons. |

| Str | ategy 3. Streamline complex graywater systems permit | review. | | |
|-----|---|---------------------|-----------|------------|
| Imp | lementation Actions | Funding | Timeframe | Lead |
| А | Work with local water districts in developing guidance and a streamlined permit for complex systems | Grants/ Partners | Q2 - 2019 | ED - Cons. |
| В | Host at least two workshops for contractors and developers | Identified | Q1 - 2018 | DSD |

WASTE REDUCTION

Objective 2.1 – Zero Waste Plan

Performance Metric: Divert 75% of solid waste from the landfill by 2020 (90% by 2035)

2020 MT C0₂^e GHG Reductions: 38,126 2035 MT C0₂^e GHG Reductions: 48,798

Strategy 1. Develop a Zero Waste Plan to supplement statewide green waste, recycling, and plastic bag ban efforts.

| Imp | lementation Actions | Funding | Timeframe | Lead |
|-----|--|------------|-----------|---------|
| Α | Initiate planning for organics management to divert from landfill | Funded | Ongoing | ED - ES |
| В | Develop a Zero Waste Policy for City Council consideration | Identified | Q4 - 2017 | ED - ES |
| С | Create Zero Waste guidelines for events | Identified | Q4 - 2017 | ED - ES |
| D | Create Zero Waste business certifications | Identified | Q4 - 2017 | ED - ES |
| Е | Create Zero Waste guidelines for building deconstruction | Identified | Q4 - 2017 | ED - ES |
| F | Draft "Management of Organics" policy for City Council consideration that would support the use of local compost on City and private properties. | Identified | Q1 - 2019 | ED - ES |

RENEWABLE & EFFICIENT ENERGY

Objective 3.1 – Energy Education & Enforcement

Performance Metric: Engage 8% of households and businesses on energy conservation per year

2020 MT CO₂^e GHG Reductions: 1,936 2035 MT CO₂^e GHG Reductions: 1,936

Strategy 1. Expand education targeting key community segments and facilitate energy performance disclosure.

| | | I | | |
|-----|---|------------|-----------|-------------|
| Imp | lementation Actions | Funding | Timeframe | Lead |
| | Offer free evaluations through Free Resource & Energy | | | |
| Α | Business Energy Evaluations (FREBE) & Home Upgrade, | Funded | Ongoing | ED - Cons. |
| | Carbon Downgrade programs | | | |
| В | Engage "green" business leaders through CLEAN | Funded | Ongoing | ED - Cons. |
| В | Business program | Tunded | Origonig | LD - Colls. |
| | Initiate community-wide social marketing campaigns to | | | |
| С | target key segments, such as DIY, disadvantaged | Funded | Ongoing | ED - Cons. |
| | residents and high energy users | | | |
| D | Launch a "Build Green" awareness and assistance | Funded | Ongoing | DSD |
| U | program for builders and permit applicants | runded | Origoring | טטט |
| E | Promote the use of Green Leases to commercial | Identified | Q2 - 2018 | ED - Cons. |
| | property owners and tenants | identined | Q2 - 2018 | LD - Colls. |
| F | Create local incentives or policies for building | Identified | Q4 - 2017 | ED - Cons. |
| | benchmarking and public disclosure | identified | Q4 - 2017 | ED - COIIS. |

Strategy 2. Leverage the building inspection process to deter unpermitted, low-performing energy improvements.

| Imp | elementation Actions | Funding | Timeframe | Lead |
|-----|--|------------|-----------|------|
| Α | Initiate monthly energy code trainings for building permit and inspection staff | Funded | Ongoing | DSD |
| В | Conduct secondary reviews of inspections to help identify common energy code errors | Funded | Ongoing | DSD |
| С | Integrate energy and sustainability info into permit counter and/or inspection outreach materials | Identified | Q4 - 2017 | DSD |
| D | Determine if bulk or annual permit program will encourage more permitted jobs | Identified | Q1 - 2019 | DSD |
| Е | Create "Build Green Chula Vista" network to support contractors, inspectors, appraisers and others who | Identified | Q2 - 2018 | DSD |

| | work with homes. | | | |
|---|---|---------|-----------|------------|
| F | Work with state/regional partners on consumer education of the value of permits and complaints related to energy code | Partner | Q1 – 2019 | ED – Cons. |

Objective 3.2 – Clean Energy Sources

Performance Metric: Provide more than 50% of electricity from renewable sources by 2020 (100% by 2035)

2020 MT C0₂^e GHG Reductions: 52,121 2035 MT C0₂^e GHG Reductions: 202,738

Strategy 1. Incorporate solar into all new buildings to help transition to Zero Net Energy design.

| lm | Implementation Actions | | Timeframe | Lead |
|----|--|----------------------|-----------|------------|
| Α | Adopt pre-wiring and pre-plumbing standards for solar photovoltaic and solar hot water, respectively | Funded | Completed | DSD |
| В | Develop a solar photovoltaic requirement for new homes and businesses for City Council consideration | Identified/ Grant | Q1 – 2018 | ED – Cons. |

Strategy 2. Provide more grid-delivered clean energy (up to 100%) through Community Choice Aggregation or other mechanism.

| lm | Implementation Actions | | Timeframe | Lead |
|----|---|--------|-----------|------------|
| _ | Conduct a CCA Feasibility Study to identify costs and | Needed | 04 2019 | ED Cons |
| Α | benefits for City Council consideration | Needed | Q4 – 2018 | ED – Cons. |
| | Evaluate potential to partner with private sector to | | | |
| В | utilize municipal facilities for community solar projects | Needed | Q2 – 2018 | ED – Cons. |
| | (such as to support SDG&E's EcoShare program) | | | |
| С | Promote "green" electricity credits and tariffs such as | Fundad | Ongoing | ED Cons |
| | SDG&E's EcoChoice | Funded | Ongoing | ED – Cons. |

Objective 3.3 – Energy Efficiency Upgrades

Performance Metric: Retrofit 13% of single family & multifamily homes and 10% of commercial Sqft to save 25% by 2020 (20% of both with 50% savings by 2035)

2020 MT CO₂^e GHG Reductions: 9,428 2035 MT CO₂^e GHG Reductions: 22,432

Strategy 1. Reauthorize the City's "cool roof" standards and expand to include re-roofs and western areas.

| Imp | Implementation Actions | | Timeframe | Lead |
|-----|--|------------|-----------|------------|
| | In consultation with community stakeholders (such as | | Completed | |
| А | Realtors) offer additional Property Assessed Clean | Funded | Q4 – 2015 | ED – Cons. |
| | Energy (PACE) programs to help finance cool roof | runded | & | |
| | retrofits in community | | Q3 – 2017 | |
| | Review related cost-effectiveness studies for the City's | | | |
| В | two climate zones and determine if cool roof | Identified | Q2 – 2018 | DSD |
| | requirements are cost effective | luentinea | | |

Strategy 2. Facilitate more energy upgrades in the community through incentives, permit streamlining (where possible), and education.

| Imp | plementation Actions | Funding | Timeframe | Lead |
|-----|--|------------|------------------------|------|
| Α | Leverage Community Development Block Grant funding for energy upgrades for low-income households | Funded | Ongoing | DSD |
| В | Offer expedited permitting for projects in voluntary Green Building Plus program | Funded | Ongoing | DSD |
| С | Transition to over-the-counter permitting for residential solar systems | Funded | Completed Q3 – 2015 | DSD |
| D | Work with SDG&E to evaluate feasibility of a permit- based energy efficiency incentive | Identified | Q4 – 2018 | DSD |
| Е | Evaluate if the City can allow SDG&E QA/QC program to serve as final permit inspection | Identified | Q4 – 2018 | DSD |
| F | Seek funds to subsidize expedited Cal Green Tier 1 projects | Needed | Q4 – 2017 | DSD |

Strategy 3. Require energy-savings retrofits in existing buildings at a specific point in time.

| Imp | Implementation Actions | | Timeframe | Lead |
|-----|---|--------|-----------|-------------|
| Α | Require free energy evaluations for businesses as part of | Funded | Ongoing | ED – Cons. |
| | licensing process | runueu | Origoning | ED - Colls. |
| В | Include free retrofit evaluations in Home Upgrade, | Fundad | Ongoing | ED Cons |
| | Carbon Downgrade program | Funded | Ongoing | ED – Cons. |

| С | Offer additional Property Assessed Clean Energy (PACE) | Funded | Completed | ED – Cons. |
|---|--|------------|-----------|-------------|
| | programs to help finance energy retrofits in community | | Q4 – 2015 | ED – Colls. |
| D | Develop Residential and Commercial Energy Conservation ordinance for City Council consideration | Identified | Q4 – 2017 | ED – Cons. |
| | Conservation ordinance for City Council consideration | luentineu | Q4 - 2017 | ED - Colls. |
| Е | Require increased energy standards on projects that | | | |
| | receive financing from the City via Notice of Funding | Identified | Q2 – 2018 | DSD – NS |
| | Availability (NOFA) | | | |

Objective 3.4 – Robust Urban Forests

Performance Metric: Expand urban tree canopy cover to 15% by 2020 (25% by 2035)

2020 MT C0₂^e GHG Reductions: 7,278 2035 MT C0₂^e GHG Reductions: 12,678

| Str | Strategy 4. Plant more shade trees to save energy, address heat island issues, and improve air quality. | | | | | |
|--------------------------------|---|--|------------|-----------|--------|--|
| Implementation Actions Funding | | | | Timeframe | Lead | |
| Α | Develop | a formal City Council policy to maximize shade | Funded | Completed | DSD | |
| | tree use | | Tunueu | Completed | 030 | |
| В | Develop | an Urban Forestry Management Plan to guide | | Q4 – 2018 | PW-Ops | |
| Ь | shade tr | ee plantings and maintenance | Identified | Q4 - 2018 | PW-Ops | |

SMART GROWTH & TRANSPORTATION

Objective 4.1 – Complete Streets & Neighborhoods

Performance Metric: Reduce average vehicle miles traveled by 4% by 2020 (5% by 2035)

2020 MT C0₂^e GHG Reductions: 14,106 2035 MT C0₂^e GHG Reductions: 16,552

Strategy 1. Incorporate "Complete Streets" principles into municipal capital projects and plans.

| Imp | lementation Actions | Funding | Timeframe | Lead |
|-----|--|------------|-------------|-------------|
| Α | Adopt a formal Complete Streets Policy to ensure all | Funded | Completed | Гра |
| | transportation users' needs are met | runueu | Q1 – 2015 | Eng |
| | Update Capital Improvement Plan (CIP) and Tentative | | Completed | |
| В | Map standard work to include complete streets | Funded | Q4 – 2015 | Eng |
| | considerations | | Q4 - 2013 | |
| С | Combine the Bikeway/Pedestrian Master Plans into a | Funded | In Progress | Eng |
| | single Active Transportation Master Plan | runueu | Q4 – 2019 | LIIE |
| | Transition Growth Management Oversight Commission | | | |
| D | (GMOC) Ordinance's traffic threshold to more broadly | Identified | Q4 – 2018 | Eng |
| | account for "transportation" | | | |
| Е | Evaluate requirements to become a "Gold" level Bicycle | Funded | Q4 - 2019 | ED – Cons. |
| E | Friendly Community and submit application | runded | Q4 - 2019 | LD - Colls. |

Strategy 2. Encourage higher density and mixed-use development in Smart Growth areas, especially around trolley stations and other transit nodes.

| Imp | lementation Actions | Funding | Timeframe | Lead |
|-----|--|------------|--|------|
| Α | Develop a specific plan for the Palomar Gateway area, including the Palomar Trolley Station | Funded | Completed | DSD |
| В | Prepare a matrix to help determine and map targeted development locations | Funded | Completed Q2 2015 & ongoing (as needed) | DSD |
| С | Review additional possible incentives for development in priority areas for City Council consideration | Funded | Completed Q2 - 2016 | DSD |
| D | Work with SANDAG to complete new South Bay Bus Rapid Transit service | Identified | Q3 - 2018 | Eng |
| Е | Implementation of Urban Core Specific Plan (UCSP) around E Street Trolley Station | Identified | Q2 - 2018 | ED |
| F | Pursue trolley grade separation along the I-5 corridor at | Identified | In Progress | Eng |

| | E Street, F Street & H Street | | Q1 - 2020 | |
|---|--|--------|-----------|-----|
| G | Complete environmental document for trolley grade separation at Palomar Street/Industrial Blvd | Funded | Q3 - 2018 | Eng |

Objective 4.2 – Transportation Demand Management

Performance Metric: Increase citywide alternative commute rates to 7% by 2020 (9% by 2035)

2020 MT C0₂^e GHG Reductions: 44,260 2035 MT C0₂^e GHG Reductions: 103,363

| Strategy 1. Utilize bike facilities, transit access/passes, and other Transportation Demand Management and congestion management offerings. | | | | nand | |
|---|------------|--|------------|-----------|------|
| Imp | lementatio | on Actions | Funding | Timeframe | Lead |
| А | - | e Transportation Demand Management study in tion with SANDAG | Identified | Q4 - 2017 | DSD |
| В | | raffic signal synchronization along Olympic, East aph Canyon and Otay Lakes roadways | Identified | Q1 - 2019 | Eng |
| С | | e traffic signal synchronization in connection Bus Rapid Transit (BRT) along East Palomar | Identified | Q1 - 2019 | Eng |

| Stra | Strategy 2. Expand bike-sharing, car-sharing, and other "last mile" transportation options. | | | | | | |
|------|---|------------|-----------|------------|--|--|--|
| Imp | lementation Actions | Funding | Timeframe | Lead | | | |
| Α | Host workshops to promote bicycle use and safety | Identified | Ongoing | ED - Cons. | | | |
| В | Review "last mile" transportation infrastructure (including technology-based solutions) and propose needed programs or policies to City Council for consideration | Needed | Q4 - 2018 | Eng | | | |
| С | Based on outcome of 4.2.2B, facilitate bike-sharing services into the City | Identified | Q4 - 2018 | ED - Cons. | | | |
| D | Based on outcome of 4.2.2B, facilitate car-sharing services into the City | Identified | Q4 - 2018 | ED - Cons. | | | |
| Е | Continue to implement bike facilities in Bikeway Master Plan & pedestrian improvements in Pedestrian Master Plan | Identified | Q2 - 2019 | Eng | | | |

Objective 4.3 – Alternative Fuel Vehicles

Performance Metric: Support citywide expansion of alternative fuel vehicle use by 4% of VMT by 2020 (11% by 2035)

2020 MT C0₂^e GHG Reductions: 28,608 2035 MT C0₂^e GHG Reductions: 61,819

| Stra | Strategy 1. Support the installation of more local alternative fueling stations | | | | |
|------|---|------------|-----------|------------|--|
| Imp | lementation Actions | Funding | Timeframe | Lead | |
| Α | Install a 12,000-gallon biodiesel tank at Public Works Yard | Funded | Completed | PW-Ops | |
| В | Install a publicly-available CNG fueling station at Public Works Yard | Funded | Completed | PW-Ops | |
| С | Install publicly-available electric vehicle (EV) chargers at 5 sites | Funded | Completed | PW-Ops | |
| D | Convert transit and solid waste hauler to alternative fuel vehicles | Funded | Completed | PW-Ops | |
| Е | Facilitate electric vehicle (EV) chargers, through programs such as SDG&E's Power Your Drive, in areas of City not currently served | Identified | Q4 - 2018 | ED - Cons. | |
| F | Update City's Alternative Fuel Station map to promote fuel availability | Identified | Q4 - 2017 | ED - Cons. | |
| G | Convert street sweeper and tow trucks to alternative fuel vehicles | Identified | Q4 - 2019 | PW-Ops | |

| Strategy 2. Designate preferred parking for alternative fuel vehicles. | | | | |
|--|--|------------|--|------------|
| Imp | plementation Actions | Funding | Timeframe | Lead |
| А | Establish preferred parking for Alternative Fuel Vehicles (AFV) at public parking lots | Funded | Completed Q2 - 2015 & ongoing (as needed) | PW- Ops |
| В | Develop new AFV parking requirements for new commercial sites for City Council consideration | Identified | Q4 - 2018 | DSD |

| Strategy 3. | Strategy 3. Design all new residential and commercial buildings to be "Electric Vehicle Ready." | | | |
|-------------|---|---------|-----------|------|
| Implementa | tion Actions | Funding | Timeframe | Lead |

| Α | Develop an EV-Ready ordinance for City Council consideration | Funded | Completed Q4 - 2015 | DSD |
|---|---|------------|------------------------|-----|
| В | Integrate EV-Ready requirement information into outreach programs | Funded | Completed Q4 - 2015 | DSD |
| С | Complete Neighborhood Electric Vehicle network in Otay Ranch. | Identified | Q2 - 2019 | Eng |