



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Board Report

Office of Sustainability, Resilience and Innovation

- **Climate Action Plan Annual Update**

Climate Action Plan Annual Update Summary

The Metropolitan Board adopted a comprehensive Climate Action Plan (CAP) in 2022. The CAP is a blueprint for how Metropolitan will cost-effectively reduce Greenhouse Gas (GHG) emissions from its operations, including those associated with delivering water through Metropolitan’s Colorado River Aqueduct, to reach the goal of reducing emissions 40 percent by 2030 and reach carbon neutrality by 2045.

This fourth Annual Progress Report highlights Metropolitan’s accomplishments in 2025 and tracks progress on CAP measures. It presents updated 2024 GHG inventory results and the carbon budget used to measure emissions reductions. It also brings the story behind the data to life—showcasing standout successes from the past year and the leadership, collaboration, and innovation across Metropolitan’s departments that are driving emissions reductions, environmental stewardship, and long-term operational sustainability.

Purpose

Informational

Attachments

Attachment 1 – Climate Action Plan Annual Update



Poppies at Diamond Valley Lake

The Metropolitan Water District
of Southern California

2025 Climate Action Plan Implementation Fourth Annual Progress Report

2024 Greenhouse Gas (GHG)
Inventory &
Implementation Update
(through December 2025)



Prepared by:

**THE METROPOLITAN WATER DISTRICT
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April 2026



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Colorado River Aqueduct

Message From the Chief Sustainability, Resilience and Innovation Officer

“ I am pleased to share our 2025 Climate Action Plan Annual Report. This year has reinforced a simple but consequential truth: Addressing climate change is inseparable from our responsibility to provide reliable water to Southern California.

The broader climate context in 2025 has been complex and, at times, sobering. At Climate Week NYC in September, I was encouraged by the commitment of public agencies, utilities, community leaders, and private sector partners who continue to advance practical solutions despite political and economic uncertainty. I was particularly encouraged to participate in so many conversations highlighting the links between water, energy, and climate. While federal funding constraints and shifting policy priorities have created challenges, the collective momentum behind climate adaptation, water resilience, and decarbonization remains evident.

For Southern Californians, catastrophic fires, unpredictable hydrology, and diminishing snowpack have further underscored the urgency of climate action and resilience. These realities demand disciplined planning, thoughtful prioritization, and prudent stewardship of lands and resources. They also remind us that our work must be grounded in partnership with our 26 member agencies, state and federal partners, and the communities we serve.

At the same time, rapid advancements in artificial intelligence are reshaping conversations in water utilities across the globe. AI offers opportunities to improve forecasting, asset management, and system optimization. Yet we are mindful that expanded reliance on data infrastructure carries its own environmental footprint. Our responsibility is to approach these tools with care. We can leverage innovation to strengthen reliability and reduce emissions, while remaining attentive to energy use, data governance, and long-term sustainability.

A significant milestone in 2025 was the adoption of CAMP4W—our Climate Adaptation Master Plan for Water. CAMP4W integrates time-bound greenhouse gas reduction targets into our long-term climate adaptation and water reliability planning. This approach reflects an understanding that resilience and decarbonization are not competing objectives; they are mutually reinforcing elements of a sustainable water system.

The projects highlighted in this report illustrate steady, practical progress. The Casa Loma Siphon Project achieved Envision Silver certification, demonstrating how infrastructure renewal can incorporate sustainability best practices. The Diemer Actuator Repair shows how in-house expertise can reduce greenhouse gas emissions associated with manufacturing and transportation while minimizing downtime and cost.



Message From the Chief Sustainability, Resilience and Innovation Officer

We are also advancing watershed partnerships and operational efficiencies beyond our core facilities. Pilot investigations in the northern Sierra watershed explore how forest health investments can support water supply reliability. Stormwater pilot projects are testing opportunities for groundwater recharge. Sustainable procurement efforts, regraphics waste reduction, zero-emission vehicle deployment, energy efficiency monitoring, battery energy storage installation and other strategic investments reflect incremental but meaningful steps toward a lower carbon and more resilient system.

The progress reflected in this report is the result of sustained effort across many teams and partners. While much work remains, we are committed to advancing climate action in a way that is technically sound, fiscally responsible, and aligned with our core mission. In a year marked by uncertainty and challenge, we remain focused on steady progress that strengthens the systems that serve our region today while preparing for the conditions of tomorrow.



Liz Crosson
Chief Sustainability, Resilience and Innovation Officer

“As climate change reshapes the hydrology of the West, Metropolitan has a responsibility to lead with both innovation and stewardship. Through our Climate Action Plan, we are reducing emissions from our operations while strengthening the resilience of the water systems that nearly 19 million Southern Californians depend on.”

Shivaji Deshmukh
General Manager



Metropolitan is a public agency and regional water wholesaler that delivers water to 26 member agencies that serve nearly 19 million people across six Southern California counties, supporting a \$1.6 trillion economy. Metropolitan is governed by a 38-member board of directors comprising representatives from each of Metropolitan’s member agencies. Metropolitan’s mission is to provide its 5,200-square-mile service area with adequate and reliable supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way.

Introduction

Metropolitan's Climate Planning Framework

Climate action planning is crucial in Southern California due to the region's exposure to severe climate events and the need for adaptation to these impacts. In 2025 we witnessed the escalating climate impacts in the devastating wildfires in the Los Angeles region driven by record-dry conditions and strong winds, causing extensive property loss and hazardous smoke exposure. Southern California also experienced a prolonged drought with record-low precipitation and above-average temperatures, compounded by a delayed wet season and intense rainfall that triggered mudslides. Climate change also continues to compound pressures on imported water supplies. In 2025, the Colorado River—one of Southern California's most critical water resources—remained under long-term drought stress, with hotter and drier conditions reducing runoff and increasing uncertainty in supply reliability.

Responding to the escalating impacts of climate change requires climate leadership. Driven by the institutional values that have guided its environmental stewardship for decades, Metropolitan has joined cities, states, corporations, and universities in adopting and implementing critical climate policies that demonstrate leadership. The cornerstones of climate planning are adaptation and mitigation. Climate adaptation focuses on preparing for and responding to climate-driven changes by strengthening resilience, reducing vulnerability, and maintaining essential services—such as upgrading infrastructure to withstand extreme heat and flooding, diversifying water supplies during drought, and improving emergency response to wildfires and storms. Climate mitigation focuses on addressing the causes of climate change by reducing greenhouse gas (GHG) emissions or enhancing carbon sinks—such as transitioning to renewable energy,



improving energy efficiency, electrifying transportation and buildings, and restoring forests and wetlands to absorb carbon.

Metropolitan has integrated both cornerstones of climate planning—mitigation and adaptation—through the adoption of its Climate Action Plan (CAP) in 2022 and its Climate Adaptation Master Plan for Water (CAMP4W) in 2025, representing critical steps to reduce emissions and address the impacts of climate change on Metropolitan.

The CAP and CAMP4W work together – projects and programs created through these policies complement one another and achieve common goals.

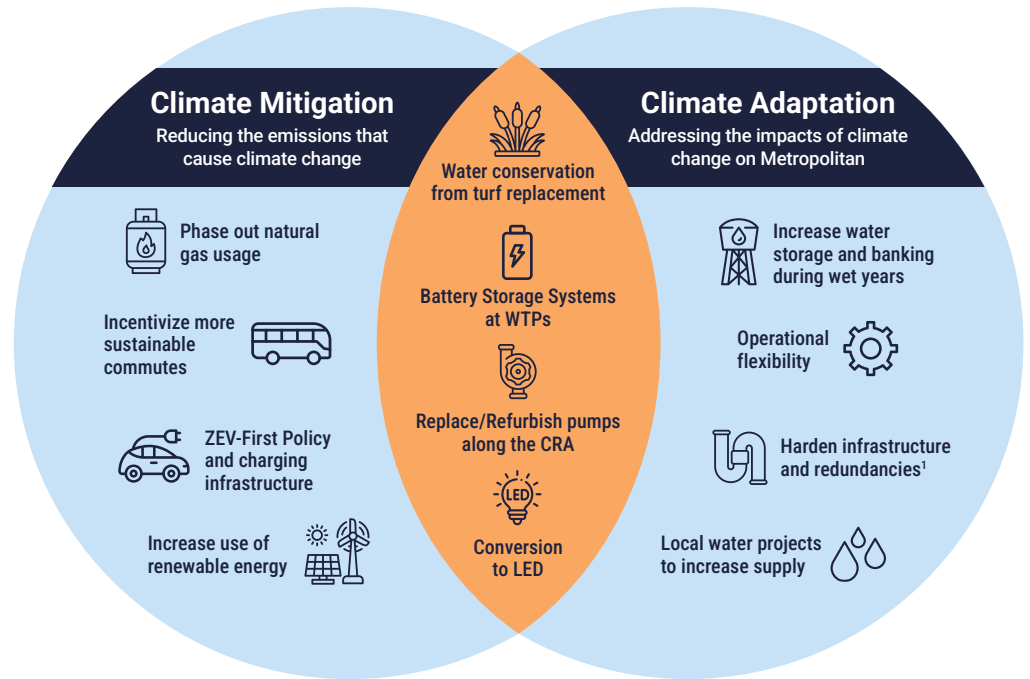
An example (Figure 1 right) is water conservation from Metropolitan's turf replacement program, which supports both climate adaptation and climate mitigation but in different ways.

As climate adaptation, turf replacement reduces outdoor water demand by shifting landscapes from high-water-use grass to climate-appropriate plants. This helps communities adapt to increasing drought frequency, higher temperatures, and more variable precipitation by stretching limited water supplies and improving long-term water reliability during dry periods.

As climate mitigation, turf replacement can lower GHG emissions by reducing the energy needed to pump, treat, and distribute water. In addition, replacing conventional turf eliminates or reduces the use of gas-powered lawn equipment and synthetic fertilizers, which further cuts emissions and nitrous oxide releases.

Turf replacement strengthens resilience to climate impacts while also reducing the emissions that contribute to climate change.

Figure 1. Integration of Mitigation and Adaptation



1. Hardening infrastructure means increasing its ability to withstand climate hazards like wildfire, extreme heat, and flooding through physical changes to the built environment. Examples of hardening are building levees or sea walls, upgrading to fire-resistant materials, or building shade structures.



Theodore Payne Foundation Native Garden Tour

5/11/2026 Committee Meeting 6c Attachment 1, Page 9 of 71

Climate Action Plan and 2025 Annual Progress Report

This fourth Annual Progress Report highlights Metropolitan’s accomplishments in 2025 and tracks progress on CAP measures. It presents updated 2024 GHG inventory results and the carbon budget used to measure emissions reductions. It also brings the story behind the data to life – showcasing standout successes from the past year and the leadership, collaboration, and innovation across Metropolitan’s departments that are driving emissions reductions, environmental stewardship, and long-term operational sustainability.

While this report centers on the Climate Action Plan and Metropolitan’s mitigation efforts, many of the initiatives highlighted advance both climate mitigation and climate adaptation objectives.

Metropolitan’s goal is to reduce GHG emissions by 40 percent by 2030 and achieve carbon neutrality by 2045. These targets are consistent with Senate Bill 32, which requires GHG reductions of at least 40 percent below 1990 levels by 2030, and Assembly Bill 1279, mandating carbon neutrality as soon as possible, but no later than 2045.

The CAP serves as a strategic roadmap for achieving those GHG emission reductions across Metropolitan’s operations in a cost-effective manner, including emissions associated with delivering water through the Colorado River Aqueduct (CRA). The CAP lays out nine key strategies, and 42 measures with clear emissions-reduction targets for core activities such as water conveyance, storage, treatment, and distribution. The measures are divided into two categories; Phase 1 measures are designed to reach their target to cut emissions by 40 percent by 2030, and Phase 2 measures support the goal to achieve carbon neutrality by 2045. CAP measures are either “quantifiable” or “supportive”. Quantifiable measures have clear GHG tracking metrics and performance standards. Supportive measures do not directly reduce GHG emissions but are critical to the success of the CAP. These supportive measures include studies and policies that serve as a foundation for future actions and facilitate collaboration across the departments and organizations. A complete list of Metropolitan’s Climate Measures and their progress can be found on pages 57-59.

The CAP aligns with and strengthens Metropolitan’s broader planning framework, complementing long-term efforts such as the Climate Adaptation Master Plan for Water, Energy Sustainability Plan, and Capital Investment Plan, while supporting California’s climate goals and preparing for future regulatory requirements. Accountability and transparency are central to implementation, with comprehensive GHG data publicly available through the CAPDash website. The plan includes clear timelines, annual progress reporting, a five-year update in 2027, and meets state environmental requirements that streamline GHG review for future projects.

The Climate Action Plan Includes



9 Key Strategies



42 Measures

2025 Highlights

Metropolitan staff continue to advance the Climate Action Plan goals through their deep expertise, dedication, and collaborative spirit. Their hard work and experience are strengthening organizational resilience, accelerating innovative solutions, and driving meaningful, District-wide progress toward a more sustainable future.



Theodore Payne Foundation Native Garden Tour

Building Climate Adaptation and Mitigation through Innovative Infrastructure

Casa Loma Siphon Project

In 2025, Metropolitan earned national recognition for a landmark infrastructure upgrade that advanced both climate adaptation and mitigation objectives. By replacing a nearly century-old section of the CRA crossing the Casa Loma Fault with one of the largest earthquake-resistant pipelines in the world, Metropolitan significantly strengthened the resilience of a critical regional water supply against seismic risk and climate-driven system stress.

Crossing the Casa Loma Fault in the San Jacinto Valley, the original concrete and steel pipe had been damaged over time by ground movement and was vulnerable to a major earthquake. This put the reliability of this critical water supply at risk.

Metropolitan and its contractors replaced the original 148-inch pipe with two parallel barrels of 104-inch diameter Earthquake-Resistant Ductile Iron Pipes that are designed to withstand up to 13 feet of movement during an earthquake. The project was the first to use an earthquake-resistant pipe of this size outside of Japan, where the technology was developed.

The new pipes will lessen the risk of rupture and major water loss during an earthquake. This enhanced reliability supports climate adaptation by safeguarding water deliveries during extreme events and improving long-term system resilience. The more flexible materials are also expected to result in fewer cracks, leaks and the need for repairs, which would generate GHG emissions from heavy-duty construction equipment.

The Institute for Sustainable Infrastructure awarded the project its prestigious Envision Silver Award, citing Metropolitan's willingness to



Casa Loma Siphon

embrace innovative earthquake-resistant pipe technology that could improve the resiliency of the entire water distribution system. Metropolitan is in the process of incorporating the Envision sustainability approach into a wide range of its Capital Investment Plan projects.

Advancing Climate Resilience and Reducing GHG Emissions through Restoration

Forest Health Initiative

Metropolitan has partnered with Blue Forest, a 501(c)(3) nonprofit, to conduct three pilot investigations that will evaluate the potential benefits of protecting forest health in northern Sierra watersheds, including the Upper Feather River Watershed – headwaters of the State Water Project (SWP).

Wildfires are becoming more frequent and more severe in California and across the West. Since 2018, catastrophic wildfires have burned more than 1.5 million acres in the Feather River Watershed. The fires have devastated communities and threaten California's drinking water supplies. Wildfires are also a significant source of planet-warming carbon emissions.

The restoration projects – two in the Feather River watershed above Lake Oroville and one in Upper Butte Creek – are tailored to the needs of each watershed. The work includes forest thinning, forest restoration after wildfire, and protection of areas not recently burned.

Through the restoration, project teams seek to better understand the effect of improving watershed health on water quality, water supply, habitat protection, wildfire risk reduction, and carbon sequestration. For example, programs to thin out dense forests would help reduce the severity of wildfires and limit evapotranspiration, as fewer trees use less water.

If the restoration projects produce demonstrable benefits for water quality and water supply, larger water agencies may be more inclined to invest in watershed health. With more funding for ecological forest management, California would increase climate resilience, decrease the risk of catastrophic wildfires, and protect communities.



Forest Health Initiative (Photo Courtesy of Blue Forest)

Strengthening Climate-Resilient Local Supplies through Stormwater Recharge

Stormwater capture and use continue to advance as a critical strategy for strengthening regional water supply resilience, enhancing groundwater recharge, and adapting to increasingly variable precipitation patterns driven by climate change. Metropolitan is evaluating several different types of stormwater opportunities by developing stormwater for groundwater recharge and direct use pilot programs. In addition to supply and resilience benefits, these approaches can also contribute to greenhouse gas (GHG) reductions: capturing and using stormwater locally—particularly for onsite or near-site direct use—can lower overall energy use intensity compared to more energy-intensive imported, pumped, and distributed supplies, thereby reducing associated GHG emissions.

In 2025, Metropolitan successfully completed its first Stormwater for Recharge pilot project in partnership with Western Municipal Water District at the Victoria Recharge Basin in Riverside. Metropolitan funding supported enhanced monitoring and operational improvements, including remote flow measurement and level-sensing devices that enable greater stormwater capture and recharge during heavy rains. The final monitoring report was submitted in September, providing critical data to inform future stormwater recharge investments. In March, the board authorized a new Stormwater for Recharge Pilot Program agreement with the City of Anaheim for the State College Stormwater Tank Project, which will divert stormwater through a reactivated pipeline to support groundwater recharge.

Stormwater for Direct Use means capturing and reusing runoff for on-site irrigation or other non-potable uses. Direct use of stormwater remains an emerging approach to stormwater reuse, with 2025 focused on overcoming early implementation challenges and positioning projects for meaningful performance evaluation. The board authorized extensions of agreements with Culver City (Culver Boulevard Project) and Long Beach (Rancho Los Cerritos Project) to allow sufficient time to complete construction of the projects and collect data.

By piloting stormwater recharge and direct-use projects, addressing real-world constraints, and prioritizing robust monitoring, Metropolitan is building the technical and operational knowledge needed to scale stormwater strategies in support of reliable, climate-resilient local supplies in the years ahead.



Victoria Recharge Basin

Metropolitan also co-funds stormwater studies and pilots through the Future Supply Actions Funding Program. Examples include a direct use demonstration project with the City of Santa Monica and LADWP's Stormwater Master Plan.

Reprographics Leads the Way – Implementing Sustainability Actions for Cost and Waste Reduction

The Imaging Services program supports the Climate Action Plan by prioritizing sustainability, operational efficiency, and cost effectiveness across all printing and reprographics activities. By producing custom quantities of printed collateral, the program team minimizes overruns and eliminates unnecessary storage, reducing both material waste and space requirements. Paper stock is routinely reused for items such as notepads and notebooks, and print substrates are maximized by coordinating and combining requests from multiple teams into a single production run.

In-house printing further reduces carbon emissions by minimizing the number of vendor deliveries and pickups, while the use of certified recycled paper supports environmentally responsible sourcing practices.

The team also works closely with customers to reduce overall material needs, such as recommending coil binding in place of three-ring binders and identifying opportunities to reuse banner bases. Real-time quality checks and on-the-fly corrections prevent reprints, which saves paper, energy, and labor. Centralized



Reprographics Technician III Oscar Real

production of common items, such as calendars and notebooks, reduces duplicative departmental orders and associated deliveries, resulting in measurable environmental benefits while maintaining high service quality and controlling costs.

Innovative In-House Fix Reduces Cost and Waste



Robert B. Diemer Water Treatment Plant



Diemer Actuator Repair Team

At the Robert B. Diemer Water Treatment Plant in Yorba Linda, field staff and engineers developed an innovative retrofit for valve actuators – key devices that open and close valves to control water flow in the treatment process. Their in-house upgrade to the actuators minimized the time the equipment was offline, preventing major disruption to water treatment

operations, and saved an estimated \$3 million since 2022 by avoiding filter downtime, costly change orders and removal of the 120 heavy actuators. Their fix also avoided thousands of hours of heavy construction work and equipment emissions.

Staff Drive Energy Efficiency at Metropolitan's Water Treatment Plants

Metropolitan partners with Southern California Edison to implement the SPARKe program

Staff at the Diemer, Weymouth and Skinner water treatment plants are demonstrating how operational expertise can play a central role in advancing energy efficiency across Metropolitan's water treatment facilities. Through a partnership with Southern California Edison and its SPARKe Strategic Energy Management Program, plant staff are identifying practical, low-cost opportunities to reduce energy use while maintaining reliable treatment operations.

The SPARKe program supports large energy users by focusing on operational and maintenance improvements to improve energy efficiency, rather than major capital projects. Diemer, Weymouth and Skinner WTPs, plant operators, engineers, and maintenance staff are working closely with energy coaches and technical specialists to evaluate how equipment and treatment processes consume energy throughout the facility. Using plant performance data and hands-on assessments, staff are identifying opportunities to reduce energy waste and improve system efficiency.



As a two-year energy audit program, the SPARKe programs includes “Treasure Hunts,” workshops, and on-site assessments. Plant staff are leading the effort to uncover quick-return efficiency opportunities and develop long-term energy management strategies. These exercises draw directly on the operational knowledge of plant personnel, empowering them to identify improvements in pumping, treatment processes, and facility operations.

The initial site visits at the three WTPs established an energy baseline to measure efficiency gains against. Cascade Energy has validated the efficient operations and equipment use at Diemer and are currently evaluating Weymouth and Skinner.



SPARKe Program Meeting at Skinner

With the assistance of Cascade Energy, the program also analyzes real-time performance data to track progress, sets measurable goals, and informs day-to-day operational decisions. This approach not only reduces energy use and associated GHG emissions, but also strengthens staff expertise in energy management and decarbonization—turning plant teams into active drivers of continuous improvement.

In addition, SPARKe provides access to enhanced financial incentives for operational improvements, retro-commissioning, capital upgrades, and electrification measures. Funded through the Public Purpose Program already included in utility bills, the program enables Metropolitan to capture energy savings and sustainability benefits without additional program costs.



SPARKe Program Visit at Weymouth

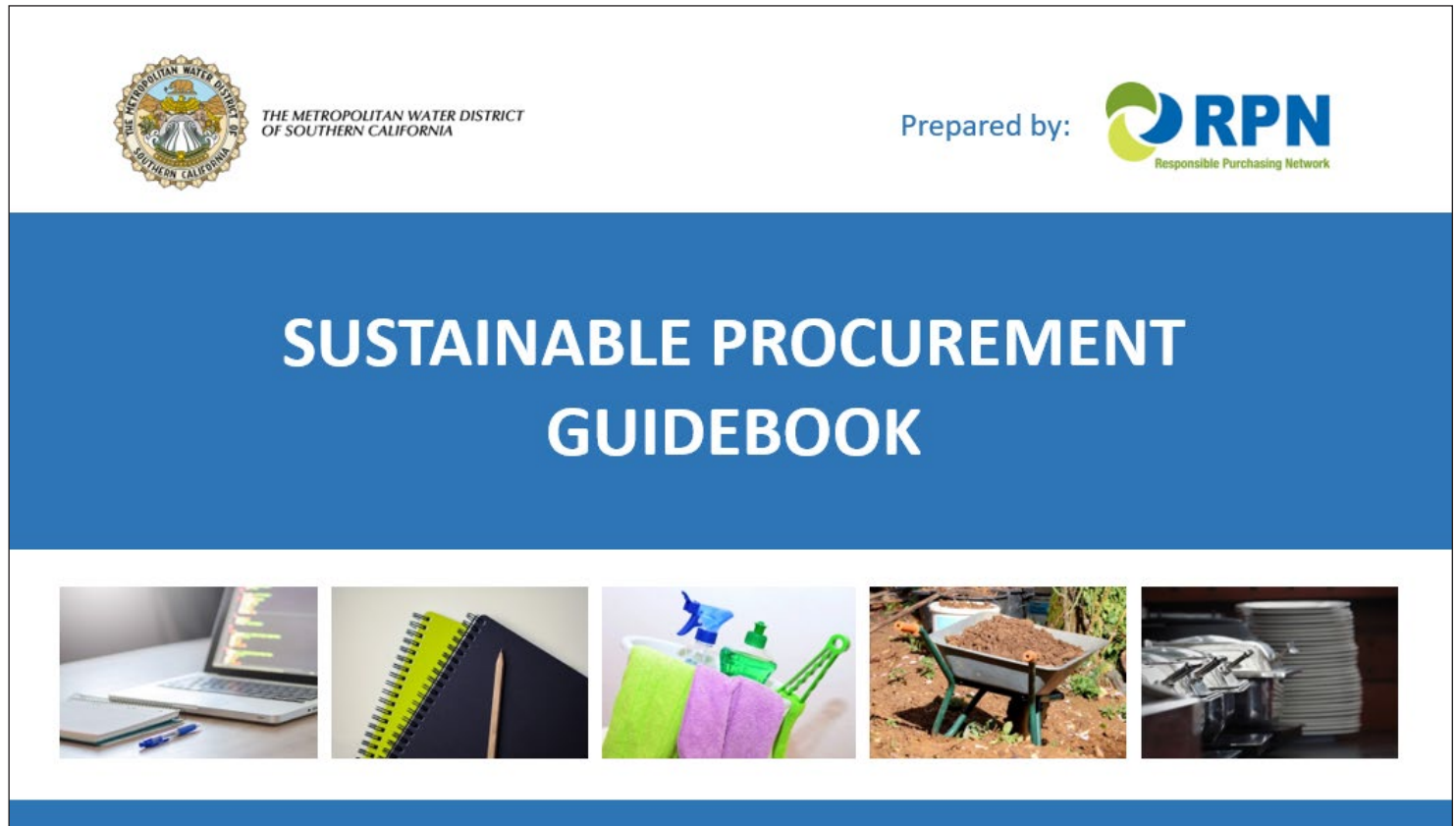
Reducing Carbon and Waste with Sustainable Procurement

Purchasing decisions influence environmental impacts far beyond an organization's own operations. By prioritizing energy-efficient equipment, low-carbon materials, and products made with recycled or responsibly sourced content, organizations reduce emissions from manufacturing, transportation, and use. Purchasing durable, repairable, and reusable products reduces the need for frequent replacement. Selecting items with minimal or recyclable packaging and avoiding single-use products helps prevent waste from entering landfills.

Metropolitan recognizes that sustainable procurement is a powerful tool for climate action and waste reduction.

The district is developing a Sustainable Procurement Program that guides how everyday items such as office supplies, cleaning products, electronics, building materials, and fleet equipment are selected and purchased.

A major accomplishment in 2025 was the completion of Metropolitan's Sustainable Procurement Guidebook, which provides practical recommendations for choosing more environmentally responsible products across a wide range of categories. To support successful implementation,



Metropolitan trained more than 100 employees and hosted a district-wide "Lunch and Learn" to introduce sustainable procurement principles and tools.

Next steps include final adoption of the new operating policies, updating procurement tools such as the requisition checklist E-Form, and revising internal processes to fully integrate sustainable procurement into purchasing decisions.

Delta Restoration: Leveraging Nature-Based Solutions to Address Climate Change

Metropolitan is advancing key strategies of its Climate Action Plan through Bay-Delta Initiatives that deliver measurable GHG reductions while restoring critical Delta landscapes. Funded by a \$20.9 million Nature-Based Solutions grant from the Sacramento-San Joaquin Delta Conservancy, the Webb Tract Rice Conversion and Wetland Restoration Projects exemplify Metropolitan's CAP strategy to implement science-based, nature-driven solutions that reduce emissions, increase carbon sequestration, and enhance long-term resilience.

The Webb Tract Rice Conversion Project supports CAP emissions-reduction goals by converting conventional farmland to rice cultivation, which reduces peat soil oxidation and associated carbon emissions. In 2026, Metropolitan identified a farming partner. Grading for the Rice Conversion Project is expected to begin in 2026, with a minimum of 500 acres scheduled for planting in 2027 and a goal to cultivate at least 1,000 acres of rice by 2028. Once operational, the project will deliver sustained, long-term GHG reductions contributing to CAP targets.

To ensure reductions are measurable and verifiable, Metropolitan completed a full year of baseline GHG monitoring across Webb Tract prior to implementation, which included measuring ecosystem-scale carbon dioxide and methane fluxes using the eddy covariance technique, which allowed continuous measurements without disturbing soil or vegetation. Also collected were non-continuous, monthly measurements of carbon dioxide, methane, and nitrous oxide fluxes to assess spatial variability and nitrous oxide emissions. The monitoring confirms higher-than-expected peat soil emissions, underscoring the value of CAP-aligned interventions and establishing a strong basis for quantifying future reductions.



Pond on Webb Tract

The Webb Tract Wetland Restoration Project advances the CAP's focus on nature-based solutions by restoring approximately 3,000 acres of wetlands and upland habitat. The project will reverse subsidence, create habitat, reduce GHG emissions, and sequester carbon while supporting regional ecosystem resilience. Design is 99 percent complete, and major regulatory milestones—including California Environmental Quality Act (CEQA) compliance and receipt of a Clean Water Act Section 401 permit—were achieved in 2025. Pending receipt of remaining permits and approval by Metropolitan's Board of Directors, construction is expected to begin in mid-2026, with initial wetland inundation in fall 2027, and project completion in 2028.

Palo Verde Valley: Regenerating Soil, Reducing Water

In support of Climate Action Plan Strategies 8 and 9, Metropolitan initiated a pilot in the Palo Verde Valley to evaluate soil health-based agricultural practices that may improve water conservation and enhance carbon sequestration potential. The pilot is assessing whether improvements in soil biological function in alfalfa fields—a water-intensive crop—can measurably improve water infiltration, reduce surface runoff, and reduce irrigation demand while maintaining crop productivity. The project is also evaluating the potential for increased soil carbon sequestration associated with improved soil structure and organic activity. Early field observations indicate faster water absorption following rainfall events. Data on water use, soil performance, and yield are under collection to determine scalability and long-term climate benefits.



Cover Crops on HayDay Farms Study Field

Progress on CAP Goals

Metropolitan’s CAP established a carbon budget designed to achieve carbon neutrality by 2045. To track its progress and ensure Metropolitan stays within its carbon budget, a GHG emissions inventory is completed on an annual basis. This section summarizes Metropolitan’s 2024 GHG emissions inventory, discusses notable drivers of emissions changes, includes CAP measure implementation progress updates through 2025, and provides a carbon budget status update.



click on image above to view latest data

Metropolitan uses CAPDash², a web-based tool that allows the public to view our progress toward our GHG emission reduction targets. Data is categorized by various strategies Metropolitan is employing, from operational fuel use to employee commuting, and is visualized in interactive charts and graphics that facilitate greater transparency.

2. https://cap.rinconconsultants.com/Metropolitan_Water_District



Diemer Water Treatment Plant

Annual GHG Inventories, Carbon Budget Update, and Implementation Progress

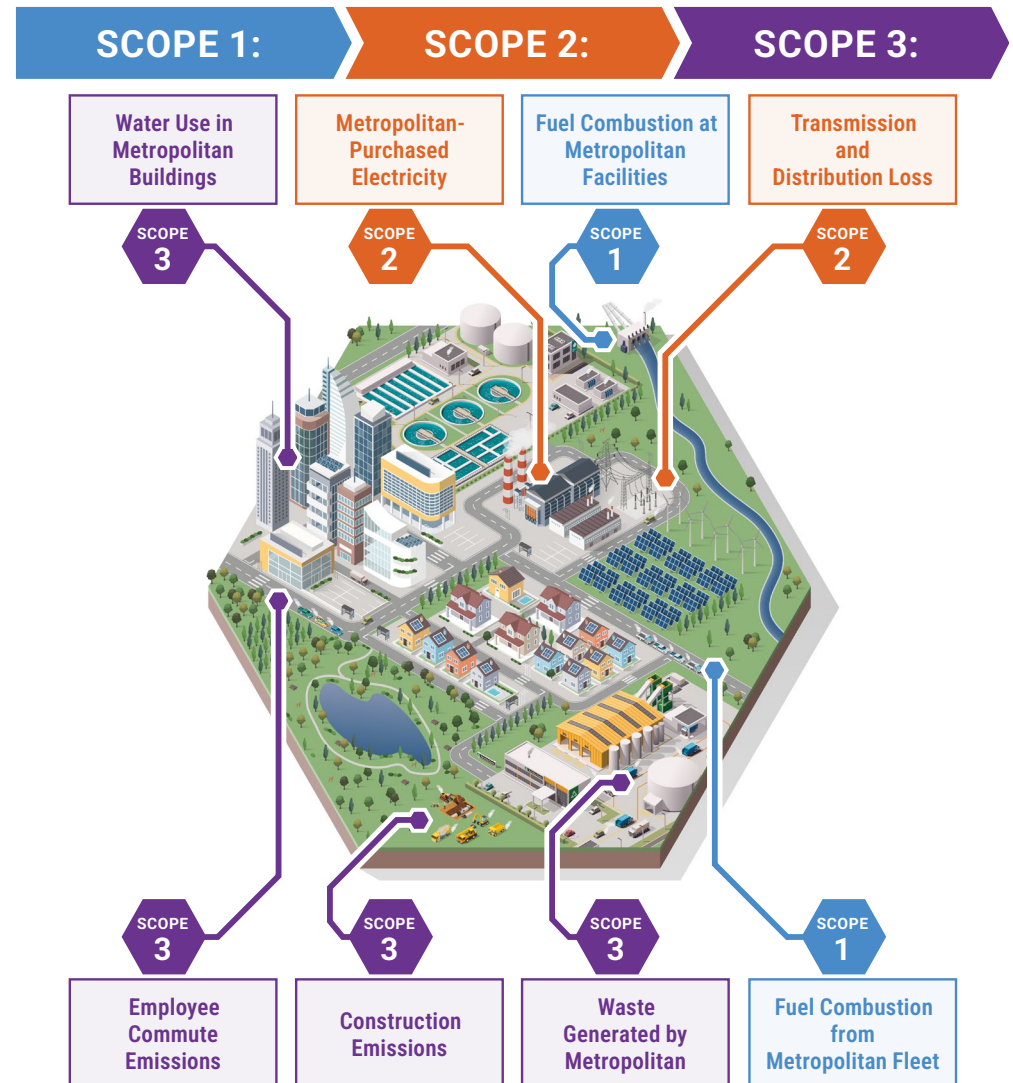
During development of the CAP, Metropolitan prepared annual GHG emissions inventories for 2005 through 2020. Taken together, the historical inventories highlight emissions trends over time, which Metropolitan operations drive overall GHG emissions, and the largest opportunities for reductions to meet Metropolitan’s targets.

Metropolitan has continued to prepare annual inventories to track progress towards their GHG reduction targets. This Annual Progress Report (APR) includes a GHG inventory update and provides an overview of Metropolitan’s GHG emissions data from 2005 through 2024. The 2024 inventory was prepared in accordance with protocols from The Climate Registry (TCR) and the International Council for Local Environmental Initiatives.^{3,4} Emissions are grouped into categories, as defined below:

Scope 1: Direct Emissions – associated with fuel use and unintended fugitive emissions.

Scope 2: Indirect Emissions – associated with the purchase and consumption of electricity. Electricity use is directly impacted by water pumping requirements.

Scope 3: Other Indirect Emissions – includes other indirect emissions not captured in Scope 2, such as those associated with employee commutes, waste generation, water consumption at Metropolitan facilities, and emissions from construction projects.



3. TCR. <https://theclimateregistry.org/registries-resources/protocols/>.

4. International Council for Local Environmental Initiatives. 2010. Local Government Operations Protocol. <http://iclei.usa.org/GHG-protocols/>.

This section summarizes Metropolitan’s 2024 greenhouse gas (GHG) emissions, compares them to 2023, and identifies the primary drivers of emissions trends. It also outlines CAP measure implementation progress by scope, highlighting key measures where progress has been made and summarizing implementation status and actions taken. A complete overview of CAP measure status, including measures completed in prior years, is provided in the Appendix.

2024 GHG Inventory Overview

Metropolitan’s organization-wide GHG emissions for 2024 were estimated at 264,766 metric tons of carbon dioxide equivalent (MT CO₂e). Compared to 2023, emissions increased 84 percent, largely due to a 97 percent rise in Scope 2 electricity emissions associated with water conveyance and pumping operations.⁴ Higher regional water demand and reduced reliance on State Water Project (SWP) supplies drove increased pumping along the Colorado River Aqueduct (CRA), resulting in an estimated 400,000 megawatt-hours (MWh) increase in electricity use.

Electricity used for CRA pumping is reported as Scope 2 emissions because these facilities are under Metropolitan’s operational control. In contrast, emissions associated with SWP water deliveries are not reported under Scope 2. As shown in Figure 2 and Table 1, electricity remains the primary source of overall emissions at 246,820 MT CO₂e, representing 93 percent of total organizational emissions.⁵

Scope 1 and Scope 3 emissions continued to comprise a relatively small share of total emissions. Scope 1 emissions decreased 15 percent due to reduced fuel combustion, fleet electrification, and Metropolitan’s full transition to renewable diesel, while Scope 3 emissions increased modestly (3 percent) primarily due to higher construction activity in 2024.

5. This total is inclusive of transmission and distribution losses which account for 4,601 MT CO₂e of the 246,819 MT CO₂e Scope 2 emissions.

Figure 2. 2024 GHG Emissions by Scope (MT CO₂e)

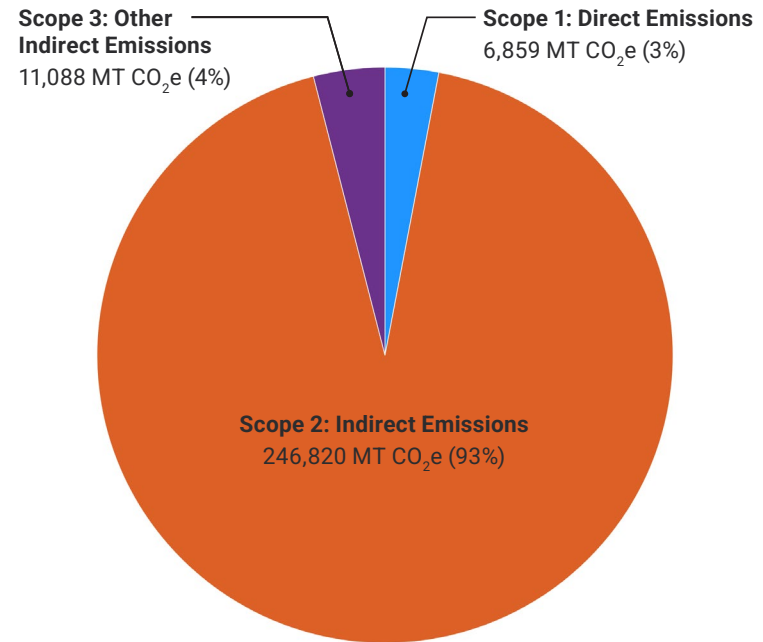


Table 1. 2023 and 2024 GHG Emissions Comparison (MT CO₂e)

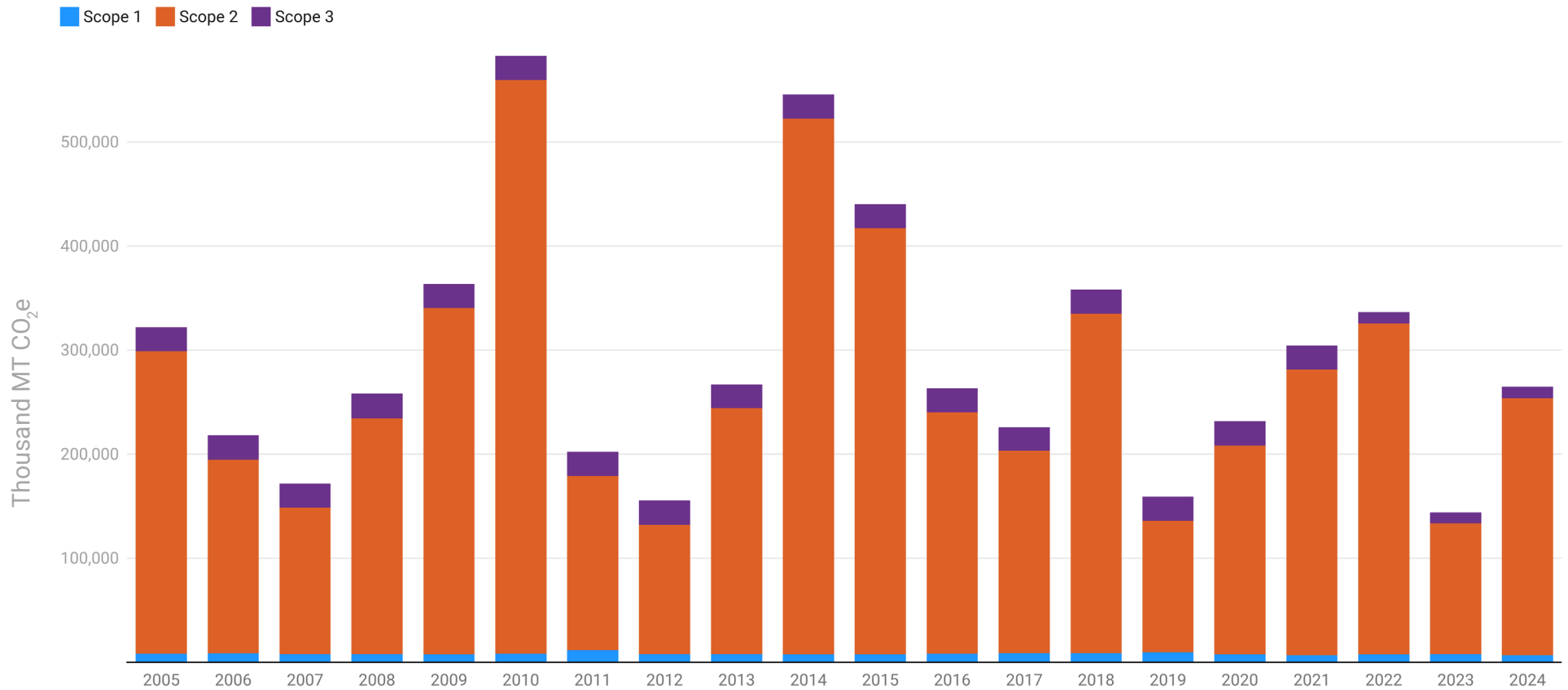
Scope	Emissions Source	2023 Annual Emissions*	2024 Annual Emissions	Change in Emissions	Percent Change Year Over Year
1	Mobile Emissions	6,293	5,626	-667	-11%
	Stationary Emissions	1,626	1,119	-507	-31%
	SF6/HFC Fugitive Emissions	107	114	7	6%
2	Electricity	123,308	242,219	118,911	96%
	T&D Losses	2,205	4,601	2,396	109%
3	All Other Indirect Emissions	10,740	11,088	348	3%
Total		144,279	264,766	120,486	84%

Values are rounded to the nearest whole number.

*2023 Annual Emissions updated to reflect The Climate Registry (TCR) verified data.

Metropolitan's GHG emissions fluctuate from year to year, depending mainly on the amount of water being pumped from the CRA, which Metropolitan owns and operates. Higher availability of SWP supplies, operated by the State of California, allows Metropolitan to reduce CRA pumping and lower its GHG footprint. Conversely, in drought years with reduced SWP allocations, more CRA pumping is required, increasing electricity demand and associated GHG emissions. This relationship between electricity use and annual emissions is demonstrated in Figure 3, which shows annual emissions by scope from 2005 through 2024.

Figure 3. Annual Emissions by Scope 2005-2024 (MT CO₂e)



A Closer Look: 2024 GHG Inventory and CAP Implementation Through 2025 by Scope

The following section provides a closer look at Metropolitan's GHG emissions by scope and summarizes implementation progress through 2025 for the CAP strategies that guide emissions reductions within each category. For each scope, this section first describes recent emissions trends and key drivers of change, followed by highlights of progress toward implementing applicable CAP measures.

Metropolitan's CAP includes nine mitigation strategies and 42 individual measures designed to reduce operational emissions across facilities, fleet operations, electricity procurement, employee commuting, waste management, and procurement practices. This section highlights representative measures demonstrating significant progress, major milestones, or notable implementation challenges. Not all CAP measures are summarized here; a comprehensive accounting of implementation status for all measures is provided in the Appendix.

Together, the inventory results and implementation updates illustrate an important distinction: Annual emissions may vary substantially due to operational conditions, while sustained implementation of CAP strategies continues to advance Metropolitan toward long-term emissions reduction goals.



Eagle Mountain Pumping Plant



Zero Emission Vehicle and Solar Panels

Scope 1: Direct Emissions: Trends and Key Drivers

Emissions from Combustion and Fugitive Emissions

Metropolitan's 2024 Scope 1 emissions comprised approximately 3 percent of total emissions and decreased 15 percent from 2023, reflecting progress in addressing mobile and stationary emissions sources. The largest source of Scope 1 emissions continues to be mobile combustion of fossil fuels such as gasoline.

MOBILE COMBUSTION

Mobile fuel combustion remains the largest source of Scope 1 emissions, comprising approximately 82 percent of Scope 1 emissions. Mobile-fuel emissions decreased from 6,293 MT CO₂e in 2023 to 5,626 MT CO₂e in 2024 (an 11 percent decrease). The key changes by fuel type are:

- **Gasoline** emissions dropped from about 5,479 MT CO₂e in 2023 to about 5,437 MT CO₂e in 2024 (a less than 1 percent decrease). Gasoline reductions are likely due to an increase in electric vehicle use at Metropolitan as well as annual variations in vehicle usage.
- **Diesel (fossil and renewable)** emissions decreased from 650 MT CO₂e in 2023 to 23 MT CO₂e in 2024 (a 96 percent decrease).⁶ This substantial drop is due to Metropolitan fully transitioning to renewable diesel, resulting in no GHG emissions from fossil diesel.
 - **Renewable diesel** emissions remained static in 2024, at 23 MT CO₂e.
- **Jet fuel** increased from 134 MT CO₂e to 150 MT CO₂e (a 12 percent increase).
- **Compressed natural gas** emissions dropped from 30 MT CO₂e to 16 MT CO₂e (a 46 percent decrease).

6. For the purposes of reporting to TCR, Metropolitan applies the fossil diesel emission factor to renewable diesel, resulting in an increase in reported emissions from mobile combustion of diesel; however, for the CAP APR and tracking operational emissions against the carbon budget, using a calculated renewable diesel emissions factor better reflects the GHG reduction benefits of renewable diesel. Since renewable diesel is derived from organic feedstocks the carbon is considered net neutral, and therefore is removed from the emission factor for renewable diesel.



Advanced Clean Fleets Expo

STATIONARY COMBUSTION

Stationary fossil-fuel combustion at Metropolitan facilities is the second largest source of Scope 1 emissions, comprising approximately 16 percent of Scope 1 emissions in 2024. In 2024, stationary equipment combustion of fuels resulted in 1,119 MT CO₂e, a decrease of 31 percent from 1,626 MT CO₂e in 2023. Most of the changes in stationary combustion are likely due to annual variation such as the need for emergency generators. Key changes by fuel type include:

- **Diesel (fossil)** emissions decreased from 608 MT CO₂e in 2023 to 358 MT CO₂e in 2024 (a 41 percent decrease).
- **Natural gas** emissions decreased from 992 MT CO₂e in 2023 to 733 MT CO₂e in 2024 (a 26 percent decrease).
- **Propane** emissions increased marginally from 26 MT CO₂e in 2023 to 28 MT CO₂e in 2024 (a 7 percent increase).

FUGITIVE EMISSIONS

Fugitive emissions of sulfur hexafluoride (SF₆) from electrical equipment and hydrofluorocarbons (HFCs) from refrigerants/welding gases remain a small fraction of Scope 1 emissions.

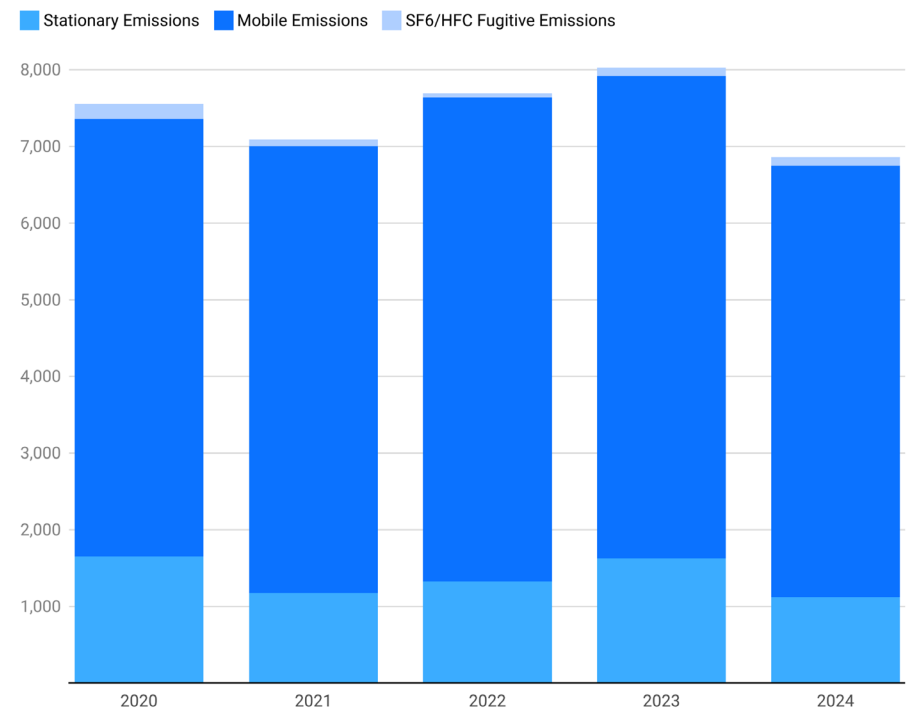
- **SF₆** remained static at zero (0) MT CO₂e in 2024.
- **HFC** fugitive emissions increased marginally from 107 MT CO₂e in 2023 to 114 MT CO₂e in 2024 (a 6 percent increase).

Overall, total Scope 1 emissions decreased by approximately 15 percent between 2023 and 2024, driven by decreases in usage across the primary fuel types, gasoline and diesel for mobile combustion, and natural gas and diesel for stationary combustion. Part of these decreases is due to Metropolitan's ongoing strategy of replacing fossil-fuel based diesel with renewable diesel, which continues to mitigate a portion of these emissions as well as the electrification of fleet vehicles.

Figure 4 shows Metropolitan's Scope 1 emissions by source for 2020-2024. In 2024, Metropolitan replaced 100 percent of its mobile combustion diesel fuel use with renewable diesel. The result of these efforts was the lowest annual total for Scope 1 emissions since Metropolitan began GHG inventories in 2005.



Figure 4. Scope 1 Emissions by Source 2020-2024 (MT CO₂e)





California Air Resources Board June 2025 Visit

Scope 1: Emissions Reductions Progress

To reduce Scope 1 emissions, Metropolitan has begun identifying opportunities for electrification of both buildings and vehicles and has shifted to renewable fuels for near-term GHG emissions reductions.

STRATEGY 1: Phase Out Natural Gas Combustion at Facilities**Measure DC-2 Reduce Natural Gas Usage by 50 percent by 2030 and 100 percent by 2045.**

STATUS: 40%

40%



Measure DC-2 focuses on reducing natural gas usage by 50 percent by 2030 and 100 percent by 2045. Although natural gas equipment remains in use across many Metropolitan facilities, total natural gas consumption has declined since the 2017 baseline, resulting in cumulative savings of approximately 21,138 MMBtu, or 40 percent of the CAP savings target. These reductions are primarily attributable to the retirement of on-site co-generation units.

In 2024, Metropolitan completed a comprehensive inventory of natural gas–fueled equipment and began updating the inventory in 2025 to track retrofits and replacement decisions. Findings indicate that while new equipment is often electric, existing natural gas equipment has largely been replaced on a like-for-like basis or had replacement deferred. For larger capital projects, such as the boiler (HVAC) retrofit at Headquarters, electrification options (e.g., heat pumps) are still challenging. Additional feasibility studies are needed to assess safety, cost, and operational impacts. However, additional emissions reductions are expected through future phase-out of smaller natural gas water heating and HVAC systems identified in the natural gas audit, supported by increased electrification guidance and feasibility analysis.



Diemer Water Treatment Plant

STRATEGY 2: Zero Emission Vehicle Fleet

Measure FL-3 Replace fossil fuel vehicle fleet as identified in the ZEV/EV feasibility study.

STATUS:
Underway



In 2025, Metropolitan advanced Measure FL-3 by prioritizing replacement of critical fleet assets to maintain operational resiliency while expanding adoption of cleaner and zero-emission technologies where feasible. Metropolitan issued purchase orders for 88 battery electric (BEV) pickup trucks, one Class 8 BEV heavy-haul tractor, two battery electric off-road telehandlers, and one heavy-duty battery electric front-end loader, reflecting a strategic focus on transitioning high-use vehicles to zero-emission alternatives when duty cycles can be met.

Metropolitan also continued electrification of off-road and warehouse equipment, replacing 10 large spark-ignition forklifts with battery electric forklifts in 2025. To support expanding field operations, Metropolitan issued its first purchase order for a mobile battery charging solution to enable EV charging in remote locations and during facility shutdowns.

Where zero-emission technologies were not yet operationally viable, Metropolitan continued to reduce emissions through cleaner alternatives. In 2025, Metropolitan replaced two Class 7 CNG pony trucks with newer, more efficient models and purchased 10 Tier 4 Final portable diesel generators to replace older Tier 1-3 units. An additional 10 pieces of portable diesel equipment, including pumps, air compressors, and blowers, were also replaced with Tier 4 Final equipment, significantly reducing particulate matter and NOx emissions. These fleet upgrades had direct emissions benefits as shown by Metropolitan's lowest Scope 1 emissions year on record.

Measure FL-4 Install EV Charging and/or ZEV infrastructure.

STATUS:
Underway



In 2025, Metropolitan continued implementation of its long-term capital program to deliver charging infrastructure for fleet, rideshare, and employee zero-emission vehicles (ZEVs). Metropolitan established maximum EV load requirements for all 18 planned district charging hubs using fleet telematics, vehicle domicile data, and applicable green building codes. While utility coordination is underway for full-scale infrastructure delivery, Operations and Engineering installed 21 chargers (supporting 30 charging spaces) in 2025, with more than 70 additional charging spaces currently in progress to support the expanding EV fleet.

In addition, the Headquarters ZEV Infrastructure constructability review was completed in March 2025, and the Weymouth constructability review is scheduled for April 2026. These multi-million-dollar projects require extensive planning, including evaluation of power connection options to maintain system reliability, coordination with near- and long-term capital improvement projects to avoid rework, and alignment on charger quantities, types, locations, and backup power needs for mission-critical vehicles.

To complement permanent infrastructure, Metropolitan also explored alternative charging solutions. In April 2025, SRI and Fleet hosted a demonstration of Dragon Wings, a solar-generated portable multi-port charger, at the Jensen Filtration Plant, allowing employees and partner agencies to test the equipment. In November 2025, SRI, Fleet and Engineering Services met with L-Charge to evaluate an off-grid, natural gas-powered charging solution, with an on-site demonstration planned for early 2026. In addition to evaluating Charging-As-A-Service on-site and mobile charging alternatives, contracts with commercial off-site vehicle charging were established.

STRATEGY 3: Use Alternative Fuels to Bridge the Technology Gap to ZEV Fleet and Equipment

Measure AF-3 Use Renewable Diesel Fuel in 100% of Diesel-Consuming On-Road and Off-Road Vehicles by 2025.

STATUS: 100%*

100%



Measure AF-3 directs Metropolitan to use renewable diesel for all mobile fuel uses by 2025. Following the transition of all available fuel contracts to renewable diesel in February 2023, Metropolitan is currently achieving 100 percent renewable diesel use for diesel-consuming mobile equipment, meeting the 2025 target. Renewable diesel continues to serve as a key near-term strategy for reducing combustion-related GHG emissions while the transition to zero-emission vehicles progresses. In 2024, Metropolitan purchased approximately 71,096 gallons of renewable diesel, and in 2025 initiated a competitive procurement process to secure a renewable diesel fuel supplier contract to support continued use.

While Metropolitan achieved 100 percent implementation in 2025, renewable diesel market conditions may affect future feasibility. Industry indications suggest that supply may become increasingly constrained beginning in 2026 following the expiration of federal Renewable Identification Number (RIN) credits in January 2025, resulting in reduced supplier participation and higher price premiums relative to conventional diesel. These conditions may be more challenging for facilities outside the Los Angeles Basin due to increased transportation costs and distance from fuel centers. Metropolitan will continue to monitor market conditions and evaluate procurement options to maintain renewable diesel use to the extent feasible.

**Percent complete based on 2024 data.*



Renewable Diesel Fuel



Solar Panels at Weymouth

Scope 2: Indirect Emissions: Trends and Key Drivers

Emissions from Electricity Use

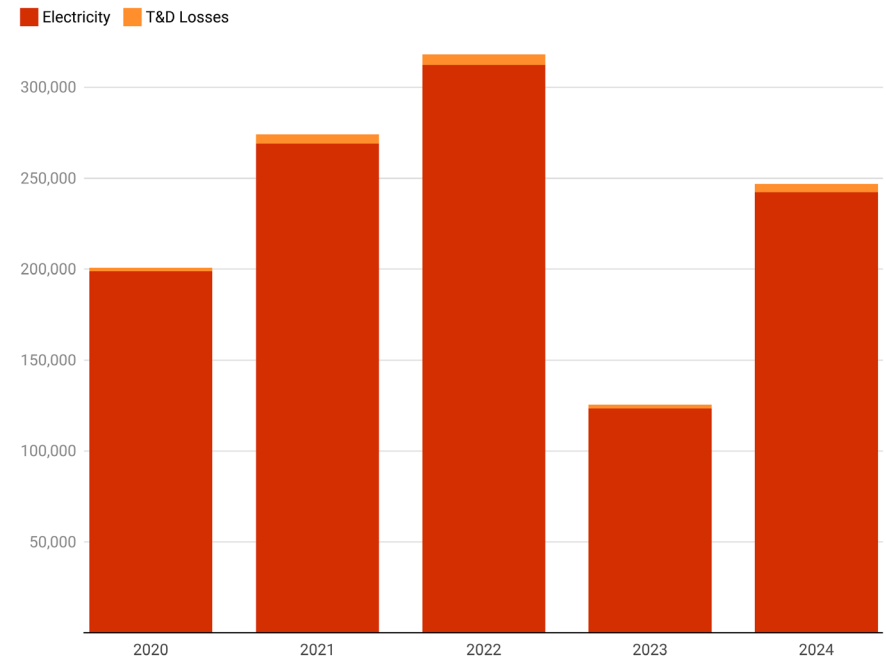
Historically, Scope 2 (purchased electricity) has comprised the majority of Metropolitan’s emissions. In 2024, Scope 2 maintains its position as the largest share of overall GHGs and increased by 97 percent in absolute terms between 2023 and 2024. These large swings in electricity consumption are normal for Metropolitan and are due to increased pumping demands from the CRA. In 2023, Metropolitan used over 1.3 million MWh of electricity, bringing Scope 2 emissions to about 87 percent of total emissions. In 2024, electricity use increased to 1.9 million MWh, increasing Scope 2 emissions to about 93 percent of Metropolitan’s total GHG inventory. The increase in electricity consumption was driven by a 45 percent increase in CRA pumping between 2023 and 2024, as higher Colorado River flows allowed Metropolitan to operate CRA pumps more frequently and reduce reliance on SWP supplies. SWP allocations were also much less (40 percent) in 2024 compared to 2023 (100 percent) requiring additional pumping from the CRA to make up the difference. Transmission and distribution losses comprise 2 percent of Scope 2 emissions, the same percentage as 2023, though absolute emissions increased proportionally with electricity use, from 2,205 MT CO₂e in 2023 to 4,601 MT CO₂e in 2024.

Figure 5 shows Metropolitan’s Scope 2 emissions by source for 2020-2024.

Electricity emissions (excluding T&D losses) rose from 123,308 MT CO₂e in 2023 to 242,219 MT CO₂e in 2024, representing a 96 percent increase. While increased electricity demand associated with CRA pumping was the primary driver, emissions were also influenced by a modest increase in the average electricity emission factor. The emission factor increased in 2024 due to a substantially higher share of electricity purchased from the California Independent System Operator (CAISO) wholesale market, which more than doubled compared to 2023 and raised the blended emission factor for wholesale power. Regardless, emissions per MWh of electricity remain lower than historic values due to significant changes in electricity procurement.

Despite year-to-year fluctuations, Scope 2 emissions remain the largest component of Metropolitan’s overall GHG footprint, consistent with historical trends. Ongoing efforts, such as switching to green tariff options (Measure E-3), investing in carbon-free energy to operate along the CRA and prioritizing lower-emission wholesale electricity (Measure E-5), are crucial to decarbonizing the power supply and will remain Metropolitan’s most impactful Scope 2 mitigation strategies.

Figure 5. Scope 2 Emissions by Source 2020-2024 (MT CO₂e)





SPARKe Program Visit at Diemer

Scope 2: Emissions Reduction Progress

Metropolitan has made significant progress in reducing emissions associated with both retail and wholesale electricity consumption through changes in energy procurement and ongoing efficiency improvements. Since 2020, Metropolitan has shifted a substantial portion of electricity purchases used to power the CRA from the higher-emission Arizona New Mexico (AZNM) subregion to the lower-carbon CAISO market, which contains a greater share of renewable generation. This transition has substantially reduced the greenhouse gas intensity of purchased electricity and helped limit emissions growth even during high pumping years such as 2024. In addition, Metropolitan continues to reduce overall electricity demand through energy efficiency upgrades, including LED lighting conversions and pump retrofits.

STRATEGY 4: Utilize Low-Carbon and Carbon-Free Electricity

Measure E-1 Analyze marginal emissions and feasibility of shifting energy use timing.

STATUS:
Ongoing



In 2025, Metropolitan's Power Operations and Planning Section, through the Power Scheduling Team (PST) and in coordination with ACES Energy, LLC, continued to optimize energy procurement and generation scheduling to reduce emissions and costs associated with CRA operations. On average, Metropolitan's allocations of carbon-free hydropower from the Hoover and Parker Dams supplied approximately 50-60 percent of CRA energy needs, with most remaining energy purchased through the CAISO day-ahead market. The CAISO grid continued to trend toward a lower-carbon mix, achieving an average renewable energy share of approximately 42 percent in 2025, up from 39 percent in 2024.

To account for hourly marginal emissions and variability in renewable generation, the PST focused on strategically scheduling United States Bureau of Reclamation (USBR) hydropower to complement CAISO solar production, particularly during the spring months when midday solar generation is abundant and often results in negative pricing. When the USBR dispatches hydropower during non-solar hours, Metropolitan reduces reliance on gas-fired generation, minimizing solar curtailment, and improving the overall renewable content of its energy supply while achieving economic benefits. While emissions reductions are difficult to quantify directly, this approach reflects a mature and ongoing practice that aligns energy use timing with lower-carbon generation availability.

Measure E-2 Connect the Yorba Linda Hydroelectric Power Plant at Diemer WTP.

STATUS: 0%

0%

In 2025, implementation of Measure E-2 focused on coordination, confirmation of baseline assumptions, and re-evaluation of the Yorba Linda Hydroelectric Power Plant connection to the Diemer Water Treatment Plant. This connection would allow Diemer to utilize carbon-free electricity produced at Yorba Linda reducing emissions and lowering operating costs. In September 2025, Engineering met with the CAP APR program manager to review the measure's status, reaffirm the original project intent, and discuss sequencing considerations prior to project initiation. Staff reviewed existing Capital Investment Plan documentation (CIP 2022-72) to confirm that the Yorba Linda Hydroelectric Power to Diemer WTP project remains identified within Metropolitan's capital planning framework.

As part of this coordination, staff reviewed available generation and demand data for the Yorba Linda Hydroelectric Power Plant and the Diemer Water Treatment Plant to inform a high-level understanding of the measure's potential contribution to carbon-free electricity use. This review confirmed that the project remains strategically aligned with CAP GHG reduction goals, with preliminary analysis indicating that Yorba Linda hydroelectric power output could offset approximately 49 percent of Diemer's annual electricity demand with carbon free power. While no design or procurement activities occurred in 2025, the coordination completed this year clarified baseline assumptions, identified required financial and utility evaluations, and established a clear path forward once management authorization, ROI validation, and utility coordination with Southern California Edison (SCE) are completed.

Measure E-4 Install 3.5 MW battery storage.

STATUS: 0%

0%⁶

Measure E-4 consists of installing battery backup power systems at several key facilities to optimize GHG emissions reductions. In 2025, Metropolitan advanced implementation of Measure E-4 through continued construction and coordination for battery energy storage systems (BESS) at the Weymouth, Jensen, and Skinner Water Treatment Plants. Construction of the BESS at the Weymouth WTP was completed in 2025 and is now only awaiting establishing the communication with SCADA and third party and obtaining final permission to operate (PTO), and is expected to come online by summer 2026. At the Jensen WTP, the LADWP permit package was obtained, and Metropolitan is coordinating closely with LADWP to complete construction, commissioning, and obtain PTO, with completion anticipated by May 2026. At the Skinner WTP, progress continued toward construction completion, pending Fire Marshal approval, followed by testing, commissioning, final utility inspection, and PTO, currently anticipated by July 2026.

Progress of these large BESS projects have been slowed by procurement challenges and construction delays. In addition, new utility requirements resulted in design modifications during construction to satisfy updated utility standards. Once operational, the combined 3.5 MW of battery storage across the three facilities will enhance energy resilience, support load management, and help optimize GHG emissions reductions by enabling greater flexibility in electricity use.

7. The BESS system at Weymouth Water Treatment Plant has been constructed. The Status shows 0% as the system is not yet operational. It is expected to come online by summer 2026.



Battery Energy Storage System Installation

Measure E-5

Manage Energy Purchases to Ensure Cost-Effective Energy Supply While Achieving Emissions Objectives.

STATUS: 73%

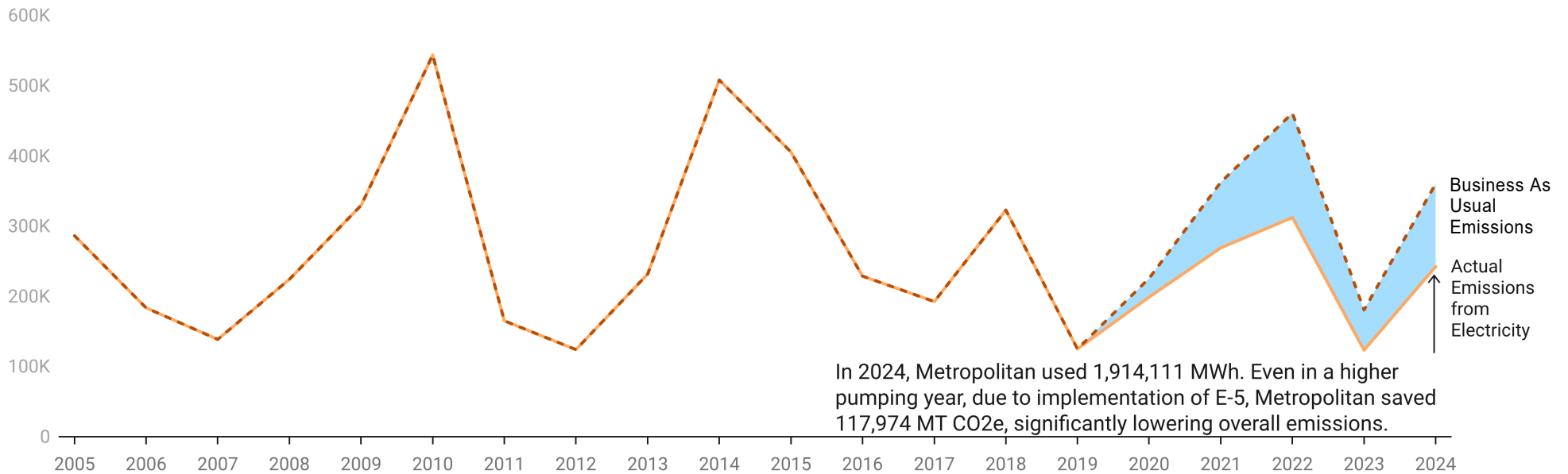
73%



Implementation of this measure began in 2020, including changes to Metropolitan’s energy procurement policies to reduce reliance on out-of-state electricity from the AZNM subregion, which is used to power the pumps along the CRA. This measure also directs Metropolitan to increase the use of energy from the CAISO subregion, which has a lower GHG emission factor as a result of greater use of renewables compared to the AZNM regional grid. Metropolitan set a goal to save 610,245 MT CO₂e by 2030 through the purchase of electricity from CAISO instead of AZNM. Making this switch reduces emissions overall, but the impact is the greatest during higher CRA pumping years and is particularly beneficial during periods of prolonged drought when additional pumping is required over numerous years. Emissions associated with CAISO electricity purchases are also decreasing over time due to Senate Bill 100, which requires 100 percent of electricity retail sales to be sourced from renewable or zero carbon sources by 2045. As noted above, CAISO average renewable procurement increased by 3 percent from 39 percent to 42 percent renewable between 2023 and 2024.

This change in electricity procurement has already reduced Metropolitan emissions associated with electricity purchases by approximately 444,190 MT CO₂e between 2020 and 2024, compared to business-as-usual emissions if Metropolitan had not made this switch, depicted in Figure 6 below. In addition, decreasing the use of electricity purchased from outside of California reduces Metropolitan’s costs associated with California’s Cap and Trade program, providing a win/win scenario.

Figure 6. Electricity Emissions Savings from Switching to CAISO from AZNM (MT CO₂e)



STRATEGY 5: Improve Energy Efficiency

Measure EE-1 Convert 50 Percent of Interior and Exterior Lighting at All Metropolitan Facilities to LED Technologies by 2030 and 100 Percent by 2045.⁸

STATUS: 117%*

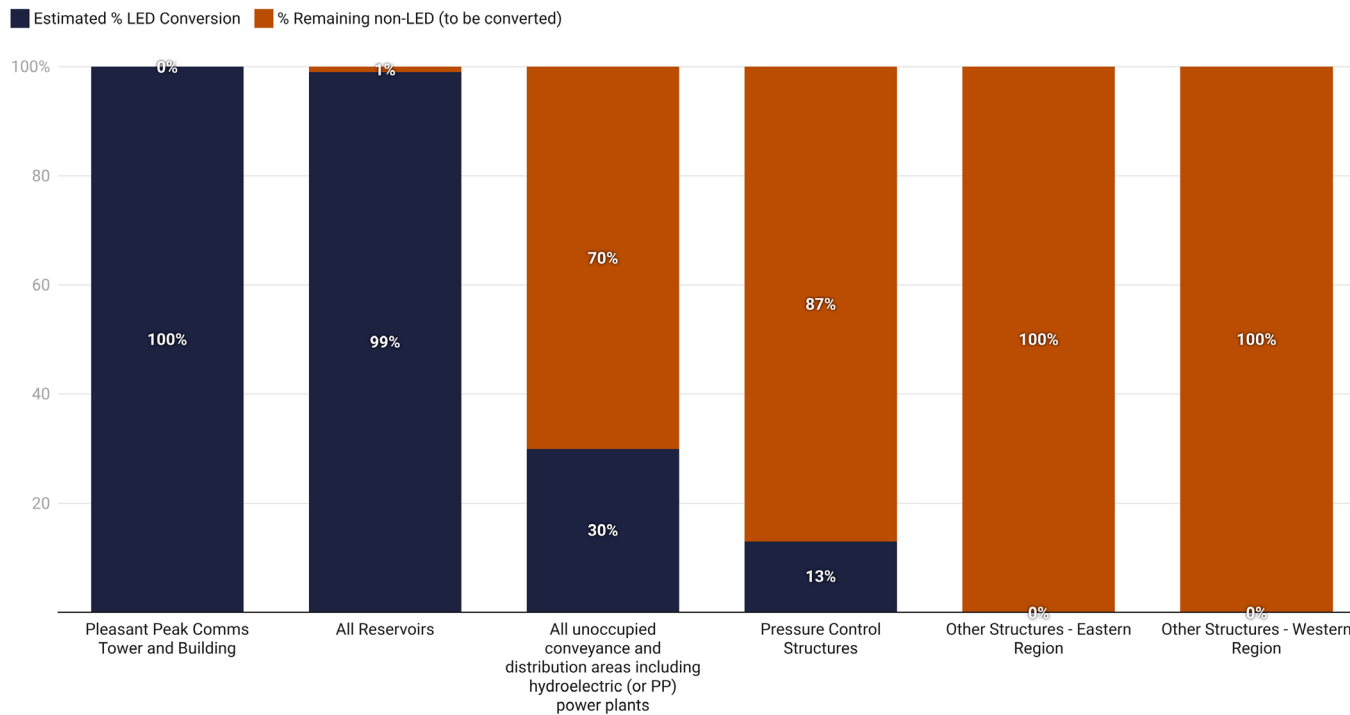
117%



Measure EE-1 directs Metropolitan to convert 50 percent of interior and exterior lighting to LED by 2030 and 100 percent by 2045. As described in previous CAP APRs, staff coordinated with electrical team managers to develop an inventory of lighting converted to LED technology at all occupied facilities and unoccupied field sites.

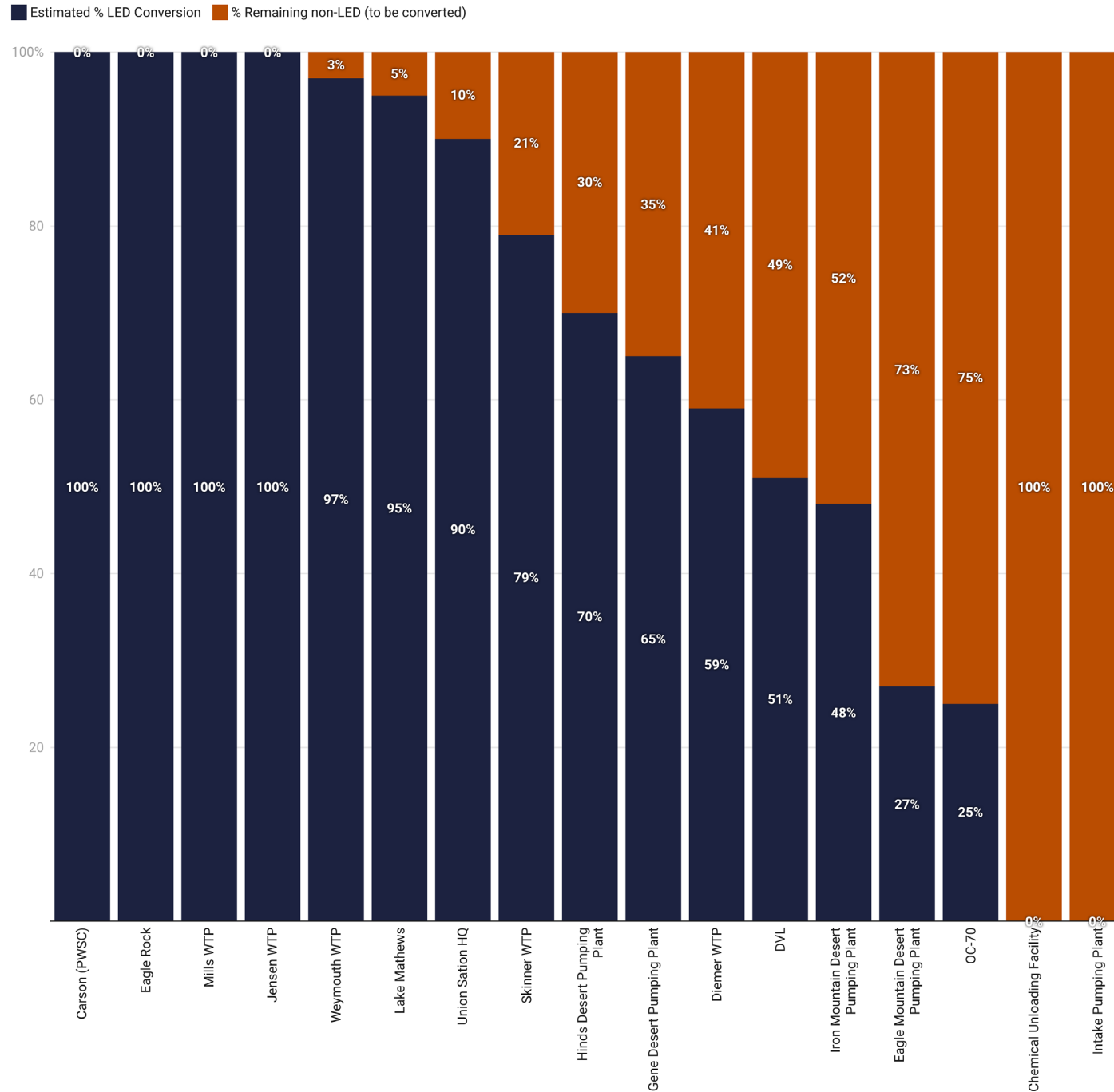
As of 2025, the LED conversion inventory update indicated an estimated 59 percent of lighting had been converted. This surpasses the 2030 target ahead of schedule thanks to the support of managers and the staff at Metropolitan facilities. This achievement has been driven by rapid LED conversion at Metropolitan’s water treatment plants, and continued LED retrofits as well as replacement of older non-LED lighting with LED technology on an as-needed basis across other facilities, resulting in an overall increase of 3 percent over the previous year. The LED retrofits to date are summarized in Figure 7 and Figure 8. Ongoing replacement of older non-LED lighting with LED technology on an as-needed basis will continue at many of the desert facilities and unoccupied field facilities.

Figure 7. Percent Conversion to LED Technology at Unoccupied Facilities



8. The original measure language in the CAP directs Metropolitan to convert all interior and exterior lighting at 50 percent of Metropolitan facilities by 2030 and at 100 percent of facilities by 2045. This assumed that LED conversion would take place at one facility at a time. However, Metropolitan has begun converting lighting to LED technology at many facilities on an ongoing basis. The updated measure language in this report and on the CAPDash represents the same outcome as the original CAP measure language through a different implementation approach that more accurately reflects Metropolitan’s progress.

Figure 8. Percent Conversion to LED Technology at Occupied Facilities



Measure EE-2 CRA pump monitoring, refurbishment, and replacement

STATUS:
Ongoing



In 2025, implementation of Measure EE-2 focused on completing system-wide assessment and planning activities to support future pump refurbishment and replacement across the CRA. The project team continued development of the CRA Pump Rehabilitation Study, which is anticipated for completion in summer 2026 and will provide prioritized refurbishment recommendations and identify a pilot pumping unit for initial implementation. Given the age of the CRA pumping assets (45 pumps originally installed between the 1930s and 1950s), the phased approach is intended to minimize impacts to water deliveries while allowing lessons learned from the pilot to inform rehabilitation of remaining units.

As part of the planned refurbishment strategy, staff identified the need to establish performance efficiency baselines, which do not currently exist at the individual pump level. The pilot project will include pre- and post-refurbishment data collection to establish baseline performance efficiency metrics and quantify improvements resulting from rehabilitation. Condition-based monitoring systems will also be incorporated, including integration with SCADA, to enable real-time performance trending and ongoing data collection. During 2025, staff conducted multiple pump inspections and held workshops with Operations staff to support development of the study and ensure operational considerations are incorporated into the final recommendations.

Measure EE-5 Pure Water Southern California inter-stage pumping system.

STATUS:
Underway



Measure EE-5 consists of installing an inter-stage pumping system on the reverse osmosis brine stream to reduce energy use if Pure Water Southern California is ultimately constructed. In 2025, Metropolitan advanced implementation of Measure EE-5 through environmental review and project definition for the Pure Water Southern California program. In May 2025, Metropolitan released the Draft Environmental Impact Report (EIR), and the Final EIR was certified by the Metropolitan Board of Directors in February 2026. The inter-stage pumping system is included in the project’s environmental commitments and is explicitly identified in the Draft EIR as an energy efficiency measure consistent with CAP Measure EE-5. These design commitments demonstrate alignment with CAP energy efficiency objectives.



Whitsett Intake Pumping Plant



Casa Loma Siphon

Scope 3: Other Indirect Emissions and Sequestration: Trends and Key Drivers

Emissions from Employee Commutes, Water/Wastewater, Solid Waste, and Construction Projects

Scope 3 emissions are the second largest source of emissions for Metropolitan, representing approximately 4 percent of total emissions. Monitoring these emissions requires a significant amount of coordination

and data collection. In 2024 Metropolitan continued to use the average emissions established by the CAP for solid waste, water, and wastewater. However, consistent with the 2023 GHG Inventory, Metropolitan used an employee commute survey and construction emissions tracking log to provide updated and more accurate estimates for employee commute emissions and construction emissions activities.

The primary drivers of change are summarized in this section by source.



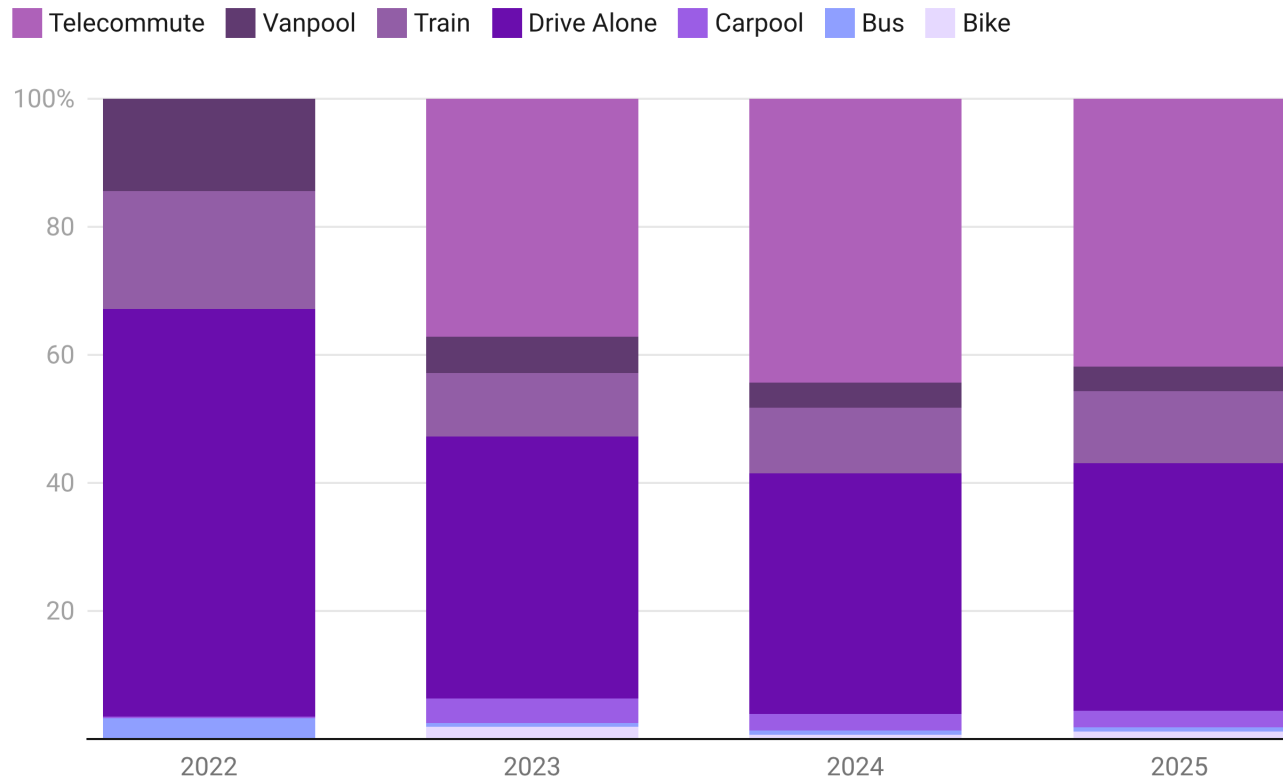
EMPLOYEE COMMUTES

Employee commute emissions decreased from 5,469 MT CO₂e in 2023 to 4,868 MT CO₂e in 2024 (an 11 percent decrease).⁹ This reduction is primarily attributable to:

- Increased telecommuting, which significantly reduced the number of commute trips, consistent with CAP strategy EC-5.
- Refinements to commute data, based on continued use of an employee commute survey, which provides a more accurate representation of travel behavior than earlier CAP averages, including alternative transportation trips and the adoption of zero emission vehicles among Metropolitan staff.

9. 2025 survey results are shown for context but have not yet been included in the GHG inventory. 2025 results are discussed further under Measure EC-5.

Figure 9. Employee Commute Mode Shares (%)



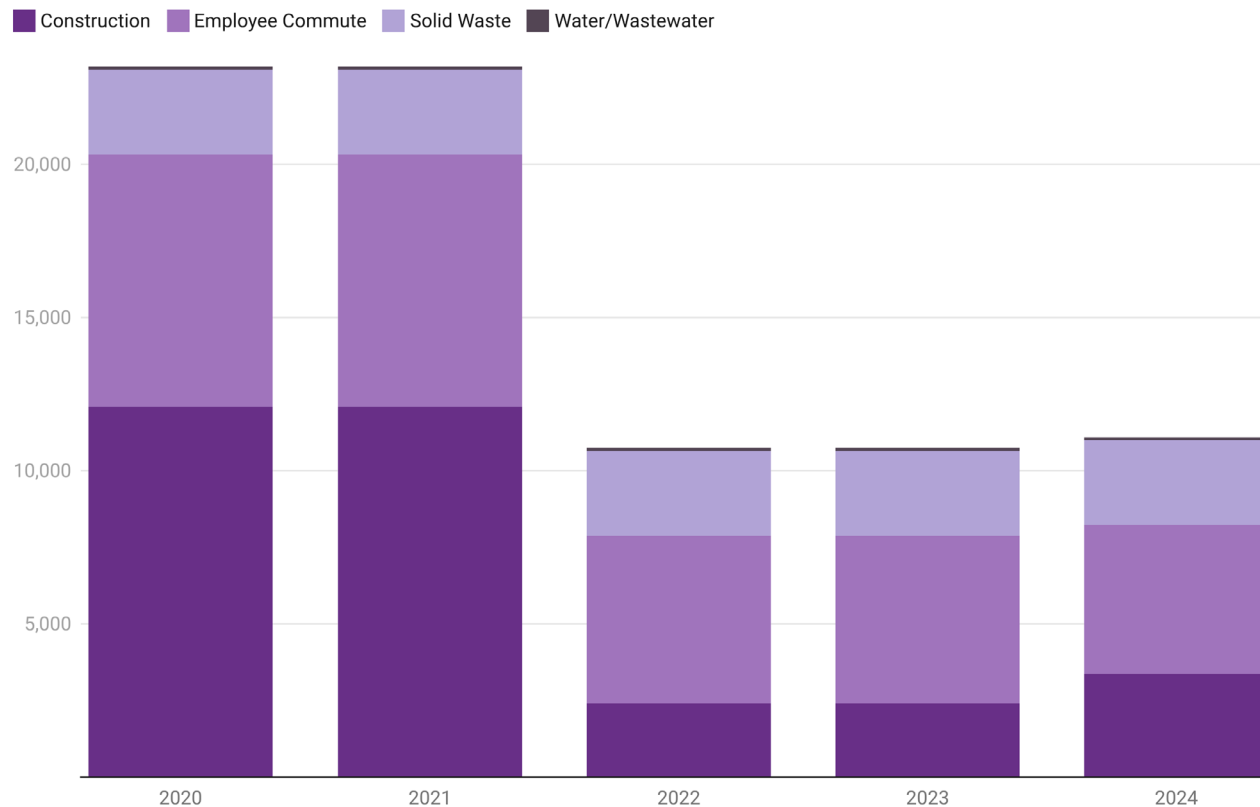
CONSTRUCTION PROJECTS

Construction-related emissions increased from 2,412 MT CO₂e in 2023 to 3,361 MT CO₂e in 2024 (a 39 percent increase). This change reflects:

- Higher construction activity levels in 2024, compared to the prior year.
- Continued use of project-specific construction emissions tracking logs, which replaced generalized construction emission estimates used in the original CAP, provide a more accurate representation of actual equipment usage and fuel consumption.¹⁰ This approach improves accuracy and highlights year-to-year emissions changes due to construction activity levels and project timing.

Overall, Scope 3 emissions changed in 2024 due to an increase in construction project activity which was buffered slightly by a decrease in employee commute emissions. In 2024, employee commutes remained the largest contributor to Scope 3 emissions (44 percent), followed by construction (30 percent), solid waste (25 percent), and water/wastewater (1 percent). Figure 10 illustrates the breakdown of Scope 3 emissions by source for 2020-2024.

Figure 10. Scope 3 Emissions by Source 2020-2024 (MT CO₂e)



10. The original CAP estimated construction emissions using planning-level assumptions based on averaged Scope 3 emissions from 2008 and 2017 and forecasted capital improvement activity for 2019-2024. These estimates were intentionally conservative and represented average or below-average historical construction activity levels to avoid underestimating emissions. Beginning in 2022, Metropolitan transitioned to project-specific construction emissions tracking that reflects actual equipment use and fuel consumption. This refinement improves accuracy and shows year-to-year variability as emissions now reflect actual construction activity.



Scope 3: Emissions Reductions Progress

Metropolitan has made continuous progress on reducing its Scope 3 emissions and is moving to increase the accuracy of its data tracking. Metropolitan has seen significant progress in implementing Scope 3 related Measures and has already exceeded its goals for turf replacement, employee commute, and water conservation.

STRATEGY 6: Incentivize More Sustainable Commutes

Measure EC-1 Expand Subsidized Transit Program.

STATUS:
Underway



In 2025, Metropolitan advanced Measure EC-1 by focusing on increased awareness and utilization of existing subsidized transit benefits. Given that substantive program changes require additional budget authorization and union approval, the Rideshare team prioritized targeted marketing as a near-term strategy to encourage participation and reduce employee commute miles. Outreach efforts included expanded use of the quarterly Rideshare newsletter and hosting on-site events, such as safety and vendor fairs, to promote available transit benefits.

These efforts resulted in measurable increases in program participation. Between November 1, 2024 and November 30, 2025, transit program enrollment increased by 19 participants, from 494 to 513. Progress toward further program expansion continues to be constrained by staffing limitations and the need for union review and approval for significant changes to bargained employee benefits, which extends implementation timelines for additional incentives or program modifications.

Measure EC-3 Install ZEV infrastructure to support 15 percent transition of employee commuter fleet to ZEV.

STATUS: 135%

135%



In 2025, Metropolitan continued advancing its long-term capital program to deploy charging infrastructure to support fleet, rideshare, and employee ZEVs. During the reporting year, Metropolitan established maximum electric vehicle load requirements for all 18 planned district charging hubs using fleet telematics, vehicle domicile data, and applicable building code requirements to guide infrastructure sizing and utility coordination. While full-scale infrastructure design and utility coordination remain underway, Operations and Engineering installed 21 chargers representing approximately 30 charging spaces, with more than 70 additional charging spaces currently in development. Interim charging solutions, including manufacturer-provided equipment, continue to support operational needs while permanent infrastructure is constructed. As a result of these efforts and broader fleet transition activities, approximately 20 percent of employee commuter vehicles were electric in 2025, exceeding the measure's target of supporting a 15 percent transition to ZEV commuting.

Major capital planning milestones were achieved in 2025, including completion of the Headquarters ZEV Infrastructure constructability review in March 2025, with the Weymouth review scheduled for April 2026. These multi-million-dollar projects require extensive coordination to evaluate electrical connection options, maintain system reliability, and align charger quantities, locations, and backup power needs with other capital improvement projects. Metropolitan also evaluated innovative charging technologies to improve flexibility and resilience, including a solar-powered portable charging demonstration hosted at the Jensen Water Treatment Plant and evaluation of off-grid charging solutions capable of providing onsite power generation, with a follow-up demonstration anticipated in early 2026.

Ongoing coordination with serving utilities for all planned charging hubs remains a critical next step to confirm electrical capacity and interconnection sequencing. Implementation continues to be influenced by site, utility, budget, and operational constraints, including facility security requirements, limitations on overhead electrical infrastructure, and the need to maintain uninterrupted charging availability for mission-critical vehicles. Despite these challenges, Metropolitan will continue expanding charging capacity to support employee EV charging as adoption continues to grow.

Measure EC-5 Allow 50 Percent of Employees at Headquarters to Telecommute to Reduce VMT and GHG Emissions Through 2030.

STATUS: 246%

246%



Measure EC-5 directs Metropolitan to allow 50 percent of the employees located at its Headquarters building to telecommute or use flexible schedules through 2030 to reduce travel time, vehicle miles traveled (VMT), and GHG emissions.

In early 2021, Metropolitan initiated a work-from-home policy due to the COVID-19 pandemic and eventually developed a hybrid schedule (2 days in the office, 3 days at home) for employees based at its Headquarters building in downtown Los Angeles. This hybrid schedule ultimately exceeded the 50 percent goal to reduce travel time, VMT, and GHG emissions established by the CAP.

Metropolitan conducts periodic employee commute surveys to quantify the VMT and GHG emission reductions associated with telecommuting and to track trends in employee commuting behavior. The most recent survey, conducted in February 2026 and assumed to reflect 2025 commute patterns, found that more than 12 percent of employee commutes were made using public transit, primarily via train or light rail. Vanpool participation remained consistent with 2024 levels at approximately four percent of commutes. Telecommuting represented 43 percent of staff commutes, a slight decrease from 45 reported in 2024, while drive-alone commutes increased modestly from 38 percent in 2024 to approximately 40 percent in 2025. The survey also indicated continued progress toward lower-emission commuting, with electric vehicles comprising approximately 20 percent of employee commute vehicles and hybrid vehicles accounting for more than 10 percent of the commuter fleet. See Measure EC-3 for more details on this effort.

The cumulative reductions during the 2022-2025 period were drastic compared to the initial target since the percentage of telecommute days far outpaced the initial goal of 50 percent of staff telecommuting 1.5 days per week. The CAP target was to reduce commute VMT by 15,560,094 by 2030. The cumulative VMT savings from telecommuting between 2022 and 2025 is an estimated 38,320,752 VMT, which is 246 percent of the 2030 goal. This reduction in VMT translates into a cumulative emissions savings of over 11,500 MT CO₂e through 2025.

While Metropolitan is currently using the hybrid schedule, negotiations between Metropolitan and its bargaining units are in progress, and the current hybrid schedule is subject to change.



LA Metro

STRATEGY 7: Increase Waste Diversion to Achieve Zero-Waste

Measure WA-1 Develop and Implement Net Zero-Waste Policies and Programs at All Facilities to Reduce Landfilled Waste by 30 Percent by 2030 and Achieve Zero Landfilled Waste by 2045.

STATUS: 1.2%

1.2%



Metropolitan set a target of diverting landfilled waste by 30 percent across all facilities by 2030, translating into a cumulative target of 22,143 tons of solid waste diverted. Collecting annually updated solid waste and waste diversion data across Metropolitan facilities is challenging, so it is unclear whether overall waste generation is increasing or decreasing. However, progress has been made at key facilities. Metropolitan implemented a waste reduction program at its Headquarters building in downtown Los Angeles in 2022, separating waste into organics, compostable, and landfill waste bins with separate pickups. In 2023, Metropolitan began tracking weekly bin weights to estimate how much waste is produced and diverted. Facilities Management continued to track and monitor waste generated at Headquarters in 2025, maintaining the 72 percent diversion rate despite an increase in building occupancy. This program serves as a model for potential waste diversion policies and practices at other Metropolitan facilities.

The Headquarters waste program diverted an estimated 100.8 MT of solid waste from landfill in 2025, and cumulatively diverted 256.8 MT since the program began weighing waste in 2023. This waste diversion reduced landfill related emissions by approximately 52 MT CO₂e during the 2023-2025 period, representing 1.2 percent of the 2030 target. A primary opportunity for advancing implementation is strengthening education and awareness among building occupants. With enhanced outreach and training—particularly for new employees and returning visitors—Metropolitan can improve understanding of disposal signage and practices, supporting broader participation and moving closer to full implementation.

In 2025, staff initiated a pilot waste assessment at Diemer WTP to better understand the facility’s waste stream, quantify current diversion rates, and identify opportunities to reduce disposal and increase reuse and recycling. Data collection began in 2025 and will continue through 2026 to capture seasonal and operational variability and ensure a robust baseline.

The Diemer pilot is intended to serve as a scalable model for other treatment plants and facilities across Metropolitan.



Waste Bins In the Cafeteria of Metropolitan’s Headquarters Building

STRATEGY 8: Increase Water Conservation and Local Water Supply

Measure WC-2 Continue innovative water use efficiency programs.

STATUS:
Ongoing



In 2025, Metropolitan continued to advance innovative water use efficiency and local supply development through the Local Resources Program (LRP) and related incentive programs. Metropolitan provided approximately \$10.5 million in LRP incentives, supporting the production of an estimated 75,000 acre-feet (AF) of recycled water and groundwater recovery. During the year, Metropolitan executed two new LRP agreements: one with the City of Los Angeles for the Los Angeles Groundwater Replenishment Project, which will produce up to 19,500 AF annually, and one with Eastern Municipal Water District for the French Valley Expansion Project, which will produce up to 140 AF annually.

Two LRP-supported projects also commenced operations: the French Valley Expansion Project and the Escondido Membrane Filtration Reverse Osmosis Facility, located in the City of Escondido. The Escondido facility is projected to produce up to 3,780 AF of recycled water annually. In addition, four LRP projects previously authorized by Metropolitan’s Board remain under construction and are anticipated to become operational in 2028-2029. Metropolitan continues to accept LRP applications and collaborate with Member Agencies to support the development of innovative, regionally beneficial water use efficiency and local supply projects across Southern California.



Escondido Membrane Filtration Project

Measure WC-3 Continue Turf Replacement Program to Install an Average of 1.5 Million Square Feet of Water Efficient Landscapes per Year Through 2030 Through the Use of a Rebate Program.

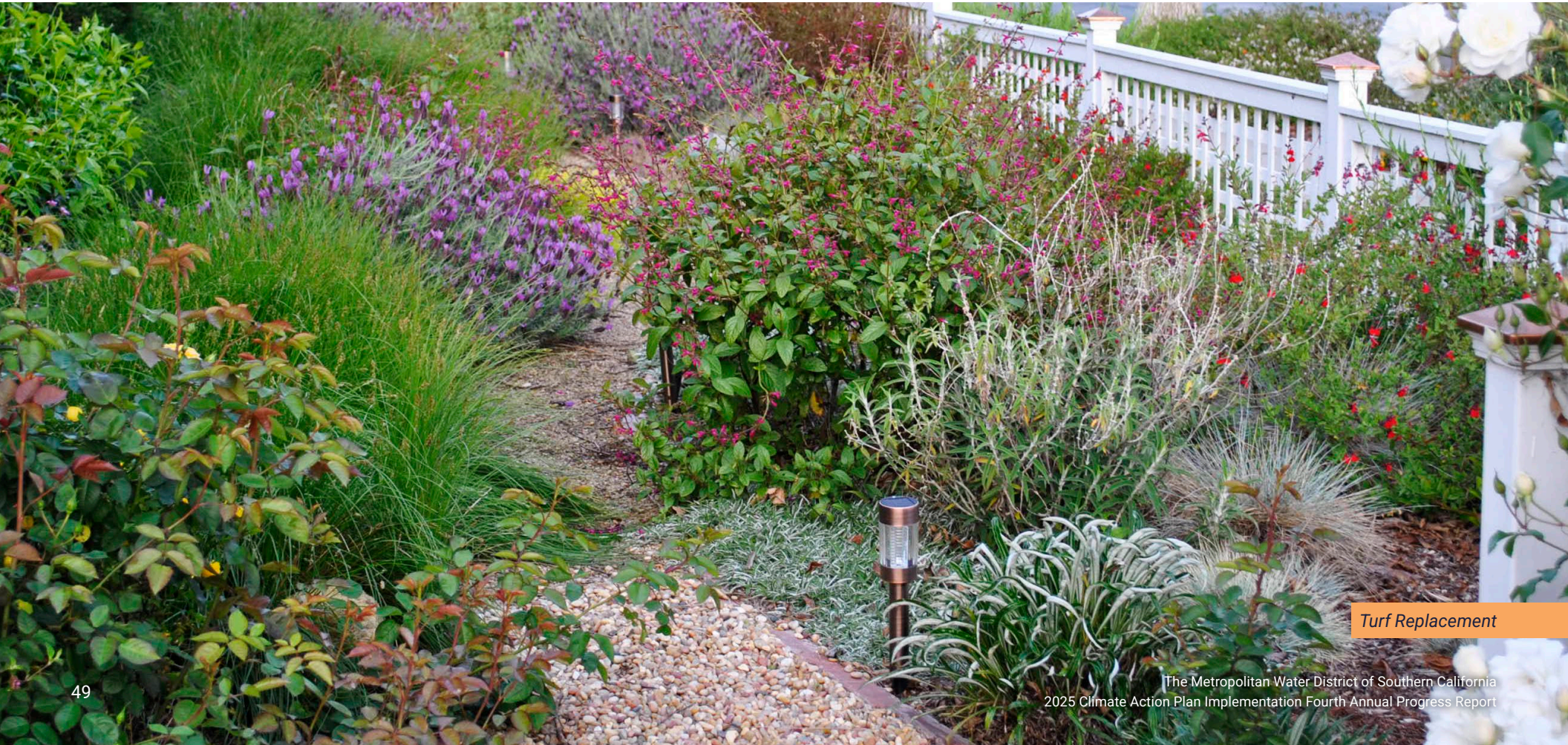
STATUS: 257%

257%



Metropolitan’s goal is to incentivize residents and businesses to replace an average of 1.5 million square feet of grass each year with water-efficient landscapes through 2030. Through its Turf Replacement Program, Metropolitan has provided rebates to help replace an average of 6 million square feet of turf per year between 2017 and 2025, far outpacing the target outlined in the CAP. Metropolitan’s progress on this measure is a major achievement for water stewardship, as more sustainable, climate-friendly landscapes use significantly less water, as well as provide other benefits such as creating important habitat for local wildlife.

As shown in Figure 11, Metropolitan removed a total of 53.8 million square feet of turf between 2017 and 2025. When turf is removed, it results in water savings from reduced watering requirements both in the initial year the turf is removed and through the life of the landscape. The estimated water savings from turf replacement projects in Metropolitan’s service area from 2017 through 2025 is approximately 27,279 acre-feet as shown in Figure 12, which translates to an emissions savings of approximately 2,482 MT CO₂e.¹¹ This surpasses Metropolitan’s target of a cumulative savings of 10,634 acre-feet, by almost 20,000 acre-feet, putting Metropolitan at 257 percent of its goal.



Turf Replacement

Figure 11. Square Feet of Turf Replacement

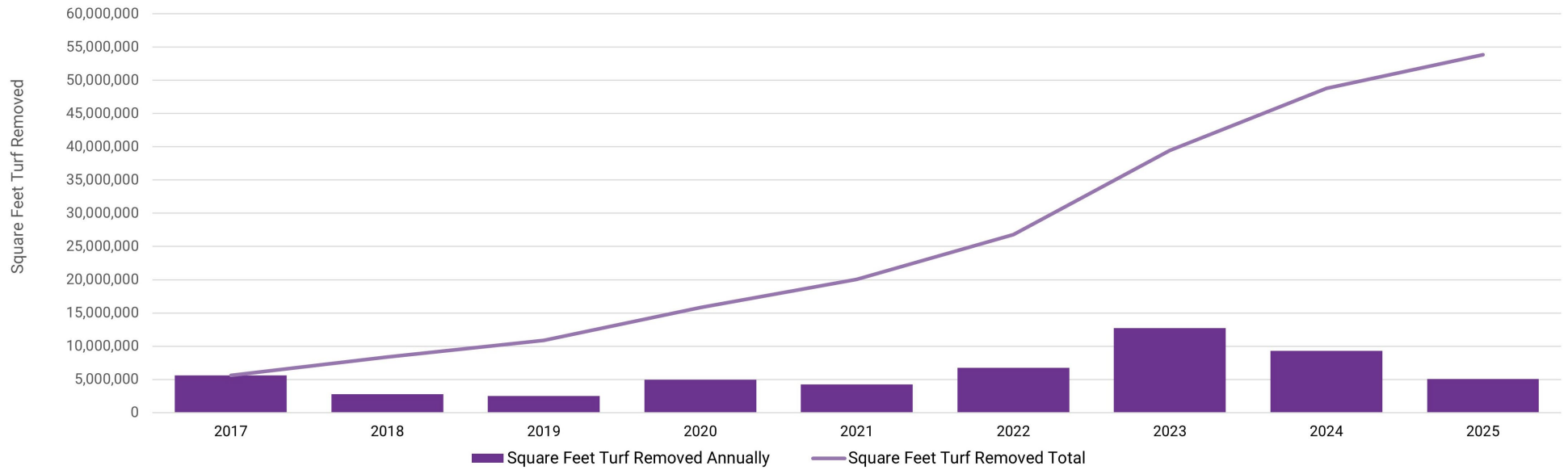
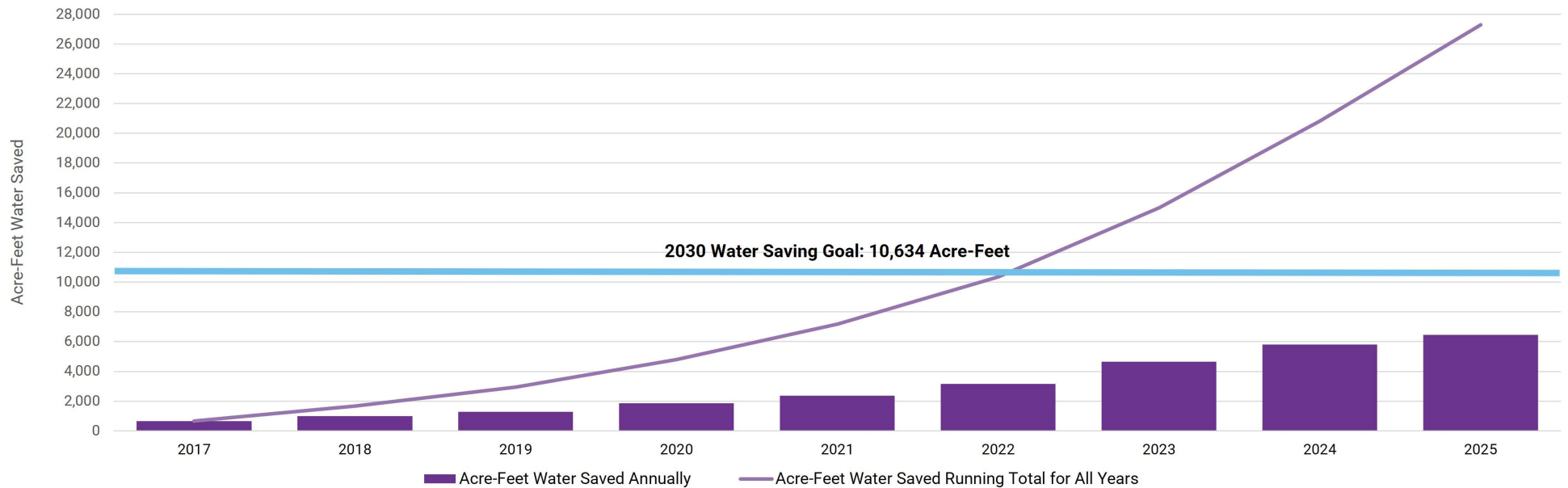


Figure 12. Water Savings from Turf Removal



Measure WC-4 Stormwater recharge and use projects.

STATUS:
Ongoing



Stormwater for Recharge

In 2025, Metropolitan completed the Stormwater for Recharge pilot project with Western Municipal Water District for the Victoria Basin project. The project included the development of a series of stormwater collection and infiltration basins that recharge the local aquifer, improve groundwater quality, and allows more efficient operation of the Arlington Desalter. This project is estimated to recharge up to 2,500 AF of water annually. To view a video of this project, please visit Western Municipal's Website by clicking <https://westernwaterca.gov/431/Victoria-Recharge-Basin>.

Additional progress is pending on two other stormwater recharge projects. The IEUA Montclair Basins Improvement Project and the Anaheim State College Stormwater Tank Project which will be completed by 2030.

Stormwater for Direct Use

Metropolitan committed \$500,000 of funding towards the Culver Boulevard Realignment and Stormwater Filtration and Retention Project which began construction in 2020 and was completed in 2022. The project installed monitoring devices and began gathering monitoring data in the spring of 2025, and is slated to provide its first annual report in August 2026. The innovative project includes stormwater capture, filtration, and direct reuse elements as well as extensive landscaping and native plantings. The project has the capacity to treat over an inch of rain from a 344-acre site.

Metropolitan also provided funding to support the Rancho Los Cerritos Looking Back to Advance Forward Project which is anticipated to complete construction and begin monitoring in early 2026. The project will be the most extensive stormwater improvement project to be located on a local, state, and nationally registered historic site. The project integrates green stormwater infrastructure into the historic site's landscape to capture and treat runoff while preserving cultural resources.



Culver Boulevard Realignment

Measure WC-5 **Review and promote new water efficiency technologies.**

STATUS:
Ongoing



In 2025, Metropolitan continued supporting investigation and review of new water efficiency technologies through the Innovative Conservation Program (ICP), a research grant program launched in 2000 to pilot and evaluate innovative water-saving devices, technologies, and strategies that could be incorporated into future conservation programs. Through competitive funding cycles held approximately every two years, Metropolitan and program partners provide grants, typically up to \$50,000 per project, to universities, nonprofits, public agencies, and private organizations to test the water-savings potential and reliability of emerging approaches. The latest ICP call for proposals included funding from Southern California Gas Company, a long-time partner with Metropolitan. Six projects were selected to receive funding, including large scale polyculture landscaping, engaging hotel chains in non-functional turf removal, quantifying outdoor irrigation in commercial, industrial and institutional mixed-used meters, identifying links between leaks and water affordability, the impact of soil regeneration on water use and avocado yield, and evaluating optimal mulch types for water conservation. Staff will review findings and consider promising technologies and practices for incorporation into future conservation programs.

Progress is expected to continue through the ICP two-year project cycle, with program completion anticipated by 2027. The primary constraint to implementation is the inherently exploratory nature of ICP-funded studies: technologies often require additional testing and development beyond the initial study before they are ready for broader adoption or consumer marketing. As a result, outcomes and implementation timelines can extend beyond the initial funding period.

As the only initiative of its kind in the region, the ICP serves as a unique catalyst for innovation in conservation, providing resources and a framework to encourage meaningful innovation beyond just Metropolitan's service area, and with many other stakeholders across the nation.

Measure WC-6 **Advanced technology for increasing Metropolitan-owned recycled and groundwater recovery systems.**

STATUS:
Ongoing



In 2025, Metropolitan advanced implementation of Measure WC-6 through significant progress on the Pure Water Southern California program, highlighted by completion and public circulation of the Draft Environmental Impact Report (Draft EIR). The document evaluates advanced water purification, conveyance, and recharge facilities designed to produce nearly 155,000 acre-feet per year (approximately 150 million gallons per day at ultimate buildout) of highly purified recycled water, supporting long-term, climate-resilient water supply goals. Preparation of the Draft EIR reflects years of technical analysis, alternatives evaluation, public engagement, and coordination between Metropolitan and the Los Angeles County Sanitation Districts.

Following circulation of the Draft EIR, Metropolitan completed the environmental review process, and the Final EIR was certified by the Metropolitan Board of Directors in February 2026. This certification represents a key milestone that allows the program to advance into subsequent phases of design, permitting, and implementation. The Pure Water program spans multiple jurisdictions and involves coordination among Metropolitan (lead agency), the Los Angeles County Sanitation Districts (responsible agency), and numerous permitting and oversight entities.

STRATEGY 9: Investigate and Implement Carbon Capture and Sequestration Opportunities

Measure CS-2 Research regenerative agriculture and carbon sequestration opportunities at Palo Verde Valley.

STATUS:
Underway



In 2025, Metropolitan continued advancing Measure CS-2 through two long-term research partnerships with California State University, Chico, focused on soil health and carbon sequestration on Metropolitan-owned lands in the Palo Verde Valley. The Chico I study, which began in 2021 and evaluates the effects of seasonal cover crops on soil health metrics, completed its fifth planned year in October 2025 and was extended for one additional year to strengthen soil carbon analysis. Researchers submitted an Annual Report summarizing five years of data collection, representing the most comprehensive assessment of the study to date. The Chico II study, initiated in 2023 as part of the broader Soil Carbon Accumulation Program, completed its third year in 2025 and has begun to show evidence of net soil carbon accrual under regenerative practices, despite a cover crop failure during one season that required temporary planting of alfalfa.

Key findings from the Chico I Annual Report indicate clear improvements in soil health metrics in cover-cropped areas compared to bare fallow controls, though evidence of continued improvement over time remains limited. Remaining work includes completion of the one-year extension of Chico I in 2026, submission of a final Annual Report, and publication of study findings in peer-reviewed literature. As the dataset matures and findings are published, the results may help establish quantifiable estimates of soil carbon sequestration that could inform future GHG accounting and potential mitigation strategies under the Metropolitan CAP.



Chico Cover Crop Field

Measure CS-3 Baseline soil carbon and sequestration pilot projects.

STATUS:
Underway



In 2025, Metropolitan advanced Measure CS-3 through continued implementation of the Webb Tract Wetland Restoration and Rice Conversion Projects, supported by completed baseline soil carbon and GHG monitoring.

During 2025 a farming partner was identified for the Webb Tract Rice Conversion Project, with grading expected to begin in 2026, first rice planting anticipated in 2027, and a goal of planting at least 1,000 acres of rice by 2028. The Webb Tract Wetland Restoration Project will convert approximately 3,000 acres of agricultural land to wetlands and upland habitat to reverse subsidence, sequester carbon, create habitat, and generate monetizable carbon credits to support long-term management. Design for the wetland project is nearly complete, CEQA review was concluded in 2025 through a statutory exemption concurrence from the California Department of Fish and Wildlife, and major permits are expected by early 2026. Subject to Board approval, construction is anticipated to begin in mid-2026, with completion expected in 2028.

Metropolitan installed two eddy covariance towers on Webb Tract to measure background GHG emissions prior to project implementation and completed one full year of baseline data collection. These data will be used to quantify GHG reductions from both projects and revealed that baseline emissions from the peat soils are higher than initially estimated, highlighting the potential climate benefits of conversion to wetlands and rice cultivation. Using this monitoring data, Metropolitan estimated baseline and projected project emissions to calculate anticipated average annual GHG reductions for each project.

While Metropolitan made progress on Measure CS-3 in 2025, implementation schedules continue to be shaped by logistical and environmental constraints associated with Webb Tract's remote island location, which can increase construction and mobilization costs and complicate scheduling. These challenges are not expected to halt implementation but may influence the pace at which project benefits are achieved.



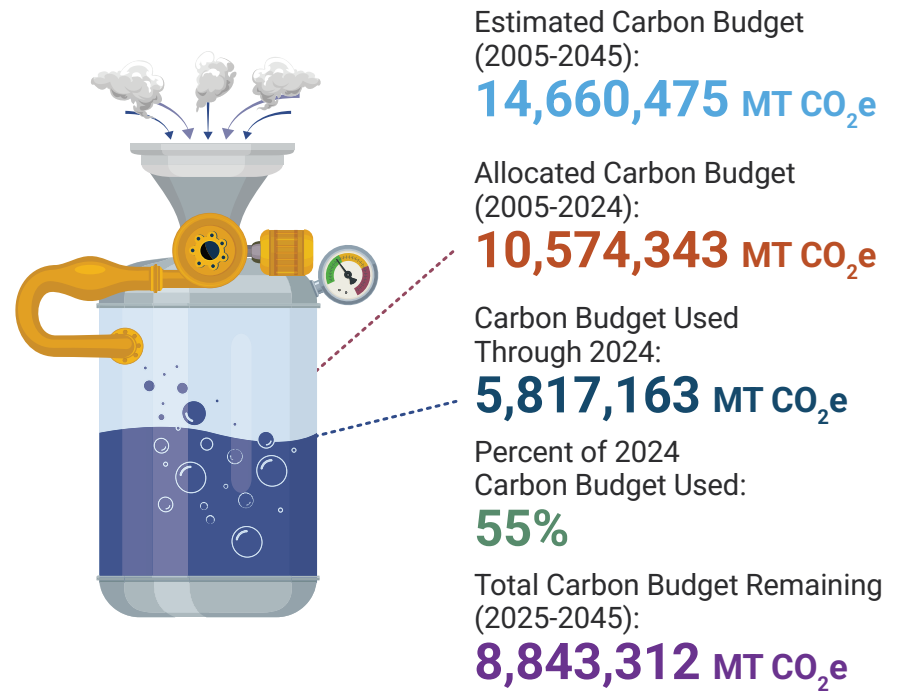
Webb Tract Wetland Restoration Project

Metropolitan’s carbon budget is analogous to a tank with a set capacity for, or a cap on, the total mass emissions Metropolitan can produce between 2005 and 2045. The total capacity has been set based on Metropolitan’s historical emissions, forecasted emissions, and GHG reduction targets. These targets are consistent with State goals.

All GHG emissions from Metropolitan’s operations recorded in the annual GHG inventories are added into the tank each year. The total capacity of the tank represents Metropolitan’s total emissions budget, and over time that tank fills up. If Metropolitan keeps its GHG emissions below the capacity of the tank by its target years of 2030 and 2045, the GHG reduction targets will be achieved. To assess progress, Metropolitan will add its annual operational emissions to the total emitted in prior years, comparing the total GHGs emitted to the remaining budgeted amount.

As summarized in Figure 13, the amount of GHG emissions in Metropolitan’s entire carbon budget from 2005 through 2045 is 14,660,475 MT CO₂e. The portion of the carbon budget allocated for 2005 through 2024 is approximately 10,574,343 MT CO₂e. During this period, Metropolitan emitted approximately 5,817,163 MT CO₂e, representing roughly half (55 percent) of the maximum emissions allowable through 2024. The annual carbon budget for 2024 was 391,388 MT CO₂e, but Metropolitan only emitted 264,766 MT CO₂e, creating an additional “buffer” of 126,623 MT CO₂e. This buffer may be needed in the future if drought or other conditions require Metropolitan to increase its pumping and subsequent emissions. Continuing to implement the strategies outlined in the CAP as well as identifying new opportunities to reduce emissions will be important as the overall budget is depleted year after year. **Metropolitan’s carbon budget has 8,843,312 MT CO₂e remaining for the period of 2025 to 2045.**

Figure 13. Carbon Budget Summary



Because Metropolitan is well under its carbon budget, the CAP is considered on pace for achieving the long-term GHG emission reduction goals.

Progress Summary

Metropolitan continues to make progress towards achieving the goals set out in the CAP and further promoting and enhancing sustainability and resilience throughout the organization and its Southern California service area. Metropolitan continues to benefit from the lower emissions electricity purchased through its wholesale and retail procurement policies, which has reduced overall emissions despite variability in pumping requirements year to year.

Initiatives and projects such as the organics waste diversion program at the Headquarters building, LED conversion, ZEV transition, telecommute policy, renewable diesel use, and turf replacement program are making positive impacts consistent with Metropolitan's environmental goals by conserving water, diverting waste, and reducing emissions now, while laying the groundwork for greater emissions reductions in the future.

Of the 11 Quantitative measures, 5 have met or exceeded their 2030 target, 2 measures are over 50 percent of the way to meeting their 2030 target, 2 measures have achieved less than 50 percent of their 2030 targets, and only 2 measures have not yet made quantifiable progress towards their 2030 targets, though preparatory work is underway on those measures.

Of the 31 Supportive measures, 6 have been completed, 9 are ongoing, 11 are underway, 1 is pending, and 4 have not made progress, though preparatory work is underway.




Metropolitan has made significant progress on several of its quantifiable and supportive measures. The following pages summarize the progress as of December 2025. Progress on supportive measures is indicated with one of the implementation statuses described in the figure key. Implementation status for quantifiable measures is indicated by the percent complete bar.



Drought Tolerant Landscape

Measure Implementation Progress

LEGEND

-  **Pending or No Action** = No action has been taken or action is pending.
-  **Underway** = Measure is in progress. Action has been taken but the measure is not yet complete.
-  **Ongoing** = Measure is fully implemented and will continue.



Complete = Measure is fully implemented. No additional action is required.



Quantitative = Measure has a quantifiable metric to track. Percent value represents progress towards the goal.



No Data = Action has been taken, but there is insufficient data to quantify progress.

Scope 1: Direct Emissions



DC-1: Conduct a survey of all natural gas consuming devices in offices, control buildings, and residential structures and establish a schedule to replace natural gas equipment with electric by 2025.

40%



DC-2: Reduce natural gas emissions by 50 percent by 2030 and 100 percent by 2045 through electrification.



DC-3: Update Metropolitan building standards to require all-electric construction for new buildings and retrofits.



FL-1: Conduct a ZEV/EV Feasibility Study to determine which fleet vehicles can be converted, what chargers/fueling stations are required, and where they should be located by the end of 2022.



FL-2: Adopt an ZEV/EV first policy for fleet vehicles to obtain ZEVs when technological, operational, or cost effectiveness parameters are met.



FL-3: Replace fossil fuel passenger fleet vehicles as identified in the ZEV/EV Feasibility Study (FL-1).



FL-4: Install EV charging and/or ZEV infrastructure at facilities pursuant to the findings of the ZEV/EV Feasibility Study (FL-1).



AF-1: Complete a pilot project on the use of renewable diesel rather than conventional diesel for all stationary equipment by 2025.




AF-2: Complete a pilot project of renewable diesel use in on-road and off-road vehicles by providing at least one renewable diesel tank at Metropolitan-owned fueling depots in 2021.




AF-3: Based on the results of the study in AF-2, Metropolitan will begin using renewable diesel fuel in 100 percent of Metropolitan's diesel-consuming on-road and off-road vehicles by 2025.

* Percent complete based on 2024 data.


Scope 2: Indirect Emissions

- 


E-1: Analyze marginal emissions rates and evaluate the feasibility of shifting energy use to lower emission periods.
- 0%**




E-2: Connect the Yorba Linda Hydroelectric Power Plant behind Metropolitan's Southern California Edison (SCE) electricity meter to directly utilize carbon-free electricity at Metropolitan's Diemer WTP by 2025.
- 65%**




E-3: In markets where available, Metropolitan will switch its retail accounts to green tariff options offered by power providers by 2025 to reduce the Scope 2 GHG emissions associated with retail electricity use.
- 0%**




E-4: Install 3.5 MW battery storage systems at the Jensen, Skinner, and Weymouth WTPs. Investigate the use of a software system to track and optimize GHG emissions reduction due to time-of-use strategies by 2025.
- 73%**





E-5: Manage Metropolitan's energy purchases to ensure cost-effective energy supply while achieving the required GHG emissions objective.
- 117%**





EE-1: Convert all interior and exterior lighting at 50 percent of Metropolitan facilities to light emitting diode (LED) technologies by 2030 and 100 percent by 2045.
- 


EE-2: Continue programs to analyze CRA pump efficiency and replace or refurbish pumps when cost effective.
- COMPLETE




EE-3: Investigate feasibility of a large-scale (100 MW) battery storage system for the CRA.
- 

EE-4a: Replace pump impellers at the Iron Mountain pumping plant if directed by findings of the pump assessment (Measure EE-2).
- 

EE-4b: Replace pump impellers at Eagle Mountain or Hinds pumping plants if directed by findings of the pump assessment (Measure EE-2).
- 

EE-4c: Refurbish motors at Iron Mountain if applicable based on the findings of the pump assessment (Measure EE-2).
- 

EE-4d: Refurbish motors at Eagle Mountain or Hinds pumping plants if directed by findings of the pump assessment (Measure EE-2).
- 

EE-5: If the proposed Pure Water Southern California is ultimately constructed, install an inter-stage pumping system on the reverse osmosis brine stream to reduce energy use.

Scope 3: Other Indirect Emissions and Sequestration



EC-1: Expand subsidized transit commute program to reduce employee commute miles.



EC-2: Expand employee use of carbon-free and low carbon transportation by providing education programs on the benefits of commute options including public transportation, EV/ZEV options, and vanpools.

135%



EC-3: Install ZEV and/or EV infrastructure as directed by the ZEV/EV Feasibility Study to support at least a 15 percent transition of employee-owned vehicles to ZEVs/EVs by 2025.



EC-4: Continue to offer benefits to employees who use alternative modes of transportation (e.g., public transportation, bikes).

246%



EC-5: Allow 50 percent of employees located at Metropolitan's headquarters to telecommute or utilize flexible schedules through 2030 to reduce travel time, VMT, and GHG emissions.



EC-6: Replace all Metropolitan vanpool vehicles with ZEVs. Start with a pilot study (Measure FL-1) to evaluate the best approach.

1.2%



WA-1: Develop and implement net zero-waste policies and programs at all facilities to reduce landfilled waste by 30 percent by 2030 and achieve zero landfilled waste by 2045.



WA-2: Implement a program to reduce organic waste at Metropolitan's Union Station building. Contract or team with local organizations and waste disposal companies to route organic waste to anaerobic digestion or composting facilities and edible food-to-food recovery centers.



WA-3: Develop and implement a sustainable procurement policy.



WA-4: Partner with municipal agencies, like the City of Los Angeles, to create programs that will allow Metropolitan to provide its fair share of diversion and help local jurisdictions meet the goals of SB 1383 for organics diversion, including food waste and composting.



WC-1: Expand programs that educate customers on water conservation initiatives through workshops and speaking engagements.



WC-2: Continue to implement innovative water use efficiency programs.

257%



WC-3: Continue Turf Removal Program to install an average of 1,500,000 square feet of water efficient landscapes per year through 2030 through the use of a rebate program.



WC-4: Provide funding for the development and monitoring of local stormwater recharge and use projects to evaluate the water supply benefit of stormwater.



WC-5: Continue to promote water efficiency technologies and innovative practices that can be adopted into future water conservation program updates.



WC-6: Implement advanced technology systems to increase Metropolitan owned recycled and groundwater recovery systems to maintain local water supply (e.g., proposed RRWP).

COMPLETE



CS-1: Study carbon capture protocols in the Sacramento-San Joaquin River Delta.



CS-2: Conduct a five-year research program to increase Metropolitan's knowledge of regenerative agriculture and carbon sequestration opportunities on Metropolitan properties in the Palo Verde Valley.



CS-3: Establish baseline soil carbon quantities through sciencebased approaches then develop pilot projects to enhance carbon sequestration and implement larger scale carbon sequestration projects as deemed feasible.

Appendix



Burros near the Colorado River

Supportive Measures - Status Summary Table

Strategy ID	Action #	Strategy Language	Phase	Target Year	Status
Scope 1: Direct Combustion					
Strategy 1—Phase Out Natural Gas Combustion at Facilities					
Strategy 1	DC-1	Conduct a survey of all natural gas consuming devices in offices, control buildings, and residential structures and establish a schedule to replace natural gas equipment with electric by 2025.	1	2025	Complete
Strategy 1	DC-3	Update Metropolitan building standards to require all-electric construction for new buildings and retrofits.	1	2030	Underway
Strategy 2—Zero Emission Vehicle Fleet					
Strategy 2	FL-1	Conduct a ZEV/EV Feasibility Study to determine which fleet vehicles can be converted, what chargers/fueling stations are required, and where they should be located by the end of 2022.	1	2030	Complete
Strategy 2	FL-2	Adopt an ZEV/EV first policy for fleet vehicles to obtain ZEVs when technological, operational, or cost effectiveness parameters are met.	1	2030	Underway
Strategy 2	FL-3	Replace fossil fuel passenger fleet vehicles as identified in the ZEV/EV Feasibility Study (FL-1).	1	2030	Underway
Strategy 2	FL-4	Install EV charging and/or ZEV infrastructure at facilities pursuant to the findings of the ZEV/EV Feasibility Study (FL-1).	1	2030	Underway
Strategy 3—Use Alternative Fuels to Bridge the Technology Gap to Zero Emission Vehicles and Equipment					
Strategy 3	AF-1	Complete a pilot project on the use of renewable diesel rather than conventional diesel for all stationary equipment by 2025.	1	2025	Complete
Strategy 3	AF-2	Complete a pilot project of renewable diesel use in on-road and off-road vehicles by providing at least one renewable diesel tank at Metropolitan-owned fueling depots in 2021.	1	2021	Complete

Strategy ID	Action #	Strategy Language	Phase	Target Year	Status
Scope 2: Electricity					
Strategy 4 – Utilize Low-Carbon and Carbon-Free Electricity					
Strategy 4	E-1	Analyze marginal emissions rates and evaluate the feasibility of shifting energy use to lower emission periods.	1	2030	Ongoing
Strategy 4	EE-3	Investigate feasibility of a large-scale (100 MW) battery storage system for the CRA.	2	2045	Complete
Strategy 5 – Improve Energy Efficiency					
Strategy 5	EE-2	Continue programs to analyze CRA pump efficiency and replace or refurbish pumps when cost effective.	1	2030	Ongoing
Strategy 5	EE-4a	Replace pump impellers at the Iron Mountain pumping plant if directed by findings of the pump assessment (Measure EE-2).	2	2045	No Action
Strategy 5	EE-4b	Replace pump impellers at Eagle Mountain or Hinds pumping plants if directed by findings of the pump assessment (Measure EE-2).	2	2045	No Action
Strategy 5	EE-4c	Refurbish motors at Iron Mountain if applicable based on the findings of the pump assessment (Measure EE-2).	2	2045	No Action
Strategy 5	EE-4d	Refurbish motors at Eagle Mountain or Hinds pumping plants if directed by findings of the pump assessment (Measure EE-2).	2	2045	No Action
Strategy 5	EE-5	If the proposed RRWP (Pure Water Southern California) is ultimately constructed, install an inter-stage pumping system on the reverse osmosis brine stream to reduce energy use.	2	2045	Underway

Strategy ID	Action #	Strategy Language	Phase	Target Year	Status
Scope 3: Other Indirect Emissions					
Strategy 6 – Incentivize More Sustainable Commutes					
Strategy 6	EC-1	Expand subsidized transit commute program to reduce employee commute miles.	1	2030	Underway
Strategy 6	EC-2	Expand employee use of carbon free and low carbon transportation by providing education programs on the benefits of commute options including public transportation, EV/ZEV options, and vanpools.	1	2030	Ongoing
Strategy 6	EC-4	Continue to offer benefits to employees who use alternative modes of transportation (e.g. public transportation, bikes).	1	2030	Ongoing
Strategy 6	EC-6	Replace all Metropolitan vanpool vehicles with ZEVs. Start with a pilot study (Measure FL-1) to evaluate the best approach.	2	2045	Pending
Strategy 7 – Increase Waste Diversion to Achieve Zero Waste					
Strategy 7	WA-2	Implement a program to reduce organic waste at Metropolitan’s Union Station building. Contract or team with local organizations and waste disposal companies to route organic waste to anaerobic digestion or composting facilities and edible food to-food recovery centers.	1	2030	Ongoing
Strategy 7	WA-3	Develop and implement a sustainable procurement policy.	1	2030	Underway
Strategy 7	WA-4	Partner with municipal agencies, like the City of Los Angeles, to create programs that will allow Metropolitan to provide its fair share of diversion and help local jurisdictions meet the goals of SB 1383 for organics diversion, including food waste and composting.	2	2045	Underway

Strategy ID	Action #	Strategy Language	Phase	Target Year	Status
Strategy 8 – Increase Water Conservation and Local Water Supply					
Strategy 8	CS-3	Establish baseline soil carbon quantities through science-based approaches then develop pilot projects to enhance carbon sequestration and implement larger scale carbon sequestration projects as deemed feasible.	2	2045	Underway
Strategy 8	WC-1	Expand programs that educate customers on water conservation initiatives through workshops and speaking engagements.	1	2030	Ongoing
Strategy 8	WC-2	Continue to implement innovative water use efficiency programs.	1	2030	Ongoing
Strategy 8	WC-4	Provide funding for the development and monitoring of local stormwater recharge and use projects to evaluate the water supply benefit of stormwater.	1	2030	Ongoing
Strategy 8	WC-5	Continue to promote water efficiency technologies and innovative practices that can be adopted into future water conservation program updates.	1	2030	Ongoing
Strategy 8	WC-6	Implement advanced technology systems to increase Metropolitan owned recycled and groundwater recovery systems to maintain local water supply (e.g., proposed RRWP).	2	2045	Underway
Strategy 9 – Investigate and Implement Carbon Capture and Sequestration Opportunities					
Strategy 9	CS-1	Study carbon capture protocols in the Sacramento-San Joaquin River Delta.	1	2030	Complete
Strategy 9	CS-2	Conduct a five-year research program to increase Metropolitan’s knowledge of regenerative agriculture and carbon sequestration opportunities on Metropolitan properties in the Palo Verde Valley.	1	2030	Underway

Quantifiable Measures - Status Summary Table

Strategy ID	Action #	Strategy Language	Sector	Metric - Goal	Metric - Unit	Implementation Target Year	% Complete
Scope 1: Direct Combustion							
Strategy 1 – Phase Out Natural Gas Combustion at Facilities							
Strategy 1	DC-2	Reduce natural gas emissions by 50 percent by 2030 and 100 percent by 2045 through electrification.	Natural Gas Stationary	53,404	MMBtu	2030	40%
Strategy 3 – Use Alternative Fuels to Bridge the Technology Gap to Zero Emission Vehicles and Equipment							
Strategy 3	AF-3	Based on the results of the study in AF-2, Metropolitan will begin using renewable diesel fuel in 100 percent of Metropolitan’s diesel-consuming on-road and off-road vehicles by 2025.	Diesel Mobile	100	Percent Renewable Diesel	2025	100%
Scope 2: Electricity							
Strategy 4 – Utilize Low-Carbon and Carbon-Free Electricity							
Strategy 4	E-2	Connect the Yorba Linda Hydroelectric Power Plant behind Metropolitan's SCE electricity meter to directly utilize carbon-free electricity at Metropolitan's Diemer WTP by 2025.	Electricity	53,400	MWh	2030	0%
Strategy 4	E-3	In markets where available, Metropolitan will switch its retail accounts to green tariff options offered by power providers by 2025 to reduce the Scope 2 GHG emissions associated with retail electricity use.	Electricity	88	Percent Renewable Retail Electricity	2025	65% ¹¹
Strategy 4	E-4	Install 3.5 MW battery storage systems at the Jensen, Skinner, and Weymouth WTPs. Investigate the use of a software system to track and optimize GHG emissions reduction due to time-of-use strategies by 2025.	Electricity	219	MT CO ₂ e Saved From Battery Arbitrage	2030	0%

11. Changes in electricity provider emission factors and electricity demands can change year to year resulting in short term changes in the percent renewable electricity purchased by Metropolitan

Strategy ID	Action #	Strategy Language	Sector	Metric - Goal	Metric - Unit	Implementation Target Year	% Complete
Strategy 4	E-5	Manage Metropolitan's energy purchases to ensure cost-effective energy supply while achieving the required GHG emissions objective. (High emissions scenario)	electricity	610,245	MT CO ₂ e Saved Compared to Baseline	2030	73%
Strategy 5 – Improve Energy Efficiency							
Strategy 5	EE-1	Convert all interior and exterior lighting at 50 percent of Metropolitan facilities to LED technologies by 2030 and 100 percent by 2045.	Electricity	50	Percent of LED retrofits completed	2030	117%
Scope 3: Other Indirect Emissions							
Strategy 6 – Incentivize More Sustainable Commutes							
Strategy 6	EC-3	Install ZEV and/or EV infrastructure as directed by the ZEV/EV Feasibility Study to support at least a 15 percent transition of employee-owned vehicles to ZEVs/EVs by 2025.	Employee Commute	15%	Percent of EVs in Commuter Fleet	2025	135%
Strategy 6	EC-5	Allow 50 percent of employees located at Metropolitan's headquarters to telecommute or utilize flexible schedules through 2030 to reduce travel time, vehicle miles traveled (VMT), and GHG emissions.	Employee Commute	15,560,094	Reduced Commuter VMT	2030	246%
Strategy 7 – Increase Waste Diversion to Achieve Zero Waste							
Strategy 7	WA-1	Develop and implement net zero-waste policies and programs at all facilities to reduce landfilled waste by 30 percent by 2030 and achieve zero landfilled waste by 2045.	Solid Waste	22,143	Tons	2030	1.2%
Strategy 8 – Increase Water Conservation and Local Water Supply							
Strategy 8	WC-3	Continue Turf Replacement Program to install an average of 1,500,000 square feet of water efficient landscapes per year through 2030 through the use of a rebate program.	Water/Wastewater	10,634	Acre-Feet	2030	257%

AF – Acre Feet

APR – Annual Progress Report

AZNM – Arizona New Mexico subregion for electricity production

BESS – Battery Energy Storage System

BEV – Battery Electric Vehicle

CAISO – California Independent System Operator

CAMP4W – Climate Adaptation Master Plan for Water

CAP – Climate Action Plan

CEQA – California Environmental Quality Act

CH₄ – Methane

CIP – Capital Investment Plan

CO₂ – Carbon Dioxide

CRA – Colorado River Aqueduct

Diemer WTP – Robert B. Diemer Water Treatment Plant

EIR – Environmental Impact Report

EV – Electric Vehicle

GHG – Greenhouse Gas

HVAC – Heating, Ventilation, and Air Conditioning

ICP – Innovative Conservation Program

IEUA – Inland Empire Utilities Agency

Jensen WTP – Joseph P. Jensen Water Treatment Plant

LADWP – Los Angeles Department of Water and Power

LED – Light-Emitting Diode. Referring to highly energy-efficient lighting technology.

LRP – Local Resources Program

Metropolitan – The Metropolitan Water District of Southern California

Mills WTP – Henry J. Mills Water Treatment Plant

MMBTu – Metric Million British Thermal Unit

MT – Metric Ton

MT CO_{2e} – Metric Tons of Carbon Dioxide Equivalent

MWh – Megawatt-hour

N₂O – Nitrogen Oxide

NOx – Nitrous Oxide

PTO – Permission to Operate

PST – Power Scheduling Team

RRWP – Regional Recycled Water Project (evaluated in the CAP), now known as Pure Water Southern California

SB – Senate Bill

SCADA – Supervisory Control and Data Acquisition

SCE – Southern California Edison

SF6/HFC Fugitive Emissions – Fugitive emissions of sulfur hexafluoride (SF6) from electrical equipment and hydrofluorocarbon (HFC) emissions from refrigerator units and use of welding gas.

Skinner WTP – Robert A. Skinner Water Treatment Plant

SRI – Sustainability, Resilience and Innovation

SWP – State Water Project

T&D – Transmission and Distribution. Referring to the delivery system of purchased electricity.

TCR – The Climate Registry

USBR – United States Bureau of Reclamation

VMT – Vehicle Miles Traveled

Weymouth WTP – F.E. Weymouth Water Treatment Plant

WTP – Water Treatment Plant

ZEV – Zero Emission Vehicle



Colorado River Aqueduct



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