### **Chula Vista Climate Action Plan: Appendix A**

Objectives, Strategies & Implementation Actions (Last updated 8/28/17)

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 CO<sub>2</sub><sup>e</sup> 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 – Rublic 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 CO<sub>2</sub><sup>e</sup> GHG Reductions: 37 2035 MT CO<sub>2</sub><sup>e</sup> GHG Reductions: 43

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

Imp	elementation Actions	Funding	Timeframe	Lead
	Offer free water evaluations and technical assistance			
Α	through NatureScape & Home Upgrade, Carbon	Funded	Ongoing	ED - Cons.
	Downgrade programs			
В	Prohibit all landscape irrigation runoff including	Funded	Completed	PW-Ops
	incidental discharges	Tanaca	Q4 - 2015	1 W Ops
С	Promote a hotline to identify water wasters and to	Identified	Q3 - 2018	ED - Cons.
	target outreach	identified	Q3 2010	LD Cons.
	Develop escalating enforcement policy (up to possible		Completed	
D	fine) for homes that repeatedly waste water through	Funded	Q4 - 2015	PW-Ops
	irrigation run off		Q4 - 2013	
E	Create outdoor signage at City facilities to showcase	Grants	Q1 - 2019	ED - Cons.
	efficient landscape designs	Grants	Q1 - 2019	LD - Colls.
F	Work with water districts to create mobile display(s)	Funded	Completed	ED - Cons.
	showcasing water conservation and re-use options	runded	Q4 - 2015	ED - COIIS.

#### **Objective 1.2 – Water Efficiency Upgrades**

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

2020 MT CO<sub>2</sub><sup>e</sup> GHG Reductions: 6,240 2035 MT CO<sub>2</sub><sup>e</sup> GHG Reductions: 14,261

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

lmp	plementation 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	Q4 - 2015	DSD
	requirements		Q4 - 2013	

Stra	Strategy 2. Require water-savings retrofits in existing buildings at a specific point in time.					
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 C0<sub>2</sub><sup>e</sup> GHG Reductions: 6,080 2035 MT C0<sub>2</sub><sup>e</sup> GHG Reductions: 9,728

Str	Strategy 1. Develop a Water Keuse Framework for storm water, graywater, and onsite water reclamation.					
lm	plementation Actions	Funding	Timeframe	Lead		
Α	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	Strategy 2. Facilitate simple graywater systems for Laundry-to-Landscape applications.					
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 r	eview.		
Imp	elementation Actions	Funding	Timeframe	Lead
Α	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 C0<sub>2</sub><sup>e</sup> GHG Reductions: 38,126 2035 MT C0<sub>2</sub><sup>e</sup> 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
E	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 CO<sub>2</sub><sup>e</sup> GHG Reductions: 1,936 2035 MT CO<sub>2</sub><sup>e</sup> GHG Reductions: 1,936

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

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

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

Imp	plementation 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	Q3 - 2018	ED - Cons.

#### **Objective 3.2 – Clean Energy Sources**

Performance Metric: Provide more than 50% of electricity from renewable sources by 2020 (70% by 2035)

2020 MT C0<sub>2</sub><sup>e</sup> GHG Reductions: 52,121 2035 MT C0<sub>2</sub><sup>e</sup> GHG Reductions: 62,420

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

Imp	plementation Actions	Funding	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	plementation Actions	Funding	Timeframe	Lead
А	Conduct a CCA Feasibility Study to identify costs and	Needed	Q1 - 2019	ED - Cons.
	benefits for City Council consideration	Needed	Q1 - 2019	ED - Cons.
В	Evaluate potential to partner with private sector to			
	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	Funded	Ongoing	ED - Cons.
	SDG&E's EcoChoice	runaea	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 CO<sub>2</sub><sup>e</sup> GHG Reductions: 9,428

2035 MT CO<sub>2</sub><sup>e</sup> GHG Reductions: 22,432

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

lm	olementation Actions	Funding	Timeframe	Lead
А	In consultation with community stakeholders (such as		Completed	
	Realtors) offer additional Property Assessed Clean	Funded	Q4 - 2015	ED - Cons.
	Energy (PACE) programs to help finance cool roof	Tunaca	&	25 001101
	retrofits in community		Q3 - 2017	
В	Review related cost-effectiveness studies for the City's			
	two climate zones and determine if cool roof	Identified	Q2 - 2018	DSD
	requirements are cost effective	identified		

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

Imp	plementation Actions	Funding	Timeframe	Lead
А	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	plementation Actions	Funding	Timeframe	Lead
Α	Require free energy evaluations for businesses as part of	Funded	Ongoing	ED - Cons.
A	licensing process			
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) programs to help finance energy retrofits in community	Funded	Completed Q4 - 2015	ED - Cons.
D	Develop Residential and Commercial Energy Conservation ordinance for City Council consideration	Identified	Q4 - 2017	ED - Cons.
E	Require increased energy standards on projects that receive financing from the City via Notice of Funding Availability (NOFA)	Identified	Q2 - 2018	DSD - NS

### Objective 3.4 – Robust Urban Forests

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

2020 MT  $C0_2^e$  GHG Reductions: 7,278 2035 MT  $C0_2^e$  GHG Reductions: 12,678

#### Plant more shade trees to save energy, address heat is and issues, and improve air Strategy 4. quality. **Implementation Actions** Funding **Timeframe** Lead Develop a formal City Council policy to maximize shade Funded Completed DSD tree use Develop an Urban Forestry Management Plan to guide Q4 - 2018 PW-Ops Identified shade tree plantings and maintenance

#### **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 C0<sub>2</sub><sup>e</sup> GHG Reductions: 14,106 2035 MT C0<sub>2</sub><sup>e</sup> 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	Eng
	transportation users' needs are met	runded	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 - 2015	
(	Combine the Bikeway/Pedestrian Master Plans into a	Funded	In Progress	Eng
	single Active Transportation Master Plan	rundeu	Q4 - 2019	Eng
	Transition Growth Management Oversight Commission			
D	(GMOC) Ordinance's traffic threshold to more broadly	Identified	Q4 - 2018	Eng
	account for "transportation"			

# 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 E Street, F Street & H Street	Identified	In Progress Q1 - 2020	Eng

G	Complete environmental document for trolley grade separation at Palomar Street/Industrial Blvd	Funded	Q3 - 2018	Eng
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#### **Objective 4.2 – Transportation Demand Management**

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

2020 MT C0<sub>2</sub><sup>e</sup> GHG Reductions: 44,260 2035 MT C0<sub>2</sub><sup>e</sup> GHG Reductions: 103,363

Stra	utilize bike facilities, transit access/passes, and Management and congestion management off		portation Den	nand
Imp	plementation Actions	Funding	Timeframe	Lead
Α	Complete Transportation Demand Management study in coordination with SANDAG	Identified	Q4 - 2017	DSD
В	Update traffic signal synchronization along Olympic, East H, Telegraph Canyon and Otay Lakes roadways	Identified	Q1 - 2019	Eng
С	Complete traffic signal synchronization in connection with new 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	elementation 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 CO<sub>2</sub><sup>e</sup> GHG Reductions: 28,608

Update City's Alternative Fuel Station map to promote

Convert street sweeper and tow trucks to alternative

fuel availability

fuel vehicles

2035 MT CO<sub>2</sub><sup>e</sup> GHG Reductions: 61,819

Identified

Identified

Q4 - 2017

Q4 - 2019

ED - Cons.

PW-Ops

Stra	Strategy 1. Support the installation of more local alternative fueling stations					
Imp	Implementation 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.		

Str	Strategy 2. Designate preferred parking for alternative fuel vehicles.						
Imp	Implementation 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. Design all new residential and commercial buildings to be "Electric Vehicle Ready."							
Implementation 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

