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EXECUTIVE OFFICE
BOARD OF SUPERVISORS
COUNTY OF LOS ANGELES
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INTERIM EXECUTIVE OFFICER

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April 19, 2024

To: Supervisor Lindsey P. Horvath, Chair
Supervisor Hilda L. Solis
Supervisor Holly J. Mitchell
Supervisor Janice Hahn
Supervisor Kathryn Barger

From: Jeff Levinson
Interim Executive Officer

REPORT BACK ON AN LA COUNTY CLIMATE BUDGET (ITEM NO. 23, AGENDA OF DECEMBER 19, 2023) AND THE CLEAN ENERGY PARTNERSHIP (ITEM NO. 10, AGENDA OF JANUARY 9, 2024)

In December 2023 and January 2024, the Board of Supervisors (Board) passed two motions focused on achieving carbon neutrality in LA County (County) operations. The December 19, 2023 Board motion, titled "*Establishing an LA County Climate Budget to Achieve Carbon Neutral County Operations,*" directed the Internal Services Department (ISD), with assistance from relevant departments, including the Chief Sustainability Office (CSO), to report back on a plan to regularly prepare an accounting of greenhouse gas (GHG) emissions for County operations. The motion also directed the CSO, with assistance from ISD, Public Works (PW), Chief Executive Office (CEO), and Department of Regional Planning (DRP), to report back on a plan to recommend climate mitigation investment targets and identify climate mitigation grant opportunities, along with an analysis of the barriers to climate mitigation investments and cost estimates for implementing the above measures. The January 9, 2024 Board motion, titled "*Los Angeles County Support for the Clean Energy Partnership,*" directed the CSO, with assistance from ISD, to include in the report back to the December 2023 motion plans to meet each of the targets in the Clean Energy Partnership (CEP) Roadmap at County facilities by 2028.

This report includes the responses to both motion directives, and also outlines existing data and gaps, current efforts, potential tools, and funding needs to support improved alignment between capital planning, budgeting, and GHG goals for County operations. To prepare this report back, CSO met with multiple teams working on climate budgeting

projects including the City of Los Angeles, C40 Cities, and a variety of consulting firms. CSO also met with related County departments and provided CEO, ISD, and PW the opportunity to provide input and review the report.

County Operations Greenhouse Gas Emissions Inventory

In 2019, with the adoption of the OurCounty sustainability plan, the Board unanimously adopted the goal of achieving carbon neutrality both countywide and in County operations by 2045 and identified Sustainability as a Board Priority. Although there are multiple efforts underway to achieve the carbon neutrality goal, including the OurCounty Plan and the DRP's 2045 Climate Action Plan (CAP), none focus exclusively on County operations. A foundational first step for any entity in establishing a climate budget and climate mitigation investment target is to develop a GHG inventory.

The County's most updated communitywide GHG inventory is from 2018, but its municipal inventory dates back to a report published in 2011, the Los Angeles County Municipal Climate Action Plan (MCAP). The Executive Summary of this plan can be found in the attachment. While this inventory is over a decade old, it does provide some insights, including that employee commuter trips were the largest single source of emissions (35.1 percent). When combined with the County's fleet emissions, this represents 45.7 percent of the total baseline inventory coming from transportation. The second largest source of emissions is building energy use (28.9 percent) followed by the County's co-generation facilities (18.9 percent). Significant shifts have occurred in all these sectors since this inventory was produced. For instance, according to the County's Department of Human Resources, 32.3% of County employees are on a hybrid work schedule, thereby reducing on-road vehicle emissions. The County has also invested in an electric vehicle (EV) fleet and EV charging stations, and has expanded solar capacity at County facilities. Power provided by the Clean Power Alliance (CPA) is now sourced from 100% clean energy sources, and the County has decommissioned all its co-generation facilities. An early estimate indicates that the County has likely reduced emissions by 25-30% since the last GHG inventory was conducted. A new GHG inventory would inform where additional action and investments should be prioritized to achieve the County operations' 2045 carbon neutrality goal.

<u>Recommendations</u>

A new GHG inventory and MCAP is needed to inform where to prioritize additional climate action and investments to achieve the County operations' 2045 carbon neutrality goal. ISD recommends bringing on one or more consultant teams to conduct this analysis and produce a public MCAP.

Climate Mitigation and Adaptation Budget Items
Currently, County departments tag their budget requests with one of nine Board-directed priorities, including sustainability. As requested in the Board motion Item No. 1, CSO, working with CEO, plans on submitting to the Board a list of items tagged "sustainability" for FY 24-25 once the Final Changes Budget phase is complete. CSO will review these tagged items, identifying which ones are relevant to climate mitigation. The list will also identify which tier the ARDI Equity Explorer projects fall into. This information is expected to be ready by July 2024.

In following years, additional or alternative tagging mechanisms may need to be considered to help identify projects that align with the County operations MCAP. This would improve tracking of current climate mitigation investments being made by the County and flag areas where additional attention is needed.

Climate Mitigation Investment Target
First pioneered by the City of Oslo in 2017, municipalities around the world have begun to develop climate budgets to better align their climate commitments with funding mechanisms. A climate budget integrates climate targets into an entity's financial budgeting process. This helps ensure climate mitigation is a priority in the investment decision-making process. To establish a climate budget for the County and annually recommend a minimum climate mitigation investment target, existing data gaps need to be addressed first.

Foundational to this effort is a County operations GHG inventory and MCAP, as described earlier. Data from the 2011 MCAP is too outdated to be relied upon for setting an investment target and does not accurately reflect the impact existing County programs and policies have already had on GHG emissions. This type of data gathering is a critical first step in establishing a County operations climate mitigation investment target.

Second, understanding the complete scope of sources and amounts of funding currently being put towards climate mitigation efforts in County operations could help inform an investment target for the County budget. County climate mitigation projects are funded through several different revenue sources, including but not limited to state and federal grants; the Safe, Clean Water Program; and the gas tax. Gaining a more complete picture of funding sources and amounts would improve any recommended investment target focused on the County budget.

Thoughtful implementation is needed to achieve the County's ambitious goal of carbon neutrality in County operations by 2045. Climate budgeting is an important part of that, and training and education for all departments will be needed to implement this work effectively and efficiently. With a better understanding of upfront opportunities, the County can reduce its GHG emissions while minimizing additional spending and maximizing health benefits.

Recommendation

The CSO and CEO will explore the development of a climate budget pilot with one or more departments. This could be done in conjunction with developing the County operations GHG inventory and MCAP, and could help inform the larger County budgeting process, once these are completed. To initiate this work, the CSO, working with the CEO, should contract with a consultant to develop the pilot.

External Grant Support Coordination

The federal Inflation Reduction Act, the Bipartisan Infrastructure Law, and other state and philanthropic funding programs have brought a historic influx of money to catalyze climate action. For municipalities to take advantage of this opportunity, they need to actively track, coordinate, and successfully submit grant applications. The County has proactively worked to enhance collaboration across departments through programs such as Infrastructure LA and the County's Infrastructure Initiative. Departments like ISD and PW have also invested in their own grant work that has been highly successful in bringing in needed funds. CEO has a new grant-tracking platform that is currently under development. This platform will enable real-time grant identification and cross-departmental collaboration on any relevant grant opportunity, including those related to climate mitigation. This has the potential to considerably enhance the County's ability to identify, share, and apply for grants.

The CEO's Municipal and Unincorporated Area Services unit, as part of the County's Infrastructure Initiative, partnered with a consultant to develop a grants digital application system. The system offers several capabilities to position the County to be on the forefront of identifying federal and state grant opportunities that are aligned with the Board's policy priorities. The current version of the system streamlines the grant development process. The system has the ability to search for grants, report and produce dashboards, as well as capabilities to collaborate and develop strategies that are aimed to facilitate digital collaboration between departments. Any web source containing grant funding opportunities can be added to the system's search engine to ensure the most comprehensive grant information is available to users. Moreover, the

system can interpret the description and/or narrative of a strategy stored in the database and will constantly match a strategy's intent to a user's grant search, ensuring that departments receive notifications immediately upon release by state and federal granting agencies.

The system was developed with the intent of being more strategic in the pursuit of grant opportunities, including gathering information to assist the County in participating in discussions with state and federal agencies ahead of the release of notices of funding opportunities. Having early discussions can better position projects for the chance of receiving a grant award. The system is being developed with capabilities to match project details from past successful grant applications to assist departments in writing strong narratives for future grant application submittals. This tool aims to ensure the County maximizes the competitiveness of its grant award pursuits.

Recommendation

CSO, CEO, and other relevant departments will continue working to leverage existing efforts to proactively pursue grant opportunities. This includes pursuing grant partnerships through Infrastructure LA and investing in grant development work at the departmental level. Once the grants digital application system is completed by the CEO, training materials and access to the system will be provided for all departments.

Successes, Opportunities, and Barriers to Climate Mitigation Investments

While significant strides have been made to reduce the County's GHG emissions in recent years, achieving carbon neutrality by 2045 will require looking carefully at barriers and streamlining opportunities for GHG reductions in County operations. The updated MCAP will identify the priority areas to focus on, but based on the 2011 MCAP, County buildings and transportation (fleet and employee commutes) are likely two on-going areas of focus. Sections below highlight successes, opportunities, and barriers that illustrate how far the County has come and how structural changes and investments might pave the way to achieve the County's ambitious climate goals.

Buildings

The County owns and operates approximately 4,500 buildings located across LA County, and they are a significant source of GHG emissions. Addressing both energy supply and energy conservation are two important components to reducing the County's building emissions. While many County buildings are powered with 100 percent clean energy through CPA, LA County receives part of its energy from the Department of Water and Power (LADWP), Southern California Edison (SCE), and other utilities which

continue to tap fossil fuel-based sources. As County buildings move towards electrification of its building stock, this will further support emissions reduction related to energy supply. Energy efficiency retrofits are another critical component to reducing building emissions, and this is currently being done through a variety of approaches.

The Energy Management Division of ISD has worked with many departments to support energy-saving retrofits. Since the last MCAP was published in 2011, this unit has installed over 60 energy-saving systems at County facilities. These include, for example, nine chillers, six HVAC systems, four building automation systems, and 13 LED lighting projects in the last 10 years. Funding for this work has been financed through an Energy Revolving Loan Fund, originally capitalized from funding from the American Recovery and Reinvestment Act. More recently this work has been supported with several millions of dollars a year from CEO funding.

The Southern California Regional Energy Network (SoCalREN) has completed 96 energy efficiency projects at LA County buildings since SoCalREN began its work in 2012, some of which overlap with ISD's Energy Management Division's work. County projects supported by SoCalREN include a countywide street lighting LED upgrade, pool pump variable frequency drive, park lighting upgrades, and comprehensive lighting and mechanical upgrades at multiple County administrative offices, libraries, and the Pitchess Detention Center.

Despite the numerous advantages of installing energy efficient equipment, including presumed long-term cost savings and reduced GHG emissions, expanding retrofit projects at County buildings faces headwinds, some of which are described below:

- **Misaligned or reduced incentives**
    - County departments receive a set utility budget to cover utility costs, resulting in zero incentive to reduce usage.
    - County departments do not receive additional funding for lighting upgrades or retrofit commissioning. Upgrades generally occur only when current equipment fails.
    - Buildings have outdated or no automated building controls, meaning lights and air conditioning may remain on even when not needed. Since 2011, ISD has installed just four automation systems in County buildings, partly due to lack of funding. The recently awarded grant from the US Department of Energy under the Energy Efficiency Community Block

Grant will be partially used to make energy management systems investments.
    - Solar installations have slowed due to changes made by California Public Utility Commission on net-metering incentives.

- **Structural issues with the Energy Revolving Loan Fund (RLF)**
    - County departments have access to a loan fund to help cover the cost of renovations, but this fund is structured in a way that disincentivizes use for energy efficiency projects.
        - Energy saving upgrades are postponed at times because it can be financially advantageous for departments to wait until equipment fails before updating them with energy efficient models. This is because the replacement or repair costs hit a general fund pool rather than a department's budget.
        - For NCC funds, the timeline of knowing the amount of funding received makes it difficult to execute a work order before the end of the fiscal year. If the NCC funds were treated as an actual RLF, County departments would know the budget in advance to solicit energy efficiency projects.

- **Limited training for building staff to minimize GHGs**
    - Staff training to reduce energy and water use would be beneficial, as employees may forget to turn off lights or the air and heating systems when leaving their buildings. Additionally, Title 24 building code changes are on a three-year cycle, and County facility staff should be, across all departments, knowledgeable about current and pending building codes.

- **Failure to account for long-term savings with efficiency upgrades**
    - While upfront costs to replace inefficient equipment and lighting, non-recreational, high-water use turf, and other changes may be a heavy lift, long-term savings would offset the investment. Budgets are often not designed to consider long-term cost savings.

- **Cultural shifts and fear of downstream costs**
    - SoCalREN's programming offers incentives to public agencies to install energy efficient equipment at their facilities. It can lower utility costs for County departments while simultaneously reducing GHG emissions. Despite these benefits, there has been resistance to adoption from

departments. For instance, SoCalREN programs that would have installed cost-free heat pumps and free EV chargers at County-run buildings faced repeated refusals in recent years. This resistance may reflect challenges with inter-agency communication and coordination or could reflect a fear of change or concerns about potential downstream costs.

Transportation

LA County has made significant progress in converting its fleet to zero emission vehicles (ZEVs), installing charging stations at County public buildings, and increasing employee telecommuting and use of personal EVs - all of which reflect leadership in the transportation sector. These successes, along with the challenges that continue to affect expansion, are described below.

- **Public charging stations**
  - ISD's Clean Transportation and Energy Program (CTEP) has installed 1,357 Level 2 and 19 DC Fast Charging stations at 100 County parking lots or garages. CTEP also monitors charging station outages and works with County electricians, departments, and associated contractors to ensure that inactive chargers are quickly brought back online. County charging stations exceed the state guidelines for uptime, consistently reporting 98 percent uptime. Additionally, 108 projects, with 17 County departments, are in development and will result in the installation of an estimated 1,722 Level 2 charging stations and 45 DC Fast Charging stations. These largely grant- and incentive-funded projects have made LA County a clear leader among counties in building its infrastructure to accommodate the transition to EVs.

- **Electrification of the County fleet**
  - ISD recently reported back to the Board on the Clean Fuel Sustainable Fleet Report dated February 29, 2024. Currently, there are 1,076 Alternative Fuel Vehicles which represent 18.2 percent of on-road, non-emergency vehicles managed under ISD Fleet Services. From 2022 to 2023, there was a near doubling of ZEVs in the ISD managed fleet. However, due to the size and service life of the fleet, absent early vehicle retirements, the transition to near 100 percent ZEV adoption will take more than a decade. Challenges to more rapid adoption include:
    - **Limited availability of ZEVs** - While the vehicles overseen by ISD Fleet services include many light-duty passenger vehicle models,

which have ZEV or plug-in hybrid availability, higher heavier duty (class 2 and up) vehicles have far fewer market options.

- **Higher upfront cost of ZEVs -** While the purchase price of ZEVs can be higher than a typical combustion engine vehicle, lower annual maintenance costs and rebates and tax incentives help to offset that higher price. Departmental purchasing decisions often do not take those factors into account. In some cases, while the upfront costs of a ZEV may appear higher, it may be lower after the capture of incentives. In addition, the County might consider instituting a price for carbon that incorporates the true societal costs of using a high GHG emission vehicle to further incentivize EV purchases.
- **Daily use of the vehicle can exceed ZEV range -** Some County vehicles are required to travel distances greater than the range of a ZEV on a daily basis, and charging during the workday may not be an option. Plug-in hybrids and increased access to DC Fast Charging stations might help address this issue. Departments should clearly demonstrate, with actual use data, when range will be exceeded for exception requests to purchasing a ZEV.
- **Funding for charging stations** - The average cost to install charging stations has increased faster than inflation and that impacts the quantity and speed ISD can install them. To mitigate against cost increases, ISD has been very successful at applying for grant and incentive funding that lowers the NCC of the charging station network, in many cases by a factor of three or more. Many of these grant and incentive programs require public access to the charging stations to increase public availability. Behind the fence infrastructure dedicated for fleet use will need significant additional investments to help enable County vehicle fleets to electrify.

- **Employee Commutes/EV Ownership**
  - GHG emissions related to County employee commutes are expected to be significantly lower when compared to the last GHG inventory. According to the County's Annual Vehicle Ridership Survey for employees who work at 68 regulated County worksites, EV usage by employees increased by 40 percent in 2023 compared to 2022. Ensuring that County work sites are equipped with EV charging infrastructure could further encourage the purchasing or leasing of EVs by County employees.

- Electrifyze is the ISD-led EV Car Coaching and Education Platform designed to increase the number of EVs purchased by County employees and the community. This pilot program's 1:1 support for people interested in buying an EV led to a 90 percent adoption rate. The national EV adoption rate is 8.5%. Based on this success, in 2023, the County began development of the Electrifyze web platform, a highly scalable approach for providing end-to-end support in a self-serve way by integrating an Artificial Intelligence virtual car-buying coach, which is trained using a custom-developed EV knowledge base. With this new platform in place, the County may see continued acceleration of EV ownership by County employees.
- The County's Employee Commute Reduction Program (ECRP), also known as Rideshare, promotes County employee participation in trip reduction and rideshare programs. The ECRP is intended to reduce traffic congestion and emissions from vehicles used for commuting between home and the worksite and to increase the Average Vehicle Ridership (AVR) at County worksites. While the pandemic resulted in a 45 percent reduction in employees who use public transportation and rideshare options to get to their worksites compared to the pre-COVID data, this was offset by a 40 percent *increase* in EV usage and an increase in telework, which resulted in the highest countywide AVR scores for the past three consecutive years.
- County employees at regulated work sites are teleworking approximately 29 percent of the time, which significantly lowers GHG emissions related to employee commutes. There is a trend towards more in-office work though. Considering ways to enable expanded telework or remote work that is closer to workers' homes, possibly by enacting cross-departmental mutual agreements for shared space (hoteling), could maintain or even increase reductions in vehicle emissions.

<u>Cross-departmental barriers</u>

County departments often share systemic limitations that negatively impact the County's ability to achieve sustainability goals. These include, in part:

- Vendor contracts that are misaligned with climate goals and lack flexibility (e.g., food vendors still using disposable utensils and other non-preferred containers);
- Lack of staff training on emissions reduction opportunities through normal job duties (e.g., maintenance staff not turning lights off or reducing heating and cooling on weekends when staff depart);

- Job duty statements that do not include requirements for skills or expertise that could contribute to climate goals; for instance, training or certifications in maintenance of native plants, etc.;
- Limited opportunity to develop new job positions to support intersectional climate-related initiatives (e.g., biological, community engagement, urban planning, climate change, etc.).

Addressing these cross-departmental issues will support more systemic changes needed at County operations.

Recommendation

ISD and CSO should integrate this analysis into the development of the MCAP and climate budgeting process, as recommended above. While funding is needed to support the County's carbon neutrality goals, misaligned incentives, training, and other structural issues need to also be addressed to effectively meet the County's ambitious targets.

Implementation Funding Needs

This report recommends contracting with consultant(s) to do the following three tasks:

1) Conduct a new County operations GHG inventory that considers emissions from all known sectors, with a particular focus on the greatest emissions sources, including the County-owned landfill, vehicle fleet, building energy use, and employee commute sectors. The estimated time needed is nine months, for a total of $250,000, not including LA County staff of ½ FTE for that duration to oversee the project and coordinate amongst relevant departments.
2) Draft an updated, public facing MCAP that synthesizes and highlights data obtained in the emissions inventory, and that elevates actions the County can take to further reduce emissions. The MCAP development could also take up to nine months and cost up to approximately $750,000. This would include a ½ LA County FTE with some potential overlap between the GHG Inventory work and the MCAP work.
3) Pilot a climate action budgeting process with recommendations for how this could be applied to the overall County budgeting process. This could be done at the same time the County operations GHG inventory and MCAP are being prepared and would take up to eight months. The estimated cost is $175,000.

Clean Energy Partnership Roadmap

CEP is convened by the Los Angeles Cleantech Incubator (LACI) with a goal to accelerate the move to 100 percent clean energy while ensuring the region meets the

needs of transportation electrification, building decarbonization, and grid resiliency. With the 2028 Olympic and Paralympic Games coming to Los Angeles, the entire region will be featured on a global scale.

The CEP leadership group is comprised of the County, the Office of Los Angeles Mayor Karen Bass, LADWP, the California Energy Commission, the California Independent System Operator, CPA, and SCE. The CEP Roadmap focuses on achieving environmental goals while prioritizing social and racial equity by ensuring the needs of frontline communities are adequately addressed. It includes existing County policy priorities, including building decarbonization, integrating transportation and building electrification, enhancing grid resiliency, and meaningfully reducing GHG emissions. By supporting the CEP Roadmap, the County can champion a comprehensive plan that aligns with the OurCounty climate goals, promotes environmental justice, and reinforces the County as a leader in sustainable urban development.

CEP Roadmap 2028 goals are focused on three areas. The first is the electrification and decarbonization of buildings, including achieving an additional 29 percent reduction in GHG emissions from buildings. Second is building and transportation electrification, buoyed by the deployment of 1,298 megawatts (MW) of clean, responsive distributed generation, including a Virtual Power Plant. Third is grid resiliency, including the development of a smart, modernized local distribution grid to increase community resilience while improving affordability, creating green jobs, and reducing health risks.

Overall, the CEP Roadmap consists of 17 targets spread among the pillars of Building Electrification, Clean Distributed Generation and Energy-Transported Nexus, and Grid Efficiency and Resiliency. The County is actively working to secure the necessary funding to be able to meet the targets listed in the CEP Roadmap.

Projects at LA County facilities

In response to stresses on the electric grid, in the summer of 2023, ISD piloted projects at six facilities in partnership with the Library, the Department of Public Social Services, and the Probation Department to participate in SCE's Emergency Load Reduction Program as well as LADWP's Demand Response Program. Chilled water setpoints were adjusted and occupied areas were assessed to reduce air handling unit operations in addition to employee behavioral changes. This resulted in a 15 percent reduction in electric load at those facilities that helped free system capacity for other residents of the County on hot days. The County's EV infrastructure is also responsive to electric grid

needs. The EV infrastructure network that ISD has deployed can today manage EV loads over 1 MW across the County to respond to grid emergencies.

Building decarbonization efforts are underway at numerous County facilities. There are 45 solar projects in various stages of completion, planning, and construction that total over 20 MW of solar and a single project is expected to be under contract later this year that could add another 10 MW of solar and more than 20 MWh of battery storage. Furthermore, ISD is helping pilot heat pumps at County facilities, with the first heat pump conversion just completed at Anthony Quinn Library in East LA. These efforts, combined with the transition to CPA's 100 percent Renewable Energy tariff, is helping decarbonize County operations.

SoCalREN Anticipated Projects

Through existing grant funding, SoCalREN estimates that public facilities in the County through 2028 will install 75 HVAC heat pumps, 310 heat pump water heaters, and much more, with a total estimated GHG emission savings of 14,773 MTC02e (Metric tons of carbon dioxide equivalent). That is equivalent to removing over 3,200 passenger vehicles off the road for one year. Additionally, through existing grant funding, SoCalREN estimates for the residential sector through 2028, ~1,000 HVAC heat pumps, ~2,000 HPWH, ~500 electric stoves, and ~250 electric dryers will be installed, creating ~300 jobs, with total of 6,504 MTC02e savings. That is equivalent to another 1,414 passenger vehicles off the road.

Pending Grants

Beyond existing SoCalREN grant funding, ISD's Energy and Environmental Services (EES) continuously applies for grant funding and has a number under review that could lead to substantial GHG reductions in LA County. As of late-March, EES has applied for funding that would reduce GHG emission by 83,431 MTCO2e. Below is a partial breakdown of the potential GHG emission reductions from these projects, if they are awarded funding and implemented.

Pending Grants for Public and Residential Facilities:

- **Equitable Building Decarbonization Grant, California Energy Commission:**

Residential HVAC Heat Pumps	3,000 units
Residential Heat Pump Water Heaters	3,000 units
Electric Stoves	3,000 units
Electric Dryers	3,000 units
Jobs created	100 jobs

- **Greenhouse Gas Reduction Fund, US EPA**

Solar installed Single-Family Homes	1240 homes
Solar benefitting Multi-Family Units	2555 homes
Community Solar Supported	8.18 MW

Pollution Reduction Grant, US EPA

Total from electrification measures at schools through electrifying buildings and transportation would result in 60,674 MTC02e savings.

Should you have any questions concerning this matter, please contact Rita Kampalath, Chief Sustainability Officer, at (323) 459-3939 or rkampalath@cso.lacounty.gov.

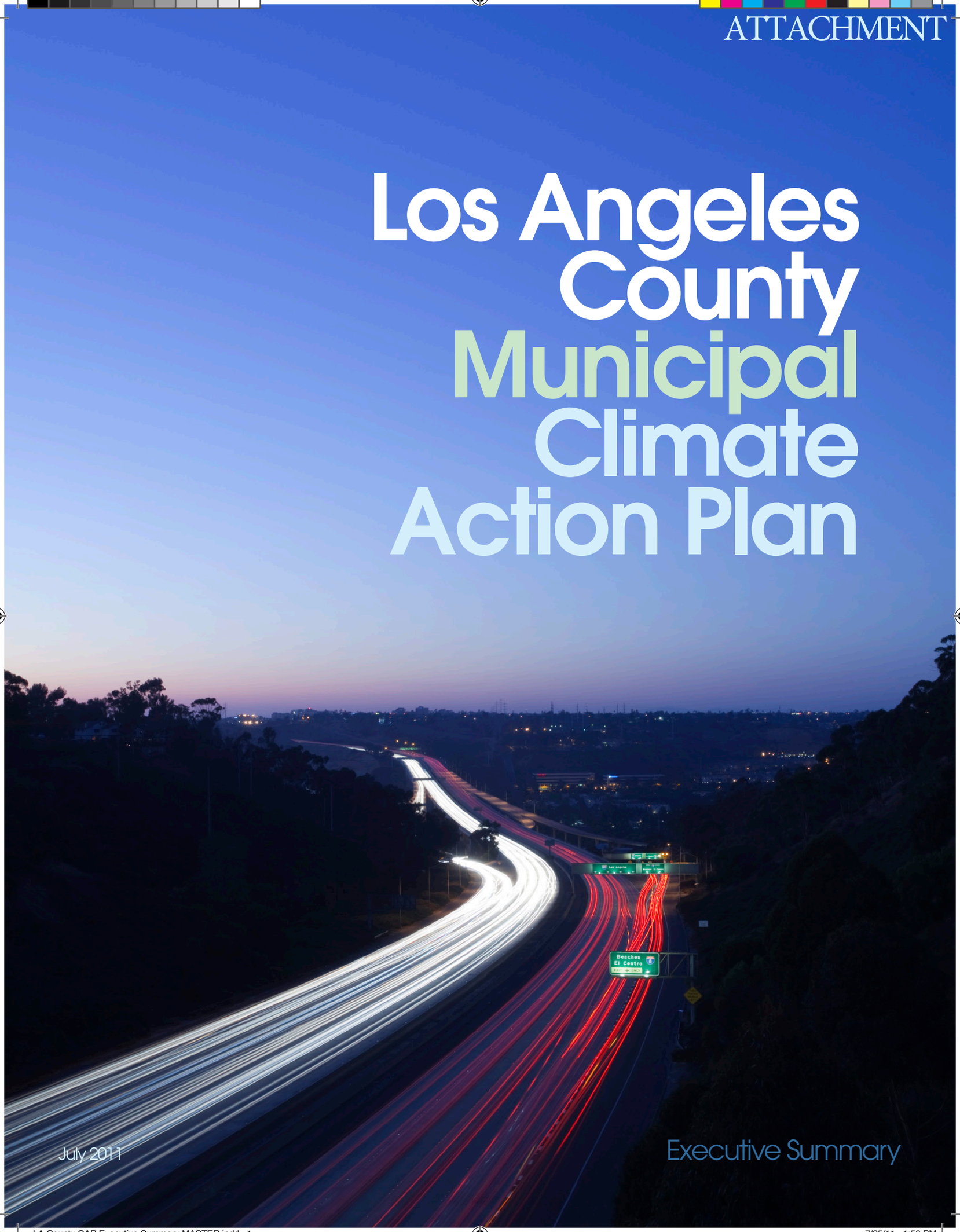
JL:RK:VS:jg

Attachment

c: County Counsel
Chief Executive Officer
Internal Services
Public Works
Regional Planning

ATTACHMENT

Los Angeles County Municipal Climate Action Plan



July 2011

Executive Summary

"Saving our environment's limited natural resources and climate is everyone's responsibility. Future generations depend on our conservation efforts today."

— Green LA County

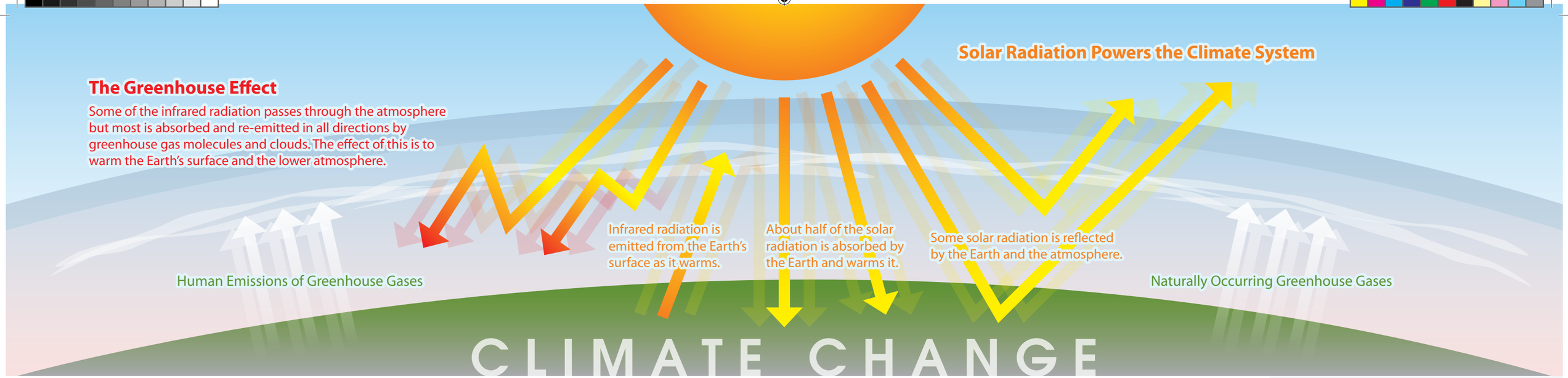
http://green.lacounty.gov/wps/portal/green

The County as a Leader

Los Angeles County has been committed to resource conservation and the improvement of environmental quality for decades. However, with the pace of development and pollution accelerating, additional action is required to ensure the well being of current and future generations. The threat of climate change and global warming has increased this urgency for enhanced environmental protection.

Recognizing that a consistent approach is often the most successful, the State of California adopted the Greenhouse Gas Solutions Act, or Assembly Bill 32, in 2006. Assembly Bill 32 establishes a statewide reduction goal to achieve 1990 greenhouse gas emissions levels by the year 2020. This goal was developed by climate scientists and represents an interim level at which California and the rest of the developed world will have to reach to begin the effort to stabilize carbon dioxide emissions. Additional substantial effort beyond 2020 will be necessary.

Encouraged by the statewide objectives, LA County has accelerated its environmental initiatives. This document outlines a strategy to reduce municipal greenhouse gas emissions and support statewide reduction goals.



Context for Climate Action Planning at the Municipal Level

Many scientists, prominent business leaders, and members of the general public agree that climate change poses a significant threat to our way of life. Over the past 50 years, changes in the global climate, such as temperature increases and sea level rise, have accelerated. There is strong consensus amongst the scientific community that these changes are the result of man-made greenhouse gas emissions.

Naturally occurring greenhouse gases help keep the earth's temperature warm by trapping heat in the lower atmosphere. This phenomenon is known as the greenhouse gas effect. Without these gases the ambient temperature would be about 60 °F cooler than at present. Human activities, such as burning fossil fuels and deforestation, create man-made greenhouse gases that have enhanced this natural greenhouse gas effect.

Global warming is a consequence of excess greenhouse gases in the atmosphere. Warming temperatures lead to changes in the global climate, which may cause unique impacts on California.

However, local governments can play a key role in developing and instituting policies to reduce man-made greenhouse gas emissions. LA County is home to one of the largest metropolitan and suburban areas in the United States. To provide adequate services for County residents and businesses, municipal operations must be equally large. Reducing greenhouse gas emissions generated by LA County's municipal activities can therefore play a substantial role in reducing regional climate change impacts. The County will also lower energy consumption and expenditures, which will improve the resiliency of its future operations in the face of unexpected surges in energy costs.

LA County's Municipal Operations

Municipal operations are managed by the Chief Executive Officer, who oversees more than 101,700 employees. These employees are organized into 37 departments and numerous commissions. Together, the County departments function to provide and maintain public services to residents and businesses. Although essential for a healthy and happy community, provision of these services generates greenhouse gas emissions. For example, the County's streetlights and traffic signals, which are managed by the Department of Public Works, consume electricity. Generation of this electricity currently requires fossil fuels, which in turn creates greenhouse gas emissions.

The County has identified 12 primary sectors that contribute to municipal emissions. The provision of public services, such as the operation of streetlights and traffic signals, represents one type of emissions sector. Resources consumed by County employees, such as water or fossil fuels, also generate greenhouse gas emissions. Finally, all the buildings owned and operated by the County require energy for heating, air conditioning, and lighting. Provision of this energy generates greenhouse gas emissions through the combustion of fossil fuels.

Existing municipal operations within LA County are comprehensive and broad. However, while the number of emission sources may seem daunting, it provides the County with a menu of options from which to select and implement programs to reduce municipal emissions. The County can therefore develop actions that target municipal operations across various economic and public sectors, rather than focusing on one source. Doing so will not only contribute to greenhouse gas emission reductions, but also strengthen the community as a whole.

How does Electricity Generate Greenhouse Gas Emissions?

Utility companies generate power through a combination of sources, such as wind, solar, gas, coal, natural gas, and biomass. Although use of alternative energy is increasing, the majority of electricity is generated by fossil fuels. So, how is electricity generated from coal/natural gas, and where do the emissions come in? First, the coal or gas is extracted from the earth and burned to generate steam. Second, the steam is used to drive a steam turbine, which in turn drives an electrical generator. Third, the electricity is transmitted over utilities lines. Finally, the electricity is used to power an appliance, such as a television or computer. This whole process generates greenhouse gas emissions, but the majority of emissions are produced when the fossil fuel (coal/natural gas) itself is burned. Fossil fuels store carbon. When they are burned, carbon dioxide, a greenhouse gas, is released. Thus, when we turn on an appliance, or leave one on unnecessarily, we create demand for electricity, which if supplied by the power plants burning fossil fuels, adds to greenhouse gas emissions

Approach to Climate Protection within LA County

LA County has been a leader in establishing initiatives to protect the environment and conserve natural resources. In fact, the County began programs to reduce its municipal energy consumption and greenhouse gas emissions nearly two decades ago. The County's commitment to climate protection is born out of an understanding that the community and its residents are dependent on the health of the environment. By reducing greenhouse gas emissions and resource consumption within its own municipal operations, the County seeks to lead by example and help create a more sustainable way of living.

Historic Achievements

LA County began programs to improve building energy efficiency and to reduce municipal resource consumption in the mid-1990s. Since this time, the County has adopted numerous programs that target various types of municipal greenhouse gas emissions. While a number of these initiatives are still on-going, the County has already achieved some significant milestones.

LA County's 12 Emissions Sectors

- **Building Energy Use**—Electricity and natural gas consumption by County owned buildings.
- **Vehicle Fleet**—Gasoline and diesel consumption by County vehicles.
- **Streetlights and Traffic Signals**—Electricity consumption by County managed streetlights and traffic signals.
- **Refrigerant Usage**—Emissions of ozone depleting substances from County refrigerators and air conditioning units.
- **Landfills**—Decomposition of solid waste at County owned and operated landfills.
- **Wastewater Treatment**—Decomposition of liquid waste at the County's four wastewater treatment plants.
- **Water Pumps**—Electricity consumption by County owned water pumps.
- **Miscellaneous Sources**—Emissions from ammunition, ethylene oxide, compressed carbon dioxide, and acetylene.
- **Waste Generation**—Decomposition of solid waste generated by County employees.
- **Water Consumption**—Electricity consumption for the treatment and transport of water consumed by County employees.
- **Employee Commute**—Gasoline and diesel consumption by employee commute trips.
- **Co-generation Facilities**—Emissions from electricity generation and consumption at the County's two co-generation facilities.

The County began creating a robust infrastructure to support new technologies and future environmental initiatives in 1994 with the creation of its building energy retrofit program, which was headed by the newly established Energy Management Division. This program is still on-going today and seeks to improve the energy efficiency of existing County facilities. Shortly after adoption of the building energy program, the County began addressing inefficient vehicles through the Clean Fuels Program. Electric vehicle charging stations were also installed at almost two dozen County sites and smart global positioning systems were placed in 250 vehicles. These and other achievements provided a strong foundation for the County's current environmental efforts.

To promote leadership on climate change through emissions reporting and verification, the County joined the California Climate Action Registry (CCAR) in 2007. CCAR is a voluntary greenhouse gas reporting registry that promotes early actions to reduce greenhouse gas emissions. With the support of CCAR, the County conducted an initial inventory of municipal greenhouse gas emissions in 2006. The County has also joined the Los Angeles Regional Collaborative for Climate Action Sustainability. Through this regional collaborative, the County shares resources with other jurisdictions and encourages collaboration on local efforts to address climate change.

LA County's commitment to environmental protection has been recognized by both outside agencies and through internal award programs. In 2007, the County received the Building Program Award at the Municipal Green Building Conference and Expo. This award showcased the County's energy-saving and resource-conservation initiatives. The County's Green Purchasing Policy was also recognized in 2008 with the California State Association of Counties Merit Award. National attention was given to the County's extensive efforts in 2009 when it was selected as one of 10 communities to host local climate conversations on Earth Day.

On-Going Activities

County initiatives to reduce resource consumption and greenhouse gas emissions have accelerated in the past five years with the adoption of the Energy and Environmental Policy (Energy Policy) in January 2007. The Energy Policy

provides guidance for the development and enhancement of environmental programs within County departments. Since its adoption, the Energy Policy has created programs that target energy and water efficiency, stewardship, outreach and education, and sustainable design.

The County's energy and water efficiency program seeks to reduce energy and water consumption at County-owned facilities by 20%. The program includes initiatives to develop conservation monitoring practices and implement energy and water efficiency projects. Through this program, the County has coordinated and implemented hundreds of retrofit projects, created the Office of Recycled Water Task Force, developed water conservation best management practices, and much more. The County continues to track its progress towards achieving reduction goals through bi-annual reports to the County Board of Supervisors.

LA County is currently implementing a number of programs to enhance its environmental stewardship and reduce its carbon footprint. For example, the Department of Public Works has distributed over 8,000 desk-side

National Conversation on Climate Action—Earth Day 2009

LA County was one of just ten communities selected out of hundreds of cities throughout the United States to host a Spotlight Conversation on Climate Action. Communities selected for this honor received national support in event planning and promotion. The County's event showcased the green initiatives currently being undertaken by County departments. It also provided an opportunity to engage all 88 cities within the County in becoming a "green" community. Hundreds of exhibits and several speakers helped make the day a success. The national recognition given through this event attests to the County's long-time support and commitment to reducing greenhouse gas emissions.

What is Environmental Stewardship?

Environmental stewardship is the shared responsibility to live within one's means and improve the quality of the natural world. Individuals and organizations can become better environmental stewards by taking simple steps. For example, recycling will reduce the consumption of natural resources and send less waste to landfills. Turning the computer off at night or using efficient lighting avoids wasteful energy use. These are both examples of the many little things that can be done to improve the world in which we live.

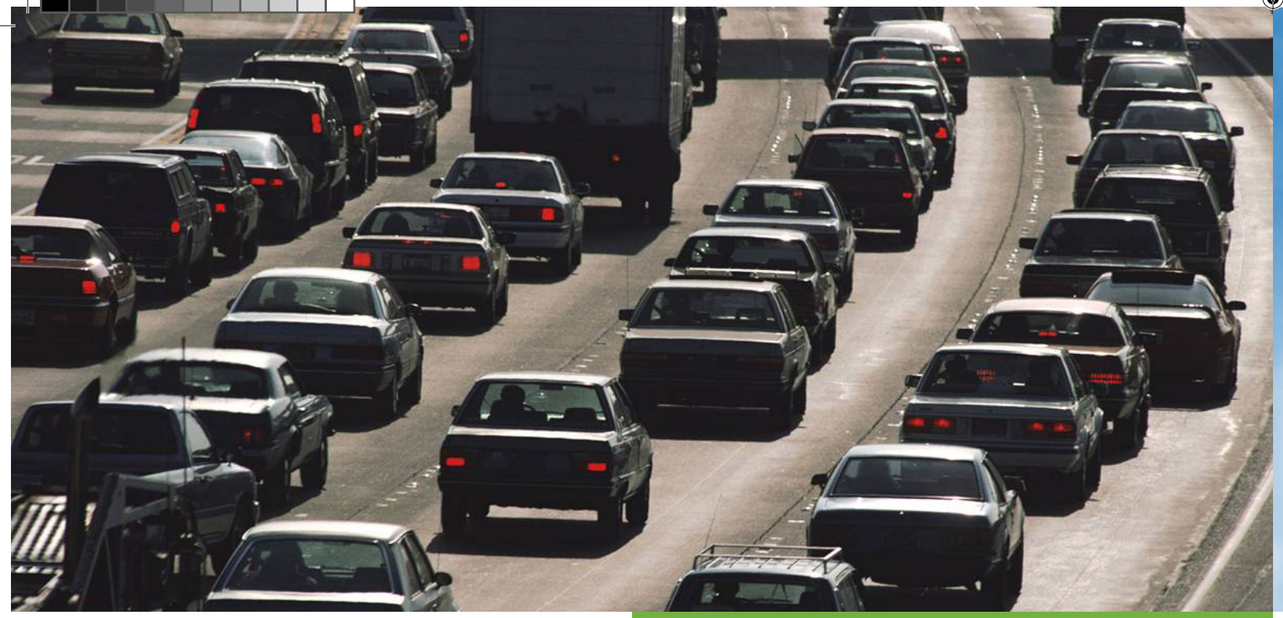
On-Going Activities

paper recycling bins to County departments. Purchasing policies are also in place that prohibit the use of Styrofoam food packaging and require all departments to purchase paper with a minimum of 30% recycled content. The County has also expanded its Clean Fuels Programs to transition vehicle fleets to alternative fuels and enhance fuel economy. Together, these programs reduce the County's consumption of natural resources, generation of greenhouse gas emissions, and energy costs.

LA County is privileged to have more than 101,700 employees working throughout 37 departments. Implementing successful programs to reduce greenhouse gas emissions is largely dependent on the support and hard work of dedicated employees. The County therefore takes an active role in providing education and outreach for environmental initiatives. Information is provided to County employees through email, events, and online. Employees are also encouraged to set personal goals and reduce individual greenhouse gas emissions. For example, the County provides financial incentives for employees to purchase green vehicles and transit passes.

The County has adopted a sustainable design program to improve the performance of County-owned buildings. As part of this program, the County requires all newly constructed facilities that are greater than 10,000 square feet to meet the Leadership in Energy and Environmental Design (LEED) Silver standards. Green Building Standards are also being developed for existing buildings larger than 4,000 square feet in size. LEED is a building certification program that encourages the construction of facilities that target energy savings, water efficiency, greenhouse gas reductions, and improved indoor air quality. Four levels of certification are offered—certified, silver, gold, and platinum—that correspond to the level of sustainable measures incorporated into the project. Through its LEED requirements, the County hopes to construct buildings that are not only more sustainable, but also more enjoyable places to work and visit.

In addition to reducing greenhouse gas emissions emitted directly by municipal buildings and employees, LA County has also adopted several programs that target emissions generated by the community. Reducing community-wide emissions not only benefits the public as



a whole, but also alleviates some of the pressure placed on municipal services. Community programs sponsored by LA County target waste generation and recycling, water consumption, energy efficiency, and much more. Perhaps one of the most robust programs is Energy Upgrade California in LA County. This program provides incentives and rebates to encourage homeowners to reduce energy use and conserve resources. LA County hopes to improve the energy efficiency of tens of thousands of homes in the County by 2012.

Overview of the Municipal Climate Action Plan

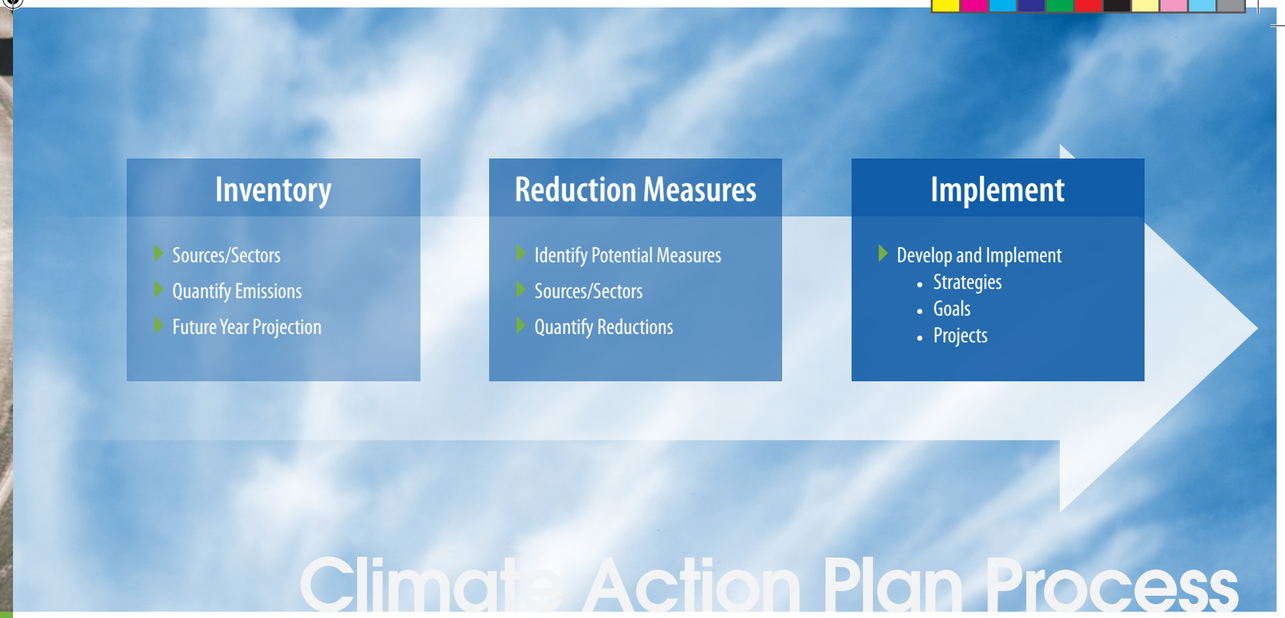
A Climate Action Plan includes an inventory of greenhouse gas emissions under a jurisdiction's control and outlines measures for reducing and avoiding future emissions to achieve a specific reduction target. This document represents LA County's strategy for reducing greenhouse gas emissions associated with its municipal operations. Using energy more efficiently and reducing the consumption of natural resources is a key priority for LA County. Continuing current levels of consumption puts the County at risk for future price shocks and market volatility, which may impact the County's ability to provide community services. The measures and actions outlined in this Municipal Climate Action Plan will improve the County's energy efficiency and reduce annual fuel consumption.

Building Retrofits—Save Money, Reduce Energy, Avoid Greenhouse Gas Emissions

LA County has implemented hundreds of energy efficiency retrofit projects. Headed by the Internal Services Department, these retrofits target lighting systems, heating and air conditioning units, and overall building energy use. To date, the County has performed:

- 39 heating, ventilating, and air conditioning retrofits at the largest County facilities.
- 282 lighting retrofits at approximately 95% of County facilities over 10,000 square feet.
- 16 installations of lighting controls at targeted County facilities.
- 45 building "tune-ups" to ensure operations achieve maximum levels of energy efficiency.

Together, the cumulative energy reduction achieved by these projects has offset nearly 362,874 metric tons of greenhouse gas emissions. This is equivalent to taking 10,000 cars off the road or planting 15,000 acres of trees. In total, the retrofits have saved LA County over $110 million. On an annual basis, this equates to about 10% of the total Internal Services Department's utilities budget used in County facilities.



Climate Action Plan Process

Purpose of the Municipal Climate Action Plan

LA County's Municipal Climate Action Plan has three primary objectives. First, the Municipal Climate Action Plan includes an inventory of all greenhouse gas emissions that result from the County's municipal operations for 2009 and projected for 2020. Performing an inventory helps the County to identify areas with the highest emissions. The County can then target emissions reductions measures to these priority areas.

Second, the Municipal Climate Action Plan identifies an emissions reduction target and measures for reducing future municipal greenhouse gas emissions. LA County's emissions reduction target was designed to support California's larger initiative to reduce statewide emissions to 1990 levels by 2020. Based on the County's existing and future emissions profile, the Municipal Climate Action Plan recommends specific actions the County can take to meet this target.

Third, the Municipal Climate Action Plan provides a road map for successfully implementing the emissions reduction measures selected by the County. Reaching LA County's reduction target involves multiple moving parts. County employees must be given the tools and knowledge to support new policies and programs. Funding for initiatives, such as building retrofits or incentive programs, must be available. Successes—and failures—need to be monitored and publicized. This Municipal Climate Action Plan outlines several recommendations to address these and other issues so that the County can make informed management decisions.

Development of the Municipal Climate Action Plan

LA County began working on its Municipal Climate Action Plan in December 2009. The County first developed a detailed analysis of existing and future greenhouse gas emissions from municipal operations. The inventory was completed in January 2011, after review by County department heads. Simultaneous with this work, the County began researching measures to reduce its greenhouse gas emissions, based on on-going and planned programs and input provided by department heads. A prioritized list of measures was identified to reduce the County's emissions, including measures that could be implemented in the future. These measures were analyzed for emissions savings, and total reductions compared to the County's emissions reduction target. The Municipal Climate Action Plan was prepared for circulation to County employees in June 2011.

Organization of the Municipal Climate Action Plan

The Municipal Climate Action Plan is organized into the following sections:

- Climate Change Science and Policy—Provides an overview of climate change, global warming, and recent state and local legislation.
- LA County's Greenhouse Gas Emissions and Emissions Reduction Plan—Summarizes greenhouse gas emissions that were generated by municipal operations in 2009 and presents an estimate of emissions in 2020. Identifies the emissions reduction measures selected by the County.
- Individual Sector Summaries—Categorizes the County's reduction measures by emissions sector.
- Implementing the Municipal Climate Action Plan—Includes employee engagement strategies, financing options, a time frame for future plan updates, recommendations for data collection and record keeping, and suggestions for long-term management.

Emissions Reduction Target

Establishing an emissions reduction target is important to help guide the development of County programs to address greenhouse gas emissions. To ensure the target is consistent with other local and regional initiatives, the County based its greenhouse gas emissions target on the California's Global Warming Solutions Act, otherwise known as Assembly Bill 32. LA County's target is to reduce municipal greenhouse gas emissions by 15% below 2009 levels by the year 2020. Achieving this goal would avoid the generation of 234,766 metric tons of greenhouse gas emissions, which is equivalent to the following actions:[1]

- Removing 46,000 passenger vehicles from the road each year.
- Reducing gasoline consumption by over 26 million gallons.
- Consuming roughly 546,000 fewer barrels of oil.

Consistency with Assembly Bill 32

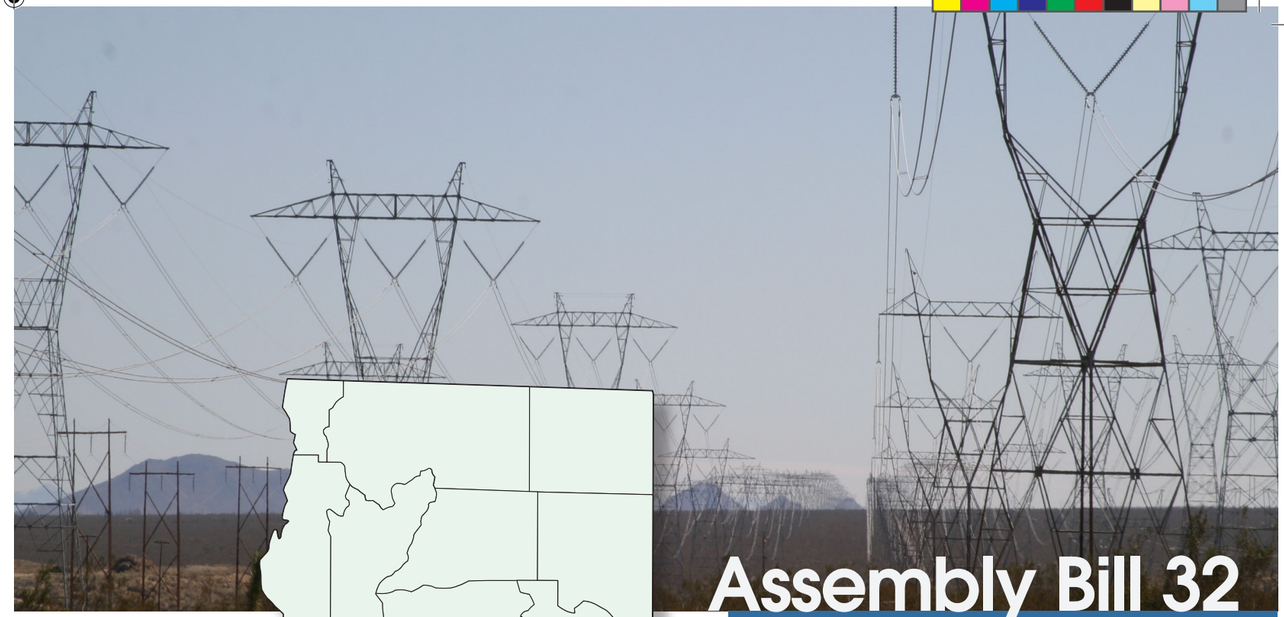
Assembly Bill 32 establishes a statewide emissions reduction goal to achieve 1990 emissions levels by the year 2020. In 2009, the California Air Resources Board published the Assembly Bill 32 Scoping Plan to outline various strategies for achieving this statewide emissions goal. The Scoping Plan recognizes the key role local governments play in reducing greenhouse gas emissions. To ensure municipal emissions match the States' reduction target, the Assembly Bill 32 Scoping Plan recommends an emissions reduction goal for local governments of 15% below today's levels by 2020.

By selecting a reduction target that is consistent with Assembly Bill 32, LA County directly contributes to statewide initiatives to reduce greenhouse gas emissions. More importantly, the County's target is supported by factual evidence and scientific analysis. Achieving the County's reduction target will therefore help avoid global impacts to climate change.

1. Based on http://www.epa.gov/cleanenergy/energy-resources/calculator.html

What is an Emissions Inventory?

Emissions inventories can be performed on various geographical or political scales. In general, all inventories include a quantitative analysis of greenhouse gas emissions associated with a particular jurisdiction. A municipal inventory includes all emissions generated by government services and operations. Government services are those things that are provided to the community, such as water pumping, streetlight and traffic signal maintenance, waste collection, and police and fire support. Government operations largely include direct resource consumption by municipal buildings and employees.



Assembly Bill 32

LA County is not alone in selecting an emissions reduction target that is consistent with Assembly Bill 32. A number of other jurisdictions throughout the state have already adopted similar goals. The figure to the left shows a selection of jurisdictions that have committed to emissions reductions. Goals that are identified by an asterisk (*) are specific to municipal operations; all others are representative of community-wide reduction goals.

Napa County
15% below existing (2005)

Alameda County
15% below existing (2003)*

City of San Francisco
20% below 1990 levels

City of Menlo Park
26% below existing (2005)*

City of Palo Alto
15% below existing (2005)*

East Bay Cities

City of Albany
25% below existing (2004)*

City of Berkeley
20% below 2000 levels

City of Emeryville
25% below existing (2004)*

City of Piedmont
15% below existing (2005)*

City of Hayward
15% below existing (2005)

City of Newark
15% below existing (2005)

San Bernardino County
15% below existing (2007)

Town of Apple Valley
15% below existing (2005)*

City of Pasadena
1990 levels by 2020

City of Los Angeles
35% below 1990 levels

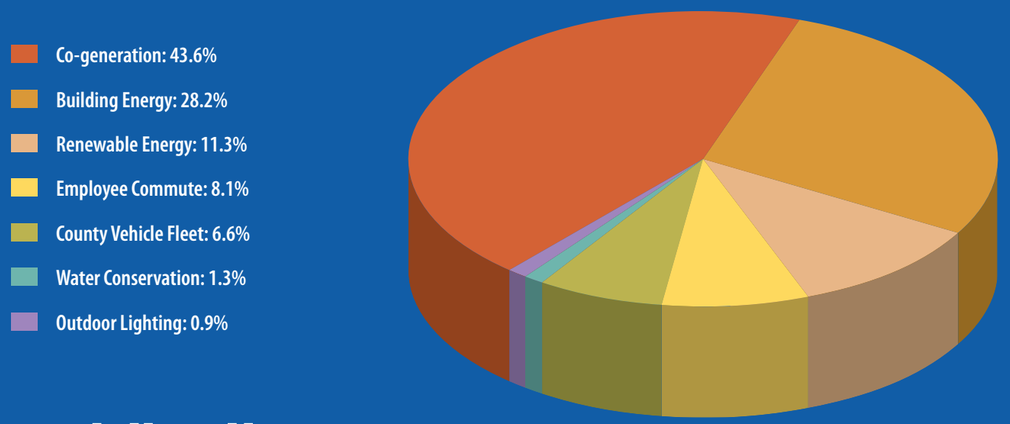
City of Irvine
1990 levels by 2020

City of Laguna Beach
15% below 1990 levels by 2012

City of San Diego
15% below 1990 levels by 2010

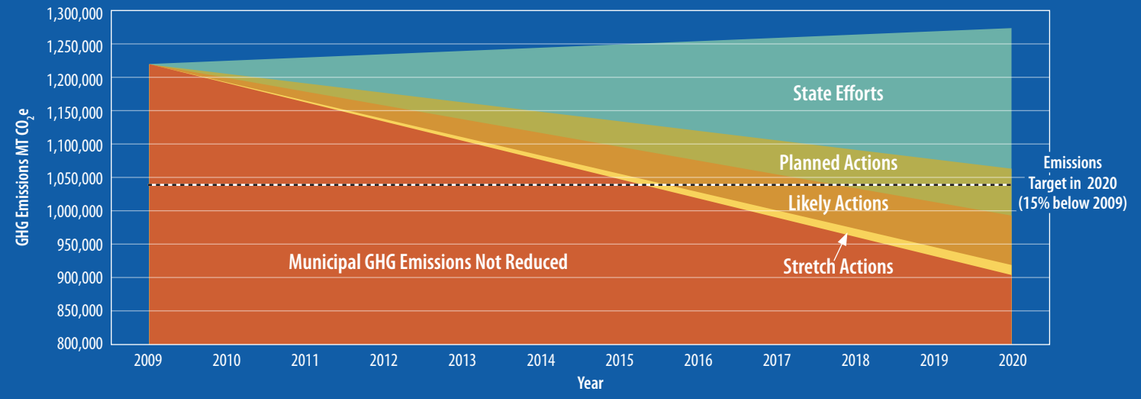
City of Chula Vista
20% below 1990 levels*

GHG Reductions by Emissions Sector



Contributions

Required, Planned, Likely and Stretch Actions



Reaching the Target

Reaching the Reduction Target

If LA County continues along its current path, greenhouse gas emissions would increase by 4% by 2020. The growth in emissions is reflective of increased demand on County services and activities. The largest increase in emissions occurs from growth in the County-owned vehicle fleet, building energy use, and employee commute sectors. Achieving LA County's greenhouse gas reduction target will therefore require commitment and action across all levels of government operations.

Key Measures for Reducing Greenhouse Gas Emissions

Over the last decade, LA County has developed multiple programs to improve energy efficiency and government sustainability. Continuing and strengthening these efforts will ensure the County meets and exceeds its emissions reduction target. In addition, implementing new policies and programs that target the largest emissions sectors, like employee commute and building energy, will further reduce municipal greenhouse gas emissions and the County's impact on climate change.

The County selected a prioritized list of reduction measures by first reviewing measures commonly taken by other municipalities and corporations. The list of greenhouse gas reduction measures was then further refined to match LA County's ongoing programs and organizational structure. The following criteria were specifically considered by the County in reviewing greenhouse gas reduction measures.

- Greenhouse Gas Reductions—How effective is the measure at reducing greenhouse gases?
- Cost—How much does the measure cost? Is funding already in place for the measure?
- Other Benefits—Does the measure improve water quality or conserve resources? Will it create jobs or enhance employee wellbeing?
- Consistency with Existing Programs—Does the measure compliment or extend existing programs?
- Impact on Employees and the Community—What are the advantages of the measure?
- Speed of Implementation—How quickly can the measure be implemented and when will the County begin to see benefits?

The County categorized selected reduction measures into three groups. Programs that are already being implemented by the County are identified as *planned* actions. These programs will continue through 2020 and support the County's reduction goal. Programs that are not currently ongoing, but will likely be implemented by 2020 are identified as *likely* actions. Finally, programs that include ambitious goals, or that may not be as feasible for the County to implement by 2020, are identified as *stretch* actions.

The reduction measures can be grouped into seven broad sectors, which will affect emissions across LA County's municipal operations. The measures include programs that improve building energy efficiency, increase renewable energy development, reduce water consumption, and much more. When combined with state efforts, implementing all *planned* actions will enable LA County to reduce its greenhouse gas emissions by 18% below 2009 levels by 2020. This means that if the County continues its on-going environmental initiatives, they would exceed their emissions reduction target by 43,339 metric tons. If the County committed to all *planned, likely, and stretch* actions, municipal greenhouse gas emissions would be reduced by 368,448 metric tons, which is 25.9% below 2009 levels.

How Do State Efforts Contribute to Emissions Reduction?

Did you know that actions undertaken by the state government will help LA County achieve its emissions reduction goal? Legislation enacted at the state level establishes requirements on automobiles, waste generation, electricity sales, and much more. For example, the state requires electric utility companies to increase their procurement of renewable resources by 2020. Renewable resources, such as wind and solar power, produce the same amount of energy as coal and other traditional sources, but do not emit any greenhouse gases. By generating a greater amount of energy through renewable resources, electricity provided to the County will be cleaner and less greenhouse gas intensive than if the state hadn't required the renewable standard. Even though this and other state measures do not require local government action, they will reduce greenhouse gases in LA County by 208,783 metric tons in 2020.

Planned Actions

Spotlight on Planned Actions

LA County began implementing programs to reduce municipal greenhouse gas emissions over a decade ago. The County has identified 11 actions for reducing greenhouse gas emissions that are ongoing initiatives, planned to continue through 2020. Together, these 11 *planned* actions, in combination with other state efforts, will ensure LA County not only meets its emissions reduction target, but exceeds it by 43,339 metric tons.

Energy Retrofits for Existing County Facilities – *40,334 metric ton GHG reduction*

Since the mid-1990s, the County has conducted energy efficiency retrofits of existing buildings. These retrofits have targeted lighting, heating and air conditioning units, and overall building energy use. In 2011, energy savings from the program will reduce greenhouse gas emission by about 5,000 metric tons. Continuing the retrofits will result in even larger greenhouse gas reductions, or a total of 40,334 metric tons in 2020.

Leadership in Energy and Environmental Design Silver Standards for New County Facilities – *1,995 metric ton GHG reduction*

In 2007, the County adopted a requirement for all newly constructed County facilities greater than 10,000 square feet to meet LEED Silver standards. LEED is a building certification program that encourages the construction of facilities that target energy savings, water efficiency, greenhouse gas emissions reductions, and improved indoor air quality. Through continuation of its LEED requirement, the County expects to reduce greenhouse gas emissions by 1,995 metric tons in 2020.

Energy Efficiency Measures for County-Owned Desktops, Vending Machines, Printers, and Leased Building – *2,686 metric ton GHG reduction*

The County is expected to own nearly 98,000 computers by 2020. A typical desktop requires 166 watts to power its system. Switching computers to thin clients reduces the desktop energy demand by 159 watts, or by 96%. The County has pledged to replace one-third of its computers by 2020 with thin clients.

Vending machines require energy for cooling and system operations. There are currently 250 vending machines operating in County facilities. Of these, about three-quarters are equipped with a VendingMiser®, which reduces energy consumption when the machine is not being used. The County plans to retrofit their remaining vending machines with a VendingMiser® by 2020.

It is estimated that by 2020, about a quarter of personal computers will be linked to an individual printer. This means that the County will likely own and operate over 24,000 printers in 2020. Replacing personal printers with shared high speed production printers can lead to energy savings of 30% to 80% for imaging and printing services. To improve printing energy efficiency, the County will install one shared system per 15 printers throughout its departments by 2020.

The County currently leases over 6% of its buildings. Requiring leasing decisions to account for the energy efficiency of a facility can help promote building energy retrofits. The County will therefore require that newly leased buildings improve energy consumption by 20% over 2009 levels.

Together, the actions included in this initiative will avoid 2,686 metric tons of greenhouse gas emissions in 2020.

Achieve the County's Goal of Reducing Department Water Consumption by 20% – *1,320 metric ton GHG reduction*

As part of the Energy Policy's goal to reduce water consumption in County facilities, the Board of Supervisors directed all County departments to implement conservation measures in August 2008. Departments were directed to immediately reduce water consumption by 10% by December 31, 2008, and to achieve an additional 10% reduction after that. Electricity is required to treat, distribute, and convey water. The generation of this electricity consumes fossil fuels and releases greenhouse gas emissions. Reducing water demand and conserving water can therefore save energy and avoid future emissions. As part of this measure, the County has committed to achieving an additional 10% reduction in water consumption by 2020. Attaining this goal will reduce greenhouse gas emissions by 1,320 metric tons in 2020.

Implement Projects Outlined in the Recycled Water Master Plan – *624 metric ton GHG reduction*

The County's Recycled Water Task Force issued a final report in January 2007 detailing several recommendations for utilizing recycled water and improving water conservation. Recycled water helps reduce greenhouse gas emissions because it requires less energy to transport and treat than water supplied by traditional sources. The County has committed to supplying over 370 million gallons of recycled water by 2020. This will result in a reduction of 624 metric tons of greenhouse gas emissions in 2020.

Expand Existing Trip Reduction Programs – *11,889 metric ton GHG reduction*

The County currently offers a number of employee benefits to promote the use of public transit and reduce single occupancy commute trips. For example, employees are able to purchase transit fares with pre-tax dollars. Information on rideshare

Energy Savings Equal Cost Savings

Did you know that greenhouse gas savings are not the only benefit achieved by building energy retrofits? Retrofits can reduce energy costs, improve air quality and health, conserve water, and enhance employee wellbeing. Continuing the retrofits of existing County facilities therefore produces results that will not only benefit the environment, but also County employees and residents.

What is a Thin Client?

"Thin Clients" are computing devices that enable more efficient networking connection and processing. They have no hard drive, fan, or other moving parts, which means they require less energy. Thin clients are also more secure and require less maintenance than their traditional desktop counterparts.

Strong verses *Weak* Greenhouse Gases?

Greenhouse gases are not created equally. All greenhouse gases have what is called a Global Warming Potential or GWP for short. The GWP is used to compare greenhouse gases based on their potential to trap heat and remain in the atmosphere. Some gases, like those emitted by refrigerants, can absorbed more heat than others, and thus have a greater impact on global warming. For example, carbon dioxide is considered to have a GWP of 1, while some gases emitted by refrigerants can have GWPs in excess of 23,000. This means that these gases are 23,000 times more powerful than carbon dioxide.

Employee Commute Benefits

Want more information on commuter benefits? Check out the County's Energy Efficiency & Environmental Information website, http://green.lacounty.gov/

programs is published in the Workspace Connection. Certain departments also offer alternative work schedules and telecommuting. These programs help reduce the number of commute trips made by County employees, which results in fewer greenhouse gas emissions.

As part of this measure, the County will expand existing trip reduction programs to encourage participation by a greater number of employees. It is expected that by 2020, more than 18,000 employees will take part in trip reduction programs. These employees will directly contribute to greenhouse gas reductions of 11,889 metric tons in 2020.

Incentives for Alternatively Fueled Vehicles – *974 metric ton GHG reduction*

In 2008, the County established the Vehicle Purchasing Services Program (VPSP). The program provides pre-negotiated pricing agreements and discounted rates for County employees to purchase green vehicles, such as hybrids. By obtaining a more fuel efficient vehicle, employees are able to lessen the environmental impact of commuting to work.

Currently, an average of 48 new green vehicles are purchased per year through the VPSP program. Together, these vehicles save about 97 metric tons of greenhouse gases annually. Continuing the program through 2020 will result in a total reduction of 974 metrics tons of greenhouse gas emissions in 2020.

Improve the Efficiency of County-Owned Diesel and Gasoline Vehicles – *2,123 metric ton GHG reduction*

The County vehicle fleet is comprised of thousands of vehicles. To reduce greenhouse gas emissions associated with mobile fossil fuel combustion, the County has developed a program to purchase vehicles with higher fuel economies. As part of this measure, the County will replace just over 1,000 trucks and vans with newer, more efficient models. The majority of these vehicles will be owned by the Sheriff's Department, Internal Services Department, and Fire Department. Replacing these vehicles will save 2,123 metric tons of greenhouse gases in 2020.

Continue the Clean Fuels Program – *7,376 metric ton GHG reduction*

The County currently operates a Clean Fuels Program that encourages the purchase of alternatively fueled vehicles. Through the Clean Fuels Program, the County's vehicle fleet has grown to include 583 alternatively fueled vehicles. If the County continues the Clean Fuels Program at a similar pace over the next decade, it will result in a reduction of 7,376 metric tons of GHG emissions.

Best Management Practices for Handling and Use of Refrigerants – *Reductions not quantified*

Refrigerants used in common appliances, such as air conditioning units, refrigerators, and freezers, are extremely potent greenhouse gases. When appliances leak or are decommissioned, refrigerants can be emitted into the atmosphere. The County currently follows best management practices, including frequent appliance inspections and responsible appliance disposal, for the handling and use of refrigerants. The County will continue to implement these best management practices through 2020 to help minimize emissions from refrigerants.

Purchasing Requirements for County Appliances – *Reductions not quantified*

Industry experts are currently conducting research to develop refrigerants that are not as potent a greenhouse gas as their existing counterparts. The County will continue to monitor the availability of these refrigerants. Although the turnover time for refrigeration equipment is long and the County will not likely need to replace refrigeration equipment before 2020, this information will inform future purchases.

Reduce the Number of Vending Machines – *Reductions not quantified*

The County plans to reduce the total number of vending machines at County-owned facilities by 2020. Because vending machines can leak refrigerants overtime, reducing the number of machines will contribute to reductions in greenhouse gas emissions.

Likely Actions

Spotlight on Likely Actions

The *likely* actions include innovative ways to reduce municipal greenhouse gas emissions. The County has identified nine actions to pursue by 2020. These programs both build on existing programs and introduce new initiatives and opportunities.

Solar Energy Funding – *2,986 metric ton GHG reduction*

Utilizing electricity generated by solar energy displaces electricity demand that would ordinarily be provided by utilities. Although energy utilities provide a substantial amount of energy from renewable sources, a good amount of electricity is still supplied by fossil fuels. Carbon neutral sources, such as solar, do not emit GHGs. The County has set aside funding for the installation of the High Desert Solar Farm at Mira Loma and rooftop systems on nine County buildings. Together, these projects will provide over 9,680 megawatt-hours of electricity to County facilities and reduce municipal greenhouse gas emissions by 2,986 metric tons in 2020.

Other Renewable Energy Generation – *483 metric ton GHG reduction*

The County is considering several options other than solar power for generating renewable energy. This measure is provided as an estimate of potential renewable energy opportunities within the County, which will be further defined through subsequent studies. Emissions reductions achieved by this measure total 483 metric tons in 2020.

Water Conservation at County Parks and Recreation Facilities – *96 metric ton GHG reduction*

Parks and recreational facilities require a substantial amount of water for irrigation and public lavatories. LA County has already begun implementing water conservation projects at several parks throughout the County. As part of this measure, the County will build on existing initiatives to reduce water consumption at parks and recreational facilities by 53 million gallons by 2020 and save 96 metric tons of greenhouse gases in 2020. Specific projects include the installation of waterless urinals, smart irrigation controllers, and efficient chlorine pumps.

High Efficiency Water Pumps – *Reductions not quantified*
The County owns a series of water pumps that are used to supply local and regional water needs. To ensure all pumps operate at maximum efficiency, the Department of Public Works implements several best management practices. The department also collaborates with Southern California Edison to conduct audits of the existing pumping infrastructure. Continuation of these programs will ensure County pumps operate at maximum energy efficiency.

Planned Shut Down of Co-Generation Facilities – *69,673 metric ton GHG reduction*
LA County owns three co-generation facilities, which burn fossil fuels to generate electricity and usable heat for County buildings. The County is investigating options to either shut down or scale back operations at two of these facilities by 2020. The electricity and heat that these facilities provide will need to be replaced with electricity and natural gas purchased from energy utilities. The carbon intensity of this purchased electricity and natural gas is expected to be much lower than the carbon intensity of the co-generation facilities. Decommissioning of two plants will therefore reduce greenhouse gas emissions by 69,67 3 metric tons in 2020.

Plug-in Hybrid Vehicles – *239 metric ton GHG reduction*
The County currently has a pilot program in place to examine the feasibility of replacing certain County vehicles with plug-in hybrids. This program, if pursued, will result in the purchase of 100 plug-in vehicles by 2020. Plug-in hybrids do not consume as much fuel as typical gasoline-powered passenger car. In fact, plug-ins achieve, on average, 60 more miles per gallon. Replacing 100 vehicles with plug-in hybrids will reduce municipal greenhouse gas emissions by 239 metric tons in 2020.

Expand Existing Trip Reduction Programs for County-owned Vehicle Fleets – *Reductions not quantified*
Currently, the County oversees numerous programs designed to minimize business travel and single occupancy vehicle trips. These programs will either avoid business travel or make business travel more efficient, therefore reducing vehicle fuel consumption. For example, several departments are equipped with video and tele-conferencing, which reduces the need for travel to in-person meetings. Expanding these programs will help the County further reduce fossil fuel consumption and municipal greenhouse gas emissions.

Energy Efficient Outdoor Lighting – *213 metric ton GHG reduction*
Adequate outdoor lighting is necessary to ensure the safety of the community. Because outdoor lights must function 365 days per year, they represent a constant source of energy consumption and greenhouse gas emissions. Installing energy efficient lighting is an excellent method for reducing energy use without comprising lighting for public safety. The County will replace 1,000 outdoor lights with induction bulbs by 2020. Use of these bulbs in place of traditional lights will save over 800,000 kilowatt hours of electricity and 213 metric tons of greenhouse gases in 2020.

Automatic Timers at Sports Complexes – *1,246 metric ton GHG reduction*
Automatic timers control the operation of lighting systems. When outdoor lighting is no longer needed, the timers can be programmed to automatically turn off lights. By limiting the amount of time outdoor lights at sporting complexes operate, the County can reduce energy consumption and greenhouse gas emissions. It is estimated that if the County installs automatic timers at 251 lighted sports complexes, municipal greenhouse gas emissions will be reduced by 1,246 metric tons in 2020.

Stretch Actions

Spotlight on Stretch Actions

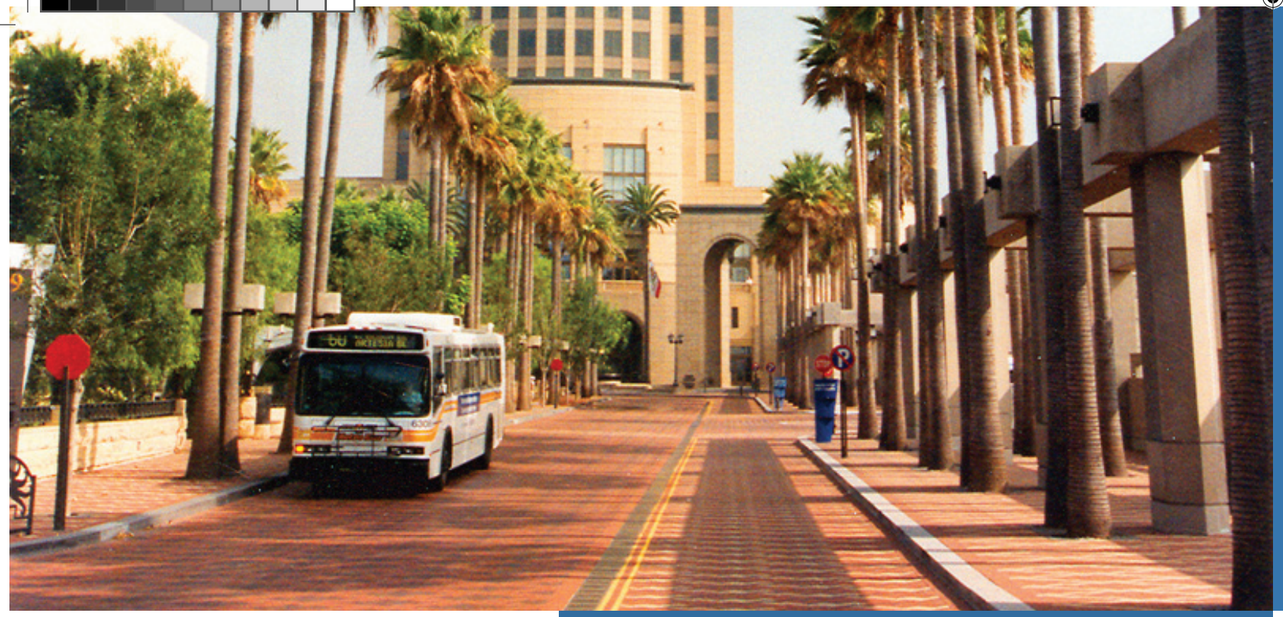
Stretch actions include ambitious goals, which depend upon new technologies or funding opportunities. The County has identified the following four *stretch* actions to evaluate as potential greenhouse gas reduction measures. Note that additional measures for other minor sectors are discussed in the main body of this document.

Expand the Existing Building Energy Retrofit Program – *55 metric ton GHG reduction*
This measure involves expanding the existing energy efficiency retrofit program to include the installation of cool roofs on County facilities. Cool roofs help reflect sunlight and heat away from a building, which reduces rooftop temperatures. The heat loss is transferred to the building below, so less energy for air conditioning is required. The County hopes to install cool roofs on half of its existing buildings that are targeted for energy retrofits. Greenhouse gas reductions achieved by this program amount to about 55 metric tons in 2020. The installation of cool roofs is also expected to improve human health and comfort by reducing air temperatures without the use of air conditioning units.

Generate 10% of County Electricity through Renewable Resources – *14,950 metric ton GHG reduction*
LA County has set a goal to offset 10% of its projected electricity usage in 2020 with renewable energy. Installing solar powered rooftops will contribute to this goal, but an additional 40 megawatts of power will be required. Installing solar systems with a combined capacity of 40 megawatts will reduce greenhouse gas emissions by 14,590 metric tons in 2020.

Accelerate the Clean Fuels Program – *763 metric ton GHG reduction*
This measure would encourage the purchase of alternatively fueled vehicles through the Clean Fuels Program at an accelerated rate of 10% more purchases per year. If implemented, the County would own 2,009 alternatively fueled vehicles by 2020 and save 763 metric tons of greenhouse gases in 2020.

Lighting Meters – *Reductions not quantified*
This measure involves the installation of lighting meters on traffic signals and streetlights at key distribution points. Lighting meters enable the County to track electricity consumption more accurately and target specific locations for efficiency upgrades without compromising public safety.



Sector	2009 Emissions	2020 BAU Emissions	Change from 2009 to 2020
Employee Commute	428,200	443,180	3.5 %
Building Energy Use	352,449	364,779	3.5%
Co-generation Facilities	230,826	230,826	0 .0%
Vehicle Fleet	129,512	147,844	14.2 %
Street Lights and Traffic Signals	26,733	28,070	5.0 %
Refrigerants	18,150	19,577	7.9 %
Water Pumps	10,955	14,649	33.7 %
Water Consumption	8,283	8,573	3.5 %
Owned Landfills	6,855	5,845	-14.7 %
Waste Generation	5,647	5,612	-0.6 %
Miscellaneous (Ammunition, Ethylene Oxide, CO_2, and Acetylene)	2,201	2,314	5.1 %
Wastewater Treatment Plants	1,662	1,748	5.2 %
Total Emissions	**1,221,473**	**1,273,018**	**4.2%**

Summary of GHG Emissions

Summary of Municipal GHG Emissions

Quantifying greenhouse gas emissions is a key component in creating a Municipal Climate Action Plan. The inventory results identify sources that contribute the most to municipal emissions and provide a baseline for evaluating the emissions reduction target.

LA County calculated greenhouse gas emissions from municipal operations in 2009, and forecasted those emissions to 2020. The 2009 emissions from all municipal sources represent the baseline inventory, or the existing emissions level. The 2020 emissions projection is a prediction of how municipal emissions may change over time, in the absence of state and local actions to reduce greenhouse gases. This analysis is called the business-as-usual scenario, and is based on the expected growth in County services and activities.

Baseline Emissions Inventory

In 2009, LA County's municipal operations generated a total of 1.2 million metric tons of greenhouse gas emissions. This represents approximately 0.3% of emissions generated by the entire State of California.[2]

Employee commute trips were the single largest source of emissions, contributing 35.1% of total emissions in 2009. This indicates that fossil fuel combustion from mobile-sources contributes significantly to the County's carbon footprint. Following a close second to employee commute trips is greenhouse gas emissions generated by building energy use, which represents 28.9% of baseline emissions. The building energy sector includes greenhouse gas emissions from electricity and natural gas use in County-owned or operated facilities. The County's three co-generation facilities are the third largest source of greenhouse gas emissions and represents about 18.9% of the baseline inventory. Co-generation facilities consume natural gas and other energy resources to power several of the County facilities. The fourth largest source of emissions, representing 10.6% of the baseline inventory, is the County's vehicle fleet. This fleet is comprised of thousands of vehicles, including passenger cars, motorcycles, fire engines, delivery trucks, and many others. When emissions from the County vehicle fleet and employee commuting are combined, fossil fuel related emissions from mobile sources total 45.7% of the baseline inventory.

Greenhouse gases generated by other municipal activities are a relatively small part of the baseline inventory. These sources include such things as the operation of streetlights and traffic signals, water consumption, and waste generation. Together, these sources represent the remaining 6.6% of LA County's municipal emissions in 2009. Although greenhouse gases generated by these sources are minor compared to emissions produced by the top four sectors, they still represent a source of greenhouse gases that can be reduced by the County through targeted reduction measures.

Business-as-Usual Emissions Inventory

If no reduction measures were implemented, greenhouse gas emissions from the County's municipal operations are projected to increase by approximately 4% from 2009 to 2020. Building energy use, employee commute trips, co-generation facilities, and the County's vehicle fleet will continue to represent the largest sources of emissions.

A Detailed Look at Building Energy

Do you ever wonder how greenhouse emissions are quantified? Here is a step-by-step outline of how greenhouse emissions from building energy consumption were calculated for LA County.

Step 1: Determine which utilities supply electricity and natural gas to County-owned and leased facilities. In the case of LA County, six different utilities (Southern California Edison, Los Angeles Department of Water and Power, Pasadena Water and Power, Burbank Water and Power, Glendale Water and Power, and Azusa Light and Water) provide electricity and three different utilities (Southern California Gas Company, Long Beach Gas & Oil Department, and the State of California Department of General Services) provide natural gas.

Step 2: Obtain annual energy usage from the utilities for County-owned and leased buildings. Electricity is typically provided in terms of kilowatt-hours consumed, while natural gas is provided in terms of therms consumed.

Step 3: Multiply electricity and natural gas quantities by greenhouse gas emission factors. These emission factors can be obtained from the utilities, as well as from statewide averages.

Step 4: Add emissions from electricity and natural gas to determine total greenhouse gas emissions from building energy use.

2. Emissions data for the State of California is from the 2008 inventory published by the California Air Resources Board.

It is anticipated that emissions from both building energy use and employee commute trips will increase by 3.5% from 2009 to 2020. This increase is due to expected growth in County employees and office space. Under a BAU scenario, the County would not implement any changes to the operation of the three co-generation facilities by 2020. Therefore, greenhouse gas emissions from co-generation facilities are not predicted to increase. The County's vehicle fleet (i.e. number of vehicles), on the other hand, is expected to increase by14.2%. This increase is because the Sheriff and Fire Departments will likely expand their vehicle fleets by almost 25%. Expanding these services will enable LA County to continue to provide superior public safety for residents and businesses.

The sector expected to experience the largest increase in emissions from 2009 to 2020 is the County's water pumping services. The County currently owns a series of pumps that are used to supply local and regional water needs. Water pumping uses electricity as a power source, which generates greenhouse gas emissions. Between 2009 and 2020, the County expects a 33.7% increase in water demand. While emissions from water pumping will increase, total emissions from the sector will still only represent about 1% of total municipal emissions in 2020.

How much Solar Power Could LA County Generate?

In 2009, the County developed a Solar Energy Map to provide information on the solar power potential within the County. It is estimated that the County could generate over 163 megawatts just through rooftop systems, which is more than enough to achieve the 10% offset goal.

Implementing the Municipal Climate Action Plan

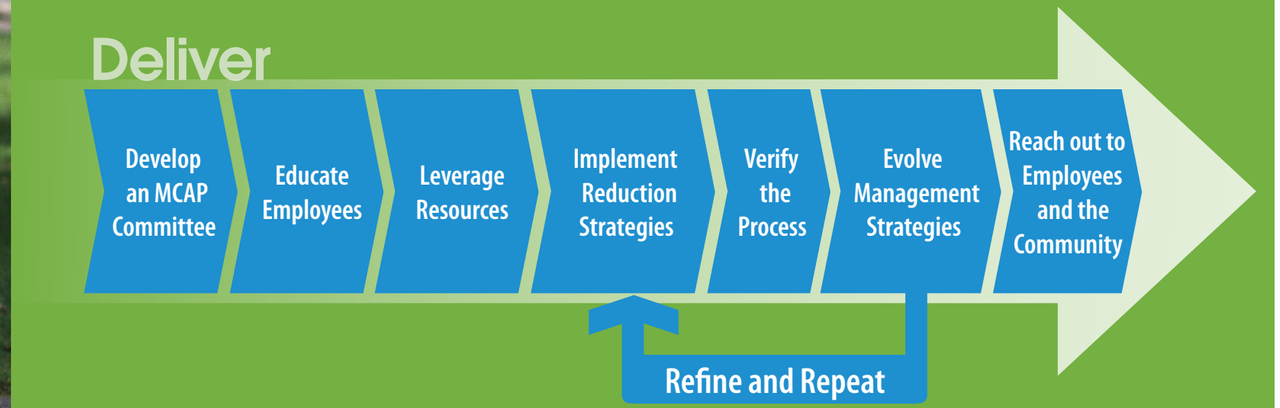
Implementing the Municipal Climate Action Plan

Meeting LA County's aggressive emissions reduction target will require participation from all departments and employees. The Municipal Climate Action Plan sets a path for achieving this target, but collective initiative will help streamline efforts and ensure new policies are integrated into everyday life as seamlessly as possible. To facilitate implementation of the Municipal Climate Action Plan, the County has identified seven steps to achieving results.

Develop a Municipal Climate Action Plan Implementation Steering Committee (MCAP Committee). The MCAP Committee will be led by County Office of Sustainability, under the direction of the Chief Executive Office. The primary function of the MCAP Committee will be to create a streamlined framework to support and manage implementation of the greenhouse gas reduction measures outlined in the Municipal Climate Action Plan.

Educate County employees. The County currently employs over 101,700 individuals. Implementing successful programs to reduce greenhouse gas emissions is dependent on the support and hard work of these dedicated employees. Providing education and outreach that focuses on new reduction efforts is essential so that employees are aware of upcoming policies and changes. The County will build on existing training resources and communication channels to provide superior education and information to all employees.

Leverage existing resources and skills. During the past decade, the County has carried out hundreds of programs to reduce resource consumption and greenhouse gas emissions. These programs create a strong foundation from which the Municipal Climate Action Plan can build. The County is also privileged to have employees that are personally motivated to improve environmental quality and fight climate change. Indeed, it is the passion of employees that have enabled previous environmental initiatives to be successful. The County will investigate methods to utilize existing resources and harness employee support to better streamline implementation of the Municipal Climate Action Plan.



Next Steps

Implement the greenhouse gas reduction measures. Because many of the strategies are designed to be implemented over a period of time, this step is on-going. The newly created MCAP Committee will oversee the successful implementation of all selected greenhouse gas reduction measures.

Verify and document the successes and challenges of the greenhouse gas reduction measures. Regular monitoring is important to ensure programs are functioning as they were originally intended. Early identification of effective strategies and potential issues will enable the County to make informed decisions on future priorities, funding, and scheduling. Moreover, monitoring provides concrete data to document the County's progress toward achieving its greenhouse gas emissions target. The County will develop a protocol for monitoring the effectiveness of emissions reduction programs. The County will also establish guidelines for reporting and documentation, from which, the MCAP Committee will make annual reports to the Board of Supervisors on progress towards meeting the emission reduction goal.

Evolve management strategies and emissions reduction programs to maximize success. The greenhouse gas reduction measures identified in this Municipal Climate Action Plan are complex. While the effectiveness of these measures is well documented, continuing existing programs and implementing new measures involves some level of uncertainty. Remaining adaptive and willing to revise previous measures will enable the County to make better management decisions. The County will develop a protocol for utilizing the real-time information collected through the verification process to modify and revise existing measures.

Reach out to employees and community members to share results and celebrate success. Publishing information not only provides transparency, but it is also a great way to gain employee and community support for the Municipal Climate Action Plan. Recognizing the hard work of staff can also improve morale and strengthen individual commitment. The County will provide annual updates to employees on the progress towards meeting the emissions reduction goal. Information will also be made public through the County's Energy Efficiency and Environmental Information website and other media outlets.

Next Steps

The Municipal Climate Action Plan provides a robust framework for reducing greenhouse gas emissions associated with municipal services and operations. With the Municipal Climate Action Plan in place, the County can increases its efforts to address climate change and promote change. Over the months following adoption of the Municipal Climate Action Plan, the County will work to appoint an MCAP committee, conduct additional feasibility studies for *likely* and *stretch* actions, and develop guidance documents for implementing emissions reduction measures. Progress towards meeting the reduction target will be measured through routine updates to the County's greenhouse gas emissions inventory. As the County approaches its 2020 reduction target, it will look for new opportunities to further reduce long-term municipal greenhouse gas emissions.

As the County moves forward with implementing the Municipal Climate Action Plan, there will likely be challenges, but also successes and triumphs. LA County is committed to working with staff to carry out the Municipal Climate Action Plan. Early leadership and previous environmental initiatives are an indication of the County's motivation and ability to get the job done. Looking forward, the County is eager to expand its efforts to reduce municipal greenhouse gas emissions and help prevent global climate change.

Los Angeles County Municipal Climate Action Plan

EXECUTIVE OFFICE
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July 31, 2024

TO: Supervisor Lindsey P. Horvath, Chair
Supervisor Hilda L. Solis
Supervisor Holly J. Mitchell
Supervisor Janice Hahn
Supervisor Kathryn Barger

FROM: Edward Yen
Executive Officer

LA COUNTY CLIMATE MITIGATION AND ADAPTATION BUDGET ITEMS IN FISCAL YEAR (FY) 24-25 RECOMMENDED BUDGET (ITEM NO. 23, AGENDA OF DECEMBER 19, 2023)

Background

The December 19, 2023, Board motion titled "*Establishing an LA County Climate Budget to Achieve Carbon Neutral County Operations*", directed the Chief Sustainability Office (CSO) to present a list of items funded in each year's budget that are intended to advance the County's climate change mitigation and adaptation goals. The purpose of this list is to support the development of the climate budget by providing insights into the County's sustainability and resiliency investments and to help identify gaps to support its goal of achieving carbon neutrality by 2045, expressed in the OurCounty Sustainability Plan. This is the first iteration of climate accounting and as described below, additional work is being done to develop a full climate budget. This is part of an ongoing process to embed climate considerations into the budget cycle and is the first of many steps to achieve that goal.

Climate Mitigation and Adaptation Budget Items

Currently, County departments can tag their budget requests with one of nine Board Directed Priorities, including Sustainability, if the budget request supports that priority. The CSO is working closely with the Chief Executive Office (CEO) to track those items tagged as "sustainability" as part of the budget cycle. The attachment to this report represents those budget items approved by the Board in the FY 24-25 Recommended Budget and Final Changes budget phases and also includes information, where relevant, about the Anti-Racism, Diversity, and Inclusion Equity Explorer tier where the project is located as directed by the Board. In summary, the budget items in this list cover energy efficiency projects that reduce greenhouse gases, electric vehicle charger installations, and sustainability and resilience planning efforts.

Next Steps

The CSO, working with CEO, will provide the Board with a follow-up list of all approved budget items tagged as sustainability after the Board approves the FY 24-25 Supplemental Changes budget. As we proceed with the plan to develop a climate budget, a more comprehensive review will be conducted in future years to fully capture climate mitigation budget items. This will be an important part of aligning resources with the County's carbon neutrality goals. The next step is to develop a pilot climate budget for the Department of Public Works. Lessons learned from that pilot will be applied to the creation of a full County operations climate budget and will inform future reports on climate mitigation and adaptation budget items.

Should you have any questions concerning this matter, please contact Rita Kampalath, Chief Sustainability Officer, at (323) 459-3939 or rkampalath@cso.lacounty.gov.

EY:RK:VS:jg

Attachment

c: County Counsel
Chief Executive Office
Public Works

Sustainability Budget Items

Department	Budget Item Description	Gross Appropriation ($)	Intrafund Transfer ($)	Revenue ($)	Net County Cost ($)	Budget Position	OurCounty Plan	ARDI Equity Explorer Tier
Internal Services Department	Electric Vehicle Infrastructure – One-time funding to continue the multi-year EV infrastructure project for the installation of EV charging stations at County facilities for use by County fleets, County employees, and the visiting public	$3,800,000	$0	$0	$3,800,000	0.0	Strategy 7B: Create a zero-emissions transportation system	NA - All locations selected based on criteria including equity
Internal Services Department	Energy Efficiency Conservation Block Grant – Funding from the American Rescue and Recovery Act for energy efficiency projects at County facilities.	$38,000	$0	$38,000 (A)	$0	0.0	Strategy 9C: Reduce building energy consumption	NA
Internal Services Department	Energy Efficiency / Conservation Programs – Funding received in support of the Energy Investment Program, Public Agency Energy Revolving Loan Fund, SoCalRen projects, and others. Projects are at County facilities as well as energy efficiency projects in the community, including public agencies and residents of 13 different counties that the SoCalREN team serves.	$24,958,000	$0	$24,958,000 (A), (B)	$0	0.0	Strategy 9C: Reduce building energy consumption	NA - All locations selected based on criteria including equity
Internal Services Department	Climate Budget - The addition of 1.0 Administrative Manager XI position to oversee and coordinate countywide efforts to reduce the County's carbon footprint	$283,000	$0	$0	$283,000	1.0	Goal 7: A fossil fuel-free LA County	NA
Internal Services Department	Climate Budget - One-time funding for consultants to conduct the Greenhouse Gas emissions inventory analysis	$250,000	$0	$0	$250,000	0.0	Goal 7: A fossil fuel-free LA County	NA
Internal Services Department	Climate Budget - One-time funding for consultants to develop an updated public Municipal Climate Action Plan	$600,000	$0	$0	$600,000	0.0	Goal 7: A fossil fuel-free LA County	NA
Chief Sustainability Office	Climate Budget - One-time funding for consultant support for a climate budget pilot.	$175,000	$0	$0	$175,000	0.0	Goal 7: A fossil fuel-free LA County	NA
Chief Sustainability Office	The addition of 1.0 Project Director, BOS position to support the Climate Resilience Initiative	$287,000	$0	$0	$287,000	1.0	Goal 1: Resilient and healthy community environments where residents thrive in place	NA
Department of Regional Planning	Advance Planning Division - The addition of 1.0 Senior Regional Planner in the Environmental Planning and Sustainability Section to help oversee the implementation of the Climate Action Plan	$172,000	$0	$0	$172,000	1.0	Goal 7: A fossil fuel-free LA County	NA

Notes:

(A) Federal grant funding.

(B) State grant funding.

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October 31, 2024

TO: Supervisor Lindsey P. Horvath, Chair
Supervisor Hilda L. Solis
Supervisor Holly J. Mitchell
Supervisor Janice Hahn
Supervisor Kathryn Barger

FROM: Edward Yen
Executive Officer

LA COUNTY CLIMATE MITIGTATION AND ADAPTATION BUDGET ITEMS IN FISCAL YEAR (FY) 24-25 RECOMMENDED BUDGET (ITEM NO. 23, AGENDA OF DECEMBER 19, 2023)

Background

The December 19, 2023 Board motion, titled "*Establishing an LA County Climate Budget to Achieve Carbon Neutral County Operations*", directed the Chief Sustainability Office (CSO) to present a list of items funded in each year's budget that are intended to advance the County's climate change mitigation and adaptation goals. The purpose of this list is to support the development of the climate budget by providing insights into the County's sustainability and resiliency investments and help identify the gaps to support its goal of achieving carbon neutrality by 2045, expressed in the OurCounty sustainability plan. This is part of an on-going process to embed climate considerations into the budget cycle and is the first of many steps to achieve that goal.

Climate Mitigation and Adaptation Budget Items

Currently, County departments are able to tag their budget requests with one of nine Board Directed Priorities, including Sustainability, if the budget request supports that priority. The CSO worked with the Chief Executive Office (CEO) to track those items tagged sustainability as part of the budget cycle. On July 31, 2024, the CSO submitted a report back of budget items approved by the Board in the FY 24-25 Recommended Budget and Final Changes budget phases. The attachment provides an update to that list, including all budget items tagged sustainability approved by the Board in the FY 24-25 Supplemental Changes budget phase. It also includes information, where relevant, about the Anti-Racism, Diversity, and Inclusion Equity Explorer tier the project is located

as directed by the Board. This report completes the identification of funded sustainability items for FY 24-25.

Next Steps

The CSO is working with the Department of Public Works (PW) and the CEO to develop a pilot climate budget for PW. A consultant has been identified and work is expected to begin in the coming month. Lessons learned from that pilot will be applied to the creation of a full County operations climate budget and will inform future reports on climate mitigation and adaptation budget items.

Should you have any questions concerning this matter, please contact Rita Kampalath, Chief Sustainability Officer, at (323) 459-3939 or rkampalath@cso.lacounty.gov.

EY:RK:VS:jg

Attachment

c: County Counsel
Chief Executive Office
Public Works

Sustainability Budget Items

Department	Budget Item Description	Gross Appropriation ($)	Intrafund Transfer ($)	Revenue ($)	Net County Cost ($)	Budget Position	Budget Phase Approved	OurCounty Plan	ARDI Equity Explorer Tier
Internal Services Department	Electric Vehicle Infrastructure – One-time funding to continue the multi-year EV infrastructure project for the installation of EV charging stations at County facilities for use by County fleets, County employees, and the visiting public	3,800,000	-	-	3,800,000	-	Recommended	Strategy 7B: Create a zero-emissions transportation system	NA - All locations selected based on criteria including equity
	SUBTOTAL - RECOMMENDED	**$3,800,000**	**$0**	**$0**	**$3,800,000**	**0.0**			
Internal Services Department	Climate Budget - The addition of 1.0 Administrative Manager XI position to oversee and coordinate countywide efforts to reduce the County's carbon footprint	283,000	-	-	283,000	1.0	Final Changes	Goal 7: A fossil fuel-free LA County	NA
Internal Services Department	Climate Budget - One-time funding for consultants to conduct the Greenhouse Gas emissions inventory analysis	250,000	-	-	250,000	-	Final Changes	Goal 7: A fossil fuel-free LA County	NA
Internal Services Department	Climate Budget - One-time funding for consultants to develop an updated public Municipal Climate Action Plan	600,000	-	-	600,000	-	Final Changes	Goal 7: A fossil fuel-free LA County	NA
Department of Regional Planning	Advance Planning Division - The addition of 1.0 Senior Regional Planner in the Environmental Planning and Sustainability Section to help oversee the implementation of the Climate Action Plan	172,000	-	-	172,000	1.0	Final Changes	Goal 7: A fossil fuel-free LA County	NA
Chief Sustainability Office	Climate Budget - One-time funding for consultant support for a climate budget pilot.	175,000	-	-	175,000	-	Final Changes	Goal 7: A fossil fuel-free LA County	NA
Chief Sustainability Office	The addition of 1.0 Project Director, BOS position to support the Climate Resilience Initiative	287,000	-	-	287,000	1.0	Final Changes	Goal 1: Resilient and healthy community environments where residents thrive in place	NA
	SUBTOTAL - FINAL CHANGES	**$1,767,000**	**$0**	**$0**	**$1,767,000**	**3.0**			
Internal Services Department	Energy Efficiency Conservation Block Grant – Funding from the American Rescue and Recovery Act and Better Buildings Program for energy efficiency projects at County facilities.	52,000	-	52,000 (A)	-	-	Supplemental	Strategy 9C: Reduce building energy consumption	NA
Internal Services Department	Energy Efficiency Conservation Block Grant – Funding from the Bipartisan Infrastructure Law for energy efficiency projects at County facilities.	1,248,000	-	1,248,000 '(A)	-	-	Supplemental	Strategy 9C: Reduce building energy consumption	NA
Internal Services Department	Healthy Store Refridgeration Grant - Funding from the California Department of Food & Agriculture for energy efficient refridgeration units for corners stores in food deserts.	1,215,000	-	1,215,000 '(B)	-	-	Supplemental	Strategy 9C: Reduce building energy consumption	NA - All locations selected based on criteria including equity
Internal Services Department	Energy Efficiency / Conservation Programs – Funding received in support of the Public Agency Energy Revolving Loan Fund, SoCalRen projects, and others. Projects are at County facilities as well as energy efficiency projects in the community, including public agencies and residents of 13 different counties that the SoCalREN team serves.	26,448,000	-	26,448,000 (A), (B)	-	-	Supplemental	Strategy 9C: Reduce building energy consumption	NA - All locations selected based on criteria including equity
Internal Services Department	Energy Revolving Loan Fund	2,500,000	-	-	2,500,000	-	Supplemental	Strategy 9C: Reduce building energy consumption	NA
Public Works	Hasley Canyon Park Stormwater Capture Project	10,000,000	-	-	10,000,000	-	Supplemental	Strategy 2C: Create an integrated and resilient water system	Moderate
Public Works	West Rancho Dominguez - San Pedro Street Green Improvements Project	1,000,000	-	-	1,000,000	-	Supplemental	Strategy 2C: Create an integrated and resilient water system	Highest/High
Public Works	La Crescenta Green Street Project	500,000	-	-	500,000	-	Supplemental	Strategy 2C: Create an integrated and resilient water system	Lowest

Sustainability Budget Items

Department	Budget Item Description	Gross Appropriation ($)	Intrafund Transfer ($)	Revenue ($)	Net County Cost ($)	Budget Position	Budget Phase Approved	OurCounty Plan	ARDI Equity Explorer Tier
Public Works	Rowland Heights - Batson Avenue Green Improvement Project	1,500,000	-	-	1,500,000	-	Supplemental	Strategy 2C: Create an integrated and resilient water system	Low
Public Works	Dominguez Channel Green Streets Project	1,000,000	-	-	1,000,000	-	Supplemental	Strategy 2C: Create an integrated and resilient water system	Low (Patronella Ave at 157th St) and Moderate (Levinson St at 213th St)
Public Works	Long Beach Island - Harco Street, et. al. Green Streets Project	1,000,000	-	-	1,000,000	-	Supplemental	Strategy 2C: Create an integrated and resilient water system	Lowest
Public Works	Harbor City Park Multi-Benefit Stormwater Capture Project	1,000,000	-	-	1,000,000	-	Supplemental	Strategy 2C: Create an integrated and resilient water system	Moderate
Public Works	Marina Del Rey Front Basins Stormwater Improvements Project	500,000	-	-	500,000	-	Supplemental	Strategy 2C: Create an integrated and resilient water system	Lowest
Public Works	Altadena Shop Parking Lot Green Improvements Project	500,000	-	-	500,000	-	Supplemental	Strategy 2C: Create an integrated and resilient water system	Moderate
Public Works	California Country Club Multi-Benefit Stormwater Improvements Project	2,000,000	-	-	2,000,000	-	Supplemental	Strategy 2C: Create an integrated and resilient water system	Moderate
Public Works	Bethune Park Stormwater Capture Project	2,000,000	-	-	2,000,000	-	Supplemental	Strategy 2C: Create an integrated and resilient water system	Highest
Public Works	Roosevelt Park Stormwater Improvements Project	1,650,000	-	-	1,650,000	-	Supplemental	Strategy 2C: Create an integrated and resilient water system	Highest
Public Works	Unincorporated Area Stormwater Urban Runoff Quality Program	1,068,000	-	-	1,068,000	-	Supplemental	Strategy 2C: Create an integrated and resilient water system	Low (Monteith Park) and High (Walnut Park)
Public Works	Quality of Life Illegal Dumping	2,000,000	-	-	2,000,000	-	Supplemental	Strategy 1A: Minimize the exposure of vulnerable populations to pollution and reduce health disparities	NA
Public Works	Vision Zero and Road Safety	4,460,000	-	-	4,460,000	-	Supplemental	Strategy 8B: Improve transportation health and safety outcomes	NA

Sustainability Budget Items

Department	Budget Item Description	Gross Appropriation ($)	Intrafund Transfer ($)	Revenue ($)	Net County Cost ($)	Budget Position	Budget Phase Approved	OurCounty Plan	ARDI Equity Explorer Tier
Public Works	Office of Oil & Gas	850,000	-	-	850,000	-	Supplemental	Strategy 1A: Minimize the exposure of vulnerable populations to pollution and reduce health disparities	NA
Parks & Recreation	Safety and Tree Maintenance	1,000,000	-	-	1,000,000	-	Supplemental	Strategy 2D: Ensure a climate-appropriate, healthy urban tree canopy that is equitably distributed	NA
Parks & Recreation	Installation of Park Security Lighting	17,000,000	-	-	17,000,000	-	Supplemental	Strategy 9C: Reduce building energy consumption	NA - All locations selected based on criteria including equity
Parks & Recreation	Deferred Maintenance - Jackie Robinson HVAC	325,000	-	-	325,000	-	Supplemental	Strategy 9C: Reduce building energy consumption	High
Beaches & Harbors	Coastal Resilience Demonstration Projects	250,000	-	-	250,000	-	Supplemental	Strategy 5B: Preserve and enhance open space, waterways, and priority ecological areas	NA
Beaches & Harbors	Coastal Resilience Countywide Implementation Plan	500,000	-	-	500,000	-	Supplemental	Strategy 5B: Preserve and enhance open space, waterways, and priority ecological areas	NA
Chief Sustainability Office	Chief Sustainability Office Carryover for OurCounty Plan refresh, Climate Resilience Initaitive, and Just Transition Task Force	548,000	-	-	548,000	-	Supplemental	Goal 2: Buildings and infrastructure that support human health and resilience; Strategy 4A: Promote inclusive growth across the changing economy	NA
Chief Sustainability Office	Chief Sustainability Office for the Clean Energy Partnership membership	75,000	-	-	75,000	-	Supplemental	Goal 7: A fossil fuel-free LA County	NA
Chief Sustainability Office	Chief Sustainability Office - PFU Request for the County Heat Action Plan	379,000	-	-	379,000	-	Supplemental	Strategy 2A: Integrate climate adaptation and resilience into planning, building, infrastructure, and community development decisions	NA
SUBTOTAL - SUPPLEMENTAL CHANGES		**$82,568,000**	**$0**	**$28,963,000**	**$53,605,000**	0.0			
FY 2024-25 GRAND TOTAL		$88,135,000	$0	$28,963,000	$59,172,000	3.0			

Notes:

(A) Federal grant funding.

(B) State grant funding.