L.A.'s GREEN NEW DEAL

Sustainable City pLAn

2019

Environment
Economy
Equity



MAYOR ERIC GARCETTI



Photo: Grown in LA



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1  **Environmental Justice**

2  **Renewable Energy**

3  **Local Water**

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10  **Food Systems**

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13  **Lead by Example**

Letter from Mayor Eric Garcetti



My fellow Angelenos:

Los Angeles has always been a city of dreamers and doers — a place that embraces tomorrow with open arms, and sees each new challenge as a chance to secure a brighter future for our children.

There is no doubt: defeating climate change will demand every ounce of Angelenos' trademark energy, creativity, determination, and drive — and we have to act now.

The United Nations has warned us of the dangers of inaction or incrementalism. But we don't need a report to confirm what's right in front of us. The rising temperatures. The pollution we inhale, the flames on our hillsides, the floods on our streets. This crisis is real. This moment demands immediate solutions. This is the fight of our lives.

Our generational battle against climate change is a moral imperative, an environmental emergency, and an economic opportunity. True to form, Los Angeles is rising to the occasion with a plan that will lead the world toward a low-carbon, green-energy future.

Four years ago, I introduced L.A.'s first Sustainable City pLAn — a directive that put us on a path to save our environment, grow our economy, and ensure that Los Angeles remains a city of opportunity for all.

Angelenos are already seeing the results. We became the number-one solar city in America, pioneered new transportation technologies, reduced our greenhouse gas emissions by 11% in a single year, and created more than 35,000 green jobs.

The pLAn set us on a course for a cleaner environment and a stronger economy. We have made huge strides in our work to curb climate change, meeting or exceeding 90% of our near-term goals on time or early.

But we have simultaneously seen the dramatic effects of a warming planet in our communities — from oppressive heat waves that endanger our health, to drought and wildfires that have swept across Southern California. It's time to think bigger.

The scale of our ambitions must meet the magnitude of this crisis. So we are doubling down with L.A.'s Green New Deal and laying out more aggressive goals that will help transform Los Angeles into a carbon neutral city where all Angelenos thrive.

We will lead with bold action on every front, by recycling 100% of our wastewater and zeroing out our City's main sources of harmful emissions: buildings, transportation, electricity, and trash.
When we hit our targets, we will cut our emissions by an additional 30% above and beyond the path of our original pLAn — the equivalent of the annual emissions of New York, London, Tokyo, and Hong Kong combined.

Our Green New Deal is not just an environmental vision. It is designed to prioritize communities that bear the brunt of climate change first.
I recently announced the establishment of a Jobs Cabinet to help train the next generation of workers in the trades of tomorrow — from installing solar panels and standing up energy-efficient homes to developing new energy technologies — so that Angelenos will be prepared to fill 400,000 good, green jobs that can't be shipped overseas.

Decades from now, our Green New Deal will have launched careers that will bring pollution to new lows, and power our economy to new highs.

But we can't simply establish big ticket policy objectives. We need to implement them.
That's why we established the Los Angeles Climate Emergency Commission, which will draw the best ideas from neighborhoods on the front lines of climate change, harness the expertise of scientists, and recommend long-term actions to reduce rising temperatures.

In Los Angeles, sustainability is a core value that guides all of our work, because our survival depends on it.

As Mayor, it is my mandate to create a more livable city, but it is my calling to create a more livable world.

Combating climate change meets both responsibilities.

Los Angeles will continue to set an example for the country to follow, and invest in a future Angelenos want their children to inherit — one that continues to provide opportunity and prosperity to its residents.

Eric Garcetti



Mayor



Photo: L.A. Mayor's Office

A Bold Vision for an Inclusive Green Economy

When the Mayor released the first Sustainable City pLAn in 2015 he committed to annual progress reports and a major update to the pLAn every four years. With immediate and evolving challenges facing our environment and economy, a renewed commitment to action is needed now more than ever. We are facing a global climate emergency that must be solved with changes right here at home so that we leave behind a safe world for future generations.

This report is the first four-year update to the 2015 pLAn. It augments, expands, and elaborates in even more detail L.A.'s vision for a sustainable future and it tackles the climate emergency with accelerated targets and new aggressive goals. This is L.A.'s Green New Deal.

L.A.'s Green New Deal is an expanded vision for our pLAn—securing clean air and water and a stable climate, improving community resilience, expanding access to healthy food and open space, and promoting justice for all—and for the future we have to build on behalf of our children and grandchildren.

Key Principles

First, a commitment to the Paris Climate Agreement and to act urgently with a scientifically-driven strategy for achieving a zero carbon grid, zero carbon transportation, zero carbon buildings, zero waste, and zero wasted water.

Second, a responsibility to deliver environmental justice and equity through an inclusive economy, producing results at the community level, guided by communities themselves.

Third, a duty to ensure that every Angeleno has the ability to join the green economy, creating pipelines to good paying, green jobs and a just transition in a changing work environment.

Fourth, a resolve to demonstrate the art of the possible and lead the way, walking the walk and using the City's resources - our people and our budget - to drive change.

LA's Green New Deal will guide our city's transition to an equitable and abundant economy powered by 100% renewable energy. This plan will support the creation of hundreds of thousands of good, green jobs in all of our communities by:

Building the country's largest, cleanest, and most reliable urban electrical grid to power the next generation of green transportation and clean buildings. With $8 billion in upgrades to our grid by 2022, $860 million per year to expand the transportation system, and billions more to build clean buildings, we will put Los Angeles at the global center of investment, innovation, and job creation in the green mobility and clean building sectors.

Educating and training Angelenos to participate in the new green economy. We will work with partners at all levels of public and private education to foster the training and retraining necessary to move thousands of L.A. households into a thriving middle class built on good, green jobs.

Enacting sustainable policies that prioritize economic opportunity. We will mandate and incentivize the transition to a zero carbon city in a way that prioritizes the needs and opportunities of disadvantaged communities, ensuring that the new green economy fulfills the promise of a more just and equitable economy.

As with the first Sustainable City pLAn, L.A.'s Green New Deal was prepared with extensive input from stakeholders, including community organizations, businesses, academia, labor groups, and City departments. We have made every effort to reflect the most current viewpoints, priorities, and needs of the Los Angeles community. The Mayor's Office of Sustainability also engaged with seven other global megacities—Boston, Durban, London, Melbourne, Mexico City, New York and Paris—in C40's* Deadline 2020 pilot program to develop and implement a framework for climate action that achieves L.A.'s pledge to meet the goals of the Paris Agreement.

*C40 Cities Climate Leadership Group (C40) connects 94 of the world's megacities (representing more than 700 million people and 25% of global GDP) in tackling climate change and creating resilient, sustainable, low-carbon cities. Los Angeles has been a member since 2005 and Mayor Garcetti has co-chaired the C40 Steering Committee since 2014.

What's New

- Globally-recognized adherence to a strict carbon budget that is consistent with the Paris Climate Agreement
- Adoption of a quantitative greenhouse gas (GHG) reduction pathway that charts a course to carbon neutrality
- Integration of equity initiatives across chapters, identified by the symbol E
- Third-party review of GHG reduction pathways and potential benefits of different initiatives to Angelenos
- Quantification of projected health outcomes from air quality improvements and job growth from investments resulting from pLAn commitments
- A Renewable Energy chapter to incorporate 2015 pLAn Local Solar and Climate Leadership commitments
- Expansion of Energy Efficient Buildings to Clean and Healthy Buildings capturing energy efficiency as well as new targets for net zero carbon buildings
- Deeper treatment of Air Quality via a new Industrial Emissions and Air Quality Monitoring chapter, as well as initiatives in Mobility & Public Transit and Zero Emission Vehicles
- First-ever commitments to address oil and gas operations in the city
- Dedicated Food Systems chapter incorporating community priorities
- Urban Ecosystems is expanded to Urban Ecosystems & Resilience to incorporate 2015 pLAn climate resilience goals on urban heat
- Inclusion and promotion of the leadership of our community partners in achieving our shared goals
- Incorporation of homelessness initiatives in recognition of link to sustainability
- Emphasis of link between L.A.'s sustainability targets and the United Nations Sustainable Development Goals

L.A.'S GREEN NEW DEAL stats:

13	Chapters
47	Targets
140	Milestones
445	Initiatives
47	Partner Initiatives



Accelerating our Targets

L.A.'s Green New Deal accelerates the following targets:

- Supply 55% renewable energy by 2025; 80% by 2036; and 100% by 2045
- Source 70% of our water locally by 2035, and capture 150,000 acre ft/yr (AFY) of stormwater by 2035
- Reduce building energy use per sq.ft. for all types of buildings 22% by 2025; 34% by 2035; and 44% by 2050
- Reduce Vehicle Miles Traveled per capita by at least 13% by 2025, 39% by 2035, and 45% by 2050
- Ensure 57% of new housing units are built within 1,500 feet of transit by 2025; and 75% by 2035
- Increase the percentage of zero emission vehicles in the city to 25% by 2025; 80% by 2035; and 100% by 2050
- Create 300,000 green jobs by 2035; and 400,000 by 2050
- Convert all city fleet vehicles to zero emission where technically feasible by 2028
- Reduce municipal GHG emissions 55% by 2025 and 65% by 2035 from 2008 baseline levels, reaching carbon neutral by 2045

When my grandchildren ask whether we did everything possible to fight climate change, I want us to be able to say: Yes, we did.

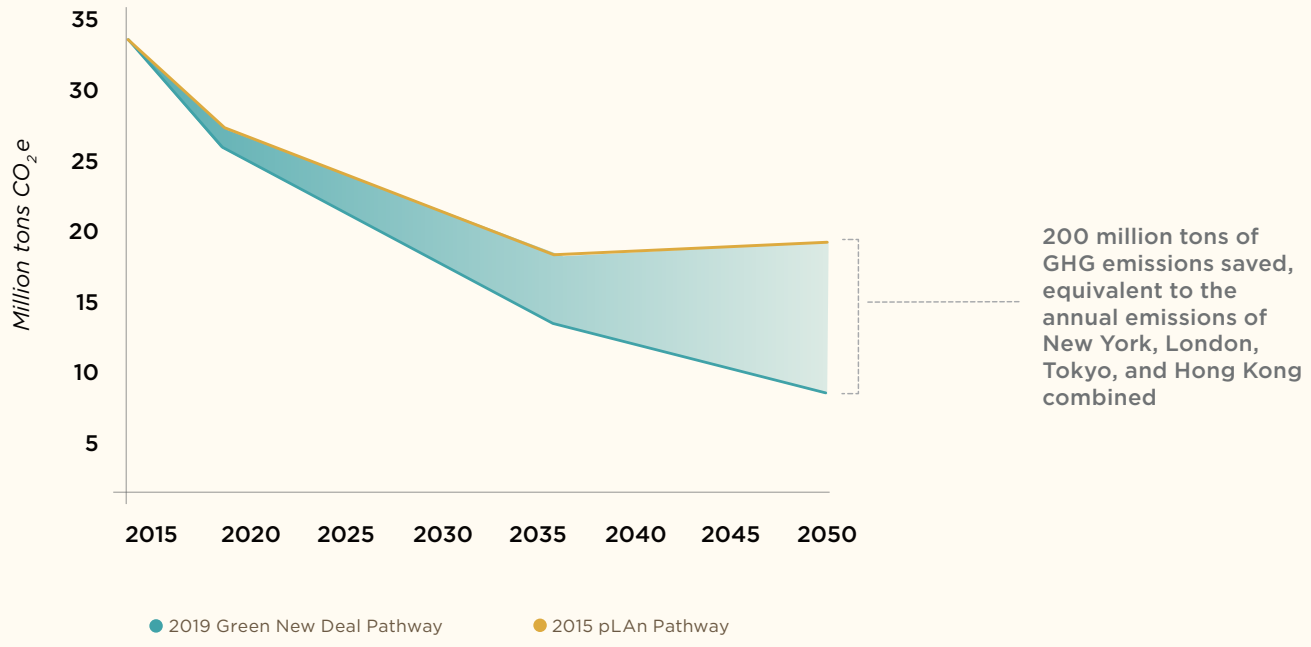


Our Climate Emergency

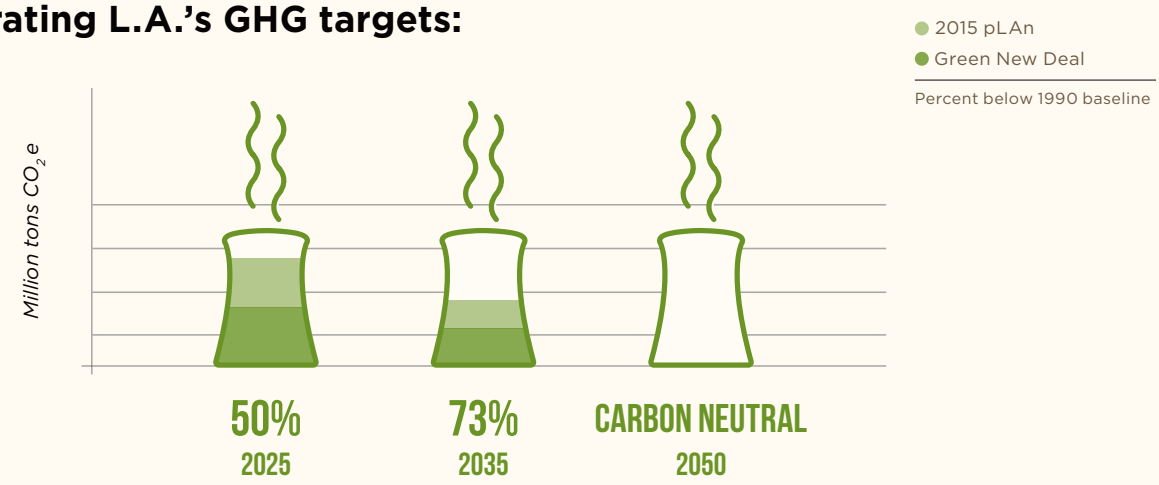
According to the world's leading scientists, we have until 2030 – only 11 years – to radically roll back the emissions we have come to depend on in a carbon-based economy. The world must cut emissions by 45% by 2030 and reach net zero emissions by 2050 to stop warming at 1.5C. If we don't, conditions will significantly worsen on earth for hundreds of millions of people. The Paris Agreement, adopted in December 2015, was the world's first collective response and commitment to avoid dangerous climate change and limit future temperature increase to 1.5 to 2°C above pre-industrial levels.

Based on our commitment to the Paris Agreement, this plan charts a new course for Los Angeles's emission reduction targets – the 2019 Green New Deal Pathway – which calls for cutting greenhouse gas emissions (GHGs) to 50% below 1990 levels by 2025; 73% below 1990 levels by 2035; and becoming carbon neutral by 2050. By following the 2019 Green New Deal Pathway, L.A. cuts an additional 30% in GHG emissions above and beyond our 2015 pLAn and ensures L.A. stays within its carbon budget between now and 2050.

L.A. Greenhouse Gas Emissions Pathways



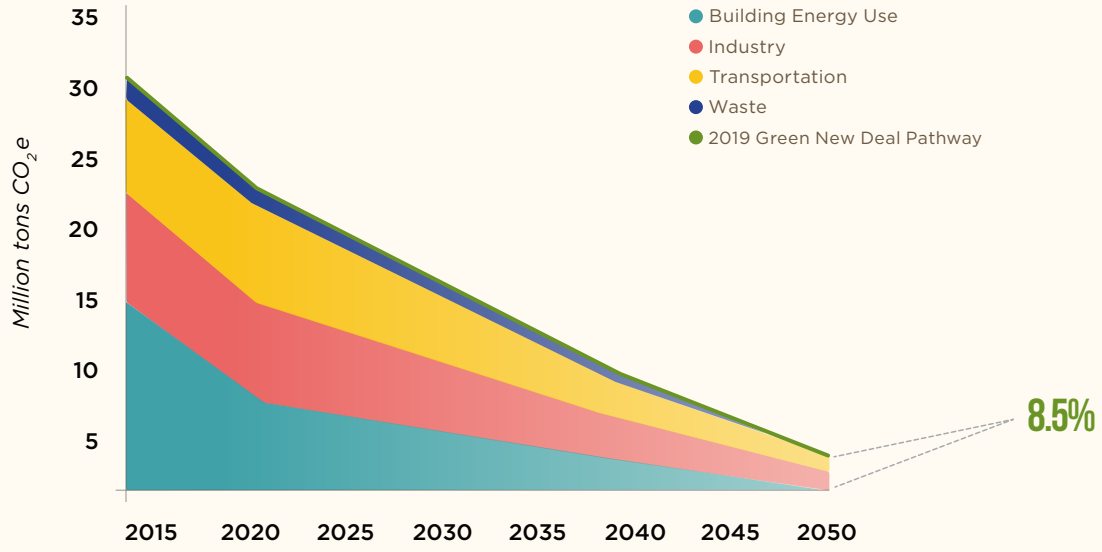
Accelerating L.A.'s GHG targets:



Emissions must decline everywhere, as soon as possible. The pace may vary depending on the opportunities and characteristics of each sector, but at the end of the day, L.A.'s Green New Deal puts our city on the road to a zero carbon future across the board.

- **Zero carbon grid**
- **Zero carbon buildings**
- **Zero carbon on-road transportation**
- **Zero waste**
- **Dramatic reductions in manufacturing and industrial GHG emissions**

L.A. Greenhouse Gas Emissions by Sector

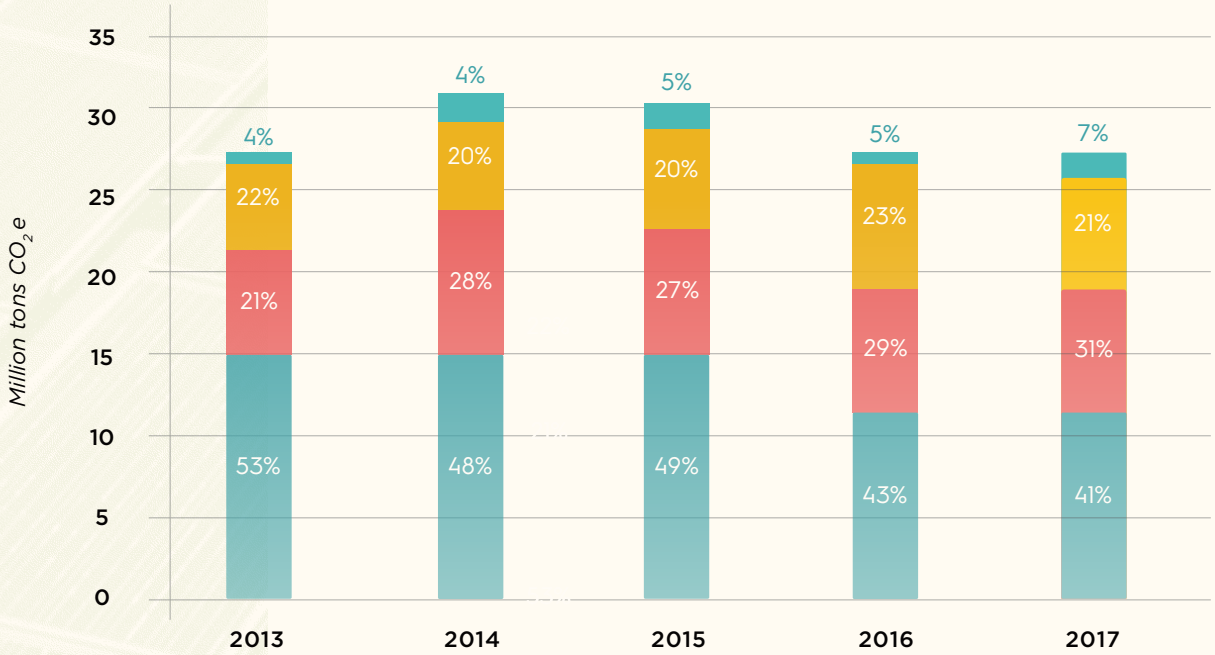


Even with today's best strategies and technologies, there are likely to be residual emissions in 2050, approximately 8.5% of our emissions today from sources such as air and sea travel and industrial energy use. New technologies will be needed, as well as carbon negative projects, such as urban forests, to potentially offset carbon emissions. As with the 2015 Sustainable City pLAn, L.A. will continue to review its progress and course-correct in the years to come.

L.A.'s Greenhouse Gas Footprint

L.A. has reduced its greenhouse gas emissions 25% below 1990 levels, and our per capita greenhouse gas emissions are one-third the national average.

L.A. Greenhouse Gas Emissions by Source, 2013 - 2017



Buildings
Residential
Commercial
Institutional

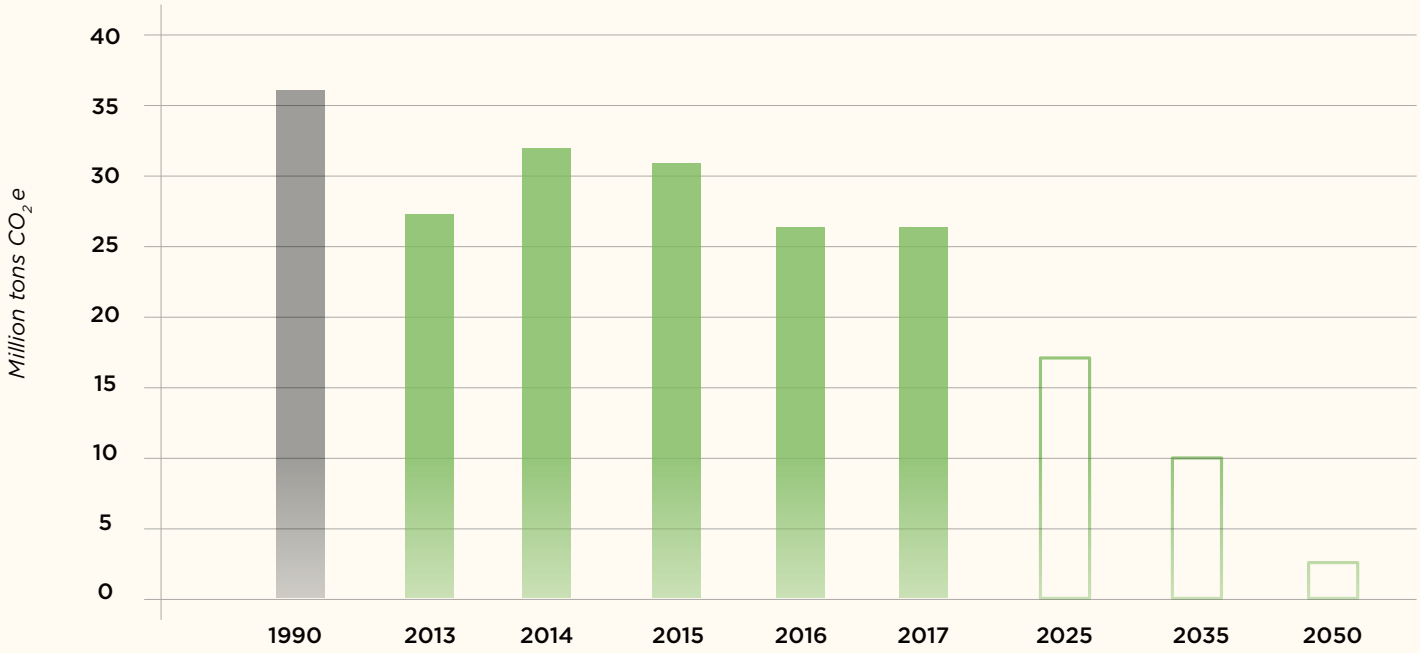
Industrial
Manufacturing
Construction
Refineries
Methane Leaks

Transportation
On-road
Rail
Waterborne
Aviation
Off-road

Waste
Solid Waste
Wastewater

L.A.'s Green New Deal accelerates our greenhouse gas emissions reduction targets, including 50% below 1990 levels by 2025, surpassing the recommendations of the 2018 U.N. Special Report on Global Warming.

L.A. Community-wide Greenhouse Gas Emissions Trends and Targets*



* L.A. estimates GHG emissions following the Global Protocol for Community-Scale GHG Emission Inventories (GPC) for a "Basic" reporting level, which includes calculation of Scope 1 emissions from fuel use in buildings, transport, and industry; Scope 2 emissions from grid-supplied energy consumption (e.g., electricity); and Scope 1 and 3 emissions from waste generated within the City's boundary.

How to Read L.A.'s Green New Deal

L.A.'s Green New Deal will result in health outcomes and support a green economy, our findings are highlighted in the Benefits to Angelenos page in each chapter.

Each chapter also identifies key benefits achieved by the respective targets, milestones, and initiatives, based on an analysis of eight criteria described below. While all chapters support all eight criteria, the Top Five Areas of Impact highlight the areas where we expect to have the greatest impact. Each chapter is assessed on how much it can achieve the following benefits:



Climate Mitigation: Reduce GHG emissions



Access and Equity: Expand access to benefits created by the pLAn (e.g., access to green/healthy spaces, clean energy programs, mobility, etc.)



Quality Jobs: Generate quality jobs and support a green, sustainable economy



Workforce Development: Improve local workers' skills, lift labor participation rates, and increase the number of Angelenos achieving higher education



Health and Wellbeing: Improve air quality, comfort and mental health, and encourage more physical activity



Economic Innovation: Attract investment in innovative industries, promote start-ups, and deepen the knowledge exchange between the private, public, and academic sectors



Increased Affordability: Make it more affordable to live in L.A. (e.g. utility rates, energy costs, and other household bills)



Resiliency: Protect L.A. against future climate change, shocks, and unexpected disasters as described in Resilient Los Angeles

Quantifying Air Quality Benefits

Poor air quality puts vulnerable and low-income communities at risk and bears significant public health costs to individuals and society. Initiatives throughout this pLAn were studied for the health improvements they will yield from reduced air pollution. This work, assisted by the South Coast Air Quality Management District, included an analysis of particulate matter and ozone pollution reduction from certain policies, and quantified the resulting health improvements – measuring prevented deaths and hospital visits from respiratory and cardiovascular complications, as well as the associated cost savings. Results can be found in the relevant chapters and reveal significant synergies between GHG reductions and better health outcomes.

Quantifying Jobs

A selection of targets, milestones, and initiatives were studied for their impact on employment in L.A. The model indicates the number of full-time and part-time jobs (including direct and indirect jobs) supported by expected investment levels from each policy, laid out in relevant chapters of this report. The Prosperity and Green Jobs chapter also includes specific targets for green job creation and workforce development.

Resilience

Sustainability and resilience work hand in hand. Together, the L.A. Green New Deal, the 2018 Resilient Los Angeles strategy, and the 2018 updated Local Hazard Mitigation Plan encompass L.A.'s approach to protecting the most vulnerable Angelenos from climate change shocks and stressors. Policies that increase resilience – climate adaptation, infrastructure modernization, and economic security – are integrated throughout relevant chapters in this report. Building resilience to extreme heat and protecting against urban heat islands is covered specifically in the Urban Ecosystems and Resilience chapter.

United Nations Sustainable Development Goals (UN SDGs)

In 2017, Mayor Garcetti committed to adopting and enacting the UN SDGs at the local level. Under this commitment, L.A. is aligning all of the City's activities with the SDGs. Each of this pLAn's 47 targets have been aligned to the SDGs, and reported in each chapter.



L.A.’s Green New Deal - What it means inside City government

To ensure that we accomplish the accelerated and ambitious goals laid out in this document, the Mayor is establishing new implementation bodies:

Climate Emergency Commission (CEC) and an Office of the Climate Emergency Mobilization Director (CEMD)

The CEC will be comprised of representatives from disadvantaged communities, indigenous local tribes, small businesses, and labor, as well as policy and science experts and City department senior executives. Jointly, the CEC and CEMD will engage local communities more deliberately around L.A.’s Green New Deal through community assemblies, particularly those who are most vulnerable to climate change and major shifts in our economy. City Council has introduced a motion to establish these roles.

Jobs Cabinet

The Jobs Cabinet will serve as both an advisory body and a task force on job creation, training, and just transition, with a primary focus on green jobs at the outset. This cabinet, to be comprised of leading employers and workforce development organizations, will: identify gaps in the size, skills, and equitability of the workforce; identify strategies to close those gaps; and develop pathways for implementation of those strategies through new and existing programs, partnerships, and policies.

In addition, effective implementation by City government continues to be driven by the following:

- Coordinated planning and implementation efforts across City government
- Strong, cohesive, empowered network of Departmental Chief Sustainability Officers (DCSOs)
- Formation of interagency committees - from EV infrastructure deployment to stormwater project development to oil and gas oversight reform - to tackle specific challenges and realize opportunities that require coordination
- Accountability through Department General Managers performance reviews and annual goal setting
- Alignment of budget priorities
- Transparency through regular progress reporting on L.A. open data portals and global platforms such as the Carbon Disclosure Project.

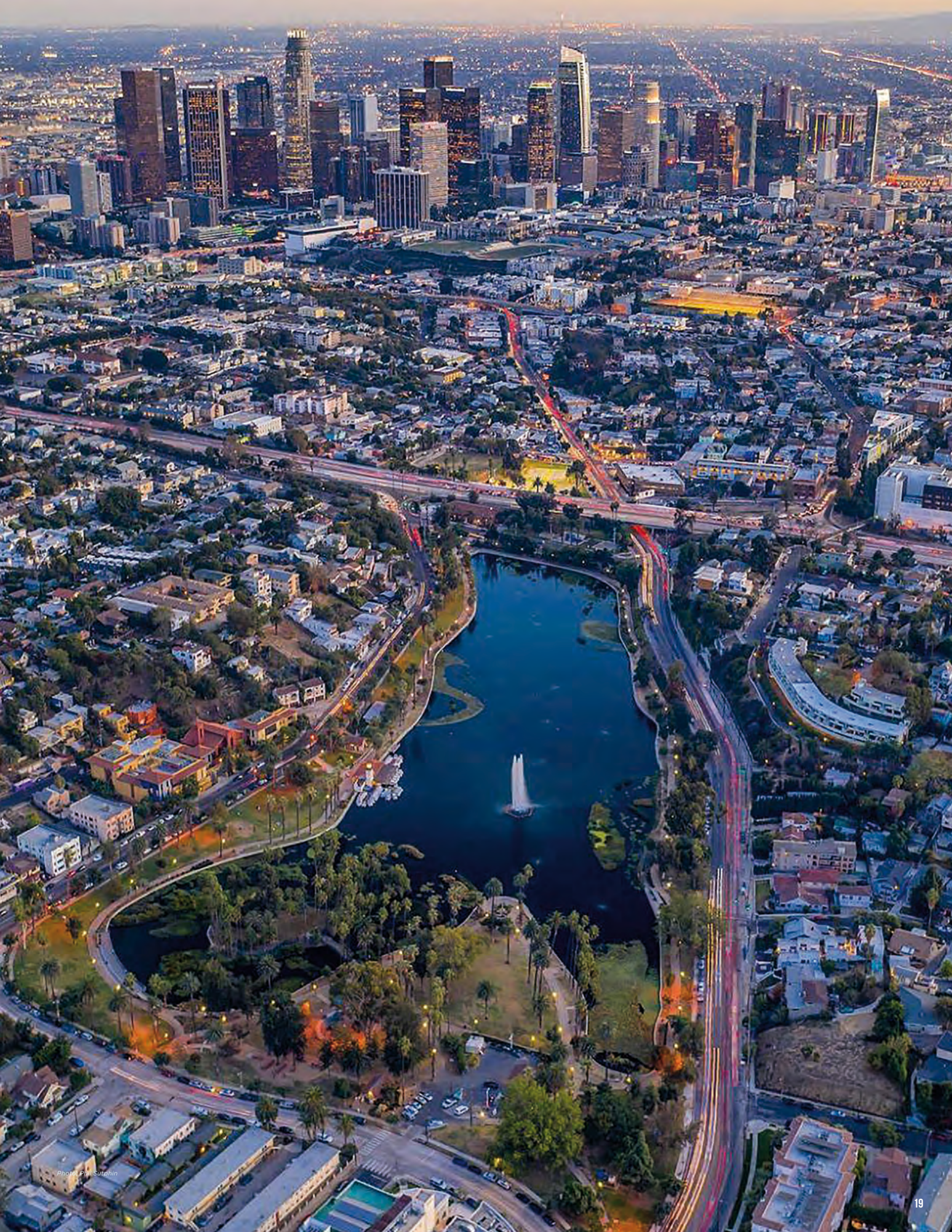


Photo: Piet Sutphin

Chapter Layout for L.A.'s Green New Deal

The following provides a guide to the structure of the report. Each topic chapter includes the following:

Benefits to Angelenos:

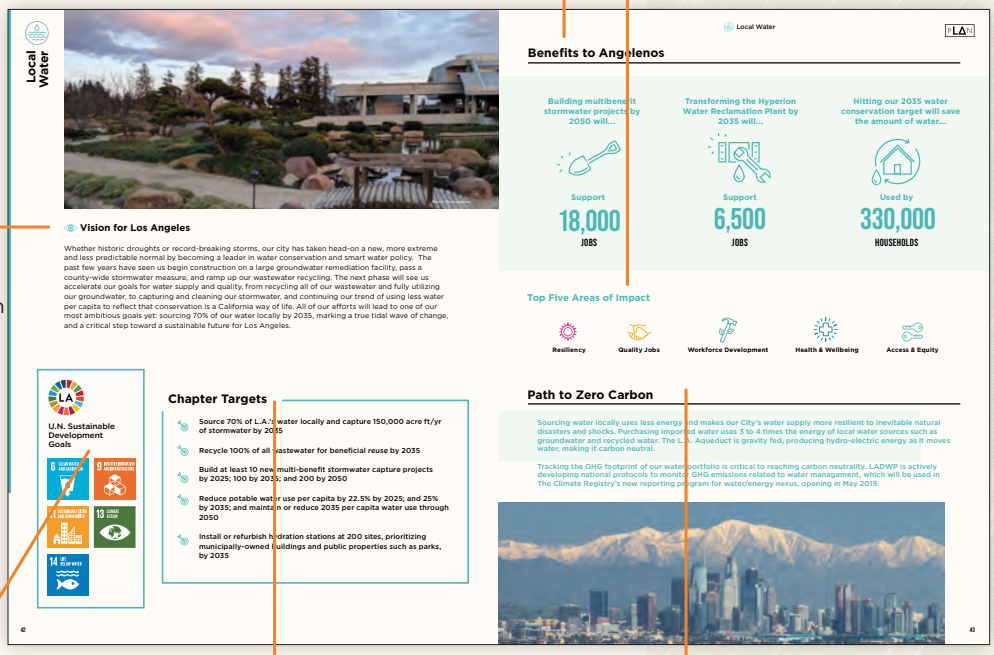
Highlights specific benefits to Angelenos coming from this chapter (e.g. health benefits, jobs, other quality of life improvements)

Top Five Areas of Impact:

Highlights the five areas, out of a suite of eight, where we expect to have the most impact in this chapter

Vision:

The vision for L.A.'s sustainability transformation by 2050



UN SDGs:

Identifies which of the 17 UN Sustainable Development Goals are supported by policies in the chapter

Targets:

Measurable, quantitative, and time-bounded outcomes by 2025, 2035, and 2050

Path to Zero Carbon:

Examines the role of this chapter in GHG reductions on the 2019 Green New Deal Pathway

Targets:

Restates the measurable, quantitative, and time-bounded outcomes by 2025, 2035, and 2050. Targets that impact GHG emissions are aligned to achieve the 2019 Green New Deal Pathway

Milestones:

Identifies intermediate measurable steps aligned toward meeting a target

Initiatives:

Identifies specific, actionable initiatives to achieve progress

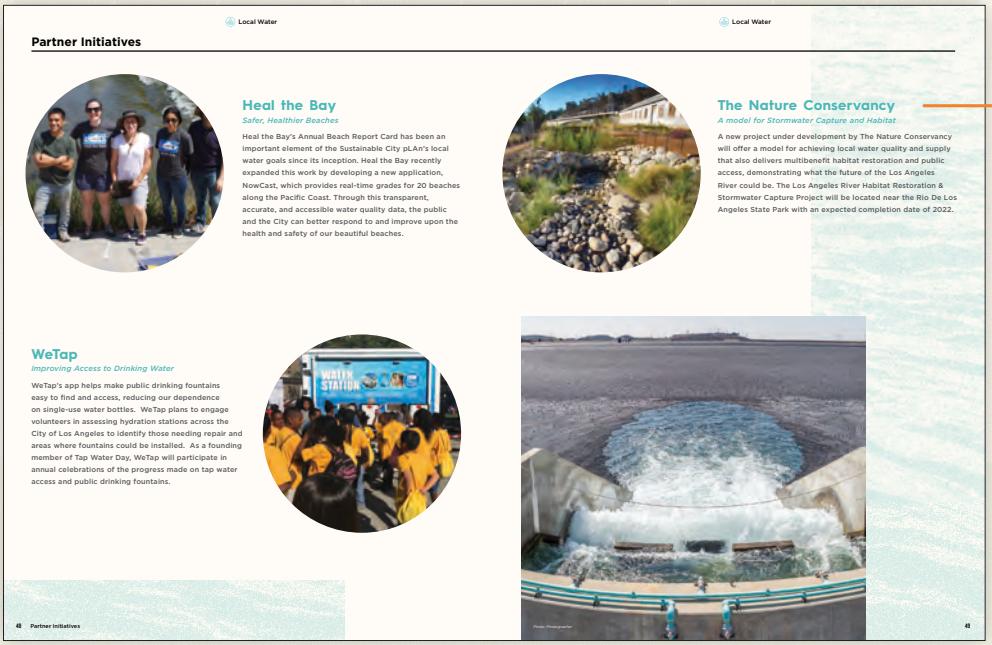
Equity:

E: Denotes an equity initiative to ensure each chapter is responsible for an equitable distribution of benefits. Equity initiatives are compiled again for emphasis in the Environmental Justice chapter alongside other actions.



Partner Initiatives:

Highlights a selection of initiatives and commitments made by organizations whose actions will help Los Angeles collectively meet our targets and milestones



Environmental Justice

Securing a healthy environment in every neighborhood



Mural by Northeast Valley Artists in collaboration with Pacoima Beautiful

1
Chapter



Photo: Billie Jean Londono



Photo: L.A. Mayor's Office

Vision for Los Angeles

L.A. is home to a diverse population, a dynamic workforce, and a growing economy. Yet too often, the Angelenos left behind by progress – low-income families and communities of color – are disproportionately impacted by pollution and face dire consequences for their health. If we wish to build a truly fair, just, and prosperous city, we have to ensure everyone experiences the benefits of a sustainable future. That's why we're electrifying our entire bus fleet, slashing emissions at the Port, and cutting oil production and consumption in the city. That's also why we've partnered with community groups to successfully secure key investments in sustainability and economic growth through Transformative Climate Community (TCC) grants and we are expanding access to community solar and electric vehicle car sharing. Across our plan, we are acting to improve air and water quality, reduce the energy burden of low-income households, address food deserts, provide economic opportunity in green jobs, build greater access to open space – and correct long-running environmental injustice across our city.

U.N. Sustainable Development Goals



Chapter Targets

- Improve the raw scores of CalEnviroScreen indicators of L.A. communities in the top 10% by an average of 25% by 2025; and 50% by 2035
- Reduce the number of annual childhood asthma-related emergency room visits in L.A.'s most contaminated neighborhoods to less than 14 per 1,000 children by 2025; and 8 per 1,000 children by 2035

Benefits to Angelenos

This chapter cuts across all the topic chapters to follow. Targets around zero emission vehicles, building electrification, and industrial emissions will reduce air pollution and...

Prevent

1,650

PREMATURE DEATHS ANNUALLY

Prevent

660

RESPIRATORY & CARDIOVASCULAR HOSPITAL ADMISSIONS ANNUALLY

Save

$16 BILLION

FROM PREVENTED DEATHS AND HOSPITAL ADMISSIONS ANNUALLY

Top Five Areas of Impact

- Access & Equity
- Health & Wellbeing
- Resiliency
- Climate Mitigation
- Increased Affordability

Path to Zero Carbon

Improving the health of our communities goes hand in hand with fighting climate change. L.A.'s Transformative Climate Communities are prime examples of how community revitalization can have a local and global impact. The TCC projects in Watts and Pacoima-Sun Valley are expected to reduce 69,041 tons of CO2e and 32,476 tons of CO2e, respectively, equivalent to taking 21,554 cars off the road for one year.



Photo: Housing Authority of the City of Los Angeles

Target

Improve the raw scores* of CalEnviroScreen indicators of L.A. communities in the top 10% by an average of 25% by 2025; and 50% by 2035

*Baseline/Source: See table on page 29 for baseline scores

Throughout the pLAn, equity initiatives are marked with an E. This section collects all of these initiatves in one place for easy reference.

Milestones & Initiatives

2025

Dramatically reduce exposure to health-harming pollutants in our most disadvantaged communities

Local Water

- Provide drinking water access at five sites in areas of highest need and install or retrofit hydration stations at municipal buildings
- Establish permanent drinking water access in Skid Row
- Incorporate stormwater capture capacity into six Complete Streets
- Develop programs to provide assistance to customers to address on-site plumbing issues, including old drinking water pipes

Mobility & Public Transit

- Implement Wilmington Avenue Great Streets Project
- Create four new DASH routes (Boyle Heights West, Pacoima, Sylmar, Canoga Park)
- Support implementation of Metro's First/Last Mile plans for the Blue Line, Purple Line, and subsequent lines
- Expand electric car sharing options, including BlueLA, to all Los Angeles neighborhoods in the top 10% of the CalEnviroScreen

Industrial Emissions & Air Quality Monitoring

- Reduce oil production by 40% below 2013 levels
- Implement and expand the Clean Up Green Up program to include one or more additional neighborhoods with high CalEnviroScreen scores
- Work with L.A. County to plan and implement the new lead hazard remediation program, ensuring resources are allocated to L.A.'s fair share of affected units

Urban Ecosystems & Resilience

- Partner with government agencies and NGOs to expand the 50 Parks L.A. Initiative
- Identify low canopy corridors and prioritize planting trees in those areas
- Adopt park equity investment criteria to help prioritize park placement

Lead by Example

- Create a Climate Emergency Council that engages impacted communities in implementing the pLAn
- Appoint a Climate Emergency Mobilization Director
- Engage Community Assemblies to identify priorities and help assess community level impact of climate programs



Mural Untitled, Pacoima, Photo by Billie Jean Landono

Milestones & Initiatives

2025

Invest in housing, services, and infrastructure upgrades that will improve the quality of life for sensitive populations including children, the homeless, and elders

Housing & Development

- Direct outreach, mental health, career, and addiction support services to nearby encampments
- Expand unified homelessness response center to improve coordination of city and county services

Food Systems

- Offer wellness and healthy eating programs including a summer lunch program for kids
- Identify food recovery partners and ensure recovered food feeds the most in need

Urban Ecosystems & Resilience

- Partner with LAUSD to formalize an agreement to establish joint use parks in schools
- Increase the use of joint-use park spaces by providing programming and activities
- Develop spatial map of existing cool roofs and heat risk to develop a strategy to add cool roofs in areas of highest heat vulnerability
- Incorporate additional cooling features such as innovative shade design, water features, and cooling centers at parks
- Upgrade cooling centers to better meet the needs of elderly and persons with disabilities
- Expand communications on types of cooling resources and available cooling spaces, including through NotifyLA for homeless populations, to increase usage and deployment

Lead by Example

- Expand opportunities for youth arts education in areas of high need

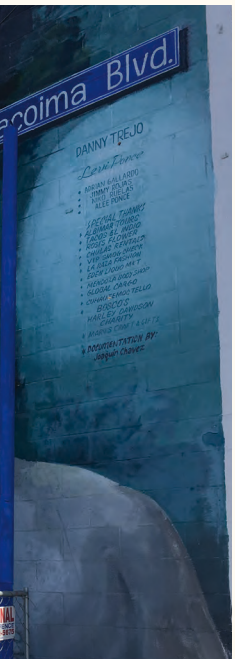




Photo: Juan Carlos Chan/ City of Los Angeles Department of Recreation and Parks

Target

Improve the raw scores* of CalEnviroScreen indicators of L.A. communities in the top 10% by an average of 25% by 2025; and 50% by 2035 (continued)

*Baseline/Source: See table on page 29 for baseline scores

Milestones & Initiatives

2025

Implement cost-saving programs to alleviate financial burdens in our most vulnerable communities

Renewable Energy

- Launch a new Virtual Net Energy Metering pilot program for multi-family households to go solar and implement a feasibility study to scale up program
- Provide community solar programs that expand access to solar savings to low-income and renter households: 1) Solar rooftops and 2) Shared solar program

Clean & Healthy Building

- Targeted outreach to renters and affordable housing customers for energy efficiency rebate opportunities
- Provide discounted energy benchmarking for affordable housing and non-profits with trainees from local colleges
- Identify and communicate energy conservation potential for multi-family properties through the City's Gateway to Green Program

Housing & Development

- Provide environmental assistance to prepare brownfield projects for redevelopment focusing on disadvantaged communities
- Develop new programs and ordinances to prevent displacement of lower income Angelenos, communities of color, and persons living with disabilities
- Leverage new development linkage fees to build affordable housing with equitable geographic distribution to address gentrification
- Implement the recommendations in the City's recently adopted Assessment of Fair Housing

Waste & Resource Recovery

- Engage individuals with high barriers to employment with opportunities in street cleanup through LA:RISE

Food Systems

- Work with L.A. County to expand EBT access at farmers markets countywide

Prosperity & Green Jobs

- Offer Green Jobs courses at L.A. Trade Technical College for 250 students and place them in internships
- Prepare workers with retraining for jobs that will be automated
- Add sustainability curriculum to WorkSource Development Center training
- Offer two free years of community college for eligible high school graduates, exposing students to hundreds of courses in sustainability
- Launch the Advanced Prototyping Center Fellowship at the Los Angeles Cleantech Incubator (LACI) to place 50 people in jobs per cohort
- Collaborate with stakeholders on a just transition for workers into the green jobs of the future
- Ensure contracts for City construction projects provide opportunities for local hiring and disadvantaged worker employment
- Support LACI to create an inclusive green economy by taking on applicants and helping them gain access to capital and resources, providing office space and executive coaching
- Launch the Founders Business Accelerator at LACI to help entrepreneurs in low-income communities grow their businesses and increase their impact

Lead by Example

- Complete first phase of the Green Meadows microgrid resiliency project

Milestones & Initiatives

2025

Improve access to community programs in low-income areas

Housing & Development

- Implement development reform initiatives such as streamlining and expediting the permitting process for all types of housing, including ADUs
- Increase density at key transit nodes and near job centers through Community Plan Updates and Transit Oriented Communities incentives
- Ensure housing developments adhere to Transit Oriented Communities guidelines for on-site affordable units

Mobility & Public Transit

- Execute a suite of bus and transit corridor improvements, including accepting mobile payments and expanding all door boarding
- Identify opportunities to implement cool corridors and other interventions to improve pedestrian comfort on routes to high-volume transit stops and cooling spaces
- Implement a Street Furniture program that reduces heat exposure, provides cool transit stops, and improves access to restrooms in high transit use areas

Waste & Resource Recovery

- Improve recycling and waste reduction education in public housing

Food Systems

- Work with L.A. County to expand opportunities and remove regulatory barriers for home-based entrepreneurs
- Provide technical assistance to healthy food merchants and entrepreneurs in low-income communities
- Develop a permitting program for sidewalk vending
- Expand Neighborhood Market Conversion program and promote investment in new grocery locations via FreshWorks fund
- Increase food access opportunities through grocery stores, farmer's markets, urban farms, and food reuse in underserved areas
- Create new retail siting policies and update Community Plans to encourage the siting of grocery retail in underserved areas
- Work with L.A. County to baseline and monitor CalFresh/SNAP participation in the city
- Promote enrollment in supplemental nutrition programs
- Identify opportunities to increase edible gardens in City's public housing
- Expand urban agriculture in the City's Promise Zones
- Build up infrastructure of smaller corner stores to sustain neighborhoods in the event of an emergency

*Raw scores of top 10% of L.A. CalEnviroScreen communities

Ozone Pollution	PM2.5 Pollution	Diesel PM Pollution	Drinking Water Contaminants	Pesticide Use	Toxic Releases from Facilities	Traffic Density	Cleanup Sites	Groundwater threats	Haz. Waste
0.05	12.26	36.55	0.93	5774.62	1981.63	613.57	30.52	24.91	2.41
Impaired Water Bodies	**Solid Waste**	**Asthma**	**Low Birth Weight**	**Cardiovascular Disease**	**Education**	**Linguistic Isolation**	**Poverty**	**Unemployment**	**Housing Burden**
4.78	7.3	74.73	6.32	9.75	46.91	23.1	66.9	14.23	34.6

Source: CalEnviroScreen 3.0, California Office of Environmental Health Hazard Assessment, 2019

Target

Reduce the number of annual childhood asthma-related emergency room visits in L.A.'s most contaminated neighborhoods to less than 14 per 1,000 children by 2025; and 8 per 1,000 children by 2035

Baseline: The neighborhoods with the most childhood asthma-related emergency room visits—Central City and Harbor Gateway—averaged 24 out of 1,000 children
Source: Plan for a Healthy Los Angeles. Data from 2010 California Office of Statewide Health Planning and Development

Milestones & Initiatives

2021

Deploy air quality tracking in high scoring CalEnviroScreen neighborhoods

- Pilot a GPS enabled smart inhaler program for evaluating air quality near the Port
- Launch air quality monitoring pilots on City street lamps within our Clean Up Green Up neighborhoods and in the neighborhood of Watts
- Deploy community air quality monitoring networks under AB 617 in Boyle Heights and Wilmington
- Conduct fence-line air quality monitoring at L.A.'s refineries and oil and gas extraction sites
- Identify and analyze toxic air contaminants emitted from oil and gas production facilities
- Identify air quality hotspots in impacted communities from goods movement, ports, and refineries

2021

Create an annual oil well and facilities compliance inspection program, prioritizing communities in closest proximity to facilities

- Enhance health and safety protection provisions for oil and gas production facilities
- Evaluate the feasibility of a no drill health and safety buffer zone between oil and gas production facilities and communities
- Coordinate with L.A. County to develop a sunset strategy for oil and gas production operations countywide
- Implement Best Available Retrofit Control Technology

2025/2035/2050

Increase the percentage of zero emission vehicles in the city to 25% by 2025; 80% by 2035; and 100% by 2050

- 100% Zero Emission school buses in Los Angeles
- Support vehicle trade-in events like Cash for Clunkers programs
- Introduce 155 new electric DASH buses into fleet
- Develop a suite of emissions reduction programs for ocean going vessels at the Port of Los Angeles
- Support development of cleaner rail transport, including investigating the feasibility of rail electrification
- Implement an updated Clean Truck Program with prioritization of zero emission trucks
- Ensure that municipally deployed EV chargers are distributed equitably around the city, with a focus on underserved and disadvantaged neighborhoods



Photo: Housing Authority


Photo: Strategic Concepts in Organizing and Policy Education


Photo: Strategic Concepts in Organizing and Policy Education



Photo: Housing Authority of the City of Los Angeles



Photo: Pacoima Beautiful

Green Together: Northeast Valley

(implementation grant, $23 million)

- 2.4 miles of pedestrian improvements
- Electrify DASH Pacoima service with 14 new battery-electric buses and 7 fast chargers
- 4 mobility hubs with solar-powered EV charging infrastructure
- 5 air quality monitoring nodes at key locations
- 175 solar electric energy systems installed on single-family homes
- 8 MW of feed-in-tariffs and/or net energy metering projects
- 6.8-acre park renovated to include 95 trees planted, a stormwater bioswale, and walking paths
- 2,090 trees planted
- 35 cool roofs installed
- David M. Gonzales Park resiliency center built to include solar, energy storage, and EV chargers
- 0.36 acres of alley space transformed into a green alley
- New light rail transit service design along Van Nuys Blvd. and San Fernando Rd.
- 1.6-acre underground infiltration gallery installed in Fernangeles Park to capture stormwater
- 95 acre-feet per year of stormwater runoff captured

South L.A. Climate Commons Collaborative

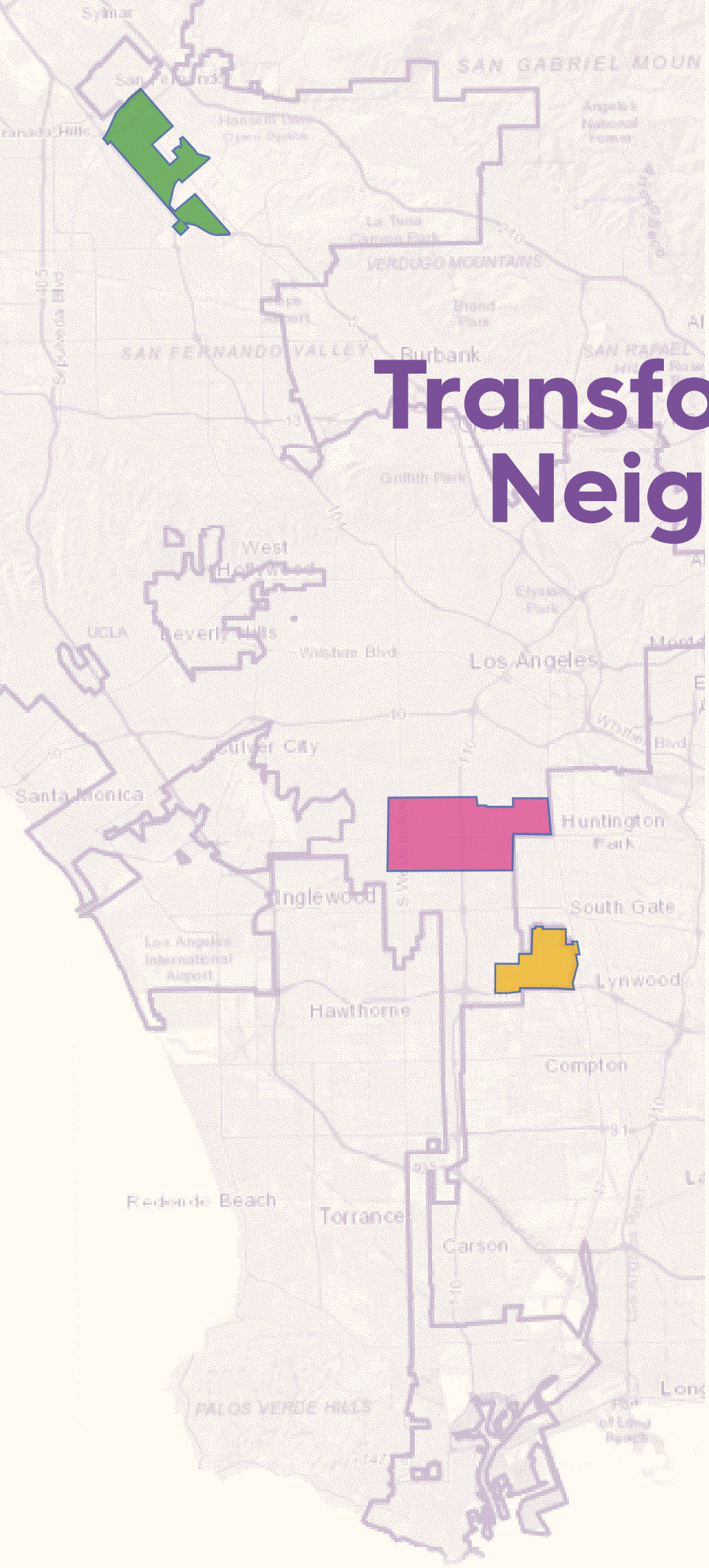
(planning grant, $200,000)

- Developing strategies on housing affordability, park access, workforce development, and community health
- Offering a community-led vision for on-going land use and transportation planning efforts including the Slauson Corridor Transit Neighborhood Plan and Metro's Rail-to-River Active Transportation Corridor
- Aligning and leveraging funding through City's General Plan, including Community Plans, focused on sustainability and economic revitalization
- Will pursue a future TCC implementation grant

Watts Rising

(implementation grant, $32 million)

- 81-unit affordable apartment community in Jordan Downs
- 135 affordable multi-family housing units
- Electrified DASH Watts service with 10 new battery-electric buses and 5 fast chargers
- 15 electric vehicles for carsharing
- Rooftop solar panels on 52 single-family homes
- 300 single-family home energy efficiency retrofits
- 5.2 miles of bike lanes, 25 pedestrian improvements, an arts and cultural walking path, and two safe passage programs for students
- 0.5 miles of pedestrian/cyclist mobility improvements
- 1,050 native plants and 5,400 square feet of pervious rain gardens
- More than 3,300 trees
- Expanded community garden at Markham Middle School, with 100 shade trees
- 2 urban pocket parks
- 50 urban mini-farms
- 250,000 pounds of food rescued and redistributed to Watts residents
- Green street and pedestrian improvements
- 1/2 mile green/complete street from Grape Street to Alameda Street
- Over 35,000 square feet of grocery store offering fresh fruits and vegetables



Transforming Our Neighborhoods

Through the State's TCC program, three L.A. neighborhoods – Watts, Pacoima-Sun Valley, and South L.A. – are channeling local knowledge and experience into solving local problems. After receiving awards totaling over $55 million by the State and leveraging over $200 million from the City and partners, each community is building upon decades of grassroots organizing and engagement to support the priorities of their residents and deliver meaningful change. In addition to the exciting projects around clean energy and urban greening, each project will incorporate workforce development plans that include training in a number of sectors – renewable energy technologies, low carbon transportation technologies, energy efficiency, waste diversion, healthy soils – and fight back against displacement. These community-driven projects protect our planet while ensuring our vibrant neighborhoods are safe, clean, and resilient for generations to come.

Renewable Energy

Laying the foundation for L.A.'s zero carbon future



2
Chapter



Photo: City of Los Angeles Department of Water and Power



Vision for Los Angeles

Transitioning to a 100% renewable energy supply is the backbone of L.A.'s strategy to go carbon neutral. LADWP is aggressively pursuing renewable energy and already started the transition with plans to invest nearly $1 billion in everything from solar to wind to energy storage over the next five years. Our leadership so far has yielded clear results: Los Angeles is the #1 solar city in America, with approximately 2.4 gigawatts of installed solar and wind, enough to power 565,000 homes, and we will phase out natural gas operations at three power plants in the city by 2029.

U.N. Sustainable Development Goals



Chapter Targets

- LADWP will supply 55% renewable energy by 2025; 80% by 2036; and 100% by 2045
- Increase cumulative MW by 2025; 2035; and 2050 of:
  - Local solar to 900-1,500 MW; 1,500-1,800 MW; and 1,950 MW
  - Energy storage capacity to 1,654-1,750 MW; 3,000 MW; and 4,000 MW
  - Demand response (DR) programs to 234 MW (2025) and 600 MW (2035)

Benefits to Angelenos

Local solar installations will...

Support

6,500

JOBS BY 2025

Clean grid infrastructure investments will...

Support

45,000

JOBS BY 2022

Top Five Areas of Impact

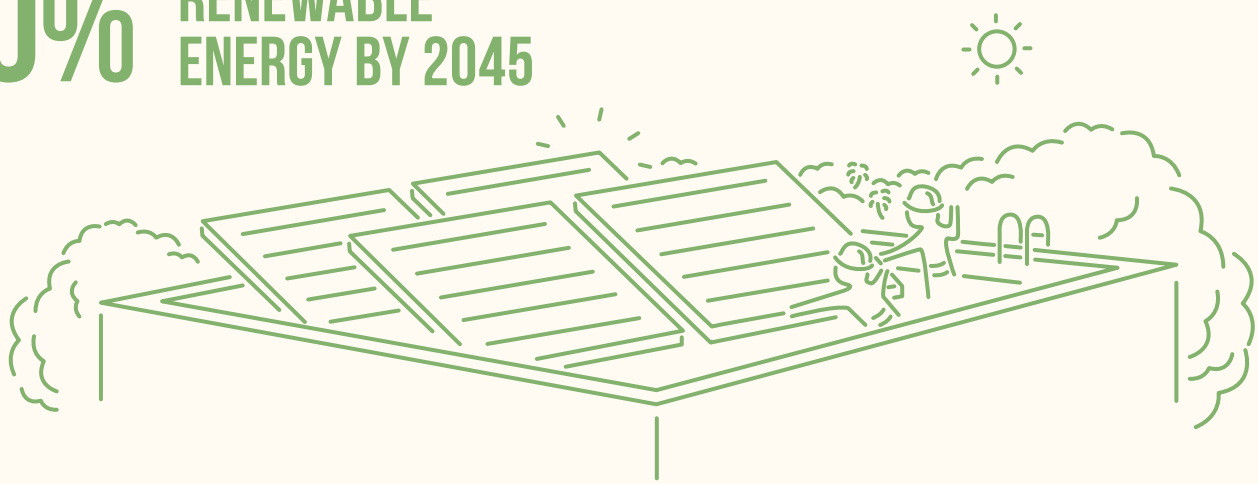
- Climate Mitigation
- Quality Jobs
- Workforce Development
- Access & Equity
- Resiliency

Path to Zero Carbon

L.A.'s Energy Supply

Cleaner energy is already responsible for 86% of L.A.'s GHG emission reductions. Continuing to ramp up renewable energy is a key underlying driver to meeting our Green New Deal Pathway.

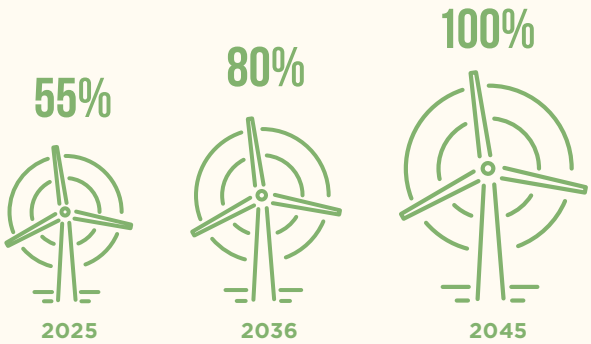
100% RENEWABLE ENERGY BY 2045



Target

LADWP will supply 55% renewable energy by 2025; 80% by 2036; and 100% by 2045

Baseline: 30% renewable energy in 2017
Source: Los Angeles Department of Water and Power



Milestones & Initiatives

2020

Release 100% Renewable Energy Plan

- Engage 100% Renewable Energy Advisory Group on study inputs and partner on public outreach

2022

Invest $8 billion to upgrade power system infrastructure and ensure power system reliability

- Make key upgrades to transmission and distribution systems, substations, and other equipment to enable renewable energy integration into the electricity grid

2025

End coal-based electricity in L.A.'s fuel mix

- Assess opportunities for compressed air energy storage at Intermountain Power Plant
- Utilize transmission access from Intermountain Power Plant as a renewables hub, enabling over a gigawatt of renewable resources over the next 15 years

2028

Provide 100% clean power for the 2028 Olympic and Paralympic Games

- Partner with local utilities and the LA2028 Olympic and Paralympic Organizing Committee to develop a clean energy plan

2029

Cancel plans to repower OTC gas power plants and cut in-basin power generation by natural gas 38%

- Release action plan for in-basin grid infrastructure investments



Photo: City of Los Angeles Department of Water and Power

E = Equity

Target

Increase cumulative megawatts (MW) by 2025; 2035; and 2050 of:

- **Local solar to 900-1,500 MW; 1,500-1,800 MW; and 1,950 MW**
- **Energy storage capacity to 1,654-1,750 MW; 3,000 MW; and 4,000 MW**
- **Demand response programs to 234 MW (2025) and 600 MW (2035)**

Baseline: 360 MW of local solar and 1276 MW energy storage as of January 2019, and 25 MW of demand response as of October 2018
Source: Los Angeles Department of Water and Power

Milestones & Initiatives

2021

Expand Feed-in-Tariff (FiT), community solar, and increase cumulative MW of local solar to 500 MW

- Provide community solar programs that expand access to solar savings to low income and renter households: 1) Solar rooftops and 2) Shared solar program E
- Launch a new Virtual Net Energy Metering pilot program for multifamily households to go solar and implement feasibility study E
- Extend FiT program and expand to include storage
- Create a standard plan for carport solar
- Require all newly built parking structures to have solar
- Maintain residential solar PV interconnection wait time to less than two weeks
- Seek opportunities for third-party clean energy service providers to leverage private property for distributed generation

2021

Increase cumulative MW of energy storage to 1,428-1,524 MW

- Identify and prioritize solar and microgrid backup power projects at critical City-owned facilities
- Streamline permitting and interconnection processes for energy storage projects
- Pilot technology for dispatchable and customer-side storage

2021

Launch residential thermostat demand response (DR) program, and increase cumulative MW of DR to 96 MW

- Deploy technology to automate the existing Commercial Demand Response Program
- Investigate bidirectional smart-grid technologies to prepare for large-scale adoption of electric vehicles (EVs)
- Implement communication network to enable use of smart meters



Photo: City of Los Angeles Department of Water and Power

Partner Initiatives



Photo: GridAlternatives

Grid Alternatives

Solar Powered Homes and Jobs

GRID Alternatives Greater Los Angeles has installed solar panels at no cost on the homes of almost 2,000 low-income families. This work has not only lowered utility bills and displaced dirtier energy sources, but also provided job training to hundreds of individuals. In 2019, GRID Alternatives will help its 500th trainee get a solar job, install over 1 MW of solar on single- and multi-family buildings, and provide low-income L.A. families with over $5,000,000 in lifetime savings while avoiding over 10,000 tons of carbon emissions. Its newly-formalized Solar Jobs Second Chances initiative has helped 200 reentry individuals gain skills and employment after release from incarceration.

Los Angeles Community College District Construction

College Campuses as Living Labratories for Renewable Energy

The Los Angeles Community College District (LACCD) is incorporating sustainability into its $9.6 billion investment in modernizing and renovating its 9 colleges in Los Angeles county. So far, LACCD has installed over 10 MW of solar energy saving over $10 million. These solar installations provide additional benefits by serving as a living lab for students enrolled in Renewable Energy Programs such as those offered through the Los Angeles Trade Technical College Going forward, LACCD is committed to featuring renewable generation at all of its campuses.


Photo: Chris Grant/ HMC Architects



Photo: Sierra Club

Sierra Club, Los Angeles

Taking Action to Support 100% Clean Energy in L.A.

The Sierra Club advocates for an equitable transition to a fully electrified, 100 percent clean energy powered Los Angeles. Working with partners and its own 15,000 members in L.A., Sierra Club seeks a future where Angelenos can breathe healthy air, are provided with clean and renewable energy, and have access to quality jobs and careers. Over the next three years, the Sierra Club's staff and volunteer leaders will activate members to take 10,000 actions in support of the pLAn. From asking members to attend workshops to gathering petitions in support of the pLAn, actions will also include participating in LADWP clean energy programs, and providing educational resources to empower residents to become clean energy advocates in their communities and in their own homes.

While the crisis has never been more intense, the solutions have never been more achievable.

Local Water

Conserving our water and sourcing it locally



3
Chapter



Photo: Mayor Eric Garcetti

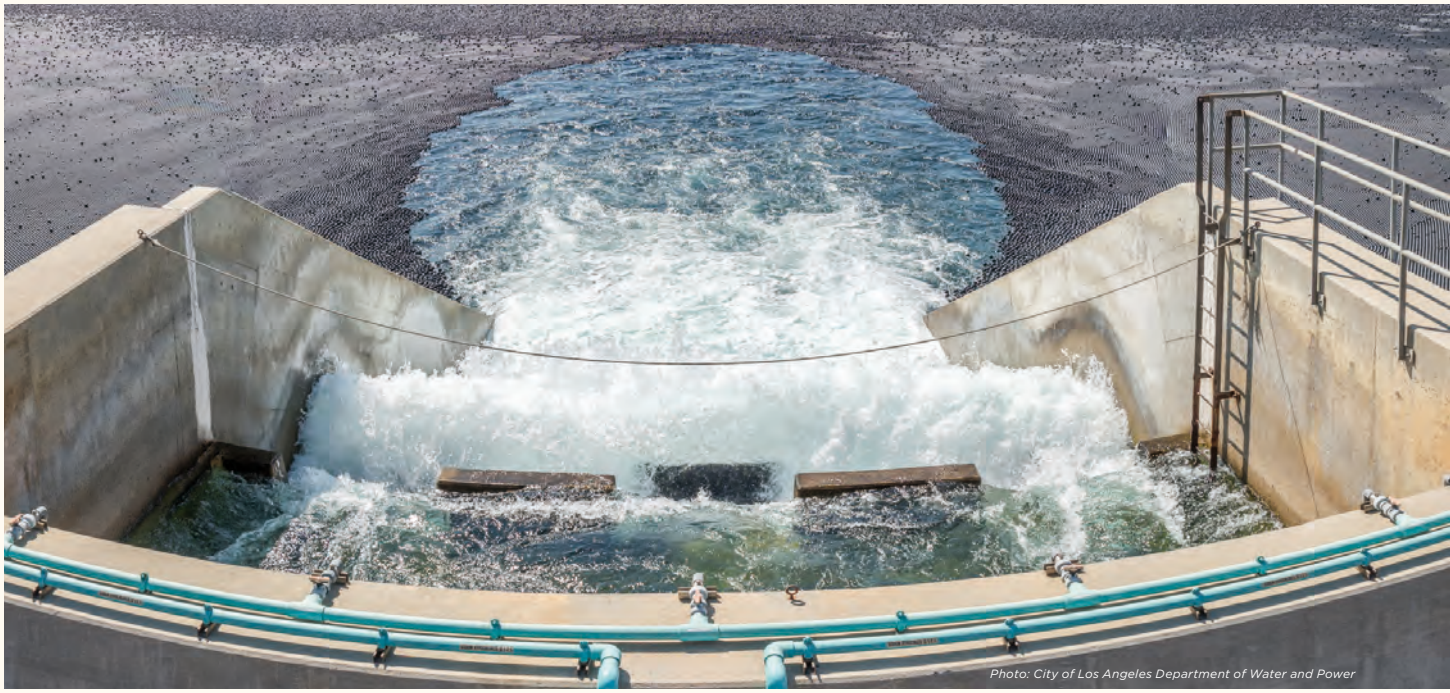


Photo: City of Los Angeles Department of Water and Power

Vision for Los Angeles

Whether historic droughts or record-breaking storms, our city has taken on a new, more extreme and less predictable normal by becoming a leader in water conservation and smart water policy. The past few years have seen us begin construction on a large groundwater remediation facility, pass a county-wide stormwater measure, and ramp up our wastewater recycling. The next phase will see us accelerate our goals for water supply and quality, including recycling all of our wastewater and fully utilizing our groundwater capturing and cleaning our stormwater, and continuing our trend of using less water per capita to reflect that conservation is a California way of life. All of our efforts will lead to one of our most ambitious goals yet: sourcing 70% of our water locally by 2035, marking a true tidal wave of change, and a critical step toward a sustainable future for Los Angeles.

U.N. Sustainable Development Goals



Chapter Targets

- Source 70% of L.A.'s water locally and capture 150,000 acre ft/yr of stormwater by 2035
- Recycle 100% of all wastewater for beneficial reuse by 2035
- Build at least 10 new multi-benefit stormwater capture projects by 2025; 100 by 2035; and 200 by 2050
- Reduce potable water use per capita by 22.5% by 2025; and 25% by 2035; and maintain or reduce 2035 per capita water use through 2050
- Install or refurbish hydration stations at 200 sites, prioritizing municipally-owned buildings and public properties such as parks, by 2035

Benefits to Angelenos

Building multi-benefit stormwater projects by 2050 will...

Support

18,000

JOBS

Transforming the Hyperion Water Reclamation Plant by 2035 will...

Support

6,500

JOBS

Hitting our 2035 water conservation target will save the amount of water...

Used by

330,000

HOUSEHOLDS

Top Five Areas of Impact

- Resiliency
- Quality Jobs
- Workforce Development
- Health & Wellbeing
- Access & Equity

Path to Zero Carbon

Sourcing water locally uses less energy and makes our City's water supply more resilient to inevitable natural disasters and shocks. Purchasing imported water uses 3 to 4 times the energy of local water sources such as groundwater and recycled water. The L.A. Aqueduct is gravity fed, producing hydro-electric energy as it moves water, making it carbon neutral.

Tracking the GHG footprint of our water portfolio is critical to reaching carbon neutrality. LADWP is actively developing national protocols to monitor GHG emissions related to water management, which will be used in The Climate Registry's new reporting program for water/energy nexus, opening in May 2019.



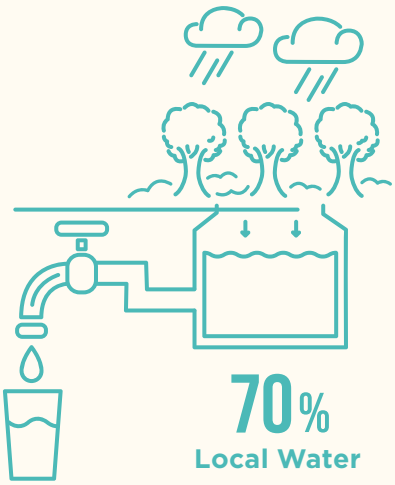
Photo: David Pinsky

Photo: David Pinsky

Target

Source 70% of L.A.'s water locally* and capture 150,000 acre ft/yr (AFY) of stormwater by 2035

Baseline: 15% of L.A.'s water sourced locally between July 2013 and June 2014
Source: City of Los Angeles Department of Water and Power



Milestones & Initiatives

2021

Increase stormwater capture to 75,000 AFY

- Leverage internal and external funding, including Measure W, and pursue additional financing opportunities

2021

Complete programmatic EIR for One Water L.A. 2040 plan

- Update important infrastructure such as the Venice Pumping Plant to increase resilience to flooding, sea-level rise, and other climate change impacts

2021/2028

Replace 108 miles of water mainlines by 2021; and 530 by 2028

- Achieve and sustain a replacement cycle consistent with expected 100 to 120-year life of water mains

2025

Reduce LADWP purchases of imported water by 50%

- Maintain the Water Cabinet to support implementation of key projects and policies
- Complete groundwater remediation facilities in the San Fernando Basin
- Develop plan to maximize use of West Coast and Central Basins
- Enhance L.A. Aqueduct system reliability and seismic resiliency



Photo: City of Los Angeles Department of Water and Power

*Locally sourced water, potable and non-potable, shall be composed of all local groundwater production, historical and future hardware-based conservation savings, centralized and distributed stormwater capture and recharge, and all recycled water produced in the City. When determining the percentage of local water, the amount of recycled water provided to jurisdictions outside the City of Los Angeles shall be included in both the numerator and denominator of the calculation.

E = Equity

Target

Recycle 100% of all wastewater for beneficial reuse* by 2035

Baseline: In FY17-18, 27% of wastewater was recycled
Source: City of Los Angeles Bureau of Sanitation

*including but not limited to non-potable reuse, groundwater recharge, and supporting environmental and recreational uses such as those in the L.A. River

Recycle
100%
By 2035

Milestones & Initiatives

2021

Produce 1.5 millions of gallons per day (MGD) of recycled water at Hyperion Water Reclamation Plant (WRP) for use at LAWA and other local facilities

- Pilot membrane reactor technology to help clean recycled water

2025

Recycle 17,000 AFY (15 MGD) of water at Donald C. Tillman WRP to recharge into our groundwater basins

- Test a suite of treatment options, including ozone

2025/2035

Increase non-potable reuse of recycled water by an additional 6,000 AFY by 2025; and an additional 8,000 AFY by 2035

- Maintain existing and connect new recycled water customers
- Convert 85% of public golf course acreage to recycled water

2025/2035

Reduce annual sewer spills to fewer than 65 by 2025; and 60 by 2035

- Identify and prioritize sewer infrastructure maintenance





Photo: L.A. Mayor's Office

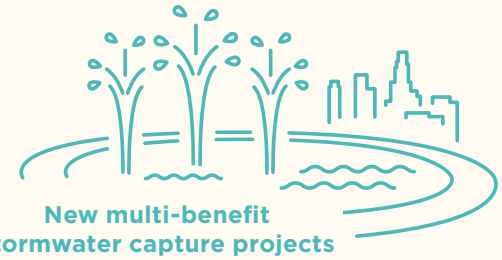


Photo: City of Los Angeles Department of Water and Power

Target

Build at least 10 new multi-benefit stormwater capture projects by 2025 to improve local water quality and increase local water supply; 100 by 2035; and 200 by 2050

Baseline: 42 projects as of 2018
Source: City of Los Angeles Bureau of Sanitation



New multi-benefit stormwater capture projects

10	100	200
By 2025	By 2035	By 2050

Milestones & Initiatives

2020

Ensure that $80 million annually from Measure W supports multi-benefit projects that improve water quality

- Increase number of green infrastructure sites such as green streets and alleys, bioswales, infiltration cutouts, permeable pavement, and street trees
- Evaluate incentives and existing policies to increase residential and commercial stormwater capture
- Expand use of permeable pavement in large infrastructure projects (e.g., LAWA)
- Develop projects that prioritize nature-based solutions

2021

Establish guidelines for incorporation of green infrastructure into street and sidewalk repair projects

- Incorporate stormwater capture capacity into six Complete Streets (E)

2025

Divert up to 25 MGD (~28,000 AFY) of urban runoff to improve local water quality

- Construct Low Flow Diversions to Hyperion WRP



Photo: City of Los Angeles Bureau of Sanitation

(E) = Equity

Target

Reduce potable water use per capita by 22.5% by 2025; 25% by 2035; and maintain or reduce 2035 per capita water use through 2050

Baseline: 133 total gallons per capita per day as of June 2014
Source: City of Los Angeles Department of Water and Power

Reduce Potable Water Use

22.5% By 2025

25% By 2035

Milestones & Initiatives

2021

Expand existing programs and develop targeted campaigns to increase awareness on L.A.'s water policy goals

- Build upon the success of Save the Drop and develop additional water conservation campaigns
- Continue benchmarking customer use and recognizing innovative water reduction initiatives
- Improve data gathering to identify most effective programs
- Expand top performing conservation incentive programs, including for landscape transformation and washing machines
- Expand sub-metering and evaluate smart water meter technologies

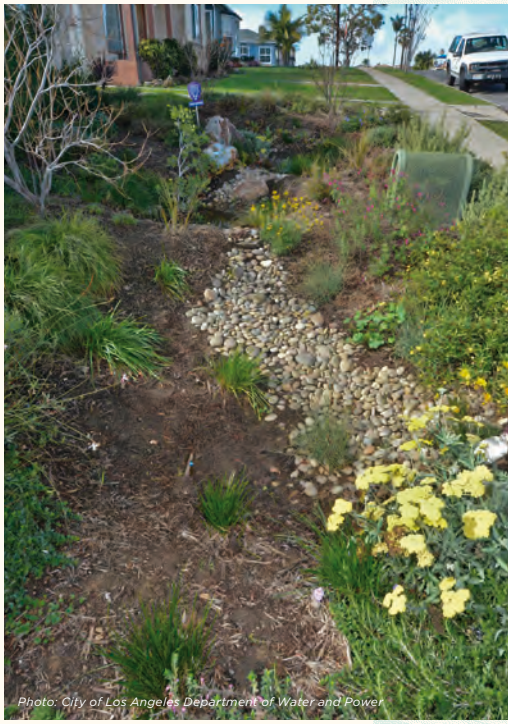


Photo: City of Los Angeles Department of Water and Power

Target

Install or refurbish hydration stations at 200 sites, prioritizing municipally-owned buildings and public properties such as parks, by 2035

Baseline: Progress being tracked from baseline year 2019
Source: City of Los Angeles, multiple departments and bureaus

Milestones & Initiatives

2021

Establish permanent drinking water access in Skid Row (E)

- Retrofit or install permanent hydration stations

2025

Provide drinking water access at 5 sites of highest need and install or retrofit hydration stations at municipal buildings (E)

- Identify priority hydration stations per council district for retrofit
- Prioritize large municipal buildings and LADWP customer service centers
- Develop strong community outreach and education programs on tap water quality



Photo: City of Los Angeles Department of Water and Power

Partner Initiatives



Photo: Heal The Bay

Heal the Bay

Safer, Healthier Beaches

Heal the Bay's Annual Beach Report Card has been an important element of the Sustainable City pLAn's local water goals since its inception. Heal the Bay recently expanded this work by developing a new application, NowCast, which provides real-time grades for 20 beaches along the Pacific Coast. Through this transparent, accurate, and accessible water quality data, the public and the City can better respond to and improve upon the health and safety of our beautiful beaches.

WeTap

Improving Access to Drinking Water

WeTap's app helps make public drinking fountains easy to find and access, reducing our dependence on single-use water bottles. WeTap plans to engage volunteers in assessing hydration stations across the City of Los Angeles to identify those needing repair and areas where fountains could be installed. As a founding member of Tap Water Day, WeTap will participate in annual celebrations of the progress made on tap water access and public drinking fountains.



Photo: WeTap



Photo: City of Los Angeles Bureau of Sanitation

The Nature Conservancy

A Model for Stormwater Capture and Habitat

A new project under development by The Nature Conservancy will offer a model for achieving local water quality and supply that also delivers multibenefit habitat restoration and public access, demonstrating what the future of the Los Angeles River could be. The Los Angeles River Habitat Restoration & Stormwater Capture Project will be located near the Rio De Los Angeles State Park with an expected completion date of 2022.

We have to confront the greatest threat to our physical security and our health – a war on our shores with rising tides, and in our mountains with burning forests. Our fight is to protect our families, and our city, from the impacts of climate change.

Clean & Healthy Buildings

Drawing an emissions-free blueprint for L.A.'s buildings



4

Chapter



Photo: Natalia Knezevic



Vision for Los Angeles

To be carbon neutral by 2050, all of L.A.'s buildings must operate 100% on clean power—because buildings have to be transformed from our largest source of climate pollution to 21st century models of efficiency. L.A.'s building stock is one of the most energy efficient in the country. However, to meet our goals, state-of-the-art technologies will further fine-tune energy use, so not a single kilowatt is wasted. Buildings will be designed, built, and rebuilt using passive energy principles, advanced efficiency measures, and on-site renewable energy, while audits and retrofits will create local job opportunities and speed up technology innovation.

U.N. Sustainable Development Goals



Chapter Targets

- All new buildings will be net zero carbon by 2030; and 100% of buildings will be net zero carbon by 2050
- Reduce building energy use per sq.ft. for all building types 22% by 2025; 34% by 2035; and 44% by 2050

Benefits to Angelenos

LADWP energy efficiency programs will...

Support
1,600
JOBS ANNUALLY

Save
$65 MILLION
ANNUALLY FOR CUSTOMERS

Zero carbon buildings will reduce air pollution and...

Support
175,000
JOBS BY 2050

Prevent
190
PREMATURE DEATHS ANNUALLY

Prevent
70
RESPIRATORY AND CARDIOVASCULAR HOSPITAL ADMISSIONS ANNUALLY

Save
$1.9 BILLION
FROM PREVENTED DEATHS AND HOSPITAL ADMISSIONS ANNUALLY

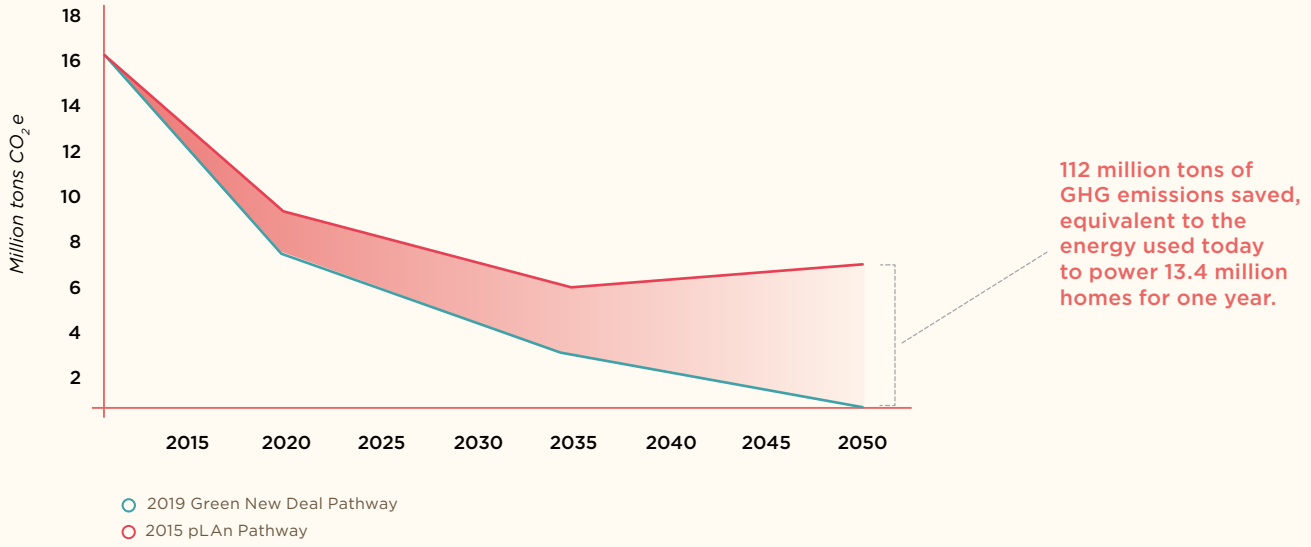
Top Five Areas of Impact

- Climate Mitigation
- Quality Jobs
- Workforce Development
- Access & Equity
- Health & Wellbeing

Path to Zero Carbon

Emissions from Building Energy Use

L.A.'s Green New Deal Pathway calls for the steepest near-term reductions in GHG emissions from building energy use than any other sector and cuts 50% of emissions by 2025 and 100% by 2050.



Target

All new buildings will be net zero carbon by 2030; and 100% of buildings will be net zero carbon by 2050

Baseline: Effectively 0% in 2019
Source: Los Angeles Department of Water and Power, and Department of Building and Safety



Milestones & Initiatives

2021

Design and implement policies to decarbonize new buildings

- Complete building electrification study and develop supporting programs for building electrification
- Engage cities around the state, country, and globe on smart building policies

2021

Design and implement policies to decarbonize existing buildings

- Expand and improve access to financing
- Create incentives for electrification in existing energy efficiency and solar incentive programs
- Engage building owners and tenants on benefits of building upgrades



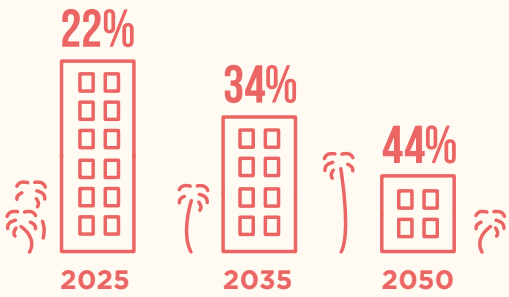
Photo: L.A. Mayor's Office

E = Equity

Target

Reduce building energy use per sq.ft. for all building types 22% by 2025; 34% by 2035; and 44% by 2050

Baseline: 68 mBTU/sqft in 2015
Source: US Department of Energy city-specific data on building energy use intensities



Milestones & Initiatives

2020/2030

Use energy efficiency to deliver 15% of L.A.'s projected electricity needs by 2020; and 30% by 2030

- Increase awareness of incentives and smart building energy management systems
- Assess and report energy consumption from energy-water nexus

2021

Invest $100 million in energy efficiency programs to renters and affordable housing customers

- Targeted outreach to renters and affordable housing customers for energy efficiency rebate opportunities E

2021

Achieve and maintain +85% compliance with Existing Building Energy & Water Efficiency (EBEWE) program

- Provide discounted energy benchmarking for affordable housing and non-profits with trainees from local colleges E
- Operate a resource center to support implementation of EBEWE
- Analyze energy data to develop more targeted energy efficiency rebates



Photo: Natalia Knezevic

Partner Initiatives


Photo: Los Angeles Better Building Challenge

Los Angeles Better Buildings Challenge

Modernizing L.A.'s Buildings to Achieve Ambitious Goals

The L.A. Better Buildings Challenge (LABBC) is catalyzing the modernization of L.A.'s buildings. Working with policymakers, industry, and advocacy groups, LABBC has set an ambitious goal of engaging 1,000 buildings (150 million sq.ft.) by 2025 to meet the Building Energy Use targets in the 2015 Sustainable City pLAn. LABBC also partners with the City in operating the EBEWE resource center.

Building Decarbonization Coalition

Building a Zero-Emissions Future in California

The Building Decarbonization Coalition (BDC) is uniting building energy stakeholders, energy providers, environmental organizations and local governments to accelerate development of zero-emission homes and buildings in California. In A Roadmap to Decarbonizing California's Buildings, BDC lays out a plan to dramatically cut carbon emissions from buildings. BDC is also rolling out statewide consumer education and contractor accreditation programs, while helping governments work together with builders, contractors, and designers on the transition to zero emission buildings


Photo: Los Angeles Better Building Challenge


Photo: Los Angeles Better Building Challenge

Natural Resources Defense Council, Energy Efficiency for All, and Los Angeles Better Buildings Challenge

Expanding Access to Energy Efficiency Benefits

Multifamily buildings present tremendous opportunity for energy efficiency improvements but also program challenges due to complex ownership structures, utility bill payment responsibilities, and lack of capital for upfront costs. The Natural Resources Defense Council (NRDC) and the Energy Efficiency for All Coalition is partnering with LABBC to expand outreach efforts to support an additional 150 affordable multifamily properties per year in communities with the highest energy use intensity, targeting 15% energy and 20% water use reductions. NRDC and LABBC estimate that these efforts will save low-income residents more than $800,000 in annual utility costs, while also increasing health and comfort and directly supporting the Sustainable City pLAn's goals around energy

U.S. Green Building Council Los Angeles

A Technology Accelerator for L.A. Developments

In 2019, the U.S. Green Building Council-Los Angeles will launch a Net Zero Building Technology Accelerator focused on the building technologies to help make zero carbon, zero energy, zero water, and zero waste buildings a reality for the region. The accelerator will source startups with an emphasis on placing pilots with building partners at the end of the program, working closely with industry to address business model and technical issues with these innovative companies before they get to market. In this first year, the program will look to graduate a minimum of five startups.



Photo: U.S. Green Building Council- Los Angeles

Housing & Development

Delivering more safe, affordable, and efficient housing to every Angeleno



Photo: Los Angeles Housing and Community Investment Department

5
Chapter


M
Grand Opening
2013
SNAKE
LA WEEKLY



Photo: City of Los Angeles Bureau of Sanitation

Vision for Los Angeles

Building a stronger, more dynamic, more sustainable Los Angeles requires us to put affordable housing within reach for every family and a roof over the head of every Angeleno. Our pLAn tackles this monumental challenge by building on our efforts to end homelessness, preserve and expand affordable housing, and shorten the distance between new homes and transit. We have started to see the results of this strategy: in 2017, over half of new housing units were built within 1,500 feet of different transportation options, and nearly three-quarters within a half-mile. Looking ahead, we will act to cut the city's unsheltered population, construct new units, and develop housing that is affordable, efficient, and connected to transit.

U.N. Sustainable Development Goals



Chapter Targets

- End street homelessness by 2028
- Increase cumulative new housing unit construction to 150,000 by 2025; and 275,000 units by 2035
- Ensure 57% of new housing units are built within 1500 ft of transit by 2025; and 75% by 2035
- Create or preserve 50,000 income-restricted affordable housing units by 2035 and increase stability for renters

Benefits to Angelenos

New transit oriented housing construction will...

Support

325,000

JOBS BY 2035

A Bridge Home Sites being built will offer

1,500

BEDS BY 2021

Top Five Areas of Impact

- Access & Equity
- Health & Wellbeing
- Quality Jobs
- Resiliency
- Increased Affordability

Path to Zero Carbon

By making our homes highly efficient and zero carbon, we will cut half of the emissions from L.A.'s buildings; this is accounted for in the Clean and Healthy Buildings chapter.

By building housing near transit, we are also helping Angelenos use public transportation and reduce emissions from vehicle use; this is accounted for in the Zero Emissions Vehicles chapter.



Photo: L.A. Mayor's Office

Target

End street homelessness by 2028

Baseline: 36,049 persons unsheltered in 2018
Source: Greater Los Angeles Homeless Count


Photo: The People Concern

Milestones & Initiatives

2021

Implement the Mayor's A Bridge Home program by building at least 1,500 beds across the city

- Direct outreach, mental health, career, and addiction support services to nearby encampments E
- Restore spaces that were previously encampment sites into safe, clean, public passageways
- Expand unified homelessness response center to improve coordination of city and county services E

2026

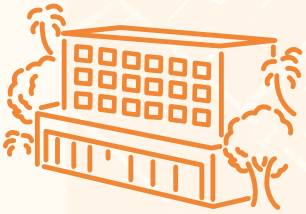
Build 10,000 new permanent supportive housing units

- Implement Prop HHH
- Streamline the permitting process of permanent supportive housing

Target

Increase cumulative new housing unit construction to 150,000 by 2025; and 275,000 units by 2035

Baseline: 12,394 units permitted in 2014.
Source: City of Los Angeles, Department of Building and Safety.



150,000 by 2025

275,000 by 2035

Milestones & Initiatives

2021

Build 100,000 new housing units

- Implement development reform initiatives such as streamlining and expediting the permitting process for all types of housing, including Accessory Dwelling Units (ADU) E
- Improve process predictability and provide for coordinated early review of development projects
- Expand opportunities for incremental housing production that is compatible with existing neighborhood, building on recent ADU policies
- Expand opportunities for homeownership and other price-stable alternatives to renting across all income levels

E = Equity

Target

Ensure 57% of new housing units are built within 1,500 ft. of transit by 2025; and 75% by 2035

Baseline: 43% in 2014
Source: City of Los Angeles, Department of City Planning



New housing within 1500ft of transit

57% by 2025

75% by 2035

Milestones & Initiatives

2020

Complete Transit Neighborhood Plans underway for Purple Line Extension and Orange Line

- Develop regulatory tools and strategies to encourage transit ridership and focus growth in housing near the North Hollywood Station, Van Nuys Station, Sepulveda Station, Reseda Station, and Sherman Way Station
- Add seven new stations to the Purple Line to extend west from Downtown L.A. to UCLA

2021

Complete Downtown Community Plan

- Expand zoning capacity to accommodate significant density, including capacity for 20% of the City's future housing needs within the Downtown area (1% of land area)
- Remove parking minimums

2024

Complete all 35 community plans

- Increase density at key transit nodes and near job centers through Community Plan Updates and Transit Oriented Communities (TOC) incentives E
- Ensure housing developments adhere to TOC guidelines for on-site affordable units E
- Promote urban infill development to maximize new and existing transit investments
- Update parking regulations to allow for adaptive reuse of space, bike and car-sharing infrastructure, and reduced parking requirements



Photo: L.A. Metro

Target

Create or preserve 50,000 income-restricted affordable housing units by 2035 and increase stability for renters

Baseline: Progress being tracked from baseline year 2019
Source: City of Los Angeles, Housing and Community Investment Department



50,000 by 2035

Milestones & Initiatives

2021

Enforce the Rent Stabilization Ordinance and further enhance tenant protections

- Develop new programs and ordinances to prevent displacement of low-income residents, communities of color, and persons living with disabilities (E)

2021/2035

Build 15,000 units of affordable housing by 2021; and 45,000 by 2035

- Leverage new development linkage fees to build affordable housing with equitable geographic distribution to address gentrification (E)
- Factor in the cost of production and minimum wage to ensure that costs per unit are affordable
- Revise the density bonus program to encourage more mixed-income, affordable development across the city
- Implement the recommendations in the City's recently adopted Assessment of Fair Housing (E)
- Develop and scale new loan products to encourage mixed-income development and the preservation of existing, naturally-occurring affordable housing

Partner Initiatives



Photo: Lawrence Anderson

Kilroy Realty Corporation

A Carbon Neutral Transformation in Building Stock

Kilroy Realty Corporation committed to achieving carbon neutral operations for its entire 13.2 million square foot portfolio by 2020. For Los Angeles, this translates to 2+ million existing and under construction square feet. Such a commitment is the first of its kind among real estate companies in North America, and programs, such as onsite energy efficiency and renewables projects, are already underway to meet this ambitious goal by year-end 2020.

(E) = Equity

Partner Initiatives


Photo: Enterprise Community Partners

Enterprise Community Partners

Fostering Sustainable Equitable Development

Enterprise Community Partners fosters community improvement from the ground up to ensure all residents can live in affordable homes in thriving, healthy and resilient communities with access to greater opportunities and increased economic prosperity. In Los Angeles County, Enterprise provides grants and technical assistance for multi-sector, joint-development projects and lead a regional peer network on sustainable, equitable development in gentrifying, low-income communities. Enterprise is now partnering with the City of Los Angeles to support their priorities of advancing the retrofit and preservation of affordable multifamily properties to increase water and energy efficiency, earthquake safety, and community resilience—a further step to ensuring that all Angelenos can live in safe, affordable, resilient homes and neighborhoods.

The People Concern

Dignified Housing for Angelenos

The People Concern provides a fully integrated system of care, including housing and wrap-around supportive services social services to homeless individuals, survivors of domestic violence, challenged youth, and others who have nowhere else to turn across Los Angeles. The People Concern was selected as the service provider for the Mayor's first A Bridge Home site, El Puente, which opened in September 2018 and is located in El Pueblo. Residents were selected from the nearby community and are provided temporary, dignified housing that is paired with tailored, holistic supportive services that empower individuals to rebuild their lives and contribute to their community. The goal of The People Concern is to bring equity to Los Angeles by making sure every Angeleno is housed, healthy and safe.


Photo: The People Concern

Mobility & Public Transit

Changing and expanding how L.A. gets around



6
Chapter



Photo: L.A. Mayor's Office



Vision for Los Angeles

We are changing the face of mobility for L.A. workers and families—because transportation accounts for 19% of our GHG emissions, and is the top contributor to air pollution. These trends cannot continue.

Now, a city known as the car capital of the world is investing more in our transit infrastructure than any other American city in history. More people than ever are walking, biking, using scooters, rideshare, and other modes of transportation to get to and from home and the office. Our streets today are testing grounds for new technology, first/last mile solutions, and major innovations in mobility. In 2028, our residents and guests will be able to get to every Olympic event on public transportation. From light rail to subway to new bus projects, we are building a comprehensive and integrated transit network. And we will not stop this progress in its tracks: by 2035, half of all trips will happen somewhere other than a single occupancy vehicle.

U.N. Sustainable Development Goals



Chapter Targets

- **Increase the percentage of all trips made by walking, biking, micro-mobility / matched rides or transit to at least 35% by 2025; 50% by 2035; and maintain at least 50% by 2050**
- **Reduce VMT per capita by at least 13% by 2025; 39% by 2035; and 45% by 2050**
- **Ensure Los Angeles is prepared for Autonomous Vehicles (AV) by the 2028 Olympic and Paralympic Games**

Benefits to Angelenos

Measure M will...

Support
788,000
JOBS IN THE REGION

Reduce
5 MILLION
VEHICLE MILES TRAVELED PER DAY COUNTYWIDE

Cut time stuck in traffic by
15%
PER DAY

When Angelenos switch from driving to include 15 minutes of walking or biking on their work commute, they will experience*...

23% REDUCED
RISK OF HEART DISEASE AND STROKE

15% REDUCED
RISK OF TYPE 2 DIABETES

*Based on a 2017 C40 / Novo Nordisk Study

Top Five Areas of Impact

- Quality Jobs
- Health & Wellbeing
- Access & Equity
- Climate Mitigation
- Workforce Development

Path to Zero Carbon

L.A.'s carbon neutral pathway calls for deep reductions in GHG emissions from the transportation sector. Building out the transit system in L.A. will enable Angelenos to use public transit and other modes to get where they need to go. This is key to going carbon neutral because mode shift will allow us to reduce today's transportation emissions by a quarter, equivalent to removing 300,000 cars from the road for one year.

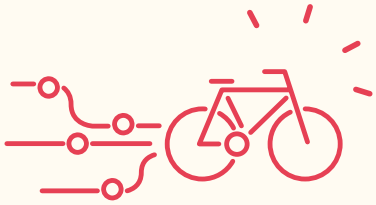


Photo: Gary Leonard/ L.A. Metro

Target

Increase the percentage of all trips made by walking, biking, micro-mobility / matched rides or transit to at least 35% by 2025; 50% by 2035; and maintain at least 50% by 2050

Baseline: 14% of all trips made by non-car modes in 2015
Source: 2016 City of Los Angeles Travel Demand Forecasting Model



35% by 2025 **50%** by 2035

Milestones & Initiatives

2021

Launch a regionally coordinated advocacy campaign to encourage shared, sustainable mobility options

- Coordinate a working group of mobility partners to develop public engagement goals of the campaign

2025

Support Metro with their implementation of a congestion pricing pilot

- Work with Metro on a congestion pricing study

2025

Increase L.A.'s average Walk Score to 75

Source: Walk Score®

- Update City standard plans for public works projects to integrate pedestrian-centric design into all applicable projects
- Implement a Street Furniture program that reduces heat exposure, provides cool transit stops, and improves access to restrooms in high transit use areas E
- Implement Wilmington Avenue Great Streets Project E
- Identify opportunities to implement cool corridors and other interventions to improve pedestrian comfort on routes to high-volume transit stops and cooling spaces E

2025

Implement Vision Zero safety improvements

- Inspect and repair 200 crosswalks on the High-Injury Network
- Implement 50 Safe Routes to School safety plans
- Pilot sensoring and monitoring technology to increase pedestrian safety
- Enhance and maintain all bikeways on the High-Injury Network

2028

Improve travel time on L.A. County's bus network by 30 percent

- Complete three BRT projects
- Complete Metro's NextGen Bus Study
- Expand DASH service to ensure system achieves 15 minute weekday and 20 minute weekend frequency
- Create four new DASH routes (Boyle Heights West, Pacoima, Sylmar, and Canoga Park) E
- Execute a suite of bus and transit corridor improvements, including accepting mobile payments and expanding all door boarding E

2028

Complete Measure M 28 by '28 projects

- Continue subway and light rail network expansion, including completion of the Regional Connector, Crenshaw / LAX, Airport Metro Connector, and Purple Line Extension projects
- Complete projects to enhance mobility through the San Fernando Valley, including Sepulveda and East San Fernando transit corridors
- Launch Metro MicroTransit pilot project

E = Equity

2028

Ensure all City residents have access to high-quality mobility options within a 10-minute walk from home

- Expand bike lane network by 20 lane-miles per year and increase bicycle-supportive infrastructure like public bicycle parking and repair stations
- Support implementation of Metro's First/Last Mile plans for the Blue Line, Purple Line, and subsequent lines E
- Expand electric car sharing options, including BlueLA, to all Los Angeles neighborhoods in the top 10% of the CalEnviroScreen E
- Expand LADOT MicroTransit operations



Photo: CicLAvia


Photo: Aaron Paley/ LA Más

Target

Reduce Vehicle Miles Travelled (VMT) per capita by at least 13% by 2025; 39% by 2035; and 45% by 2050

Baseline: 15 VMT per capita per day
Source: Southern California Association of Governments Transportation Demand Model

13% by 2025 **39%** by 2035 **45%** by 2050

Milestones & Initiatives

2021

Adopt a Mobility First policy

- Update the Transportation Demand Management (TDM) ordinance
- Develop and implement first/last mile infrastructure improvements around transit stations, including integration of existing and emerging mobility services (e.g. bikeshare, e-scooters, carshare, etc.)
- Update the City's transportation impact study guidelines and related tools, including a VMT calculator
- Implement TDM strategies and other congestion easing measures in the West Side Mobility Plan

2021

Launch a user-friendly, searchable app mapping all curbside designations throughout the city

- Expand DOT Express Park Program to Venice, study feasibility for other locations
- Pilot new curbside regulations and parking zones to better integrate and help facilitate new mobility options

2021

Expand Metro Bike Share to at least three new neighborhoods

- Deliver multi-modal Integrated Mobility Hubs with infrastructure for car share, shared rides, bike share, and dockless mobility services, starting in Downtown L.A. and Hollywood
- Double annual Metro Bike Share trips in Downtown L.A. and University Park



Photo: City of Los Angeles Department of Transportation

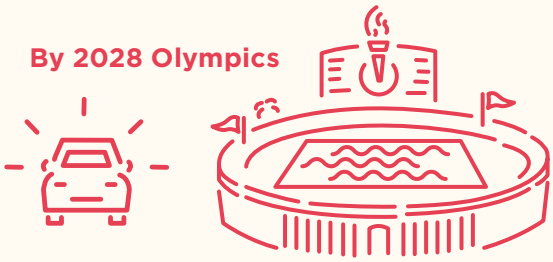


E = Equity

Target

Ensure Los Angeles is prepared for Autonomous Vehicles (AV) by the 2028 Olympic and Paralympic Games

Baseline: No baseline; progress tracked starting 2019
Source: Los Angeles Department of Transportation



Milestones & Initiatives

2021

Use transportation data to ensure that new transit, app-enabled, and for-hire mobility options are equitably available across the City

- Create design guidelines for AV and zero emissions mobility infrastructure in the public right of way

2021

Ensure all autonomous vehicles (AVs) used for sharing services are electric

- Develop software applications and APIs to optimize autonomous vehicle performance and safety, and ensure that AV deployments in Los Angeles are consistent with the City's core values of safety, equity, and livability
- Develop a suite of incentives for electric autonomous shared vehicles, and electric car and rideshare overall



Photo: City of Los Angeles Department of Transportation

Partner Initiatives


Photo: Jon Endow/ LA Más

LA Más

Changing the Landscape of the First/Last Mile

LA-Más is an urban-design non-profit that works with lower-income and underserved communities to shape the growth of their own neighborhoods. One example of their collaborative approach is the Go Ave 26 project located next to the Lincoln/ Cypress station on the Metro Gold Line. This project creatively addresses first/last mile issues by integrating seating, murals, transit wayfinding and other designs to make getting to and from public transit hubs along Avenue 26 easier, safer, and more welcoming. LA-Más is now working on sidewalk policy to make sure communities across L.A. can implement similar projects in their neighborhoods.

EYCEJ

Taking to the Road for Active Transportation

East Yard Communities for Environmental Justice (EYCEJ) runs the Ride on All Roads (ROAR) program, which promotes active transportation, like cycling, in disadvantaged communities. ROAR helps demystify riding on the streets and teaches participants about leadership and self-advocacy on environmental justice issues, especially related to zero emissions transportation. EYCEJ has quarterly Toxic Tour Rides and maintains a fleet of bikes for participants to use. The organization plans to continue this engagement and expand participation.


Photo:East Yard Communities for Environmental Justice


Photo: Via

Via

Innovative and Equitable Solutions to Accessing Public Transit

In January 2019, the Los Angeles County Metropolitan Transportation Authority partnered with ride-hailing company Via on a pilot project connecting individuals to public transit. Riders living near three LA Metro stations - El Monte, Artesia, and North Hollywood - can be transported to a station for $1.75 with a TAP card or for free for those who already use Metro's low-income subsidy programs. The goal of the pilot program is to make it easier for customers to use public transit and open up the benefits of app-based ride hailing to a wider audience. Over the year, data will be gathered to assess the pilot program's effectiveness and inform future program feasibility.

People for Mobility Justice

Bridging Community Expertise with Transit Planning

People for Mobility Justice (PMJ) educates, facilitates and advocates for equitable transportation options across all communities. They engage directly with affected communities and other Community Based Organizations to advocate for just transportation access among government and transit planning agencies. In addition, PMJ offers regular, bilingual, culturally-relevant bike safety classes and rides that serve low-income populations in L.A. County. Future work includes offering an educational program called Hood Planners Certification and broadening their policy impact at the local, state, and national level.


Photo:People for Mobility Justice

Zero Emission Vehicles

Bringing a cleaner future to L.A.'s streets



7
Chapter



Photo:City of Los Angeles Department of Transportation



Vision for Los Angeles

Zero emission transportation and goods movement are cornerstones to improving our air quality, meeting our climate goals, and enhancing Angelenos' quality of life. The benefits will be felt every day on our roads and in our neighborhoods: quiet, more pleasant streets; no harmful bus, truck, and car fumes; and an end to pollution hot spots generated by freight corridors. Los Angeles continues to lead in this area, with more electric vehicles than any region in America and the most EV chargers available to the public. The City launched BlueLA, the country's first all-electric EV carshare program focused on disadvantaged communities. The broad range of successes and lessons learned to date are informing the next round of policies and programs in this critical space—from making 100% of LA Metro and LADOT's buses zero emission, to installing 28,000 EV chargers citywide, to ensuring an equitable path to get 10,000 trucks working at the Port to zero emission.

U.N. Sustainable Development Goals



Chapter Targets

- Increase the percentage of electric and zero emission vehicles in the city to 25% by 2025; 80% by 2035; and 100% by 2050
- Electrify 100% of LA Metro and LADOT buses by 2030
- Reduce port-related GHG emissions by 80% by 2050

Benefits to Angelenos

Growing the publicly available EV charging infrastructure in L.A. by 2025 will...

Support

1,500

JOBS

Electrifying 100% of buses in the L.A. region by 2030 will...

Support

10,000

JOBS

Electrifying all vehicles by 2050 will reduce air pollution and...

Prevent

980

PREMATURE DEATHS ANNUALLY

Prevent

400

RESPIRATORY AND CARDIOVASCULAR HOSPITAL ADMISSIONS ANNUALLY

Save

$9.5 BILLION

FROM PREVENTED DEATHS AND HOSPITAL ADMISSIONS ANNUALLY

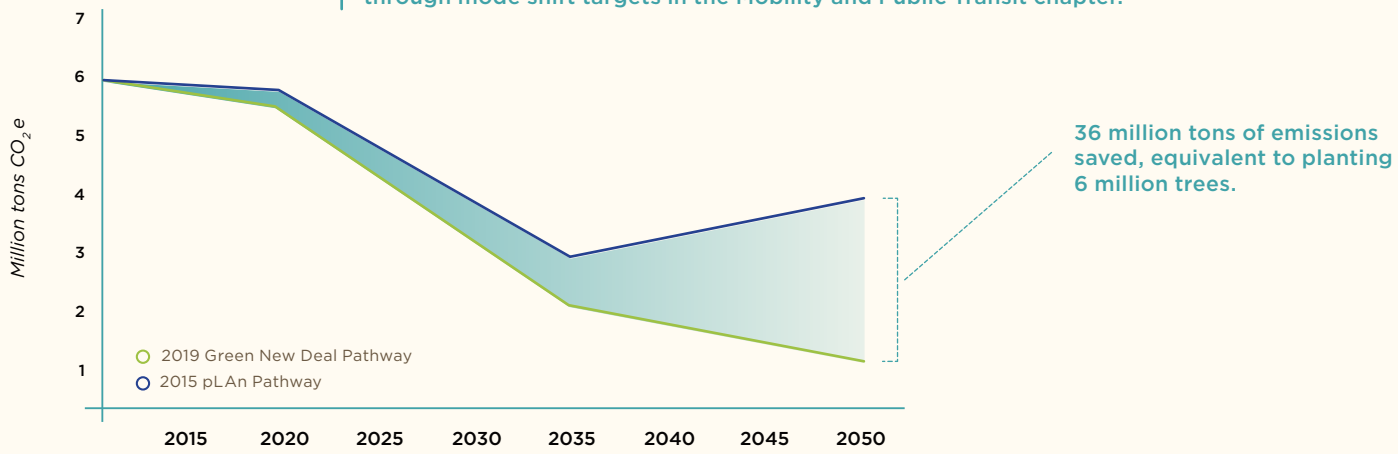
Top Five Areas of Impact

- Health & Wellbeing
- Climate Mitigation
- Economic Innovation
- Access & Equity
- Quality Jobs

Path to Zero Carbon

Emissions from Transportation

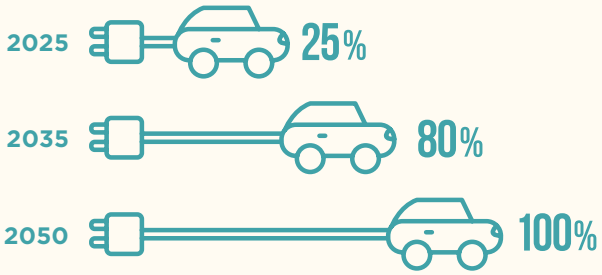
L.A.'s Green New Deal pathway calls for deep reductions in GHG emissions from the transportation sector, and cuts 25% of emissions by 2025 and 100% of on-road emissions by 2050. Reductions in transportation emissions are accounted for through the electrification targets in this chapter as well as through mode shift targets in the Mobility and Public Transit chapter.



Target

Increase the percentage of zero emission vehicles in the city to 25% by 2025; 80% by 2035; and 100% by 2050

Baseline: 1.4% of vehicles as of September 2018
Source: CA Department of Motor Vehicles



Milestones & Initiatives

2021

Distribute 1,000 used electric vehicle (EV) rebates, 11,500 Level 2 EV charger rebates, and 75 DC fast charger rebates

- Enhance EV outreach efforts, including dealership engagement
- Support vehicle trade-in events and programs like Cash for Clunkers (E)
- Pursue public-private partnerships to develop charging depots in heavy duty sector
- Initiate a design competition for the gas station of the future to meet the needs of both passenger and heavy duty vehicles

2021

Develop a zero emission roadmap for LAX

Release a RFQ to gauge industry capacity to deliver zero emission FlyAway service

2021/2030

Develop roadmap for Fossil Fuel Free Zone by 2021; and implement by 2030

- Identify CBO and businesses partners
- Host neighborhood visioning sessions
- Use incentives to eliminate food truck idling

2022/2028

Install 10,000 publicly available EV chargers by 2022; and 28,000 by 2028

- Streamline permitting and interconnection processes for EV charger installations
- Update building code to expand EV charging requirements to meet anticipated need
- Build 20 Fast Charging Plazas throughout the city
- Expand curbside EV charger program to include the private sector

2022/2028

Electrify 10% of taxi fleet by 2022; and 100% by 2028

- Install network of dedicated chargers for electric taxis around the city
- Launch an incentive for EV taxis

2028

100% Zero Emission school buses in Los Angeles (E)

- Execute a MOU between DWP and LAUSD to ensure availability of charger incentive funds
- Pilot a vehicle to grid school bus program

2035

100% of urban delivery vehicles are zero emission

- Create a suite of innovative street and curb usage regulations to encourage electrification of urban goods movement
- Develop an electric freight and commercial vehicle billing rate

(E) = Equity

Target

Electrify 100% of Metro and LADOT buses by 2030

Baseline: 4.6% LA Metro (zero in service), 2018; 8.2% LADOT (four in service), 2018. Includes buses on order
Source: LA Metro, Los Angeles Department of Transportation



Electrify **100%** by 2030

Milestones & Initiatives

2021

Electrify LA Metro's Orange and Silver Lines

- Develop an electric transit billing rate
- Install charging infrastructure at four Metro bus facilities

2021

Introduce 155 new electric DASH buses into fleet E

- Deploy charging infrastructure at two additional LADOT bus yards
- Open a shared downtown bus facility for LADOT, Foothill, and AVTA
- Deploy innovative and resilient charging solutions at bus depots
- Standardize charging practices across L.A. County with help from the L.A. Regional Electric Bus Working Group

2026

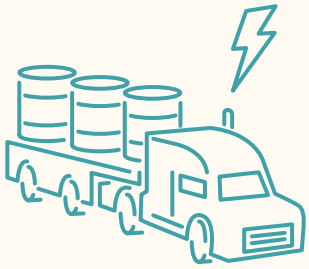
Electrify 100% of paratransit shuttle buses

- **Complete near term pilot of one electric paratransit shuttle and one electric coach bus**

Target

Reduce port-related GHG emissions by 80% by 2050

Baseline: 1,511,975 metric tons of CO2e
Source: Port of Los Angeles



Reduce **80%** by 2050

Milestones & Initiatives

2028

Expand the use of shore power (AMP) or other emissions capturing technologies to 100% of ships as part of a suite of emissions reductions programs for ocean going vessels E

- Develop technology and pilot at-berth controls for liquid bulk vessels

2030

100% zero emission cargo handling equipment

- Incorporate sustainable practices in tenant lease agreements
- Support development of cleaner rail transport, including investigating the feasibility of rail electrification E

2035

100% zero emissions on-road drayage trucks

- Deploy 50-100 zero emission trucks in a clean truck pilot
- Implement an updated Clean Truck Program with prioritization on zero emission trucks E
- Execute a long term electrification-focused MOU between the Port and LADWP

Partner Initiatives



Liberty Hill

Bringing Electric Vehicles to All Communities

The emPOWER outreach campaign, overseen by the Liberty Hill Foundation, provides funding for community-based organizations to connect low-income residents in disadvantaged communities to energy- and money-saving programs. With the goal of increasing electric vehicle use in disadvantaged communities, one area of focus is offering significant rebates (potentially up to $14,000) to individuals or families to purchase new or used electric vehicles. Working with Pacoima Beautiful in the Northeast San Fernando Valley, SCOPE in South LA, and Union de Vecinos in Boyle Heights, the emPOWER campaign is looking holistically at the resources available to Los Angeles' most vulnerable residents to help reduce emissions in areas hit hardest by pollution to ensure everyone's right to a clean energy future.

Los Angeles Cleantech Incubator

Transitioning Goods Movement to a Zero Emissions Source

As part of an effort to transition the goods movement sector to zero emissions, the Los Angeles Cleantech Incubator (LACI), in collaboration with the California Air Resources Board, the California Energy Commission, and the Ports of Los Angeles and Long Beach, issued a Request for Information (RFI) for Zero Emission Trucks, Pilots and Infrastructure for Goods Movement, receiving responses from nearly 40 companies leading in this sector. Responses to the RFI will inform and shape pilots, as well as identify gaps and potential solutions to dramatically reduce carbon and air pollution in the Greater L.A. region. LACI will share the RFI results with stakeholders in spring 2019.





Photo:URB-E

URB-E

Innovative Last-Mile Delivery

URB-E, an L.A. County based company, is helping transition last-mile goods delivery with a zero emissions, foldable electric scooter. Working with local businesses and global corporations, URB-E takes delivery vans off the streets, thus reducing congestion and emissions in communities. During the 2018 holiday season, URB-E piloted a project in L.A. with a large logistics company resulting in 15 delivery vans being taken off the road. Going forward, URB-E is working to expand this project to one that is year round.

CALSTART

Connecting Innovators to Increase the Zero-Emissions Bus Fleet

CALSTART is a nonprofit membership consortium working to grow the clean, high-tech transportation industry by connecting private industry leaders and government agency innovators. In Los Angeles and the San Fernando Valley, CALSTART is supporting a rapid expansion of the DASH bus system. This effort will result in expanded services and new routes, increasing ridership by 90% by reducing wait times for a ride on 100% of its existing routes in 28 communities across Los Angeles. The effort will add 112 battery-electric zero-emission buses to the DASH fleet creating more efficient connections to regional bus and regional rail services.



Photo:City of Los Angeles Department of Transportation

Industrial Emissions & Air Quality Monitoring

Making clean air a right for all, regardless of zip code



8
Chapter



Photo: rekandshoot_ Shutterstock.com

Industrial Emissions & Air Quality Monitoring



Vision for Los Angeles

Addressing air pollution from all sources is critical to ensuring every Angeleno can breathe clean, healthy air. Nowhere is this challenge more urgent than in low-income neighborhoods and communities of color, which bear the brunt of poor air quality stemming from industrial activity, including active oil and gas wells and refineries across Los Angeles. In addition to taking on our greatest source of air pollution—transportation emissions—we have already reinstituted the Petroleum Administrator office to manage petroleum issues, drilling leases, operation compliance, and more for the City. We have begun deployment of Clean Up Green Up. And next, we will advance a suite of air quality monitoring programs, develop a sunset strategy for oil and gas operations in L.A., and improve inspection protocols for industrial facilities—each step focused on prioritizing the health and wellbeing of overburdened families and delivering environmental justice to the people of our city.

U.N. Sustainable Development Goals



Chapter Targets

- The City will reach the U.S. EPA 80 ppb ozone attainment standard by 2025 and meet all future compliance dates
- Reduce industrial emissions by 38% by 2035; and 82% by 2050
- Reduce methane leak emissions by 54% by 2035; and 80% by 2050

Benefits to Angelenos

Reducing industrial emissions 82% by 2050 will reduce air pollution and...

Prevent
480
PREMATURE DEATHS ANNUALLY

Prevent
190
RESPIRATORY AND CARDIOVASCULAR HOSPITAL ADMISSIONS ANNUALLY

Save
$4.7 BILLION
FROM PREVENTED DEATHS AND HOSPITAL ADMISSIONS ANNUALLY

Achieving our air quality goals by 2025 will reduce air pollution and...

Prevent
600
PREMATURE DEATHS ANNUALLY

Prevent
250
RESPIRATORY AND CARDIOVASCULAR HOSPITAL ADMISSIONS ANNUALLY

Save
$5.8 BILLION
FROM PREVENTED DEATHS AND HOSPITAL ADMISSIONS ANNUALLY

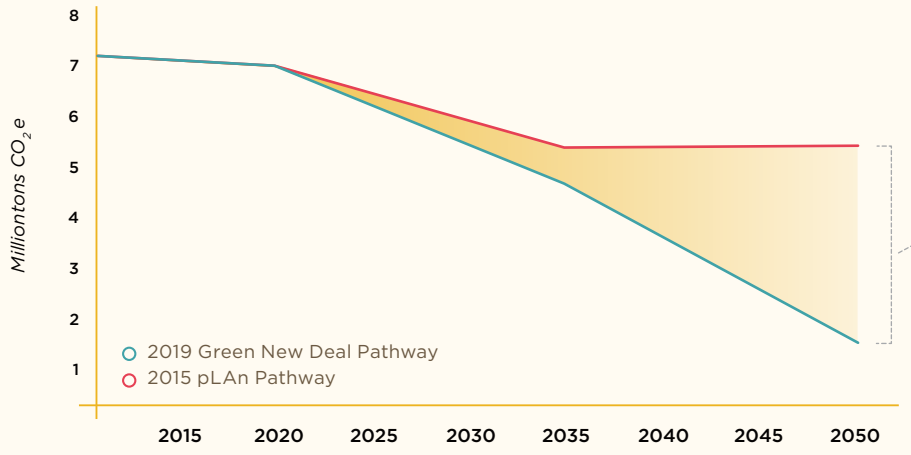
Top Five Areas of Impact

- Health & Wellbeing
- Economic Innovation
- Climate Mitigation
- Access & Equity
- Workforce Development

Path to Zero Carbon

Emissions from Industry

The industrial sector accounts for 24% of L.A.'s GHG emissions. L.A.'s Green New Deal Pathway cuts 40% of emissions by 2035 and 80% by 2050.



50 million tons of emissions saved, equivalent to taking 10 million cars off the road for a year.

Target

The City will reach the U.S. EPA 80 ppb ozone attainment standard by 2025 and meet all future compliance dates

Baseline: For the 8-hr ozone standard of 80 ppb, there were 16 exceedence days in the Los Angeles County portion of the South Coast Air Basin

Source: South Coast Air Quality Management District

City will reach the U.S. EPA 80 ppb by 2025

Milestones & Initiatives

2021

Deploy community air quality monitoring networks

- Pilot a GPS enabled smart inhaler program for evaluating air quality near the Port (E)
- Launch an air quality monitoring pilot on City streetlamps within our Clean Up Green Up neighborhoods and in the neighborhood of Watts (E)
- Conduct fence-line air quality monitoring at L.A.'s refineries and oil and gas extraction sites (E)
- Deploy community air quality monitoring networks under AB 617 in Boyle Heights and Wilmington by 2019 (E)
- Identify and analyze toxic air contaminants emitted from oil and gas production facilities (E)
- Identify air quality hotspots in impacted communities from goods movement, ports, and refineries (E)

2021

Expand the City's efforts to improve air quality from industrial sources

- Assess implementation progress of Clean Up Green Up policies and expand program to include one or more additional neighborhoods (E)
- Enhance health and safety protection provisions for oil and gas production facilities (E)
- Evaluate the feasibility of a no drill health and safety buffer zone between oil and gas production facilities and communities (E)
- Train City Sanitation inspectors to identify air quality violations and notify local authorities
- Create working group to prioritize and execute local air quality mitigation steps in highly impacted neighborhoods



Photo: City of Los Angeles, Bureau of Street Lighting

(E) = Equity

Target

Reduce industrial emissions* by 38% by 2035; and 82% by 2050

Baseline: 7.2 million metric tons CO2e
Source: 2015 community-wide GHG inventory used as baseline for carbon pathway analysis
*industrial emissions include combustion of on-site fossil fuels used to run operations for petroleum refineries and other manufacturing and industrial facilities



Milestones & Initiatives

2021

Create an annual oil well and facilities compliance inspection program

- Improve tracking for flaring emissions and create transparent database of air quality impacts
- Evaluate waste to energy technologies and conversion technology pilot projects to replace flares at oil drill sites; e.g. Micro Turbines

2021

Support the implementation of refinery and heavy duty industry emissions reduction plans

- Support leak detection and repair initiatives, and explore new emissions capture technology at refineries
- Implement Best Available Retrofit Control Technology E

2021

Reduce oil production by 40% below 2013 levels E

- Develop an inter-agency Task Force to update City processes for inspections and permitting of oil and gas extraction facilities
- Coordinate with L.A. County to develop a sunset strategy for oil and gas production operations countywide E
- Reduce fugitive and vented emissions of methane from new and existing oil and gas facilities through improved monitoring


Photo: Strategic Concepts in Organizing and Policy Education


Photo: City of Los Angeles Department of Cultural Affairs

Target

Reduce methane leak emissions by 54% by 2035; and 80% by 2050

Baseline 0.09 million metric tons CO2e
Source: 2015 community-wide GHG inventory used as baseline for carbon pathway analysis

Reduce **54%** by 2035

Reduce **80%** by 2050

Milestones & Initiatives

2021

Eliminate backlog of leaks within the natural gas supply chain

- Update all pipeline franchise agreements to require leak detection, abatement best practices, and strong environmental and health and safety protections
- Develop an audit of methane hotspot sensors installed in the City
- Ensure a pathway to closure is established for the Aliso Canyon storage facility
- Support the evaluation and testing of methane detection monitors as part of the AQ-SPEC program

2021

Develop an auditing and tracking program for oil and gas wells throughout the City

- Adopt best available software to track oil and gas operations in City
- Evaluate and prioritize risk of orphan and abandoned oil wells
- Ensure idle wells are properly identified and remediated
- Engage heavy industry stakeholders in LADWP 100% renewable energy study process to identify renewable generation opportunities compatible with operational needs

2021

Improve tracking for emissions from imported oil and gas

- Monitor and track imports and exports of crude oil and gasoline at the Port
- Improve tracking of consumption emissions associated with imported oil
- Quantify out-of-state GHG emissions from methane leakage during the production, processing, and transportation of imported natural gas

E = Equity



Photo: L.A. Mayor's Office

Partner Initiatives



Photo: Southern California Edison

Coalition for Clean Air

Uniting to Clean the Air

Clean Air Day is built on the idea that shared experiences unite people to action. The inaugural Clean Air Day in 2018 resulted in 100,000+ day-of participants who engaged in an action related to improving our air quality. Building off of this engagement, 76% of those who took the pledge encouraged friends to participate. The goal in 2019 is to achieve 10% participation regionally.

Legacy LA

A Community Park for Public Health Improvements

Legacy LA was awarded over $380,000 from the California Air Resources Board to develop air pollution reduction measures to improve air quality, reduce community exposure to criteria air pollutants and improve public health at the Ramona Gardens housing development. The project involves building a coalition of stakeholders and partnerships, facilitating community interaction with government agencies, and writing action plans integrating findings from technical analysis and community member recommendations. This input and engagement will help support the construction of a Natural Park along the 10-Freeway as a pollution mitigation system to improve air quality and public health for residents.



Photo: David Ng



Photo: Communities for a Better Environment

Communities for a Better Environment

Reducing Pollution through Community Action

Communities for a Better Environment is the recipient of an AB 617 Community Air Grant through the California Air Resources Board that will go toward launching a capacity, skills-building and education program in Southeast LA County and Wilmington. The overarching goal of the project is to support community participation in order to effectively engage in decision-making that will achieve cumulative emissions reductions at the local level, something EJ communities have long sought.

Physicians for Social Responsibility-Los Angeles

An Air Quality Academy in South Central L.A.

Physicians for Social Responsibility-Los Angeles is the recipient of a $500,000 CARB grant to launch an air quality academy called the South Central LA: Project to Understand the Sources of Air Pollution and Health Impacts (SCLA-PUSH). This project is a collaborative effort between PSR-LA and Strategic Concepts in Organizing and Policy Education, Community Health Councils, USC, Occidental College and the works LA, to better understand air quality and health impacts in South Central Los Angeles, by strengthening the knowledge and capacity of local residents, to identify the sources and character of air pollution in their community. Residents will collect data through ground-truthing and local air quality monitoring, and will analyze the data and related health impacts in collaboration with academic partners. Based on this reporting, SCLA-PUSH will advocate for environmentally just policies that reduce harm stemming from cumulative impacts and the historic overexposure to toxic air pollutants.



Photo: Physicians for Social Responsibility-LA

Waste & Resource Recovery

Making L.A. the largest U.S. city to achieve zero waste



9
Chapter



Photo: Jilbert Ebrahimi



Photo: City of Los Angeles Bureau of Sanitation

Vision for Los Angeles

L.A. has set an ambitious goal: we will become the largest city in America to achieve zero waste, a 90% landfill diversion rate, by 2025. Reaching this bold target will require us to change the way we think about trash and recycling and move toward a system where discarded materials become resources for others to use; where recycling becomes standard operating procedure for households and businesses; where edible food destined for landfills is recovered to feed hungry people; and where composting ensures we utilize the full value of all waste. In 2017, we launched recycLA which sets the foundation, but there is much more to be done. When we hit our goals, we will decrease our need for landfills and reduce the impacts of waste collection processes—from noise to air pollution—on disadvantaged communities. We will harness our waste as a resource, stimulate economic innovation, and create green jobs.

U.N. Sustainable Development Goals



Chapter Targets

- Increase landfill diversion rate to 90% by 2025; 95% by 2035; and 100% by 2050
- Reduce municipal solid waste generation per capita by at least 15% by 2030, including phasing out single-use plastics by 2028
- Eliminate organic waste going to landfill by 2028
- Increase proportion of waste products and recyclables productively reused and/or repurposed within L.A. County to at least 25% by 2025; and 50% by 2035

Benefits to Angelenos

Citywide residential organics collection by 2021 will...

Support

1,700

JOBS

Composting instead of landfilling one ton of organics will...

Support

2X

AS MANY JOBS

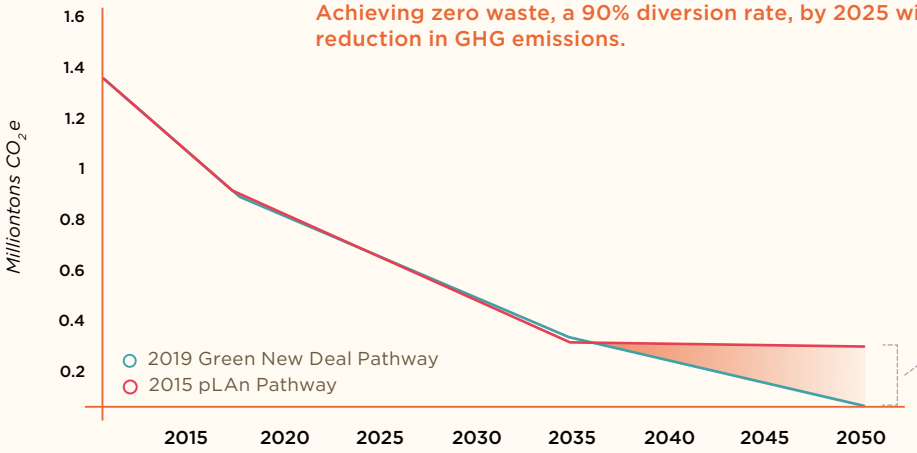
Top Five Areas of Impact

- Climate Mitigation
- Economic Innovation
- Access & Equity
- Workforce Development
- Resiliency

Path to Zero Carbon

Emissions from Waste

Although the waste sector contributes a small portion of citywide emissions, rapid decarbonization is needed here as well to achieve carbon neutrality by 2050. L.A.'s Green New Deal Pathway calls for a 99% reduction in emissions generated from the City's waste sector. Achieving zero waste, a 90% diversion rate, by 2025 will lead to a 42% reduction in GHG emissions.



2 million tons of emissions saved, equivalent to the energy used to power 348,000 homes for a year.

Target

Increase landfill diversion rate to 90% by 2025; 95% by 2035; and 100% by 2050

Baseline: 76.4% diversion rate achieved at the end of 2011
Source: City of Los Angeles Bureau of Sanitation Zero Waste Progress Report, UCLA 2013



90% by 2025 **95%** by 2035 **100%** by 2050

Milestones & Initiatives

2021

Pass legislation requiring take-out foodware be made with compostable material*

*material must be compostable in municipal solid waste processing facilities within 60 days

- Engage with restaurants and food service providers to understand barriers to implementation

2021

Cut illegal dumping by one-third

- Expand the City's bulky item pick-up program

2021

Reduce the number of street grids rated 'unclean' by one-third

- Launch CleanStat 2.0, a citywide effort to clean our neighborhoods
- Engage individuals with high barriers to employment with opportunities in street cleanup through LA:RISE (E)

2021

Increase construction and demolition (C&D) waste recycling requirements to at least 80%

- Pilot use of 100% recycled aggregate
- Build up municipal hot mix asphalt capacity to pave all city streets using 50% recycled asphalt
- Explore additional strategies to increase C&D waste recycling

2021

Pilot a sector-specific recycling program

- Engage with film studios to explore strategies for reducing waste generated from film production
- Engage the textile and apparel industry to develop and implement zero waste manufacturing strategies and divert unwanted garments from landfills
- Investigate options for addressing non-recyclable plastics, including secondary markets

2021

Conduct a waste characterization and diversion study every 4 years

- Continue to optimize recycLA services
- Update the Solid Waste Integrated Resources Plan
- Diversify recycling markets to ensure recycling remains a viable landfill diversion strategy
- Analyze diversion strategies for other organic waste including food soiled paper, carpets, palm fronds, organic textiles, etc.



Photo: LA Compost



Photo: City of Los Angeles Bureau of Sanitation

(E) = Equity

Target

Reduce municipal solid waste generation per capita by at least 15% by 2030, including phasing out single-use plastics* by 2028

Baseline: 17.85 pounds of waste generated per capita per day in 2011
Source: City of Los Angeles Bureau of Sanitation Zero Waste Progress Report, UCLA 2013
*Including but not limited to plastic straws, plastic utensils, plastic take-out containers, and expanded polystyrene



15%
by 2030

Milestones & Initiatives

2021

Ban expanded polystyrene* citywide

*expanded polystyrene includes but is not limited to foodware, packaging materials, and coolers

- Engage with key stakeholders, including food service providers, on alternatives to expanded polystyrene products
- Assess best practices from other cities and integrate relevant lessons learned into policy

2021

Design and implement a zero waste policy for City-sponsored and permitted events

- Develop vendor guidelines, emphasizing waste minimization and surplus edible food rescue

2021

Launch an educational awareness campaign on source reduction

- Improve recycling and waste reduction education in public housing E
- Utilize libraries as a platform to promote waste reduction, including launching zero waste, reuse, or upcycling workshops
- Promote public recognition programs for organizations with sustainable food waste management practices
- Reduce contamination in green and blue bins and increase use of existing waste programs through public education



Photo: City of Los Angeles Bureau of Sanitation

Target

Eliminate organic waste* going to landfill by 2028

Baseline: An estimated 722,725 tons of organic waste was sent to landfill in 2011
Source: City of Los Angeles Bureau of Sanitation Zero Waste Progress Report, UCLA 2013; Sunshine Canyon Landfill Comprehensive Waste Characterization Study, 2016
*Organic waste refers to food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste



2028

Milestones & Initiatives

2021

Establish food scraps drop-off locations at all city farmers markets

- Partner with local organizations to ensure food scraps are composted locally first

2021

Launch citywide residential food scraps collection

- Expand the City's anaerobic digestion capacity
- Develop a composting master plan to expand community and regional composting infrastructure

2025

Recover and distribute at least 30% of discarded edible food

- Ensure all food businesses have food rescue options available through their recycLA waste hauling service
- Standardize food donation options for businesses through recycLA
- Identify and engage major point sources of food waste throughout the city on food recovery programs and organics recycling



Photo: LA Compost



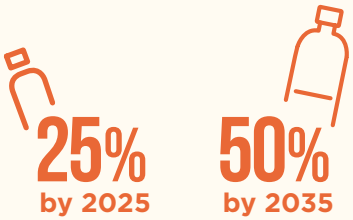
City of Los Angeles Bureau of Sanitation

E = Equity

Target

Increase proportion of waste products and recyclables productively reused and/or repurposed within L.A. County to at least 25% by 2025; and 50% by 2035

Baseline: Will be established with 2021 waste characterization study
Source: City of Los Angeles Bureau of Sanitation



Milestones & Initiatives

2021

Modernize the City's environmentally preferable purchasing policy to include waste reduction strategies

- Assess best practices from other cities around product packaging, vendor take-back, and recycled content requirements

2021

Pilot an industrial materials exchange program

- Conduct a study to assess the potential for reusable material exchange across L.A.'s various industries

2025

Establish extended producer responsibility (EPR) policies

- Lead cities in California to engage in advocacy for EPR
- Develop EPR guidelines to encourage retailers and manufacturers to recycle goods, take back materials, and/or reduce packaging
- Work with electric vehicle OEMs, battery storage companies, and cleantech industry to identify new markets for used EV batteries and ensure proper recycling at end of life



Photo: Alfonso Navarro

2025

Develop a resource recovery hub pilot

- Support startup companies utilizing secondary material through the Los Angeles Cleantech Incubator
- Promote use of incentives in L.A.'s Recycling Market Development Zone and explore additional incentives for recycled-content product manufacturers

Partner Initiatives


Photo: LA Compost

LA Compost

Closing the Loop on Food Waste

LA Compost supports community scale composting through programs such as educational workshops, household organics drop off locations, and community compost hubs. Since its creation, LA Compost has diverted over 500 tons of food scraps from landfills to be composted for use at urban farms, parks, gardens, and homes. Compost Managers, who live and work within the neighborhoods they serve, are trained in best management practices for healthy and safe composting at community hubs. By the end of 2019, LA Compost will increase its capacity to divert 70 additional tons of food "waste" to total 570 tons annually – the equivalent of removing 85.5 cars off the road each year – and will continue to expand its workforce and commitment to community wellbeing.

L.A. LIVE

Promoting Change at the Workplace

L.A. LIVE's food and materials diversion program, Green Star, provides diversion training to all new kitchen and housekeeping employees at campus restaurants and offices. Exemplary employees who consistently divert food and materials in the workplace are rewarded with their picture being featured on the "Wall of Green Stars" as well as with movie and sporting game tickets. The L.A. LIVE Management team is currently working with its waste hauler, NASA, to measure progress and set specific goals on increasing waste diversion.



Photo: LA LIVE

EcoSet

Reusing Materials from the Big Screen

EcoSet Consulting is an environmental production service implementing zero waste standards for productions and events. Their ReDirect service is an alternative to standard disposals, keeping tons of sets and creative waste out of landfills. EcoSet's Material Oasis reuse center leverages the production process to facilitate the reusing and repurposing of discarded materials. Items such as set walls, scenic elements, construction materials, props, set dressing, and art supplies are recirculated to schools, nonprofits, filmmakers, theaters, and artists at no cost to them. EcoSet has already diverted 1,225 tons of waste and plans to expand their ReDirect service to intake and recirculate more materials from TV shows, feature films, events and other types of production.



Photo: Ecoset

A shift toward sustainability isn't just about our physical survival—it's about our economy.

Food Systems

Ensuring access to healthy food in a changing climate



9
Chapter



Photo: Michael Mayer


Photo: L.A. Metro

Vision for Los Angeles

Access to healthy food is absolutely essential to every family's well-being, happiness, and ability to prosper. Yet it is also a distant reality for far too many communities – a disparity that will only deepen in the face of a changing climate. We cannot build a sustainable city without a secure food supply, and we have to act now to ensure every Angeleno, regardless of means or zip code, can feed their families. That's why we were the first big city in America to require all farmers markets to accept EBT, and why we launched the Good Food Purchasing Policy to reward food vendors who prioritize values of health, fair labor, and justice. And we will continue to do our part: increasing urban agriculture in the city, closing the gap between low-income families and fresh food, scaling the City's edible food recovery programs, reinforcing the resilience of our food system, and ensuring food scraps are returned back to our soil as nutrients.

U.N. Sustainable Development Goals



Chapter Targets

- Ensure all low-income Angelenos live within ½ mile of fresh food by 2035
- Increase the number of urban agriculture sites in L.A. by at least 25% by 2025; and 50% by 2035
- Prepare for natural disasters by increasing the resiliency of our food systems infrastructure

Benefits to Angelenos

Full participation in CalFresh will...

Create

$1.2 BILLION

OF ADDITIONAL ECONOMIC ACTIVITY IN L.A. COUNTY ANNUALLY*

*CALIFORNIA FOOD POLICY ADVOCATES REPORT, 2016

The 3,000 tons of edible food recovered to date by recycLA could...

Feed

4,500

ANGELENOS FOR AN ENTIRE YEAR

Top Five Areas of Impact

- Access & Equity
- Resiliency
- Workforce Development
- Health & Wellbeing
- Increased Affordability

Path to Zero Carbon

Building up our local food supply so that fruits and vegetables travel fewer miles to get to our plates, and keeping food from going to landfills through edible food recovery and food scrap composting will decrease the carbon footprint of our food system.



Photo: L.A. Metro

Target

Ensure all low-income Angelenos live within ½ mile of fresh food by 2035

Baseline: 414,384 low-income residents without grocery retail within 1/2 mile in 2010
Source: United States Department of Agriculture Economic Research Service, Food Research Atlas

Live within **1/2 MILE** of fresh food by 2035



Milestones & Initiatives

2021

Increase food recovery beyond pre-packaged food at LAX

- Identify food recovery partners and ensure recovered food feeds the most in need (E)
- Develop cold storage infrastructure to scale food recovery efforts

2021

Establish a healthy food cart program and support early-stage good food entrepreneurs

- Work with L.A. County to expand opportunities and remove regulatory barriers for home-based food entrepreneurs (E)
- Provide technical assistance to healthy food merchants and entrepreneurs in low-income communities (E)
- Develop a permitting program for sidewalk vending (E)

2025

Design and implement 5 Good Food Zones* in the city

*geographic areas of the city with a high concentration of low-income households lacking access to affordable, fresh, and healthy food

- Expand Neighborhood Market Conversion program and promote investment in new grocery locations via FreshWorks fund (E)
- Increase food access opportunities through grocery stores, farmers markets, urban farms, and food reuse in underserved areas (E)
- Create new retail siting policies and update Community Plans to encourage the siting of grocery retail in underserved areas (E)
- Offer wellness and healthy eating programs including a summer lunch program for kids (E)

2025

Achieve 100% enrollment of eligible households in CalFresh/SNAP

- Work with L.A. County to baseline and monitor CalFresh/SNAP participation in the city (E)
- Promote enrollment in supplemental nutrition programs (E)
- Work with L.A. County to expand EBT access at farmers markets countywide (E)

(E) = Equity

Target

Increase the number of urban agriculture sites in L.A. by at least 25% by 2025; and 50% by 2035

Baseline: 494 urban agriculture sites as of June 2013
Source: CultivateLA: An Assessment of Urban Agriculture in Los Angeles County, University of California Cooperative Extension - Los Angeles

25% by 2025

50% by 2035

Milestones & Initiatives

2021

Leverage public property for urban agriculture by increasing the number of edible gardens in City parks and public libraries by 50%

- Continue monitoring urban agriculture sites in L.A. using the best available data
- Identify opportunities for edible gardens in the City's public housing (E)
- Streamline permitting for gardens on public land
- Expand urban agriculture in the City's Promise Zones (E)
- Convert appropriate parkways and open lots to agriculture and gardening

2021

Double participation in the Urban Agriculture Incentive Zone program

- Monitor and increase the number of sites in the Urban Agriculture Incentive Zone program
- Streamline permitting for gardens on private land
- Establish new zoning categories for innovative food production
- Encourage urban farming through City's compost giveaway and distribution program



Photo: City of Los Angeles Public Library

Target

Prepare for natural disasters by increasing the resiliency of our food systems infrastructure

Baseline: Will be established with 2021 food system resilience study

Milestones & Initiatives

2021

Commission a study to strengthen our infrastructure for a more resilient local food system

- Build up infrastructure of small corner stores to sustain neighborhoods in the event of an emergency E
- Encourage and prioritize resilient building improvements for food distribution suppliers in Los Angeles
- Increase City departments' level of compliance in implementation of the Good Food Purchasing Guidelines
- Encourage other public and private food institutions to adopt the Good Food Purchasing Policy
- Identify opportunities to increase capacity for distribution points, such as food banks, schools, and hospitals, to serve people after a disaster

2021

Pilot two healthy soil projects

- Explore incentives for regenerative agricultural practices, including water conservation
- Develop a healthy soil strategy for the city to support urban agriculture, address carbon sequestration, and increase water capture
- Amplify community education campaigns on the benefits of healthy soils, biodiversity, and regenerative agriculture





Photo: Harmony Esqueda

We cannot build the Los Angeles our children—and their children—deserve unless we protect the planet that they will inherit.



Photo: City of Los Angeles Bureau of Sanitation

Partner Initiatives



Photo: Harmony Esqueda

Leadership for Urban Renewal Network

Bringing Affordable, Healthy Food to Low-Income Communities

COMPRA Foods was developed through a partnership between the Leadership for Urban Renewal Network (LURN) and the Los Angeles Food Policy Council. It serves as an alternative food distribution system for small grocers and convenience stores in "food desert" neighborhoods in Los Angeles. Through this program, tens of thousands of residents in low-income communities like South Los Angeles and MacArthur Park now have access to affordable produce and healthy foods. COMPRA is expanding to the Southeast cities of L.A. County including South Gate. Future goals include making COMPRA a self-sustaining program while growing its workforce and network.

Environmental Media Association

Turning Concrete into Gardens

The Environmental Media Association (EMA) supports 20 L.A. school gardens located in underserved communities through its Green My Schools program. The program helps transform urban school concrete into edible gardens by engaging and training teachers and students in the process. Through this connection to the outdoors, students are making healthier food choices and building confidence and leadership skills. EMA plans to add more edible gardens to schools throughout L.A. County and develop a garden tool kit for schools to easily implement their own program.



Photo: Environmental Media Association



Photo: Los Angeles Food Policy Council

Los Angeles Food Policy Council

Transforming Neighborhood Markets into Healthy Food Champions

The Los Angeles Food Policy Council's Healthy Neighborhood Market Network (HNMN) builds the capacity of neighborhood small market owners in underserved communities to operate as healthy food retailers. Best Market recently underwent a renovation to become Skid Row People's Market, now stocked with fresh fruits and vegetables. The transformation was led by second-generation store owner Danny Park, whose family has owned and operated the market as a convenience store for 24 years. HNMN has teamed up with Gensler Architecture firm and Build Group Construction to complete the next transformation project, Lupita's Market in the Westlake neighborhood, which will reopen this summer to offer healthier food options.

Safe Place for Youth

Where Education, Training, and Community Come Together

Through their Community Garden Program, Safe Place for Youth (SPY) provides homeless and/or at-risk youth with a safe and engaging outdoor environment that highlights food justice, community building, and healing. Onsite garden internships and educational workshops provide youth with workforce development opportunities while cultivating greater self-esteem, self-sufficiency, and connections to their community. Additionally, SPY's Community Garden Program includes workshops for community members and youth, quarterly farm meals open to the public, plant sales, and a youth farmers market. In support of creating a more equitable and sustainable city, SPY will work to expand the Community Garden Program.



Photo: Safe Place For Youth

Urban Ecosystems & Resilience

Creating a cooler city with more green space for people and habitat



11
Chapter



Photo: L.A. Mayor's Office



Photo: L.A. Mayor's Office

Vision for Los Angeles

A healthy urban ecosystem is a powerful tool to improve the health of our residents, preserve our environment, support our wildlife, and build in capacity to adapt to climate change. Our pLAn realizes this vision by expanding the tree canopy in areas of greatest need, putting more parks and open space within walking distance of every L.A. household, advancing our work to restore the iconic L.A. River, and protecting biodiversity and natural areas while preventing displacement in our communities. Changing the face of L.A.'s urban landscape, along with piloting cool neighborhoods and installing cool roofs and cool pavement, will help produce a city full of cool spaces that is resilient in the face of additional hotter days.

U.N. Sustainable Development Goals



Chapter Targets

- Increase tree canopy in areas of greatest need by at least 50% by 2028
- Complete or initiate restoration identified in the 'ARBOR' Plan by 2035
- Create a fully connected LARiverWay public access system that includes 32 miles of bike paths and trails by 2028
- Reduce urban/rural temperature differential by at least 1.7 degrees by 2025; and 3 degrees by 2035
- Ensure proportion of Angelenos living within 1/2 mile of a park or open space is at least 65% by 2025; 75% by 2035; and 100% by 2050
- Achieve and maintain 'no-net loss' of native biodiversity by 2035

Benefits to Angelenos

Installing cool roofs will...



Support

500

JOBS ANNUALLY

Planting and maintaining 90,000 trees by 2021 will...



Support

2,000

JOBS



Provide

61.3 MILLION

SQUARE FEET OF SHADE AT MATURITY

Top Five Areas of Impact



Resiliency



Access & Equity



Health & Wellbeing



Workforce Development



Quality Jobs

Path to Zero Carbon

Healthy ecosystems can sequester carbon dioxide from the air and store it as carbon in biomass and soil. L.A. will begin to study the carbon sequestration potential of healthy ecosystems and pilot methods for including carbon dioxide emissions/sequestration from trees in our GHG inventory.



Photo: City of Los Angeles Bureau of Sanitation

Target

Increase tree canopy in areas of greatest need by at least 50% by 2028 to grow a more equitable urban forest that provides cooling, public health, habitat, energy savings, and other benefits

Baseline: Average across City is 20%; to be updated upon completion of citywide tree inventory
Source: MacPherson, 2008



50% by 2028

Milestones & Initiatives

2021

Plant and maintain at least 90,000 trees citywide

- Support the planting of 20,000 trees annually on residential and public properties
- Identify and leverage state and federal funding to plant, preserve, and maintain an additional 4,000 trees annually
- Expand tree maintenance green jobs training programs and create pipelines to City employment
- Establish an Adopt-a-Canopy program to expand support for city trees

2021/2025

Complete citywide tree inventory by 2021; and an Urban Forest Management Plan by 2025

- Update the Protected Tree and Shrub Ordinance to preserve, maintain, and grow protected tree species
- Identify low canopy corridors and prioritize planting trees in those areas (E)
- Ensure General Plan update includes supportive policies and guidance on preserving, maintaining, and increasing tree canopy

2025

Update and align City policies and procedures to grow and protect public and private trees

- Review and revise public right-of-way standards to ensure optimum street tree canopy
- Pilot opportunities to expand flexibility in tree procurement, including contract-grow nurseries
- Explore incentivization programs to encourage private tree-trimming businesses to prioritize tree health, public safety, and shade

Target

Complete or initiate restoration identified in the federal L.A. River Ecosystem Restoration Plan ('ARBOR' Plan) by 2035

Baseline: Progress being tracked from baseline year 2019
Source: ARBOR Plan, City of Los Angeles and US Army Corps of Engineers

Milestones & Initiatives

2021

Create a partnership to develop an 100-acre L.A. River open space

- Allow initial public use of Taylor Yard/G2

2021

Initiate work on L.A. River reaches 6, 7, and 8

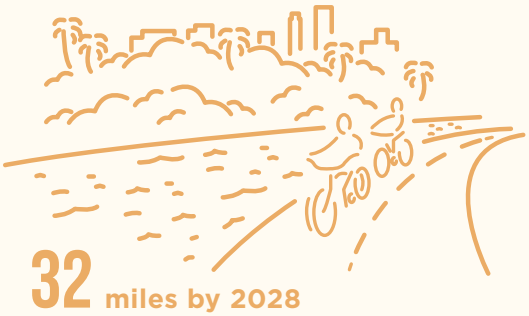
- Secure support from state and federal partners

(E) = Equity

Target

Create a fully connected LARiverWay public access system that includes 32 miles of bike paths and trails that prioritize native habitat, stormwater capture, and shading by 2028

Baseline: 13.3 miles of Los Angeles River public access as of June 2014
Source: City of Los Angeles Bureau of Engineering



Milestones & Initiatives

2021

Increase access by completing 3 active transportation bridges

- Build the Taylor Yard, North Atwater, and Red Car bridges

2021/2025

Complete at least 1 additional mile of LARiverWay bike paths and trails by 2021; and 10 by 2025

- Plan and build out LARiverWay bike path and trails supportive infrastructure

2025

Support at least 8 partnership opportunities on L.A. River-adjacent public and private properties

- Build L.A. River Headworks Park project, including habitat restoration and public access to the river
- Support terracing along the L.A. River by planning and effectuating public access through City properties
- Support completion of the "Bending the River Back into the City" Project (Water Wheel)
- Support and expand compatible L.A. River recreational opportunities



Photo: shutterstock_196692344

Target

Reduce urban/rural temperature differential by at least 1.7 degrees by 2025; and 3 degrees by 2035

Baseline: 5.58°F * in 2012
Source: Yale-NUIST Center on Atmospheric Environment, using NASA MODIS data
*Annual-mean daytime

1° by 2025
3° by 2035

Milestones & Initiatives

2020/2021

All new roofs must be cool roofs by 2020; and install 13,000 additional cool roofs by 2021

- Update cool roof ordinance, to cover all roof types and increase cooling characteristics requirements
- Develop spatial map of existing cool roofs and heat risk to develop a strategy to add cool roofs in areas of highest heat vulnerability (E)
- Expand marketing around cool roof incentives program to accelerate retrofits

2021/2025

Pilot 6 cool neighborhoods in vulnerable communities by 2021; and 10 by 2025

- Design neighborhood pilots to include a mix of cool roofs, cool pavements, and urban greening
- Incorporate additional cooling features such as innovative shade designs, water features, and cooling centers at parks (E)
- Ensure every high-volume transit stop has access to cooling features
- Upgrade cooling centers to meet the needs of elderly and persons with disabilities (E)
- Expand communications on types of cooling resources and available cooling spaces, including through NotifyLA for homeless populations, to increase usage and deployment (E)
- Include air temperature monitoring in air quality sensor deployments

2028

Install cool pavement material on 250 lane miles of City streets, prioritizing neighborhoods with the most severe heat island effect

- Update "cool surface" regulations to require that at least 50% of all non-roof (e.g., hardscape) surfaces around new buildings meet certain criteria to reduce urban heat island effect
- Promote cooling strategies and "softening" of hardscape in alleys and parking lots
- Study cool streets and determine maximum potential of cooling strategies to reduce urban heat impacts



Photo: City of Los Angeles Bureau of Street Services

(E) = Equity

Target

Achieve and maintain 'no-net loss' of native biodiversity by 2035

Baseline: Will be established in 2019 Biodiversity index
Source: City of Los Angeles Bureau of Sanitation



Milestones & Initiatives

2021

Set biodiversity targets and pilot L.A.'s first wildlife corridor

- Complete first biodiversity assessment using L.A.-specific index
- Build up City's biodiversity program to improve internal practices
- Monitor biodiversity and natural areas
- Update watershed protection policies to include enhanced stream protection

2021

Update a citywide Integrated Pest Management plan

- Prioritize reducing pesticide and rodenticide use, including the use of non-toxic pest management options wherever possible
- Develop guidance and training for City maintenance staff on natural area and non-toxic pest management

2025

Develop a citywide strategy for protection and enhancement of native biodiversity

- Preserve and expand connectivity and access to natural habitats
- Collect data and map urban biodiversity to identify key areas to enhance or protect
- Protect and restore sensitive habitats
- Increase the number of native and pollinator-friendly gardens and natural areas in public spaces
- Incorporate the L.A. River flow study in management decisions around the river

2025

In partnership with L.A. County, get L.A. into the top three cities/counties in the City Nature Challenge

- Host annual bioblitz using community science apps such as iNaturalist or eBird
- Increase observations of L.A.'s biodiversity indicator species list
- Develop strategies to increase community science app users, especially in data-poor areas

Target

Ensure proportion of Angelenos living within 1/2 mile of a park or open space is at least 65% by 2025; 75% by 2035; and 100% by 2050

Baseline: 56% of residents live within ½ mile of a park or open space as of 2018
Source: Trust for Public Land ParkScore® Index



65% by 2025 | 75% by 2035 | 100% by 2050

Milestones & Initiatives

2021/2025

Add at least 8 parks by 2021; and 30 parks by 2025

- Partner with government agencies and NGOs to expand the 50 Parks L.A. Initiative
- Adopt park equity investment criteria to help prioritize park placement (E)
- Complete 3 new L.A. River parks
- Assess and track park acreage per 1000 residents
- Leverage Measure A, Measure W, and Prop 68 to support groundwater recharge, stormwater management, and green infrastructure

2025

Establish 25 joint-use parks in underserved communities

- Partner with LAUSD to formalize an agreement to establish joint use parks (E)
- Increase the use of these spaces by providing programming and activities (E)



Photo: Annie Bang, courtesy of The Trust for Public Land



Photo: L.A. Mayor's Office

(E) = Equity



Photo: City of Los Angeles Bureau of Sanitation

Partner Initiatives


Photo: Grown in L.A.

Grown in L.A.

Planting the Seed to Transform L.A.

Grown in L.A. (GiLA) is working to transform underutilized land in L.A. into a network of nurseries designed to produce the plants needed for green infrastructure projects. Working collaboratively with groups such as Seed L.A. and The Nature Conservancy, GiLA is streamlining seed collection efforts, and helping to start nurseries at Griffith Park and other, and public properties around the region. GiLA has begun developing and piloting educational programs for schools and plans to work with partners to develop vocational training that could be offered to youth corps, veterans and other Angelenos.

Los Angeles Urban Cooling Collaborative

Improving Public Health by Cooling the City

The L.A. Urban Cooling Collaborative (LAUCC) is an interdisciplinary group of researchers, practitioners and government agencies led by TreePeople that focuses on reducing heat-related illness and death through changes in landcover. By modeling climate and public health data, LAUCC is working to identify optimal "prescriptions" of increased tree cover and reflectivity of roofs and pavements in order to protect communities. The group is currently working on developing healing "prescriptions" on smaller geographic areas, including in the City of L.A.


Photo: TreePeople



Photo: Annie Bang, courtesy of The Trust for Public Land

Trust for Public Land

Let's Walk to the Park!

The Trust for Public Land, National Recreation and Park Association, and Urban Land Institute have led a nationwide effort to ensure everyone is just a 10 minute walk away from a great park. The City of L.A. has participated in the 10-Minute Walk Campaign since its inception in 2017 and was recently awarded $40,000 to support planning and policy efforts to increase access to high-quality, close-to-home parks, and public green space.

When we plant 90,000 trees across Los Angeles in the next three years, we'll be rooting them in neighborhoods that have been the most impacted by high emissions and high temperatures.

Prosperity & Green Jobs

Growing jobs and a strong, inclusive economy



12
Chapter



Photo: Expo Construction Line Authority



Photo: City of Los Angeles Economic and Workforce Development Department

Vision for Los Angeles

Achieving our bold climate goals is both a moral imperative and a massive economic opportunity. In a city where innovation drives our prosperity, where sustainability is a core value, and where everybody belongs, we have to enlist all Angelenos in the effort to build our greener future. From increasing the local water supply, and building out transit, housing, or parks, to remaking our energy system and installing solar panels on our rooftops—the Green New Deal will create 400,000 green jobs by 2050. Cleantech investment has already led to $379 million in economic activity, and with workers set to earn a $15 minimum wage starting in 2020, we will ensure our workforce is prepared to fill the positions of our future and fuel the industries of tomorrow.

U.N. Sustainable Development Goals



Chapter Targets

- Create 300,000 green jobs by 2035, and 400,000 green jobs by 2050
- Increase private sector green investment in L.A. by $750 million by 2025; and $2 billion by 2035
- Eliminate unemployment rate gap between City of L.A. and L.A. County

Benefits to Angelenos

Since the Mayor took office in 2013, L.A. has...

Created

35,000
GREEN JOBS

Reduced unemployment by

5.6%

Top Five Areas of Impact

- **Access & Equity**
- **Workforce Development**
- **Resiliency**
- **Economic Innovation**
- **Quality Jobs**

Path to Zero Carbon

The scale of transformation needed across L.A.'s building stock, transportation network, electricity grid, and waste management will lead to the creation and support of hundreds of thousands of jobs.



Photo: City of Los Angeles Economic and Workforce Development Department

Target

Create 300,000 green jobs by 2035, and 400,000 by 2050

Baseline: 35,000 green jobs created since 2013
Source: Los Angeles Green Job Calculator; The Bureau of Labor defines green jobs to be:
A. Jobs in businesses that produce goods or provide services that benefit the environment or conserve natural resources
B. Jobs in which workers' duties involve making their establishment's production processes more environmentally friendly or use fewer natural resources



Green Jobs

300,000 by 2035

400,000 by 2050

Milestones & Initiatives

2021

Open green career pathways through the following programs

- Connect Hire LA's Youth participants with green job opportunities
- Collaborate with Los Angeles Community College District to develop pipelines for employment in green construction industry professional services
- Offer Green Jobs courses at L.A. Trade Technical College for 250 students and place them in internships E
- Work with local trade and technical schools to create an EV workforce pipeline
- Establish workforce training programs for landscape managers on the installation and care of native plants
- Prepare workers with retraining for jobs that will be automated E
- Add sustainability curriculum to WorkSource Development Center training E
- Offer two free years of community college for eligible high school graduates, exposing students to hundreds of courses in sustainability E
- Launch the Advanced Prototyping Center Fellowship at the Los Angeles Cleantech Incubator (LACI) to place fifty people in jobs per cohort E

2025

Create 100,000 green jobs

- Create a Jobs Cabinet to convene City departments to identify job growth opportunities
- Work with the private sector to grow green jobs within their companies
- Create private sector partnerships to establish business apprenticeships
- Collaborate with stakeholders on a just transition for workers into the green jobs of the future E
- Ensure contracts for City construction projects provide opportunities for local hiring and disadvantaged worker employment E
- Track the number of people trained and placed through the WorkSource Development Centers
- Expand targeted local hire positions to more City Departments

E = Equity

Target

Increase private sector green investment in L.A. by $750 million by 2025; and $2 billion by 2035

Baseline: $100,000,000 cumulative private sector investment to 2017
Source: Los Angeles Cleantech Incubator

$750 MILLION by 2025

$2 BILLION by 2035

Milestones & Initiatives

2025

Increase the total number of businesses certified and recertified through the Green Business Certification Program to 1,000

- Expand deployment of clean technologies through City departments
- Expand existing programs that generate demand for clean technologies such as feed-in tariff, energy efficiency funds, and the Port Technology Enhancement Program
- Work with Proprietary departments to develop, pilot, and prefer L.A. made clean technologies
- Work with the Clean Energy Smart Manufacturing Innovation Institute (CESMII) at UCLA to develop a smart manufacturing tool set to assist L.A. manufacturers in cutting their energy and water usage

2025

Maintain top ranking for offering the most business incentives of any city within L.A. County

- Support the LACI to create an inclusive green economy by taking on applicants and helping them gain access to capital and resources, providing office space and executive coaching E
- Attract green industries through tax incentives, low-cost loan and grant programs, and regulatory guidance through the L.A. Industry Initiative
- Leverage opportunities with the State's Recycling Market Development Zone program which includes Industrial Development Bonds, Small Business Fund, Community Financial Resource Center loan program, technical assistance from Valley Economic Development Corporations, and Empowerment Zone incentives



Photo: City of Los Angeles Bureau of Street Services

Target

Eliminate unemployment rate gap between City of L.A. and L.A. County

Baseline: 0.6% in November 2014
Unemployment rate in L.A. County was 7.9%, L.A. City was 8.5%
Source: U.S. Bureau of Labor Statistics



Milestones & Initiatives

2025

Maintain ranking in CNBC's top five cities to start a small business

- Launch the Founders Business Accelerator at the LACI to help entrepreneurs in low-income communities grow their businesses and increase their impact (E)
- Provide free business consulting through nine BusinessSource Centers on topics such as financial analysis, marketing, business planning, one-on-one management consulting, and loan consultations
- Provide microloans for eligible business from $5,000-$50,000
- Provide free business services for employers through sixteen WorkSource Centers including customized employee recruitment, free job listings, candidate screening, and on-the-job training
- Promote Bureau of Contract Administration's Contractor Assistance Seminars that provide free training for bidding on public works construction projects



Photo: City of Los Angeles Department of Transportation

(E) = Equity

Partner Initiatives

Electric Vehicle Infrastructure Training Program Collaborative


Photo: PDE Total Energy Solutions

Excellence in the EV Infrastructure Workforce

The Electric Vehicle Infrastructure Training Program provides advanced training and certification for over 3,000 electrical workers who install electric vehicle charging infrastructure. The curriculum was developed working collaboratively with automakers, charger manufacturers, educational institutions, utility companies, and electrical industry professionals. These courses are taught at California community colleges via their Advanced Transportation Technology and Energy Program Network, as well as state certified electrical apprenticeships such as IBEW-NECA's Net Zero Plus Electrical Training Institute located locally. Going forward, the goal is to increase both participation and courses offered through this program to meet the increasing demand caused by a zero emission transportation transformation regionwide.



Photo: Theodore Payne Foundation

Theodore Payne Foundation for Wild Flowers and Native Plants

Developing Sustainable Landscaping Skills

The California Native Plant Landscaper training equips professionals with the specific knowledge and skills they need to extend their client base to service sustainable gardens. The course involves 30 hours of training in native plant identification, plant-appropriate irrigation practices, assessment of conditions and needs from garden establishment to maturity, and how to maximize the value of the training through client relations. Future certification will include an optional promotion of the landscaper by curriculum developers to further increase the value and interest in this training.

Partner Initiatives


Photo: Shopify

Shopify

AccelerateLA Ecommerce Initiative

Small business owners will be assisted through a series of workshops designed to equip them with ecommerce strategies and tools at Shopify's new downtown L.A. location. In addition to workshops, Shopify offers one-on-one consultation and product prototyping to help entrepreneurs start and build ecommerce business models such as ecommerce for manufacturers, print on demand, point of sale, and website audits.

AltaSea

Using Our Port as an Innovation Hub

AltaSea at the Port of Los Angeles is a 35-acre waterfront campus focused on ocean-inspired scientific collaboration, job creation, and education. Its Research and Business Hubs serve as a marine-based "Silicon Valley," nurturing scientific breakthroughs and emerging technologies, creating ocean-related products, services, and supporting local jobs. Over the next year, AltaSea will complete construction on the 180,000 square foot Center of Innovation that will be fully leased to ocean-related businesses and organizations. Through the business incubator, AltaSea will assist the development of over 350 small businesses, create over 700 quality jobs, and lead to the filing of 21-26 patents by participating blue economy businesses by 2021.


Photo: Gensler

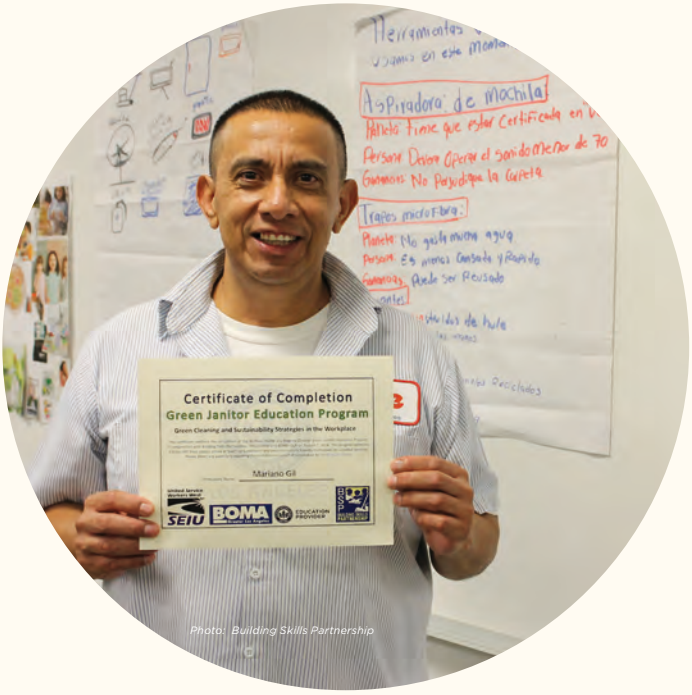


Photo: Building Skills Partnership

SEIU-USWW, Building Skills Partnership, BOMA-L.A., U.S. Green Building Council- Los Angeles

Empowering Janitors to Become Sustainability Advocates

The Green Janitor Education Program, sponsored by Service Employees International Union-United Service Workers West, Building Skills Partnership, Building Owners and Managers Association of Greater Los Angeles, and U.S. Green Building Council- Los Angeles trains and empowers janitors to become active sustainability advocates in their workplace and community. Since its inception in 2015, over 1,000 Green Janitors have been certified statewide. Moving forward, the goal is to certify 250 green janitors and engage 20 new buildings in 2019.

AECOM

Accelerating the Transition to a Low Carbon Economy

AECOM is a global infrastructure firm that works with public and private sector clients to deliver on their environmental and sustainability goals. Proudly headquartered in the city of Los Angeles, with nearly 1,000 employees, AECOM recently surpassed its original 2020 goal of reducing enterprise-wide greenhouse gas emissions (GHGs) by 20% and last year, unveiled its new commitment to reduce GHGs by an additional 20% by 2025. Through efforts such as consolidating offices, leveraging more energy efficient office spaces, and shifting to higher efficiency vehicles, AECOM is devoted to accelerating the transition to a low carbon economy and making ambitious GHG reduction targets to aid the transformation.


Photo: AECOM

Lead by Example

Keeping City government front and center in our sustainable future



13

Chapter



Photo: shutterstock_175270967



Photo: L.A. Mayor's Office

Vision for Los Angeles

Decisions made at City Hall determine how we realize our clean energy future. But it's not just a matter of changing policies and driving innovation in the marketplace; it's also about changing what we do with city resources, buildings, construction projects, and more. If we want to build a carbon free, sustainable Los Angeles, we have to lead by example in our government-owned properties and publicly-driven investments. We can do our part by reducing municipal greenhouse gas emissions; cutting municipal energy and water use; creating a zero waste City Hall; driving an all-electric city vehicle fleet; and making all new public sector facilities like the Civic Center all-electric.

U.N. Sustainable Development Goals

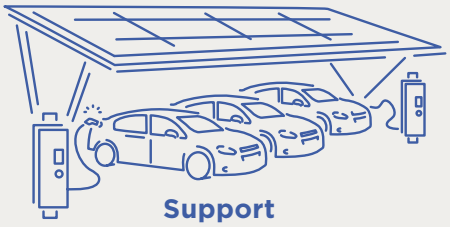


Chapter Targets

- Reduce municipal greenhouse gas emissions 55% by 2025; 65% by 2035; and reach carbon neutral by 2045
- Reduce municipal energy use by 18% by 2025; 35% by 2035; and 44% by 2050
- Reduce municipal water use by at least 25% by 2025; and 30% by 2035
- Lead on zero waste and achieve a zero waste City Hall by 2025
- Convert all City fleet vehicles to zero emission where technically feasible by 2028
- Ensure all new municipally owned buildings and major renovations will be all-electric, effective immediately
- Reach 2 million Angelenos through outreach, education, and training programs by 2025

Benefits to Angelenos

Municipal renewable energy and EV projects will...



Support

500

JOBS BY 2028

Achieving a 30% reduction in municipal energy and water use by 2035 will...



Save

$13 MILLION

ANNUALLY

Top Five Areas of Impact

- Climate Mitigation
- Resiliency
- Access & Equity
- Workforce Development
- Health & Wellbeing

Path to Zero Carbon

The City has reduced municipal greenhouse gas emissions by 40% since 2008, surpassing the 2015 pLAn target for 2025 eight years ahead of schedule.



Photo: L.A. Mayor's Office

Target

Reduce municipal greenhouse gas emissions 55% by 2025; 65% by 2035; and reach carbon neutral by 2045

Baseline: 16.8 million metric tons CO2e in 2008
Source: City of Los Angeles Municipal Greenhouse Gas Emissions Inventory

Target

Reduce municipal energy use 18% by 2025; 35% by 2035; and 44% by 2050*

Baseline: 3,476,841 mmBtu in 2015
Source: City of Los Angeles Municipal Greenhouse Gas Emissions Inventory
*These are 50% higher than the original targets in the 2015 pLAn when adjusted to the new baseline. The original targets also did not include 2050.

Milestones & Initiatives

2021

Install 15 MW of solar at the Port

- Support resilience through integrating solar into the microgrid at Pasha Terminal

2025

Install 3 MW of solar at City facilities

- Complete the first phase of the Green Meadows microgrid resiliency project (E)
- Deploy a resilient battery/ solar project at the LAPD Motor Transportation Division to power EV fleet
- Complete the L.A. Zoo - LADWP solar resiliency project
- Ensure at least 1MW of solar on L.A. Convention Center Expansion
- Examine on-site renewable energy at LADWP facilities and pursue smart metering and energy management solutions

2028

Complete LED retrofits at all City buildings subject to the Existing Building Energy and Water Efficiency Ordinance

- Complete LED retrofit for terminals at the Port and Harbor Department buildings
- Complete LED retrofits at recreation centers, gymnasiums, and the L.A. Convention Center
- Control Central Library lighting with advanced energy building management software
- Finish converting all street lights to LEDs and explore auto-dimming technology



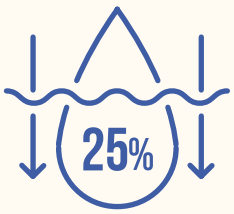
Photo: AEG

(E) = Equity

Target

Reduce municipal water use by at least 25% by 2025; and 30% by 2035

Baseline: 16,099 acre-feet used from July 2012- June 2013
Source: Los Angeles Department of Water and Power



by 2025



by 2035

Milestones & Initiatives

2021

Expand municipal and proprietary buildings retrofits through the following actions

- Install smart faucets in 45 library facilities
- Wash City vehicles only at facilities with 100% recirculated water
- Implement the water conservation measures in the L.A. Zoo Vision Plan
- Continue publishing water use at each City-owned building

2025

Expand low water use landscaping

- Install sustainable, low water use landscaping at 25 branch libraries
- Convert road medians and publicly-owned parkway strips to low- or no-water use landscaping
- Implement sustainable landscaping projects on public housing and other multi family facilities
- Update the landscape ordinance to include greater water efficiency measures
- Incorporate additional low water use and permeable materials into standard parkway design guidelines
- Exempt solar panel installations and drought-tolerant landscaping proposals with no increase in hardscape from Historic Preservation Overlay Zone review processes
- Maintain watering at City facilities on a reduced schedule of two times per week



Photo: L.A. Mayor's Office

Target

Lead on zero waste and achieve a zero waste City Hall by 2025

76.4% diversion rate achieved at the end of 2011
Source: Los Angeles Bureau of Sanitation Zero Waste Progress Report, UCLA 2013



Milestones & Initiatives

2021

Transition to paperless personnel files

- Acquire database for all City departments to upload and store personnel files

2021

Adopt and implement a sustainable technology policy across all City departments

- Expand the OurCycleLA program to 15,000 wifi devices to decrease the City's e-waste and improve online connectivity for low-income Angelenos
- Develop systems and infrastructure to improve recycling rates of specialty waste streams, particularly e-waste
- Purchase new or refurbished equipment with less packaging through the Environmentally Preferred Products Purchasing Program
- Monitor recycling at the Piper Technical facility

2021/2024

Ensure all City facilities are equipped with appropriate recycling, including recycling for machining material and organics collection, by 2021; and proprietary facilities by 2024

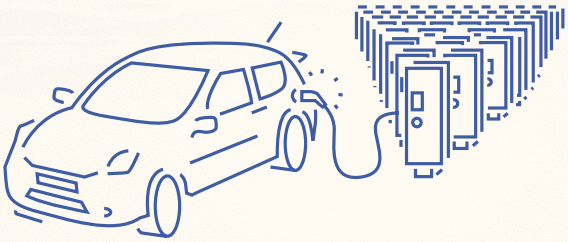
- Update City procurement and contracting requirements to include specifications on surplus food recovery, styrofoam, and single-use plastic
- Expand the L.A. Zoo's food sharing program to divert at least 180 tons of food waste
- Transition to compostable foodware at the Convention Center


Photo: L.A. Mayor's Office

E = Equity

Target

Convert all City fleet vehicles to zero emission where technically feasible by 2028



Milestones & Initiatives

2021

Deploy additional charging stations

- Install 400 EV chargers at City buildings and parks
- Install EV chargers at all libraries
- Install 500 additional streetlight EV chargers
- Ensure that municipally deployed EV chargers are distributed equitably around the city, with a focus on disadvantaged neighborhoods E
- Develop a fleet EV infrastructure master plan

2021

Lead locally and nationally on EV adoption through the following actions

- Continue national leadership role to promote municipal electrification by adding medium and heavy duty vehicles to the Climate Mayors EV Purchasing Collaborative
- Help lead the Transportation Electrification Partnership (TEP), convened by the Los Angeles Cleantech Incubator, to ensure regional coordination on goals and efforts
- Release EV RFI for electric offroad equipment
- Commission a study on converting City pool vehicles to ride share and other alternatives
- Revise City employee commuter benefits to encourage mode shift and carpooling

2021

All vehicle procurement will follow a "zero emission first" policy for City fleets

- Ensure that 100% of the City's new light duty purchases are electric
- Ensure that 100% of new vehicles for the Meals on Wheels program are electric

2028

Ensure that 100% of medium duty trash and recycling trucks are zero emission

- Release solicitation for medium duty trash trucks



Photo: PDE Total Energy Solutions

Target

Ensure all new municipally owned buildings and major renovations will be all-electric, effective immediately

ALL ELECTRIC

Milestones & Initiatives

2021

Implement GHG performance standards for material procurement for purchasing by City Departments

- Update the City's Environmentally Preferred Products Purchasing Program to include additional construction materials and a GHG performance standard, such as the Buy Clean California Act
- Further identify embedded carbon emissions in the City's supply chain through Departmental participation in the Carbon Disclosure Project supply chain reporting program

2028

Implement 5 new net zero energy projects at City facilities

- Complete Los Angeles Street Civic Building
- Pilot passive house certification and monitor energy savings on one City facility
- Electrify 100% of the Department of Recreation and Parks yard maintenance equipment

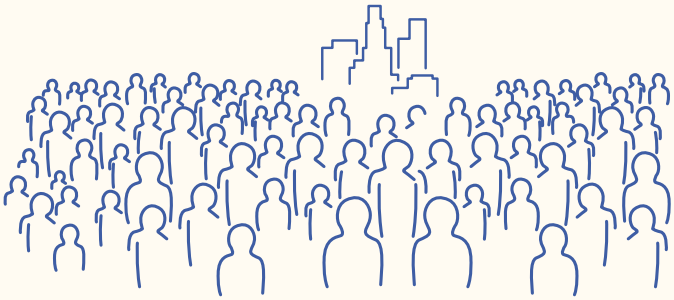


Photo: shutterstock_149282399

E = Equity

Target

Reach 2 million Angelenos through outreach, education, and training programs by 2025



Milestones & Initiatives

2019

Create a Climate Emergency Commission that empowers impacted communities in implementation of the pLAn (E)

- Appoint a Climate Emergency Mobilization Director (E)
- Engage Community Assemblies to identify priorities and help assess community level impact of climate programs (E)

2020

Launch pLAn engagement campaign

- Launch a media campaign to invite Angelenos to be part of the sustainable movement with specific actions
- Collaborate with LADWP on energy and water rebate outreach

2021

Convene 10 citywide forums through the Department of Neighborhood Empowerment, inviting participation from 96 Neighborhood Councils on critical sustainability issues

- Partner with L.A. Bureau of Sanitation, the Emergency Management Department, and relevant key departments to host events
- Improve information available through 311, including City/LADWP rebate programs

2025

Increase education and training through City science, arts, and cultural programming offered by departments

- Offer STEM programming including robotics, coding, circuitry, and community science through the L.A. Public Libraries
- Expand opportunities for youth arts education in areas of high need through the Department of Cultural Affairs (E)
- Collaborate with LAUSD to support sustainability education and events
- Collaborate with L.A. Community College District to increase course offerings that prepare students for careers in sustainability

2020/2021

Develop and implement sustainability training for on-boarding all new City employees by 2020; and current employees by 2021

- Update personnel policies to reflect sustainability priorities



Photo: City of Los Angeles Bureau of Sanitation

Partner Initiatives



Climate Mayors and The Electrification Coalition

Growing Demand Across the Country for EVs

L.A. has led the way in converting its municipal fleet to EVs. Taking that leadership a step further, L.A. and its partners initiated the Climate Mayors Electric Vehicles Purchasing Collaborative. This unprecedented collaborative, launched in 2018 with 19 cities and 2 counties, now up to 43 U.S. cities and 5 counties, seeks to leverage cities' collective buying power and send a powerful message to the global car industry that electric vehicles are in demand right now across the U.S. The Coalition has committed to purchasing 953 EVs, representing more than $28 million in EV investment, and is working to bring in even more partners.

C40

Working Globally, Acting Locally

C40 cities connects 94 of the world's greatest cities to take bold action on climate change. Mayor Garcetti has served as Vice Chair of C40 Cities since April 2014. L.A. is an active member of the C40 networks for Climate Change Risk Assessment, Cool Cities, Private Building Efficiency, Mobility Management, Low Emissions Vehicles, Land Use Planning, Transit Oriented Development, Food Systems, and Waste to Resources. As part of this group, L.A. recently signed the Fossil Fuel Free Streets Declaration pledging to procure only zero-emission buses by 2025 and ensure a major area of L.A. will be zero-emission by 2030. L.A. is also a recent signatory to the Advancing Towards Zero Waste Declaration and has committed to achieving net zero carbon emissions by 2050. L.A. is a pilot city of the Deadline 2020 Climate Action Planning Program which outlines the pace, scale, and prioritization of action for this pLAn to achieve the Paris Agreement.



Bloomberg Philanthropies

Accelerating L.A.'s Carbon Commitments

In October 2018, L.A. was selected a winner by the Bloomberg Philanthropies' American Cities Climate Challenge based on its innovative, ambitious, and achievable climate action plan. As a Leadership City, L.A. will gain access to powerful new resources and world-leading support to help L.A. meet - or beat - its near term carbon reduction goals.



Photo: L.A. Mayor's Office

As climate intensifies, every new solution we come up with saves us exponetially more money—and more lives.

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City Family

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pLAn Partners and Stakeholders

Heal the Bay / WeTap / The Nature Conservancy / Grown in LA / TreePeople / Trust for Public Land / LA Compost / AEG / EcoSet / Los Angeles Food Policy Council / Leadership for Urban Renewal Network / Environmental Media Association / GRID Alternatives / Los Angeles Community College District / Building Decarbonization Coalition / Natural Resources Defense Council / U.S. Green Building Council- LA / LA Better Building Challenge / Kilroy Realty / The People Concern / Enterprise Community Partners / Coalition for Clean Air / Communities for a Better Environment / Physicians for Social Responsibility / Legacy LA / LA Más / East Yard Communities for Environmental Justice / People for Mobility Justice / Via / Liberty Hill / CalSTART / LACI Transportation Electrification Partnership / URB-E / International Brotherhood of Electrical Workers / Los Angeles Trade-Tech College / AECOM / AltaSea / Theodore Payne Foundation / Kiss the Ground / Safe Place for Youth / Electrification Coalition / C40 / Bloomberg Philanthropies / UCLA Sustainable LA Grand Challenge / Earthjustice / Southern California Association of Nonprofit Housing / The Climate Registry / Food & Water Watch / Los Angeles County Metropolitan Transportation Authority / People for Parks / Los Angeles Beautification Team / Watts Century Latino Organization / Los Angeles County Bicycle Coalition / Grant Housing and Economic Development Corporation / LA 2028 / Los Angeles Walks / Global Green / City Plants / From Lot to Spot / STAND-L.A. / Habitat for Humanity / Sierra Club / Los Angeles County Chief Sustainability Office / Little Tokyo Service Center / East LA Community Corporation / Sustainable Economic Enterprises of Los Angeles / Community Health Councils / Open Silo / Investing in Place / Strategic Concepts in Organizing and Policy Education / USC Keck School Of Medicine / American Lung Association / Climate Resolve / Environmental Defense Fund / St. Francis Center / Los Angeles Community Garden Council / Studio-MLA / Michaels Development Company / Los Angeles Regional Collaborative / Sustain LA / UCLA Institute of the Environment and Sustainability / UCLA Luskin Center for Innovation / Center for Biological Diversity / Los Angeles Business Council / LA Waterkeeper / Environment California / Esperanza Community Corporation / Community Healing Gardens / T.R.U.S.T. South LA / Koreatown Youth and Community Center / National Renewable Energy Laboratory / Food Forward / Los Angeles Alliance for a New Economy / CicLAvia / The Better World Group / Los Angeles Sustainability Executives Roundtable / Social Justice Learning Institute / Southeast Asian Community Alliance / Friends of the LA River / LA Neighborhood Land Trust / The River Project / Local Initiatives Support Corporation / Raimi + Associates / LA Conservation Corps / American Institute of Architects / The Wilderness Society / South Coast Air Quality Management District / Pacoima Beautiful

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L.A.'s GREEN NEW DEAL Sustainable City pLAn 2019

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PLAN

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