

APPENDIX E

Implementation Details

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Table E-1 provides implementation details for the measures and actions discussed in Chapter 3. The “Performance Objectives” included in the Table embody the 2045 CAP’s specific objectives for each measure and action. These performance objectives represent guideposts for the successful implementation of each measure and the 2045 CAP as a whole. However, they are not specific mandates. As the 2045 CAP is implemented and adapted over time, many of these performance objectives may change. GHG emission reductions for 19 of the identified measures were quantified at the measure level based on these performance objectives, and monitoring will also occur at the measure level. Performance objectives included for implementing actions identify intermediary steps that may be taken in order to meet the performance objective of the corresponding overarching measure. Note that the action-level performance objectives do not always add up precisely to the measure-level performance objectives, and they were not intended to. The table also identifies funding for all quantified measures. Additional future funding sources will need to be identified for non-quantified measures.

Table E-1: Greenhouse Gas Strategy, Measure, and Action Implementation Details

ID	STRATEGY/MEASURE/ACTION	LEAD	PARTNERS	PERFORMANCE OBJECTIVES	TRACKING METRICS	TIME FRAME	COST	FUNDING
Strategy 1: Decarbonize the Energy Supply								
ES1^Q	Develop a Sunset Strategy for All Oil and Gas Operations: Develop a sunset strategy for all oil and gas operations that prioritizes disproportionately affected communities and develop a strategy for carbon removal.			Reduce oil and gas operations: <ul style="list-style-type: none"> • 40% by 2030 • 60% by 2035 • 80% by 2045 	<ul style="list-style-type: none"> • Number of well sites decommissioned and remediated • Emissions reductions achieved through well decommissioning 			
ES1.1	Collaborate with other local jurisdictions to develop a sunset strategy for all oil and gas operations that prioritizes disproportionately affected communities.	CSO, DRP	PW, ISD, Cities, California Geologic Energy Management Division; DPH	<ul style="list-style-type: none"> • Develop ordinance. • Reduce oil and gas operations by 40% by 2030, 60% by 2035, and 80% by 2045. 	<ul style="list-style-type: none"> • Number of well sites decommissioned and remediated • Emissions reductions achieved through well decommissioning 	Short term (2023–2025)	\$-\$\$	LA County General Fund
ES1.2	Develop a policy that requires the examination of all active, idle, and abandoned oil wells for fugitive emissions of GHGs. Coordinate with federal and state agencies conducting fugitive emissions data.	CSO	DRP, PW, ISD, Cities, California Geologic Energy Management Division; DPH	Examine all active and abandoned oil wells for fugitive emissions of GHGs.	<ul style="list-style-type: none"> • Number of oil wells examined • Amount of GHGs emitted (estimated or measured) 	Short term (2023–2025)	\$-\$\$	LA County General Fund
ES1.3	Develop a carbon removal strategy that considers direct air capture and carbon and sequestration (CCS).	CSO	PW, DRP, ISD, CARB CCS Program	Conduct feasibility study, if needed.	<ul style="list-style-type: none"> • Number of CCS systems constructed • GHG emissions removed annually 	Medium term (2025–2030)	\$-\$\$\$\$	Federal CIFIA Program
ES2^Q (Core)	Procure Zero-Carbon Electricity: Supplying the County’s power demand with zero-carbon electricity is critical to achieving significant GHG emissions reductions. The Clean Power Alliance (CPA) is a nonprofit and community choice energy provider that currently serves 32 communities across Southern California.			Participate in CPA’s Green Power option or SCE’s Green Rate option: <ul style="list-style-type: none"> • 100% municipal participation by 2025. • 96% community participation by 2030 (~4% opt-out rate). 	<ul style="list-style-type: none"> • CPA participation and/or opt-out rate • Electricity supplied by CPA 			
ES2.1	Transition all LA County facilities within unincorporated areas to CPA’s 100% Green Power option, SCE’s 100% Green Rate option, or other available 100% renewable electricity service. ^M	CSO, ISD	CPA, SCE, LA100	100% enrollment of County facilities in CPA’s Green Power option or SCE’s 100% Green Rate option by 2025 and maintain 100% enrollment through 2045.	<ul style="list-style-type: none"> • CPA Green Power enrollment for County accounts • SCE’s 100% Green Rate enrollment for County accounts 	Short term (2023–2025)	\$	Funded
ES2.2	Complete enrollment of the community in CPA’s 100% Green Power or SCE’s Green Rate option.	CSO	CPA, SCE, LA100	96% of all customers participate in CPA’s Green Power option by 2030 (~4% opt-out rate).	<ul style="list-style-type: none"> • CPA participation and/or opt-out rate • Electricity supplied by CPA (MWh) 	Short term (2023–2025)	\$\$	CPA Powershare Program
ES3^Q	Increase Renewable Energy Production: Expand local solar power generation on existing and new development and for LA County projects.			Install rooftop solar PV on all existing multifamily residential buildings and existing commercial buildings:	<ul style="list-style-type: none"> • Number of rooftop solar PV installations for existing multifamily residential buildings 			

ID	STRATEGY/MEASURE/ACTION	LEAD	PARTNERS	PERFORMANCE OBJECTIVES	TRACKING METRICS	TIME FRAME	COST	FUNDING
				<ul style="list-style-type: none"> • 5% by 2030 • 10% by 2035 • 20% by 2045 Install rooftop solar PV on all new multifamily residential buildings: <ul style="list-style-type: none"> • 80% by 2030 • 85% by 2035 • 95% by 2045 Install rooftop solar PV on all new commercial buildings: <ul style="list-style-type: none"> • 40% by 2030 • 50% by 2035 • 70% by 2045 Install 20,000 kW of solar PV at LA County facilities.	buildings and existing commercial buildings <ul style="list-style-type: none"> • Number of rooftop solar PV installations for new multifamily residential buildings • Number of rooftop solar PV installations for new commercial buildings • Total kW solar capacity installed in community • Total kW of solar PV installed at LA County facilities 			
ES3.1	Require rooftop solar PV for all new development.	PW	DRP, CSO	Rooftop solar PV installed at all new development.	<ul style="list-style-type: none"> • Number of rooftop solar PV installations • Total kW solar capacity installed in community 	Short term; implement ordinance immediately (2023–2024)	\$	Federal Solar Investment Tax Credit, CPUC Self-Generation Incentive Program, California Solar Energy System Property Tax Exclusion, CPUC Single-Family Affordable Solar Homes (SASH) Program, SCE
ES3.2	Install rooftop solar PV at existing buildings.	PW	DRP, CSO	Rooftop solar PV installations for existing residential buildings (multifamily and single-family) and existing commercial buildings: <ul style="list-style-type: none"> • 5% by 2030 • 10% by 2035 • 20% by 2045 Install solar PV on commercial buildings over 50,000 square feet/single-family residential buildings: <ul style="list-style-type: none"> • 30%/15% by 2030 • 40%/25% by 2035 • 60%/50% by 2045 	<ul style="list-style-type: none"> • Number of rooftop solar PV installations for existing multifamily residential buildings and existing commercial buildings • Total kW solar capacity installed in community 	Short term (2023+)	\$-\$\$\$	Federal Solar Investment Tax Credit, CPUC Self-Generation Incentive Program, California Solar Energy System Property Tax Exclusion, CPUC Single-Family Affordable Solar Homes (SASH) Program, SCE
ES3.3	Identify and install solar PV systems at existing viable LA County facilities and properties.	ISD	PW, CSO, SCE, CPA	Install 20,000 kW of solar PV at LA County facilities by 2030.	<ul style="list-style-type: none"> • MW solar capacity installed 	Short term (2023+)	\$\$\$	Federal Solar Investment Tax Credit, CPUC Self-Generation Incentive Program, California Solar Energy System Property Tax Exclusion, SCE
ES3.4	Explore the feasibility to install community-shared solar facilities on LA County properties where opportunities exist. ^M	ISD	PW, CSO, SCE, CPA	Install solar PV for community use (MW goals for each target year TBD).	<ul style="list-style-type: none"> • MW solar capacity installed 	Medium term (2025–2030)	\$\$\$	Federal Solar Investment Tax Credit, CPUC Self-Generation Incentive Program, California Solar Energy System Property Tax Exclusion, SCE
ES3.5	Require and incentivize renewable energy in multifamily housing for both new development and existing buildings.	DRP, CSO, LACDA	PW, SCE, CPA	Rooftop solar PV installed at all affordable housing developments.	<ul style="list-style-type: none"> • Number of rooftop solar PV installations 	Short term; implement ordinance	\$	Federal Solar Investment Tax Credit, CPUC Self-Generation Incentive Program, California

ID	STRATEGY/MEASURE/ACTION	LEAD	PARTNERS	PERFORMANCE OBJECTIVES	TRACKING METRICS	TIME FRAME	COST	FUNDING
					<ul style="list-style-type: none"> Total kW solar capacity installed 	immediately (2023–2024)		Solar Energy System Property Tax Exclusion, CPUC Single-Family Affordable Solar Homes (SASH) Program, SCE
ES4	Increase Energy Resilience: Expand energy storage and microgrids throughout the community and for LA County operations.			Achieve community electricity storage capacity equal to the community-wide 24-hour average usage by 2035/2045.	<ul style="list-style-type: none"> kW of energy storage capacity installed countywide (existing and new development tracked separately if possible) 			
ES4.1	Develop a program to deploy community resilience hubs at scale.	ISD, DRP	PW, CSO	<ul style="list-style-type: none"> Establish a community resilience hub program to equip community serving LA County facilities (e.g., libraries, rec centers, senior centers). Provide solar and battery systems sufficient to support emergency cooling and other emergency functions. Partner with local community for implementation. Locate at least one hub in each LA County district, with focus on vulnerable populations. 	<ul style="list-style-type: none"> Amount of generation/ storage capacity per hub Number of community resilience hubs Number of people who can be supported at each hub during emergencies (daytime and nighttime) Proximity of hubs to at-risk residents Number of partnerships/ engagements/ trainings at each hub 	Short to medium term (2023–2030)	\$-\$\$	Leverage bulk purchasing for portfolio-scale implementation
ES4.2	Invest in energy storage and microgrids at critical LA County facilities through CPA’s Power Ready Program. ^M	ISD	PW, CSO	<ul style="list-style-type: none"> kW of energy storage capacity installed (TBD) Number and capacity of microgrids (TBD) 	<ul style="list-style-type: none"> kW of energy storage capacity installed countywide 	Short to medium term (2025–2035)	\$\$\$	Power purchase agreement
ES4.3	Develop a publicly accessible community energy map that identifies opportunities for deploying distributed energy resources and microgrids to improve energy resiliency.	CSO	ISD, PW, SCE, CPA	Development of the map	TBD	Medium to long term (2030+)	\$\$	SCE, CEC, CPUC
ES4.4	Conduct feasibility studies to identify priority areas for solar and storage combined with building and community-scale microgrids and controls to support demand management and peak shaving to support grid resilience. Study implementation, costs, barriers, and obstacles. Adopt regulations that establish this use and standards for its development. Limiting peak energy demand can eliminate or reduce the use of high-carbon peaker plants.	ISD	CSO, PW, DRP, SCE, CPA	Number of microgrids installed and total energy capacity for each target year	<ul style="list-style-type: none"> Number of microgrids installed 	Short to medium term (2025–2035)	\$	Leverage bulk purchasing for portfolio-scale implementation; power purchase agreements
ES4.5	Develop a Countywide program to promote energy efficiency and resilience measures in facilities providing critical community services.	ISD	CSO, PW, DRP, SCE, CPA, SoCalRen	Obtain a grant and establish a program to support an energy efficiency and assurance program for facilities that are large energy users and support critical community functions	<ul style="list-style-type: none"> Number of facilities engaged Number of efficiency projects implemented Number of energy resilience projects implemented 	Short to medium term (2025–2035)	\$\$	State or federal grant (CEC, DOE)
ES5	Establish GHG Requirements for New Development: Develop requirements to ensure that new development is consistent with the 2045 CAP goals as well as its milestone targets for 2030 and 2035 and long-term aspirational goal for 2045. This includes a project review consistency checklist for new development to demonstrate consistency with the 2045 CAP. LA County will assess the feasibility of developing a GHG offsets/credit program to create a pathway toward achieving the aspirational 2045 goal of carbon neutrality.			All new development that does not require a General Plan amendment shall be consistent with the 2045 CAP	Number and type of projects performing consistency review			

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ES5.1	Identify new requirements for new development, including reach codes, ordinances, and conditions of approval to reduce GHG emissions from energy use, transportation, waste, water, and other sources. Include affordable housing considerations in these requirements, and develop supporting measures (financial support, technical assistance, or other incentives) to defray potential additional first costs in order to maintain housing affordability.	DRP, CSO	PW, ISD	Development of reach codes, ordinances, and conditions of approval	TBD	Short term (2022–2025)	\$-\$\$	LA County General Fund
ES5.2	Create a consistency review checklist for new development to demonstrate consistency with the 2045 CAP’s strategies, measures, and actions.	DRP	PW	All new development that does not require a General Plan amendment shall be consistent with the 2045 CAP	Number and type of projects performing consistency review	Short term (2025)	\$	LA County General Fund
ES5.3	Evaluate a program for reducing GHG emissions for new development that require General Plan amendments.	DRP	CSO, ISD	TBD	TBD	Short term (2023)	\$	LA County General Fund
Strategy 2: Increase Densities and Diversity of Land Uses Near Transit								
T1^Q	Increase Density Near High-Quality Transit Areas: Increase housing opportunities that are affordable and near transit, to reduce VMT.			<ul style="list-style-type: none"> Implement and complete Housing Element Update rezoning programs to achieve the minimum densities Achieve a minimum of 20 DUs per acre (maximum of 50 DUs per acre) for HQTAS Majority of residential and employment centers in unincorporated Los Angeles County are within 1 mile of an HQTAS 27% increase in DUs within HQTAS 	<ul style="list-style-type: none"> Number and percent of increase in DUs in HQTAs, Specific Plans, or Area Plans Implementation of the Housing Element Update rezoning programs 			
T1.1	Incentivize residential and community-serving uses to be developed in high quality transit areas (HQTAs), while ensuring inclusion of vital public amenities, such as parks and active transportation infrastructure.	DRP	SCAG, Metro	Majority of residential and employment centers in unincorporated county are within 1 mile of an HQTAS	<ul style="list-style-type: none"> Number and location of HQTAS Number and percent of increase in DUs in HQTAs Implementation of the Housing Element Update rezoning programs 	2021–2029 (Housing Element time frame)	\$	LA County General Fund
T1.2	Develop land use tools that will increase the production of a diversity of housing types, such as missing middle housing.	DRP	Cities, Metro, and other transit agencies, SCAG	20% increase in DUs to be developed in HQTAs by 2030; TBD for other target years	<ul style="list-style-type: none"> Number and percent increase in DUs within HQTAS DUs per acre Change in number of jobs and housing in non-HQTAs 	Short term, 2023+	\$\$	LA County General Fund
T2^Q	Develop Land Use Plans Addressing Jobs-Housing Balance and Increase Mixed Use: Increasing density and the mix of land uses can help reduce single-occupancy trips, the number of trips, and trip lengths.			Job density of 300 jobs per acre for all new projects by 2030	<ul style="list-style-type: none"> Number and % increase in DUs in HQTAs Change in number of jobs and housing in non-HQTAs 			
T2.1	Develop community plans that will increase the percentage of residents who could live and work within the same community, and that could decrease VMT.	DRP	PW	For communities with an imbalance of jobs/housing (+/- 20%), Community Plans will identify and quantify strategies for bringing below 20%	<ul style="list-style-type: none"> Comparison between existing and future statistics for employment and housing density and totals within each area Number and % increase in DUs in HQTAs Change in number of jobs and housing in non-HQTAs 	Housing Element time frame	\$\$	LA County General Fund

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Strategy 3: Reduce Single-Occupancy Vehicle Trips								
T3^Q	Expand Bicycle and Pedestrian Network to Serve Residential, Employment, and Recreational Trips: Travel options that serve a variety of land uses and trip purposes can help shift some trips away from single-occupancy vehicles.			Increase bikeway miles by 500% by 2030	<ul style="list-style-type: none"> Miles of bikeway type Miles of transit routes Headways 			
T3.1	Create a more connected and safer bikeway network by expanding bikeway facilities and implementing protected and separated lanes.	PW	DRP, Metro, transit providers	Implement LA County Bicycle Master Plan and Vision Zero Plan	<ul style="list-style-type: none"> Miles of bikeway type Additional employees or residents served Number of cities collaborated with to inform key areas for bicycle infrastructure expansion Number of funding sources identified or % of funding secured 	Long term 2030+	\$\$\$\$	Road reconstruction funds
T3.2	Implement and regularly update LA County's Pedestrian Action Plan, Bicycle Master Plan, Active Transportation Plans, and Vision Zero Action Plan.	PW	DRP, DPH, Metro, transit providers	Complete updates every five years	<ul style="list-style-type: none"> Miles of bicycle sidewalk added Number of destinations connected 	Long term 2030+	\$\$\$\$\$	LA County General Fund, Bikeway funds, Supervisor TIP funds.
T3.3	Enhance pedestrian and bicycle environments through energy efficient pedestrian-scale lighting and shading to promote active transportation. Build shade structures at major transit stops, such as those identified in Metro's Active Transportation Strategic Plan, prioritizing communities with high heat vulnerability. Develop and implement a Shaded Corridors Program.	DRP, PW	Metro, transit providers, Parks, DPH, DRP	HQTAs and disadvantaged communities priority areas for shade and lighting projects	Number and location of shade and lighting projects planned and completed	Medium term (2025–2030)	\$\$\$	Partial funding secured; additional funds required
T4^Q	Broaden Options for Transit, Active Transportation, and Alternative Modes of Transportation: Transit service, micro mobility services (such as bike-share, scooter-share, and drone deliveries), and access to these transportation options can help reduce VMT.			<ul style="list-style-type: none"> By 2030, double transit service hours from 560,000 to 1.12 million By 2030, install bus-only lanes and signal prioritization on 100% of all transit routes By 2030, 75% of unincorporated County residents live within one-half mile of shuttle or mobility service 	<ul style="list-style-type: none"> Number of residents within ½ mile of bus or active transportation option 			
T4.1	Expand and improve the frequency of service of County shuttles and explore new mobility services, such as micro transit, autonomous delivery vehicles, micro mobility, and on-demand autonomous shuttles.	PW	ISD, transit providers including Metro, Foothill Transit, Long Beach Transit, and Montebello Bus Lines LA	75% of unincorporated County residents live within one-half mile of a bus-only lane	<ul style="list-style-type: none"> Size of area served Number of employees and residents served Service frequency and headways 	Medium term (2025–2030)	\$\$\$\$	New funds required
T4.2	Install bus-only lanes and signal prioritization along major thoroughfares, and work with transit agencies and neighboring jurisdictions to plan and install full bus rapid transit infrastructure along priority corridors, as appropriate.	PW	Metro, transit agencies, other cities	75% of unincorporated County residents live within one-half mile of a bus-only lane	<ul style="list-style-type: none"> Increase in headways or frequencies Increase in headways Increase in residents/employees served Travel time reliability Creation of new HQTAs 	Long term 2030+	\$\$\$\$\$	New funds required
T4.3	Develop a transportation technology strategy to proactively address how evolving tech-enabled mobility options can support public transit.	PW	CSO, DPH	Develop strategy	TBD	Medium term (2025–2030)	\$\$	Funding secured, no new funds needed

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T4.4	Set aside maintenance funds to ensure that public transit facilities, including stations and stops, are safe and clean to enhance the transit experience and increase ridership.	PW	CSO, DRP	<ul style="list-style-type: none"> Year over year improvement to customer satisfaction surveys Improved services and access for children, elderly, disabled, and users needing accommodations for bicycles or active transportation 	<ul style="list-style-type: none"> User surveys show annual improvement in station condition metrics Maintain or increase level of maintenance funds 	Short term, 2023+	\$\$	Funding secured, no new funds needed
T4.5	Develop and implement a transportation demand management (TDM) ordinance that requires projects to incorporate measures such as subsidized transit passes and car share.	PW	CSO, DRP, Metro, transit agencies	<ul style="list-style-type: none"> Number of employers participating Trip reduction goal for TDM program Total trips/VMT reduced 	Mode share, commute trips, and parking occupancy at the tenant and building level	Short term, 2023–2025	\$	LA County General Fund
T4.6	Offer free transit passes for students, youth, seniors, people with disabilities, and low-income populations.	PW	Metro, other transit agencies	Increase in number of transit trips for each target year	<ul style="list-style-type: none"> Increase in number of transit trips Metro Board Action regarding fareless transit 	Spring 2022	\$\$	Proposition A Local Return Transit fund
T4.7	Expand and improve LA County’s Telecommuting Policy, using data gathered through the alternative work program.	ISD, DHR	CSO, DRP, PW, SCAG	<ul style="list-style-type: none"> Number of employers participating in telecommuting policies Number of employees actively telecommuting 	<ul style="list-style-type: none"> Parking demand/ occupancy at LA County office/ employment sites Number of trips generated at LA County office/ employment sites 	Short term (2023–2025)	\$	LA County General Fund
T4.8	Establish temporary and permanent car-free areas.	DRP	PW, Cities	Number and location of car-free areas in the county for each target year (goal TBD)	Number and location of car-free areas in the county for each target year	Long term 2030+	\$	LA County General Fund
T4.9	Develop a VMT banking or exchange program.	PW	DRP, CSO	Implement exchange program for use in project development	TBD	Short to medium term (2023–2030)	\$\$\$	LA County General Fund
T5	Limit and Remove Parking Minimums: Parking strategies such as parking maximums, unbundling parking, or market price parking can help reduce VMT.			<ul style="list-style-type: none"> Reduce parking stipulations to reduce parking supply and encourage transit use Unbundle parking costs to reflect cost of parking Implement parking pricing to encourage “Park-once” behavior 	Locations of strategies and changes to parking requirements or costs			
T5.1	Implement a comprehensive parking reform strategy, which should include, but not be limited to: elimination of minimum parking requirements for all new residential units, establishment of parking maximums within one-half mile of high-quality transit stops, creation and expansion of parking benefit districts, and incentives for developers to provide less than maximum allowable parking.	DRP	PW	<ul style="list-style-type: none"> Reduce parking stipulations to reduce parking supply and encourage transit use Unbundle parking costs to reflect cost of parking Implement Parking pricing to encourage “Park-once” behavior 	<ul style="list-style-type: none"> Percent change in parking supply Parking occupancy Funding received through parking benefit district Mode shift surveys in areas/buildings with reduced/unbundled/priced parking 	Short term, 2025	\$\$-\$\$\$	LEAP Grant

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Strategy 4: Institutionalize Low-Carbon Transportation								
T6^Q (Core)	Increase ZEV Market Share and Reduce Gasoline and Diesel Fuel Sales: Increase the County's ZEV market share and vehicle penetration to the maximum extent feasible. Set targets for reducing total gasoline and diesel vehicle fuel sales.			Increase the total amount of light-duty vehicles in the County that are ZEVs to: <ul style="list-style-type: none"> • 30% by 2030 • 50% by 2035 • 85% by 2045 Increase the sales of new light-duty vehicles in the County that are ZEVs to: <ul style="list-style-type: none"> • 60% by 2030 • 100% by 2035 	<ul style="list-style-type: none"> • Number of ZEVs registered & number of non-ZEVs registered • Number of public and private EVCSs installed • Total sales of gasoline and diesel fuel within the County 			
T6.1	Develop a Zero Emission Vehicle Master Plan.	CSO	DRP, PW, ISD	The plan would set ambitious targets for ZEV infrastructure and ZEV adoption (TBD)	The plan would identify specific tracking metrics	Short term (2022–2025)	\$	TBD
T6.2	Install EVCSs at existing buildings and right-of-way infrastructure (e.g., lamp poles) throughout unincorporated Los Angeles County.	CSO, ISD	PW	Number of EVCS installed for each target year (TBD)	Number, location, and availability of EVCS	Short to long term (2023–2045)	\$\$\$	CEC CALeVIP and EVSERebate
T6.3	Require all new development to install EVCSs through a condition of approval/ordinance. Residential development must install EVCSs; nonresidential development must install EVCSs at a percentage of total parking spaces.	DRP	PW	Number of EVCS installed for each target year (TBD)	Number, location, and availability of EVCS	Short term (2022–2025)	\$	SCE Charge Ready Program EVSE rebates
T6.4	Install EVCSs at LA County facilities and properties for public, employee, and fleet use, prioritizing locations in BIPOC and disadvantaged communities. Complete an assessment of EV charging locations, identifying gaps in publicly accessible stations for BIPOC and disadvantaged communities.	ISD	Fire, LASD, PW, Parks, Beaches and Harbors	Install the following total number of EVCS: <ul style="list-style-type: none"> • 5,000 by 2030 • 10,000 by 2035 • 25,000 by 2045 	Number, location, and availability of EVCS	Short to long term (2023–2040)	\$\$\$	CEC CALeVIP EVSE rebate, SCAQMD Alternative Fuel Vehicle and Fueling Infrastructure Grants
T6.5	Continue to pilot vehicle-grid integration applications at workplaces to maximize the benefits that daytime charging for plug-in electric vehicles (PEVs) can have on the grid, including demand response to reduce peak loads and energy storage during periods of renewable overproduction.	ISD, PW	SCE, CSO, DRP, ISD	TBD	TBD	Short term (2023–2025)	\$	SCE
T6.6	Expand electric options for active transportation, such as electric scooters and e-bikes.	CSO	DRP, PW, ISO	<ul style="list-style-type: none"> • Number and type of scooters or e-bikes made available (TBD) • Vehicle trips and VMT reduced (TBD) 	Number of scooters/e-bikes available; number of residents served; number of rides; average ride distance	Short term (2023–2025)	\$	CARB Clean Mobility Options Voucher Pilot Program
T6.7	Increase the use of green hydrogen vehicles. Use biomethane and biogas created from organic waste as a "bridge fuel" to achieve 100% green hydrogen and electric vehicles.	ISD	PW	Percent of the community truck fleet that use green renewable natural gas and hydrogen	NG and hydrogen truck registration data (or fuel consumption data)	Medium term (2025–2035)	\$\$\$	CARB Bus Replacement Grant, CARB Hybrid and Zero Emission Truck and Bus Voucher Incentive Project, Federal Zero-Emission Transit Bus Tax Exemption, CARB California Clean Mobility Options Voucher Pilot Program, SCAQMD Heavy-Duty Zero Emission Vehicle Replacement Grant, SCAQMD Goods Movement Emission Reduction Program.

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T7^Q	Electrify LA County Fleet Vehicles: Electrify the LA County bus, shuttle, and light-duty vehicle fleet and shuttles.			Electrify the LA County bus, shuttle, and light-duty vehicle fleets by 2030 Increase the total amount of light-duty vehicles in the LA County-owned fleet that are ZEVs to: <ul style="list-style-type: none"> • 35% by 2030 • 60% by 2035 • 100% by 2045 	<ul style="list-style-type: none"> • Number of ZEV buses • Number of ZEV light-duty vehicles • Total ZEV percentage of bus and light-duty vehicle fleet 			
T7.1	Electrify the LA County bus fleet, inmate transfer fleet, and shuttles, and partner with transit agencies for group purchasing and siting of shared charging and/or fueling infrastructure. ^M	PW, Sheriff	ISD	Achieve 100% electric bus fleet by 2030	ZEV percentage of LA County bus/shuttle fleet	Short to medium term (2023-2030)	\$\$\$\$	Caltrans grant, CARB Bus Replacement Grant, CARB Hybrid and Zero Emission Truck and Bus Voucher Incentive Project, Federal Zero-Emission Transit Bus Tax Exemption, CARB California Clean Mobility Options Voucher Pilot Program, SCE Charge Ready Transit Bus Pilot and Charge Ready Transport.
T7.2	Electrify light-duty LA County fleet vehicles. ^M	ISD, LASD, Fire, PW, Parks	CSO	Increase the total amount of light-duty vehicles in the LA County-owned fleet that are ZEVs to: <ul style="list-style-type: none"> • 35% by 2030 • 60% by 2035 • 100% by 2045 	ZEV percentage of light-duty LA County-owned fleet	Short to medium term (2023+)	\$\$\$	CARB Clean Vehicle Rebate Project (CVRP) public fleet vehicle rebates, CARB Clean Cars for All program, Caltrans grants
T8^Q (Core)	Accelerate Freight Decarbonization: Incentivize and implement freight decarbonization technologies, specifically focusing on charging infrastructure.			Increase the total amount of medium- and heavy-duty vehicles in the County that are ZEVs to: <ul style="list-style-type: none"> • 40% by 2030 • 60% by 2035 • 85% by 2045 Increase the total amount of medium- and heavy-duty vehicles in the LA County-owned fleet that are ZEVs to: <ul style="list-style-type: none"> • 60% by 2030 • 80% by 2035 • 100% by 2045 Ensure that 100% of the drayage truck fleet is ZEV by 2035	<ul style="list-style-type: none"> • Percent of medium- and heavy-duty vehicles in the County that are ZEVs • Percent of medium- and heavy-duty vehicles in the LA County-owned fleet that are ZEVs • Percent of drayage truck fleet is ZEV • Medium- and heavy-duty truck EVCS count 			
T8.1	Implement freight decarbonization technologies along highway corridors passing through unincorporated Los Angeles County communities through programs such as zero-emission delivery zones.	DRP, CSO	SCAQMD, CARB, SCAG, Metro, Councils of Governments, cities	<ul style="list-style-type: none"> • Heavy-duty truck charging locations by target year (TBD) • 100 percent of sales of drayage trucks are ZEV by 2035 and 100 percent of sales of medium- and heavy-duty trucks are ZEV by 2045. 	<ul style="list-style-type: none"> • Medium- and heavy-duty truck EVCS • Miles between EVCS • Sales and registrations of ZEV trucks 	Medium to long term (2025-2045)	\$\$\$\$	SCAQMD Heavy-Duty Zero Emission Vehicle Replacement Grant, SCAQMD Goods Movement Emission Reduction Program, CEC CALeVIP EVSE Rebates, SCE Charge Ready Program EVSE rebates, CARB Advanced Technology Freight Demonstration Projects

ID	STRATEGY/MEASURE/ACTION	LEAD	PARTNERS	PERFORMANCE OBJECTIVES	TRACKING METRICS	TIME FRAME	COST	FUNDING
T8.2	Create an ordinance requiring new goods movement facilities to install alternative fueling infrastructure.	DRP, CSO	PW, ISD	All new warehouse loading docks must have EVCS Total number of medium- and heavy-duty vehicles that are ZEVs: <ul style="list-style-type: none"> • 40% by 2030 • 60% by 2035 • 85% by 2045 	Number and location of EVCS facilities	Short term (2025)	\$	LA County General Fund, SCAQMD Heavy-Duty Zero Emission Vehicle Replacement Grant, Goods Movement Emission Reduction Program, CEC CALeVIP EVSE Rebates, SCE Charge Ready Program EVSE rebates for implementation/compliance.
T8.3	Adopt Building Performance Standards for existing goods movement facilities and reach code requirements for major retrofits and renovations that require alternative fueling infrastructure for medium- and heavy-duty vehicles. Require goods movement facilities to install alternative fueling infrastructure for medium- and heavy-duty vehicles at the point of sale.	DRP, CSO	PW, ISD	All existing warehouse loading docks must have EVCS by 2035. Total number of medium- and heavy-duty vehicles that are ZEVs: <ul style="list-style-type: none"> • 40% by 2030 • 60% by 2035 • 85% by 2045 	Number and location of EVCS facilities	Short term (2025)	\$\$	LA County General Fund, SCAQMD Heavy-Duty Zero Emission Vehicle Replacement Grant, Goods Movement Emission Reduction Program, CEC CALeVIP EVSE Rebates, SCE Charge Ready Program EVSE rebates for implementation/compliance.
T8.4	Streamline permitting of ZEV charging and fueling infrastructure for medium- and heavy-duty vehicles.	DRP	CSO, PW	Permitting changes adopted	Number of permits completed	Short to medium term (2023–2030)	\$	LA County General Fund
T9^q	Expand Use of Zero-Emission Technologies for Off-Road Vehicles and Equipment: Prohibit the use of gas- and diesel-powered small (≤25 horsepower) off-road equipment and increase the use of zero-emission and near-zero-emission construction, agriculture, and manufacturing equipment.			Increase the total amount of off-road fleet and equipment in the County that are ZEVs to: <ul style="list-style-type: none"> • 20% by 2030 • 50% by 2035 • 90% by 2045 	Off-road vehicle and equipment fleet count, type, and fuel type.			
T9.1	Partner with the South Coast Air Quality Management District and Antelope Valley Air Quality Management District to increase the use of zero-emission and near-zero-emission construction, agriculture, and manufacturing equipment.	PW	DRP, CSO, ISD, SCAQMD, CARB	Increase the total amount of construction, agriculture, and manufacturing equipment in the County that are ZEVs to: <ul style="list-style-type: none"> • 50% by 2030 • 75% by 2035 • 100% by 2045 	Off-road vehicle and equipment fleet count, type, and fuel type.	Short term (2023–2025)	\$	CARB Clean Off-Road Equipment Voucher Incentive Project, SCAQMD Surplus Off-Road Opt-In for NOx (SOON) Program, Carl Moyer Program.
T9.2	Identify types of ZEV equipment and green hydrogen equipment that are commercially available (e.g., forklifts, loaders, welders, saws, pumps, fixed cranes, air compressors, sweepers, aerial lifts, pressure washers) and require the use of these types of equipment on all new projects through an ordinance or conditions of approval.	PW, DRP	CSO, ISD, SCAQMD, CARB	Development and adoption of ordinance	Off-road vehicle and equipment fleet count, type, and fuel type.	Short term (2023–2025)	\$	CARB Clean Off-Road Equipment Voucher Incentive Project, SCAQMD Surplus Off-Road Opt-In for NOx (SOON) Program, Carl Moyer Program
T9.3	Require, to the maximum extent feasible, the use of zero-emission and near-zero-emission construction, agriculture, and manufacturing equipment for LA County projects. ^M	PW	DRP, CSO, ISD, SCAQMD	Development and adoption of ordinance	Off-road vehicle and equipment fleet count, type, and fuel type.	Short term (2023–2025)	\$\$	CARB Clean Off-Road Equipment Voucher Incentive Project, SCAQMD Surplus Off-Road Opt-In for NOx (SOON) Program, Carl Moyer Program.

ID	STRATEGY/MEASURE/ACTION	LEAD	PARTNERS	PERFORMANCE OBJECTIVES	TRACKING METRICS	TIME FRAME	COST	FUNDING
Strategy 5: Decarbonize Buildings								
E1^Q (Core)	Transition Existing Buildings to All-Electric: As the carbon intensity of grid-supplied energy decreases, decarbonization must be combined with building electrification, shifting more load toward cleaner sources. This measure aims to electrify existing buildings. Biomethane is another preferred alternative to fossil natural gas; however, the existing opportunities for widespread use of biomethane are limited.			Electrify all existing residential buildings: <ul style="list-style-type: none"> • 25% by 2030 • 40% by 2035 • 70% by 2045 Electrify all existing nonresidential buildings: <ul style="list-style-type: none"> • 15% by 2030 • 25% by 2035 • 40% by 2045 Require Zero Net Energy (ZNE) for all major renovations: <ul style="list-style-type: none"> • 50% by 2030 • 75% by 2035 • 100% by 2045 	<ul style="list-style-type: none"> • Total energy consumption by type (gas use vs. electricity use) • Electricity consumption for residential and nonresidential buildings • Number of existing residential and nonresidential buildings transitioned to all-electric 			
E1.1	Adopt Building Performance Standards for existing buildings and reach code requirements for major retrofits and renovations that require electric water and space heating. Require buildings to retrofit natural gas water and space heating to electric water and space heating at the point of sale.	CSO, PW	DRP	Adopt building performance standards and reach code(s).	<ul style="list-style-type: none"> • Energy consumption (gas use vs. electricity use vs. biomethane use) • Number of existing buildings transitioned to all-electric 	Short to medium term (2023–2035)	\$	Funded; CPUC Technology and Equipment for Clean Heating (TECH) and Building Initiative for Low Emissions Development (BUILD) programs.
E1.2	Increase alternatives to natural gas uses, such as for cooking, in existing buildings. Establish carbon intensity limits for existing nonresidential and residential buildings over a certain size.	CSO, DRP	PW, SoCal Gas	Adopt reach code(s) and/or building performance standards.	<ul style="list-style-type: none"> • Carbon intensity limits/reporting • Biomethane consumption 	Short to medium term (2023–2035)	\$	CPUC TECH program, CPUC BUILD program, CARB Greenhouse Gas Reduction Fund (GGRF), CARB California Climate Investments program, California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA), California Lending for Energy and Environmental Needs (CLEEN) Center, Affordable Housing and Sustainable Communities (AHSC) Program, CPUC Energy Saving Assistance Program (ESAP), CPA and CALeVIP rebates,
E1.3	Adopt a ZNE ordinance for building renovations, based on certain criteria (such as commercial facilities with 10,000 square feet of additions). Adopt ZNE Building Performance Standards for certain buildings not undergoing major renovations or retrofits.	CSO, DRP	PW, CSO, SCE, CPA	<ul style="list-style-type: none"> • Adopt ZNE ordinance. 	<ul style="list-style-type: none"> • Number of ZNE buildings constructed 	Short term (2023–2025)	\$	LA County General Fund; funding sources identified above
E1.4	Create a plan for phased electrification of LA County facilities. Phase out gas-powered infrastructure and appliances as they need replacement. ^M	ISD	PW, CSO, SCE, CPA	<ul style="list-style-type: none"> • Conduct buildings portfolio analysis and cost feasibility study. • Electrify LA County facilities to the maximum extent feasible. 	<ul style="list-style-type: none"> • Buildings portfolio analysis completed • Number of buildings electrified • Energy consumption (gas use vs. electricity use) 	Short to long term (2025–2045)	\$\$-\$\$\$\$	Funding sources identified above.

ID	STRATEGY/MEASURE/ACTION	LEAD	PARTNERS	PERFORMANCE OBJECTIVES	TRACKING METRICS	TIME FRAME	COST	FUNDING
E1.5	Create a comprehensive fund aggregation program to support energy efficiency, decarbonization and resilience in new and existing affordable housing.	CSO, DRP	DRP, SCE, CPA, RePowerLA Coalition, NRDC	<ul style="list-style-type: none"> Retrofit affordable housing units for efficiency, decarbonization, and resilience. Work with local stakeholders to define affordable housing eligibility requirements. Create a flexible financing program to cover full retrofit costs, not just equipment. Ensure low-income households do not experience rent increases as result of first cost. Enable multiple retrofits to be covered through a single application process. Aggregate funding from utility, public, private, philanthropic sources. Provide linkages for asset transfer to public, land trust, or occupant ownership. 	<ul style="list-style-type: none"> Amount of money available through the program Number of units retrofitted Number of units with increased renter protections as result of incentives 	Short to medium term (2023–2035)	\$\$\$	TBD
E1.6	Create an energy retrofit accelerator to provide a one-stop shop for guidance, technical support, training, and access to aggregated funds to support building owners and contractors. Target support to low-income communities and affordable housing.	CSO, DRP	DRP, SCE, CPA, SoCal Gas, RePowerLA Coalition, NRDC	<ul style="list-style-type: none"> Partner with local stakeholder to design program to meet needs of low-income communities, affordable housing, multifamily buildings, renters Provide training and support for advance planning and phasing Link with fund aggregator from E1.5 	<ul style="list-style-type: none"> Number of owners served Number of retrofits implemented Number of contractors trained 	Short to medium term (2023–2035)	\$\$	TBD
E2^q	Standardize All-Electric New Development: This measure aims to electrify all new buildings.			<ul style="list-style-type: none"> All new buildings will be all-electric beginning in 2025. All new residential will be ZNE beginning in 2025 and all new nonresidential will be ZNE beginning in 2030. 	<ul style="list-style-type: none"> Number of all-electric buildings built Total electricity and natural gas consumption 			
E2.1	Adopt an ordinance requiring all new buildings to be fully electric with no natural gas hookups. Include affordable housing considerations in these requirements, and develop supporting measures (financial support, technical assistance, or other incentives) to defray potential additional first costs in order to maintain housing affordability.	PW, DRP	CSO, WDACS	<ul style="list-style-type: none"> Residential: 100% all-electric by 2025 Nonresidential: 100% all-electric by 2025 (except large industry and possibly food service) Provide affordable housing set-aside to offset first cost 	<ul style="list-style-type: none"> Number of all-electric buildings built Total electricity and natural gas consumption 	Short term; implement ordinance immediately (2023–2024)	\$	LA County General Fund
E2.2	Adopt a ZNE ordinance for all new residential buildings built after 2025 and all new nonresidential buildings built after 2030. Include renter protections for affordable housing. Provide affordable housing set-aside to offset first cost.	PW, DRP	CSO	<ul style="list-style-type: none"> Residential: 100% ZNE by 2025 Nonresidential: 100% ZNE by 2030 (except large industry) Include affordable housing set-aside 	<ul style="list-style-type: none"> Number of residential and nonresidential buildings constructed to be ZNE 	Short term; implement ordinance by 2025	\$	LA County General Fund
E2.3	Adopt CALGreen Code Tier 1 green building standards and identify which Tier 2 standards could be adopted as code amendments.	PW	CSO, DRP	CALGreen Tier 1 green building standards required for all new development	<ul style="list-style-type: none"> New development permitting/applications 	Implement by 2023 (ongoing with CALGreen updates)	\$	New funds needed

ID	STRATEGY/MEASURE/ACTION	LEAD	PARTNERS	PERFORMANCE OBJECTIVES	TRACKING METRICS	TIME FRAME	COST	FUNDING
E3	Other Decarbonization Actions: Reduce the life-cycle carbon intensity of building materials and phase out the use of high-GWP refrigerants.			Increase the proportion of biomethane in the utility natural gas mix to: <ul style="list-style-type: none"> • 20% by 2030 • 40% by 2035 • 100% by 2045 Use negative-carbon concrete for all new construction. Replace high-GWP refrigerants with low-GWP refrigerants: <ul style="list-style-type: none"> • 15% by 2030 • 25% by 2035 • 50% by 2045 	Proportion of biomethane in utility natural gas mix			
E3.1	Work with utilities to incorporate increasing levels of biomethane into the natural gas mix.	CSO, DRP	PW, SoCal Gas, LACSD, CalRecycle	Increase the proportion of biomethane in the utility natural gas mix: <ul style="list-style-type: none"> • 20% by 2030 • 30% by 2035 • 80% by 2045 	Proportion of biomethane in utility natural gas mix	Short to medium term (2023–2035); develop ordinance to be in effect by 2030	\$\$\$ (TBD based on cost of biomethane)	TBD
E3.2	Adopt a concrete code for new construction that limits embodied carbon emissions; specify code requirements of carbon intensity limit for concrete.	PW	CSO, DRP	Use negative-carbon concrete for all new construction; identify carbon intensity limit of concrete	Quantity of low-carbon concrete used in new construction	Implement ordinance by 2025	\$	TBD
E3.3	Adopt reach code requirements that include performance standards to limit the amount of embodied carbon associated with construction.	CSO	DRP, PW	Identify carbon intensity limits for materials	Quantity of low-carbon materials used in new construction	Implement standards by 2025	\$	TBD
E3.4	Develop a refrigerant management program that establishes a phase-out timeline for high-GWP refrigerants in existing buildings, incentivizes industrial equipment replacement, and specifies requirements for new development to use low-GWP refrigerants.	PW, ISD	DRP, US EPA, CARB	Replace high-GWP refrigerants with low-GWP refrigerants: <ul style="list-style-type: none"> • 15% by 2030 • 25% by 2035 • 50% by 2045 	Quantity of low-GWP refrigerants charged/used	Implement standards/phase-out timeline by 2025	\$	TBD
Strategy 6: Improve Efficiency of Existing Building Energy Use								
E4^Q	Improve Energy Efficiency of Existing Buildings: Retrofit existing building stock to reduce overall County energy use.			Reduce building Energy Use Intensity below 2015 levels as follows: <ul style="list-style-type: none"> • 15% for residential and industrial and 25% for commercial by 2030 • 25% for residential and industrial and 35% for commercial by 2035 • 35% for residential and industrial and 50% for commercial by 2045 	<ul style="list-style-type: none"> • Total number of retrofits • energy use/savings • Building size (square footage) retrofit 			SCE, CARB, EPA
E4.1	Adopt Building Performance Standards for energy efficiency in existing buildings. Require all buildings to perform energy efficiency retrofits at the point of sale. Expand and enhance the energy efficiency programs offered by the Southern California Regional Energy Network (SoCalREN). Include affordable housing considerations in these requirements, and develop additional renter protections and supporting measures (financial support, technical assistance, or other incentives) to limit the amount of first costs being passed on to low-income renters. (See Actions E1.5 and E1.6.)	ISD, CSO	SoCalREN, SCE, SoCalGas, CPA	<ul style="list-style-type: none"> • Adopt building performance standards and reach code(s) • Overall energy savings • Number of homes or businesses participating 	Overall energy savings: Number of homes or businesses participating	Short to medium term (2025–2035)	\$\$\$	New funds needed; GoGreen Business Energy Financing program, SoCalREN, SCE On-Bill Financing

ID	STRATEGY/MEASURE/ACTION	LEAD	PARTNERS	PERFORMANCE OBJECTIVES	TRACKING METRICS	TIME FRAME	COST	FUNDING
E4.2	Adopt an energy efficiency ordinance for existing buildings, requiring all buildings over 20,000 square feet to benchmark and report their energy use and demonstrate their pathway to efficiency.	CSO	PW, DRP, SCE, SoCalGas, CPA	Reduce building EUI (kBtu/square foot) below 2015 levels as follows by: <ul style="list-style-type: none"> • 15% for residential and industrial and 25% for commercial by 2030 • 25% for residential and industrial and 35% for commercial by 2035 • 35% for residential and industrial and 50% for commercial by 2045 	<ul style="list-style-type: none"> • Energy use, electricity and gas (Btu) • Building size (square footage) 	Short term (2025+)	\$	LA County General Fund
E4.3	Convert existing LA County–owned heat-trapping surfaces to cool or green surfaces. ^M	ISD	CSO, PW	<ul style="list-style-type: none"> • Number and area of cool and green roofs installed (TBD) 	<ul style="list-style-type: none"> • Number and area of cool and green roofs installed 	Medium term (2030)	\$\$-\$\$\$	Project-based funding
Strategy 7: Conserve Water								
E5	Increase Use of Recycled Water and Gray Water Systems: Increasing the use of alternative water sources (e.g., recycled water, gray water, indirect potable reuse) reduces the demand for water sources with higher energy and carbon intensities (e.g., imported water, groundwater).			County demand met by recycled water, gray water, or direct potable reuse: <ul style="list-style-type: none"> • 25% by 2030 • 50% by 2035 • 100% by 2045 	County water supply breakdown by source; total water consumption			
E5.1	Require dual waste piping to be installed in new residential developments to allow for future graywater irrigation systems.	PW	DPH	Number of greywater systems installed (TBD)	Number of greywater systems installed	Long term (2035–2045)	\$	State Department of Water grant; partial funds secured; additional funds needed.
E5.2	Require the use of recycled water and gray water for agricultural purposes where recycled water is available. Identify soil and water conservation best practices for agricultural uses. Work with LACSD and other water suppliers to assess the feasibility of new recycled water facilities for unserved communities.	PW	DRP, DPH, LACSD, MWD	Water demand for agricultural will be recycled or greywater: <ul style="list-style-type: none"> • 30% by 2030 • 50% by 2035 • 80% by 2045 	Recycled/greywater supply for agricultural purposes	Short to long term (2025–2045)	\$\$-\$\$\$	New funds needed
E5.3	Require the use of recycled water and gray water for industrial purposes where recycled water is available. Identify water conservation best practices for industrial uses. Work with LACSD and other water suppliers to assess the feasibility of new recycled water facilities for unserved communities.	PW	DRP, DPH, LACSD, MWD	Water demand for industrial will be recycled or greywater: <ul style="list-style-type: none"> • 30% by 2030 • 50% by 2035 • 80% by 2045 	Recycled/greywater supply for industrial purposes	Short to long term (2025–2045)	\$\$-\$\$\$	TBD
E5.4	Partner with LA County water districts and retail suppliers to explore the potential for widespread utilization of direct potable reuse through pilot projects.	PW, CSO	LA County water districts, MWD	Implement a successful direct potable reuse project by 2025.	Direct potable reuse input volume; direct potable reuse output volume	Short term (2022–2025)	\$	TBD
E6^Q	Reduce Indoor and Outdoor Water Consumption: Reducing indoor and outdoor water consumption is essential as the state experiences longer and more severe droughts. Not only will water conservation improve regional resiliency, but it will also reduce GHG emissions through the reduction of energy consumption associated with the processing, treatment, and conveyance of water and wastewater.			Reduce total water use to less than: <ul style="list-style-type: none"> • 110 gallons per capita per day (GPCD) by 2030 • 100 GPCD by 2035 • 85 GPCD by 2045 	Total water use; Water use per capita			
E6.1	Develop a net-zero water ordinance for new greenfield development. Develop a water conservation ordinance for new development (public and private).	PW, CSO	DRP	<ul style="list-style-type: none"> • 100% of new development in greenfield areas is net zero • Gallons/square foot target for non-greenfield development (TBD) 	<ul style="list-style-type: none"> • Square footage of each type of development (res, commercial, municipal) built water-neutral • Total water use • Building size (square footage) 	Short term (2022–2025)	\$	New funds needed

ID	STRATEGY/MEASURE/ACTION	LEAD	PARTNERS	PERFORMANCE OBJECTIVES	TRACKING METRICS	TIME FRAME	COST	FUNDING
E6.2	Adopt a water efficiency ordinance for existing buildings, requiring all buildings over 20,000 square feet to benchmark and report their water use and demonstrate their pathway to efficiency.	PW, CSO	DRP	<ul style="list-style-type: none"> Gallons/square foot target for existing development (TBD) 	<ul style="list-style-type: none"> Total water use Building size (square footage) 	Short to medium term (2025–2035)	\$	LA County General Fund
E6.3	Incentivize residents to replace water-intensive landscaping, such as grasses, with water-conserving landscaping through a new ordinance along with education and incentive programs.	PW	CSO, DRP, Water Districts	Reduce outdoor landscaping water use to 10% by 2030, 20% by 2035, and 50% by 2045	Water use for landscaping	Short term (2022–2025)	\$	LA County General Fund
E6.4	Implement strategies to improve water efficiency at LA County facilities. ^M	PW, ISD, Parks	CSO, DRP	Reduce municipal water consumption 10% by 2030, 20% by 2035, and 50% by 2045	Total water use; water use for landscaping; indoor water use	Short term (2022–2025)	\$\$	Project-based funding
E6.5	Integrate water related programs into LA County’s affordable housing preservation program to protect the housing affordability of units and to keep the units fit for their purpose in a changing climate.	PW, DRP	CSO	TBD	TBD	Short to medium term (2025–2035)	\$	Water agency funding and grant programs
Strategy 8: Minimize Waste and Recover Energy and Materials from the Waste Stream								
W1^Q (Core)	Institutionalize Sustainable Waste Systems and Practices: Undertake actions that result in sustainable waste systems. Responsible and sustainable waste practices are learned behaviors, which LA County can facilitate through outreach, education, and mandates. Increase diversion of recyclable materials and organics from landfills through ordinances, service improvements, education and outreach, and promotion of product stewardship and markets for material reuse. An increased diversion rate indirectly reduces the demand for virgin materials, which reduces the life-cycle carbon intensity of any resulting products. Through action taken at the LA County level, waste-conscious habits and thoughtful consumption can become the default.			Decrease overall per-capita waste disposal in landfills: <ul style="list-style-type: none"> 25% by 2030 (0.65 tons per capita per day) 30% by 2035 (0.61 tons per capita per day) 35% by 2045 (0.56 tons per capita per day) Increase the total County waste diversion rate to: <ul style="list-style-type: none"> 80% by 2025 85% by 2030 90% by 2035 95% by 2045 	<ul style="list-style-type: none"> Per capita landfill disposal County unincorporated area diversion rate 			
W1.1	Identify best practice waste pricing programs to reduce waste generation to the maximum extent feasible, including but not limited to differential prices for waste based on amount generated in the residential sector and reforms to tipping rate structures.	CSO, PW	LACSD, DPH	Development of best practices. Decrease overall per-capita waste disposal in landfills: <ul style="list-style-type: none"> 25% by 2030 (0.65 tons per capita per day) 30% by 2035 (0.61 tons per capita per day) 35% by 2045 (0.56 tons per capita per day) 	<ul style="list-style-type: none"> Per capita landfill disposal County unincorporated area diversion rate 	Short term (2022–2025)	\$\$	Funding secured, no new funds
W1.2	Implement, enforce, and expand to the maximum extent feasible the single-use plastics ordinance.	CSO, PW	DPH	Eliminate the disposal of single use plastics in landfills	TBD		\$-\$\$	Funding secured, no new funds
W1.3	Increase the diversion requirements in LA County’s Construction and Demolition Debris Ordinance and allow the use of recycled construction materials in new projects.	PW	CSO, DRP, LACSD, CalRecycle	<ul style="list-style-type: none"> Increase C&D Ordinance to 70% diversion Percentage of CC&D debris reused in new projects (private, public) 	C&D tonnage recycled/diverted from landfill C&D tonnage reused	Short term (2022–2025)	\$	Funding secured; no new funds needed

ID	STRATEGY/MEASURE/ACTION	LEAD	PARTNERS	PERFORMANCE OBJECTIVES	TRACKING METRICS	TIME FRAME	COST	FUNDING
W2^o (Core)	Increase Organic Waste Diversion: Provide services for diverting yard waste, food scraps, and compostable paper from landfills to beneficial uses, including compost, food rescue, and energy production.			Maximize organic waste disposal reduction compared to 2014 levels. <ul style="list-style-type: none"> • 75% by 2025 • 80% (340,000 tons) by 2030 • 85% (394,000 tons) by 2035 • 90% (433,000 tons) by 2045 	Organic waste (tons) sent to landfill. Organic waste composted, diverted for food rescue, anaerobically digested, converted to energy, recycled, or otherwise diverted from landfill disposal			
W2.1	Adopt a mandatory composting ordinance that requires all persons in the County, including residents, building owners, and tenants, to keep recyclables, compostables, and trash separated. Require organics generators to properly manage organic waste through this ordinance.	PW, Agricultural Commissioner/Weights and Measures	CSO, LACSD, CalRecycle	Total tons (or pounds per capita) of organic waste disposed	Per capita organic waste disposal or total organic waste disposed			USDA Supplemental Nutrition Assistance Program-Education (SNAP-Ed); Grants from CalRecycle, CEC, CDFA, USDA
W2.2	Develop organic waste collection, management, and diversion programs for constituents in unincorporated communities and all LA County operations; establish a contamination monitoring plan for organic waste programs.	PW	Waste collectors, CalRecycle	Total tons (or pounds per capita) of organic waste disposed for each target year.	Organic waste (tons or pounds per capita) disposal tonnage	Medium term (2025–2035)	\$\$\$	New funds needed; Grants from CalRecycle, CEC, CDFA, USDA
W2.3	Collaborate with the LA County Sanitation Districts and other waste and wastewater service providers to utilize unused anaerobic digestion capacity of existing wastewater treatment plants and solid waste facilities to generate vehicle fuel (electricity and/or biomethane) from newly diverted organic waste. Develop a strategy for using bioenergy created from recycled organic waste.	PW	CSO, LACSD, CalRecycle	Total energy generation or renewable vehicle fuel created from organic waste for each target year.	Total energy generation or renewable vehicle fuel created from organic waste	Medium to long term (2035–2045)	\$\$\$\$	New funds needed; Grants from CalRecycle, CEC, CDFA, USDA
W2.4	Provide regional leadership for organic waste processing capacity planning and infrastructure development.	PW	LACSD, CalRecycle	<ul style="list-style-type: none"> • Capacity of organic waste processing facilities serving Los Angeles County • Amount of organic waste processed for each target year 	<ul style="list-style-type: none"> • Capacity of organic waste processing facilities • Amount of organic waste processed 	Medium to long term (2035–2045)	\$\$\$\$	New funds needed; Grants from CalRecycle, CEC, CDFA, USDA
W2.5	Enhance and expand LA County’s existing Food DROP food donation and redistribution program to divert edible food from landfills and make it available to food insecure communities.	PW	DPH, local businesses, restaurants, grocery stores, and nonprofits	<ul style="list-style-type: none"> • Reduction of food waste disposed in landfills • Total tons of edible food donated to food recovery organizations 	<ul style="list-style-type: none"> • Total tons of food waste disposed in landfills • Total tons of edible food donated to food recovery organizations 	Short to medium term (2025–2035)	\$\$, USDA Supplemental Nutrition Assistance Program-Education (SNAP-Ed); Grants from CalRecycle, CEC, CDFA, USDA
Strategy 9: Conserve Forests and Working Lands								
A1^o	Conserve Agricultural and Working Lands, Forest Lands, and Wildlands: Preserve, conserve, and restore agricultural lands, working lands, rangelands, forest lands, wetlands, and other wildlands in unincorporated Los Angeles County.			Reduce the amount of natural land converted for urban uses: <ul style="list-style-type: none"> • 25% by 2030 • 50% by 2035 • 75% by 2045 Conserve natural lands that would have otherwise been converted for urbanized uses: <ul style="list-style-type: none"> • 53 acres annually by 2030 • 106 acres annually by 2035 • 159 acres annually by 2045 	Acreage of land conserved and restored by land type			

ID	STRATEGY/MEASURE/ACTION	LEAD	PARTNERS	PERFORMANCE OBJECTIVES	TRACKING METRICS	TIME FRAME	COST	FUNDING
A1.1	Develop an open space conservation and land acquisition strategy to conserve lands for carbon sequestration.	DRP	CSO, Parks, CA DOC, Fire Dept	Conserve and restore natural forest land: <ul style="list-style-type: none"> • 2,000 acres by 2030 • 4,000 acres by 2035 • 6,000 acres by 2045 Goal for the number, location, and size of easements created for each target year (TBD)	Total acres of forest land conserved Easements established; percentage of easements within climate-hazard areas or SEAs	Short to long term (2025–2045)	\$\$-\$\$\$	LA County General Fund
A1.2	Employ vegetation management of wildlands to reduce wildfire risk and prevent carbon loss in forest lands.	Agricultural Commissioner/Weights and Measures, Fire	DRP, CSO, Parks, CA DOC	Acres of wildland managed for wildfire risk reduction and carbon stock savings: <ul style="list-style-type: none"> • 10,000 acres by 2030 • 20,000 acres by 2035 • 50,000 acres by 2045 	Acres of wildlands managed for wildfire risk reduction and carbon stock savings.	Short to long term (2025–2045)	\$\$-\$\$\$	Grants through CAL FIRE
Strategy 10: Sequester Carbon and Implement Sustainable Agriculture								
A2	Support Regenerative Agriculture: Promote agricultural practices that sequester carbon and restore soil quality, biodiversity, ecosystems health, and water quality.			<ul style="list-style-type: none"> • Reduce the quantity of synthetic fertilizers used/applied • Increase in number of acres of cover crops using regenerative agricultural techniques 	<ul style="list-style-type: none"> • Quantity of synthetic fertilizers used/applied • Number of acres of cover crops using regenerative agricultural techniques 			
A2.1	Create fallow and field resting incentives to reduce bare-fallow land by adding cover crops and promoting crop rotation for active agricultural sites to improve soil quality and limit risks of nutrient erosion, pollutant runoff, and yield reduction. Create a carbon farming plan with the primary objectives of carbon removal and regenerative agriculture.	Agricultural Commissioner/Weights and Measures	CSO, PW, ISD	TBD	TBD	Medium term (2025–2035)	\$\$-\$\$\$	TBD
A2.2	Provide compost and/or organic or nonsynthetic fertilizer to farmers free of charge or at a discounted rate.	Agricultural Commissioner/Weights and Measures	CSO, LACSD	Goal for the total tonnage of fertilizer/compost produced each year and provided to farmers	Tonnage of fertilizer/compost produced each year; tonnage provided to those producing crops	Short term (2022–2025)	\$\$\$	TBD
A3^Q	Expand Unincorporated Los Angeles County’s Tree Canopy and Green Spaces: Create an Urban Forest Management Plan to plant trees, increase the unincorporated County’s tree canopy cover, add green space, and convert impervious surfaces.			Plant trees: <ul style="list-style-type: none"> • 5,000 by 2030 • 10,000 by 2035 • 20,000 by 2045 Increase county tree canopy cover: <ul style="list-style-type: none"> • 10% by 2030 • 15% by 2035 • 20% by 2045 	<ul style="list-style-type: none"> • Tree count • Tree canopy cover • Green space area • Area of impervious surface converted 			
A3.1	Create and implement an equitable Urban Forest Management Plan that prioritizes: (1) tree- and parks-poor communities; (2) climate- and watershed-appropriate and drought/pest-resistant vegetation; (3) appropriate watering, maintenance, and disposal practices; (4) provision of shade; and (5) biodiversity.	CSO, PW	DRP, Agricultural Commissioner/Weights and Measures, Parks, DPH, DBH, LASD, Fire, CALFIRE, ISD	Develop Urban Forest Management Plan		Short to long term (2025–2045)	\$\$	New funds needed; CAL FIRE Urban and Community Forestry Grant

ID	STRATEGY/MEASURE/ACTION	LEAD	PARTNERS	PERFORMANCE OBJECTIVES	TRACKING METRICS	TIME FRAME	COST	FUNDING
A3.2	Expand County tree planting both in the public right-of-way and on private property.	CSO, PW	DRP, Parks, DPH, DBH, LASD, Fire, CALFIRE, ISD	Plant trees: <ul style="list-style-type: none"> • 5,000 by 2030 • 10,000 by 2035 • 20,000 by 2045 Increase county tree canopy cover: <ul style="list-style-type: none"> • 10% by 2030 • 15% by 2035 • 20% by 2045 	<ul style="list-style-type: none"> • Number of trees planted • Acres of tree canopy cover 	Short to long term (2025–2045)	\$\$	CAL FIRE Urban and Community Forestry Grant

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