



Sustainable City pLAn

# 2nd Annual Report

2016-2017



# Sustainable City pLAn 2nd Annual Report 2016-2017



TRANSFORMING LOS ANGELES  
ENVIRONMENT | ECONOMY | EQUITY

## Contents

### Introduction

Letter from Mayor Eric Garcetti	04
Note from Chief Sustainability Officer Matt Petersen	06
Meet the People behind the pLAn Departmental Chief Sustainability Officers Mayor's Sustainability Team	08 09
How to Read the Report	10
Annual Report at a Glance Summary of Completed Outcomes Where L.A. is Leading	12 14

### Environment

 01. Local Water	16
 02. Local Solar	22
 03. Energy Efficient Buildings	28
 04. Carbon & Climate Leadership	34
 05. Waste & Landfills	40

### Economy

 06. Housing & Development	46
 07. Mobility & Transport	52
 08. Prosperity & Green Jobs	58
 09. Preparedness & Resiliency	64

### Equity

 10. Air Quality	70
 11. Environmental Justice	76
 12. Urban Ecosystem	82
 13. Livable Neighborhoods	88
 14. Lead by Example	94

Acknowledgements	100
------------------	-----

## Letter from Mayor Eric Garcetti



When I released my Sustainable City pLAN in April 2015, I laid out ambitious yet achievable targets that are time-bound and measurable. I also prioritized economic and equity goals that I believe are inseparable from our sustainable future.

True success depends on holding City departments accountable for the results. And we wanted to see marked progress in 2017, 2025, and 2035. Two years after releasing the pLAN, we have produced outcomes that should make all Angelenos proud. Not only have we met or exceeded two-thirds of the 2017 targets nearly a year ahead of schedule, and even achieved some of the 2025 goals early – many of the results have put Los Angeles in a class by itself:

- We have created over 20,000 green jobs since July 2013, and reduced the unemployment gap between the City and the County to 0.2 percent (and beating our 2025 pLAN goal early) – proving again that economic prosperity and environmental stewardship go hand-in-hand.
- We came together in the face of historic drought, and did what many thought was not achievable – reduce our per capita water use city-wide by another 20 percent, strengthening L.A.’s leadership as the most water-efficient big city in America.
- We have put up enough solar in Los Angeles in the last year to power over 12,000 homes – and we continue to lead the nation in total installed solar, with the largest rooftop solar system in the world due to come online in the city by the end of the year.
- We passed the nation’s most comprehensive and ambitious existing building energy and water efficiency ordinance – helping us lower greenhouse gas emissions and reduce utility bills.
- We are 50 percent of the way to my goal for 100,000 units of housing, which is key to helping improve affordability of housing in our city.
- We not only set the nation’s most aggressive EV procurement goal – we achieved the goal early, and now L.A. has the most pure battery EVs of any city in the U.S. The over 250 battery electric vehicles so far include the City’s motor pool fleets, and 150 LAPD cars.
- We are testing the on-road use of innovative cool pavement technology, a promising solution to reducing urban heat islands.

We are gaining quickly on other goals that a year ago seemed a bit out of reach. We are picking up the pace toward our 2017 target for 400 MW of local solar installations, and LADWP projects we will meet 80 percent of that goal by year’s end. How are we accelerating our progress? For one, by becoming the first city to allow solar roof permitting online. That change alone slashed interconnection wait-times from up to a year – which was unacceptable – to the current benchmark of two weeks.

We also faced some unexpected environmental challenges, and took action to help support our residents. The Aliso Canyon methane leak disaster threatened our community’s safety and health, and we have a legacy of oil drilling across our city and in our neighborhoods. To help the City address these concerns, I appointed Uduak-Joe Ntuk to be the City’s first petroleum administrator since the 1980s.

The Exide clean up in Boyle Heights was moving too slowly, so I helped mobilize the city’s resources to help accelerate access agreements and make blood testing available at local libraries. I also signed the

‘Clean Up Green Up’ ordinance, which provides new tools not just for Boyle Heights to address pollution, but Wilmington and Pacoima as well. We hired a ‘Clean Up Green Up’ Ombudsman who is working directly with community groups in these neighborhoods.

As we transform Los Angeles into the most sustainable city in our country, we are also taking seriously our responsibility to act on climate change nationally and globally.

That is why I led 71 other American mayors late last year to write to then President-elect Trump, reaffirming our cities’ commitment to tackling climate change and urging him to join our efforts. The Mayors National Climate Action Agenda, which I co-founded in 2014, now has 75 members in red states and blue states. Together, we represent nearly 42 million Americans.

At the international level, the C40 Network, of which I am vice chair, connects 80 of the world’s megacities in sustainability efforts. Collectively, we represent 600 million people and a quarter of the global economy. At C40’s bi-annual mayors summit, I committed to studying how L.A. can do its part to achieve the Paris Climate Agreement goal of keeping global temperature rise to 1.5°C.

Closer to home, I will be co-chairing a newly formed joint Leadership Council with UCLA Chancellor Gene Block to help advance the Sustainable City pLAN, and the UCLA Grand Challenge for a Sustainable L.A. The Leadership Council will kick off in April and bring together key leaders from community, business, government, and other sectors to help advance the pLAN goals (including the 4 year update of the pLAN we will begin by the end of 2017, and release early in 2019), inform UCLA research, and engage more Angelenos.

I am very grateful to everyone who has played a role in our progress – most importantly our residents. Angelenos have stepped up by conserving water, reducing energy use, and taking advantage of our growing integrated transportation network. I also want to acknowledge my Chief Sustainability Officer Matt Petersen and his entire team, as well as the 27 sustainability chiefs across our City departments, for helping us advance, and track, all the targets in the pLAN.

We are unique among great cities: We have our own sea port, a major international airport, and our own utility. And we have 292 days a year of sunshine for clean power.

While much work remains to be done, together we can and will succeed in making Los Angeles the most sustainable city in the United States, and the world.

Sincerely,

A handwritten signature in black ink, appearing to read 'EG' followed by a flourish.

Mayor Eric Garcetti



## Note from Chief Sustainability Officer Matt Petersen

When Mayor Garcetti appointed me L.A.'s chief sustainability officer – the first in the City's history – I understood that he expected me and my team to run a marathon at a sprinter's pace. Time is a luxury we don't have, as the planet grows warmer, carbon levels rise and Earth's natural resources, such as life-sustaining conifer forests and coral reefs, retreat.

Three years later, I am happy to report we have not slowed down – in fact, we're gaining speed. We released the Sustainable City pLAN on April 8, 2015, setting a vision and a road map for a cleaner environment, a stronger economy and a more equitable society. This comprehensive road map sets time-bound, measurable targets. While we set long-term targets to achieve by 2025 and 2035, the first goals for 2017 come due at the end of this year, and the news is good: we have completed ahead of schedule, or are on track to complete over 90 percent (56 out of 61) of our outcomes for 2017. And we even have achieved 2 of our 2025 outcomes early.

The implementation of pLAN has helped grow and build an unwavering commitment to sustainability, sparking a culture of collaboration across the City's departments and bureaus. For example, our pLAN target to require 50 percent of all vehicles we procure annually to be pure battery electric vehicles (EV). This helped unlock innovation between our L.A. Police Department, Bureau of Engineering, and L.A. Department of Water and Power to put in place the necessary power infrastructure, install 104 EV chargers in one parking structure, and procure 100 battery EVs – all in eight months. This is not only record speed, it shows the women and men that work for our great city want to help unlock innovation, reduce emissions, and save up to 61 percent on the total cost of vehicle ownership (versus conventional gasoline vehicles).

The Mayor and Los Angeles' leadership on climate change has also helped spur collaboration across the nation. Mayor Garcetti co-founded the Mayors National Climate Action Agenda (MNCAA), bringing together 75 mayors (aka, #ClimateMayors) and cities across the United States. Working with my peers and colleagues in MNCAA, Los Angeles, Seattle, San Francisco and Portland cities developed an electric vehicle request for information (EV RFI) and invited additional MNCAA cities. In the end 30 cities came together –

including NYC, Chicago, Philadelphia, Phoenix, and Boston – to show automakers and manufacturers that our cities want over 110,000 cars and trucks in our fleets to be electric, helping reduce emissions while saving us money on fuel and maintenance. Next, we will work to not only do joint pilots to help ensure new EVs can be manufactured that meet the needs of cities, but to do joint procurement to help create economies of scale and lower costs to cities.

Finally, I want to acknowledge my dedicated team: deputy chief sustainability officer Lauren Faber O'Connor, water policy advisor Liz Crosson, energy efficiency analyst Hilary Firestone, EV and zero waste senior analyst Susana Reyes, policy analyst Michael Samulon, policy analyst Jeanalee Obergfell, and our many interns and fellows. They deserve much of the credit for working with our partners and supporting departments in reaching the remarkable achievements outlined in the annual report.

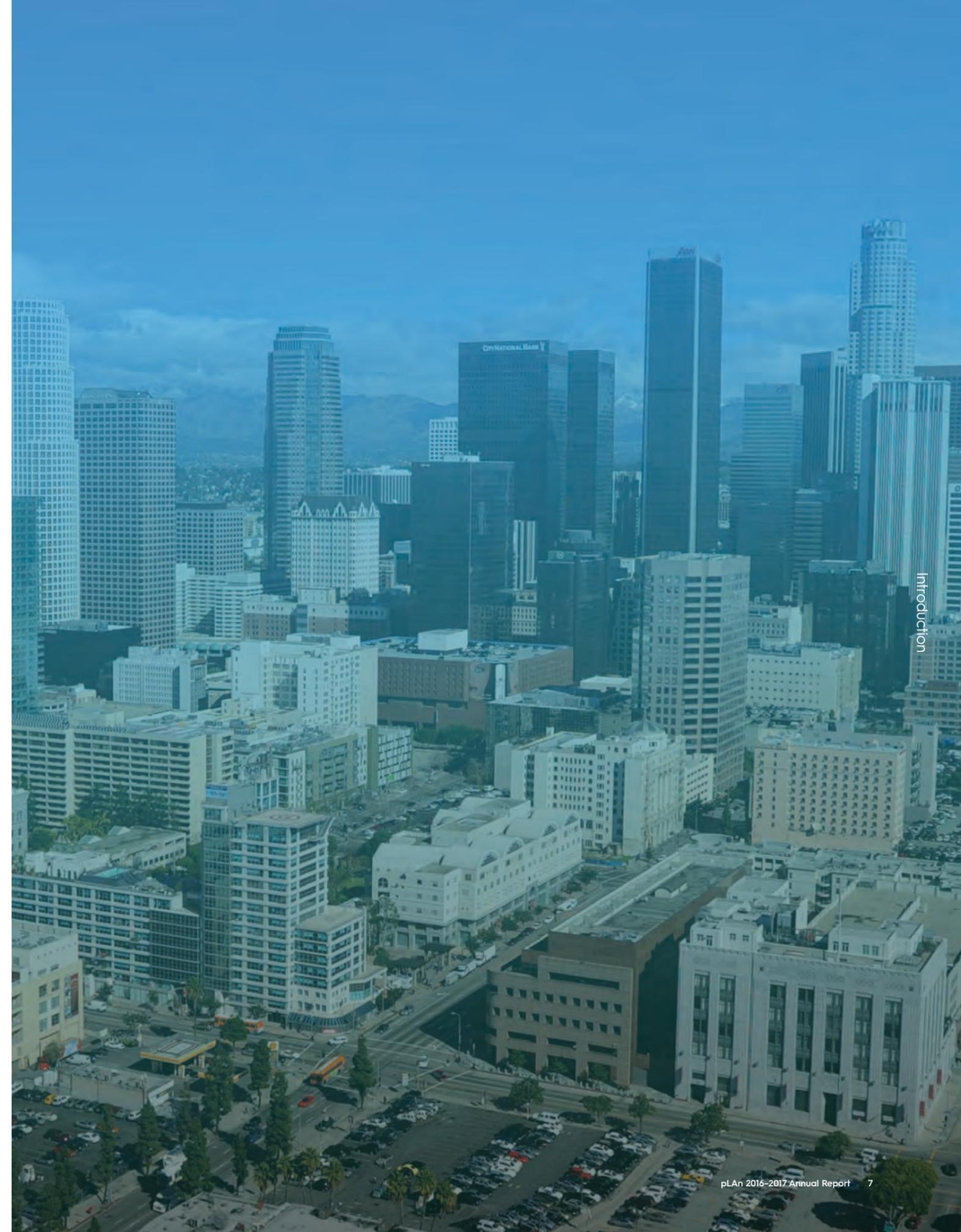
Equally deserving are the City's 27 department sustainability chiefs. But our most important change agents are the citizens of Los Angeles. We need every Angeleno to take action in their communities, as they have already done by achieving a historic 20 percent per capita reduction in water use, and installing more solar panels than any other U.S. city.

Our progress has been significant, yet many challenges remain to be tackled across these 503 square miles that make up the City of Los Angeles. We can and must do even more together in the months and years to come here in L.A., regionally, and beyond.

Sincerely,



Matt Petersen, Chief Sustainability Officer



## The People Behind the pLAN Meet L.A.'s Departmental Chief Sustainability Officers



**Department of Aging**  
 Marco Perez  
 Additional Sustainability Staff: Jennifer Ware



**Department of Animal Services**  
 Dana Brown



**Department of Building and Safety**  
 Osama Younan



**Department of Contract Administration**  
 Chris Smith  
 Additional Sustainability Staff: Hannah Choi



**Department of Cultural Affairs**  
 Danielle Brazell



**Economic and Workforce Development Department**  
 Stella Catanzarite  
 Additional Sustainability Staff: Daniel Tarica



**Bureau of Engineering**  
 Mahmood Karimzadeh  
 Additional Sustainability Staff: Shawn Farzan, Zohra Akhter, Jeannie Park



**Los Angeles Fire Department**  
 Chief Fred Mathis  
 Additional Sustainability Staff: Chief Nikki Brodowy



**General Services Department**  
 Lisa Gabriel  
 Additional Sustainability Staff: Valerie Melloff



**Housing and Community Investment Department**  
 Laura Guglielmo  
 Additional Sustainability Staff: Sally Richman



**Information Technology Agency**  
 Jeanne Holm



**Department of Neighborhood Empowerment**  
 Stephen Box  
 Additional Sustainability Staff: Jasmine Elbarbary



**Department of City Planning**  
 Shana Bonstin  
 Additional Sustainability Staff: Claire Bowin



**Los Angeles Police Department**  
 Commander Sean Malinowski  
 Additional Sustainability Staff: Commander Jeffrey Bert, Detective Michael Bland



**Port of Los Angeles**  
 Christopher Cannon  
 Additional Sustainability Staff: Rachel McPherson



**Los Angeles Public Library**  
 Eloisa Sarao



**Department of Recreation and Parks**  
 Matthew Rudnick



**Bureau of Sanitation**  
 Doug Walters



**Bureau of Street Lighting**  
 Norma Isahakian  
 Additional Sustainability Staff: James Quigley



**Department of Street Services**  
 Greg Spotts  
 Additional Sustainability Staff: Ron Lorenzen



**Department of Transportation**  
 Marcel Porras



**Department of Water and Power**  
 Nancy Sutley  
 Additional Sustainability Staff: Aaron Gross



**Los Angeles World Airports**  
 Samantha Bricker  
 Additional Sustainability Staff: Tamara McCrossen-Orr



**Los Angeles Zoo**  
 Darryl Pon

## The People Behind the pLAN Meet Mayor's Sustainability Team



**Matt Petersen**  
 Chief Sustainability Officer



**Liz Crosson**  
 Water Policy Advisor



**Jeanalee Obergfell**  
 Policy Analyst



**Hilary Firestone**  
 Senior Project Manager, Energy Efficiency



**Lauren Faber O'Connor**  
 Deputy Chief Sustainability Officer



**Susana Reyes**  
 Senior Analyst



**Michael Samulon**  
 Policy Analyst



**Elena Guevara**  
 CivicSpark Climate Action Fellow

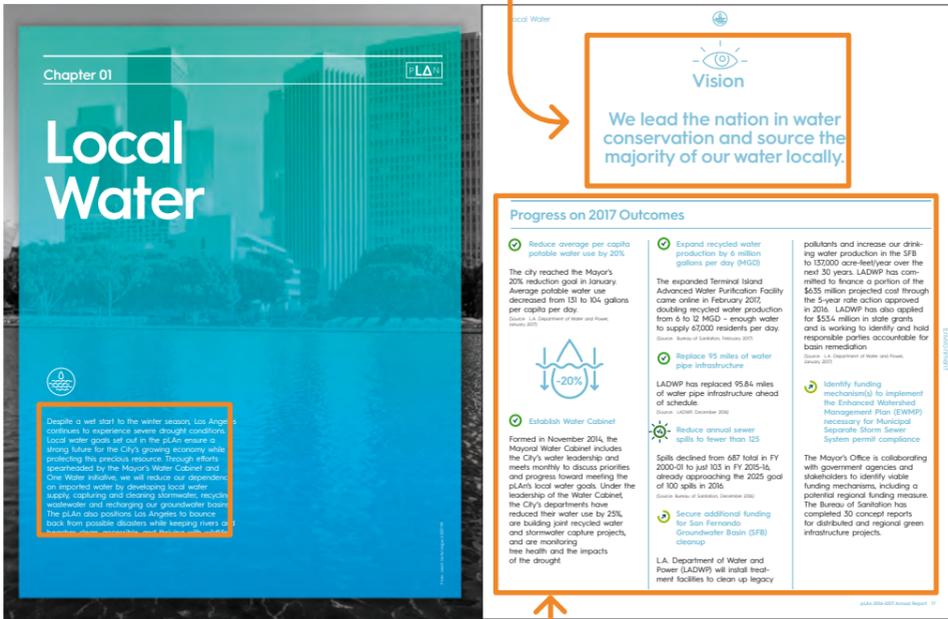
# How to Read the Report

## Chapter Title

The plan is organized into three sections: Environment, Economy, and Equity. Within this framework, there are 14 topic chapters.

## Vision

The vision statement from the pLAN for each topic that is ambitious and achievable in the next 20 years



Introduction

Introduction

## Introduction

The rationale for the importance of the topic area and summary/highlights of key outcomes

## Outcome Progress Icons

The icons show the progress being made toward each of the 2017 outcomes and select 2025 outcomes

- Outcome exceeded
- Outcome achieved early
- On track to achieve outcome by target date.
- Making progress toward outcome

## Outcomes

Listed are selected outcomes--measurable, quantitative, time bound deliverables--from the pLAN with progress in the last year toward that outcome underneath

## Feature Story

Highlighting a story demonstrating progress on a significant outcome, initiative, and/or project

## Progress Equivalency

Expressing results and progress on outcomes through graphics and easy-to-understand conversions

## City Wins

Progress by a City of L.A. department on an outcome, initiative and/or related project in the last year



## Partner Wins

Progress on an outcome, initiative, Adopt the pLAN commitment and/or project related to the pLAN by a local organization or set of partners

# Annual Report at a Glance

Below are all 2017 (or where noted 2025) outcomes already achieved or exceeded. See full outcome results in each chapter. Two-thirds of the 61 outcomes due to be completed by the end of 2017, and 2 of the 2025 outcomes, have been completed ahead of schedule.



Local Water

- ✓ Establish Water Cabinet to implement key aspects of local water policy
- ✓ Replace 95 miles of water pipe infrastructure
- ✓ Expand recycled water production by at least 6 million gallons per day
- ✓ Reduce average per capita potable water use by 20%
- ⚠ Reduce number of annual sewer spills to less than 125



Local Solar

- ✓ Upgrade Castaic Pumped-Storage Plant to accommodate intermittent renewable energy sources
- ✓ Launch a revised Integrated Resource Plan (IRP) process that includes in the 2015 and/or 2016 IRP a local solar scenario that achieves the long-term stretch goal outcomes
- ✓ Reduce residential solar PV interconnection wait time to less than two weeks



Energy Efficient Buildings

- ⚠ Avoid cumulative 1250 GWh of energy use between 2014 and 2017 due to efficiency programs
- ⚠ Expand Los Angeles Better Buildings Challenge (LABBC) to 60 million square feet
- ✓ Create benchmarking policy to monitor and disclose building energy use
- ✓ Develop policy package (e.g., audits and retro-commissioning) to address energy consumption in the city's largest buildings (public and private)



Carbon & Climate Leadership

- ⚠ Establish a pathway to derive 50% of LADWP's electricity from renewable sources by 2030
- ✓ Develop a comprehensive climate action and adaptation plan, including an annual standardized GHG inventory
- ✓ Work with other cities to establish standardization of municipal and community-wide GHG inventory reporting in the US and globally
- ✓ Lead Mayors of the US's largest cities to sign on to the Mayor's National Climate Action Agenda (MNCAA)
- ✓ Accelerate the decarbonization of the electricity grid, including ceasing delivery of power from Navajo Generating Station



Waste & Landfills

- ✓ Implement a waste franchise system to increase commercial recycling rates, reduce pollution from heavy-duty waste-hauling vehicles, and enhance material recovery opportunities to reach an 80% diversion rate by 2020
- ✓ Designate a site and project parameters for an anaerobic digestion facility with at least 50 tons of capacity to process local organic waste



Housing & Development

- ⚠ Increase the combined annual amount of federal, state, and local money dedicated to affordable housing development by at least 33% compared to 2014 levels
- ✓ Minimize the loss of existing affordable housing units through density bonus revision and implementation of AB 2222



Mobility & Transport

- ✓ Complete LA Metro's regional integrated bike share system plan
- ✓ Establish bike share system in LA starting with at least 65 stations and 1,000 bikes
- ✓ Increase multi modal connections at 10 rail stations



Prosperity & Green Jobs

- ⚠ Attract \$100 million of private-sector investment through the L.A. Cleantech Incubator
- ⚠ Increase Minimum wage to \$13.25/ hr
- ⚠ Create 20,000 green jobs
- ⚠ Reduce the unemployment gap between City of LA and LA County to .35% (2025)



Preparedness & Resiliency

- ✓ Implement enhanced Reverse 911 system to incorporate mobile phones and alerts
- ⚠ Pilot installation of "cool slurry" pavement



Air Quality

- ⚠ Install more than 1,000 publicly available EV charging stations, with more than 100 (including DC fast chargers) on City property



Environmental Justice

- ✓ Implement and expand Clean Up Green Up program by targeting the highest scoring (i.e., most impacted) CalEnviroScreen census tracts, including South LA
- ✓ Implement neighborhood-level air quality monitoring
- ✓ Require all city farmers' markets to accept EBT



Urban Ecosystem

- ✓ Develop strategy for funding Park Stewardship Alliance with nonprofits and other partners
- ✓ Pass legislation allowing for and encouraging urban agriculture in open space (e.g., medians, vacant lots, etc.)



Livable Neighborhoods

- ✓ Implement improvements on 15 commercial corridors/ Great Streets
- ✓ Achieve designation as an Age-Friendly City by the World Health Organization's Global Network of Age-Friendly Cities and Communities



Lead by Example

- ⚠ Reduce water use at city facilities and proprietary departments by 20%
- ✓ Ensure that 50% of the City's light duty vehicle purchases are EVs, and analyze conversion of other vehicle types to EVs
- ✓ Establish a pLAN working group of key city departments, business leaders, local universities and major stakeholders.
- ✓ Reduce municipal water use by at least 25% (2025)

Introduction

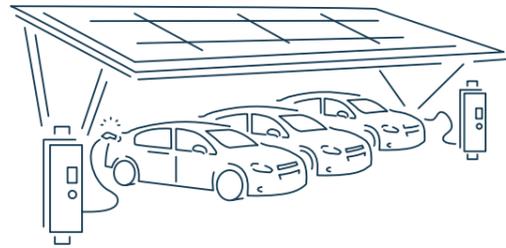
Introduction

# Where L.A. is Leading



## Local Water

- L.A. is the most water efficient big city in the U.S. (lowest total gallons per capita daily consumed)
- L.A. signed the most stringent water efficiency building codes of any big city in the U.S.



## Lead by Example

- L.A. has the largest municipal battery electric vehicle fleet of any U.S. city.
- With 150 battery electric vehicles, LAPD has the largest EV police force in the nation.



## Air Quality

- At over 1,300, L.A. has the most publicly available electric vehicle chargers of any U.S. city.



## Prosperity & Green Jobs

- L.A. is the first big city in the U.S. to raise the minimum wage to \$15.
- At over 20,000, L.A. has created the most green jobs of any U.S. city.



## Local Solar

- At 225 MW, L.A. has the most installed solar power of any city in the U.S.
- L.A. is the first U.S. city to offer expedited online permitting for residential solar projects.



## Environmental Justice

- L.A. is the first big city to require all city farmers markets to accept EBT.
- L.A. is the first city to roll out an electric vehicle carshare program designed to serve low-income residents.



## Energy Efficient Buildings

- L.A. adopted the most ambitious and comprehensive energy and water efficiency law for existing buildings of any U.S. city.



## Mobility and Transport

- With 1,090 bicycles, 65 multi-unit docking stations, and over 90,000 trips taken as of January 2017, L.A.'s bike share is the biggest system in the county.



## Preparedness & Resiliency

- L.A. is the first U.S. city to test on-road use of cool pavement to combat urban heat.



## Carbon and Climate Leadership

- L.A. is the first U.S. city to use the Compact of Mayors globally recognized methodology for calculating a city's greenhouse gas emissions.



## Waste & Landfills

- L.A. has the highest recycling rate of any big U.S. city.



# Local Water



Despite a wet start to the winter season, Los Angeles continues to experience severe drought conditions. Local water goals set out in the pLAN ensure a strong future for the City's growing economy while protecting this precious resource. Through efforts spearheaded by the Mayor's Water Cabinet and One Water initiative, we will reduce our dependency on imported water by developing local water supply, capturing and cleaning stormwater, recycling wastewater and recharging our groundwater basins. The pLAN also positions Los Angeles to bounce back from possible disasters while keeping rivers and beaches clean, accessible, and thriving with wildlife.

Photo credit: Gettyimages-53397191



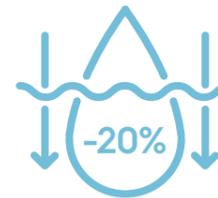
We lead the nation in water conservation and source the majority of our water locally.

## Progress on 2017 Outcomes

**Reduce average per capita potable water use by 20%**

The city reached the Mayor's 20% reduction goal in January. Average potable water use decreased from 131 to 104 gallons per capita per day.

(Source: L.A. Department of Water and Power, January 2017)



**Establish Water Cabinet**

Formed in November 2014, the Mayoral Water Cabinet includes the City's water leadership and meets monthly to discuss priorities and progress toward meeting the pLAN's local water goals. Under the leadership of the Water Cabinet, the City's departments have reduced their water use by 25%, are building joint recycled water and stormwater capture projects, and are monitoring tree health and the impacts of the drought.

**Expand recycled water production by 6 million gallons per day (MGD)**

The expanded Terminal Island Advanced Water Purification Facility came online in February 2017, doubling recycled water production from 6 to 12 MGD - enough water to supply 67,000 residents per day.

(Source: Bureau of Sanitation, February 2017)

**Replace 95 miles of water pipe infrastructure**

LADWP has replaced 95.84 miles of water pipe infrastructure ahead of schedule.

(Source: LADWP, December 2016)

**Reduce annual sewer spills to fewer than 125**

Spills declined from 687 total in FY 2000-01 to just 103 in FY 2015-16, already approaching the 2025 goal of 100 spills in 2016.

(Source: Bureau of Sanitation, December 2016)

**Secure additional funding for San Fernando Groundwater Basin (SFB) cleanup**

L.A. Department of Water and Power (LADWP) will install treatment facilities to clean up legacy

pollutants and increase our drinking water production in the SFB to 137,000 acre-feet/year over the next 30 years. LADWP has committed to finance a portion of the \$635 million projected cost through the 5-year rate action approved in 2016. LADWP has also applied for \$53.4 million in state grants and is working to identify and hold responsible parties accountable for basin remediation.

(Source: L.A. Department of Water and Power, January 2017)

**Identify funding mechanism(s) to implement the Enhanced Watershed Management Plan (EWMP) necessary for Municipal Separate Storm Sewer System permit compliance**

The Mayor's Office is collaborating with government agencies and stakeholders to identify viable funding mechanisms, including a potential regional funding measure. The Bureau of Sanitation has completed 30 concept reports for distributed and regional green infrastructure projects.



## Feature Story

# Introducing New Water-Saving Building Standards

Los Angeles continues to lead the nation in water conservation. In 2016, new measures were incorporated into the City's Green Building Code mandating water-saving technologies in new buildings, landscapes and additions or alterations costing more than \$200,000. Responding to Mayor Garcetti's Executive Directive No. 5 ("Emergency Drought Response"), the Department of Building and Safety partnered with stakeholders to draft the most stringent water conservation measures in any big city in the U.S., which went into effect in June.

The new rules require a 20 percent reduction in indoor water use through the installation of more efficient plumbing fixtures and fittings. They also set water budgets for landscape irrigation to be consistent with statewide standards. New multi-family dwellings and commercial buildings larger than 50,000 square feet must include sub-meters, giving occupants an incentive to save water. Buildings must also be greywater-ready and use recycled water where available.



Photo credit: LA. Department of Water and Power

*"These are important steps toward creating a water-wise city far into the future. New buildings should reflect the 21st-century appreciation of water as a critical resource."*

**Mayor Eric Garcetti**

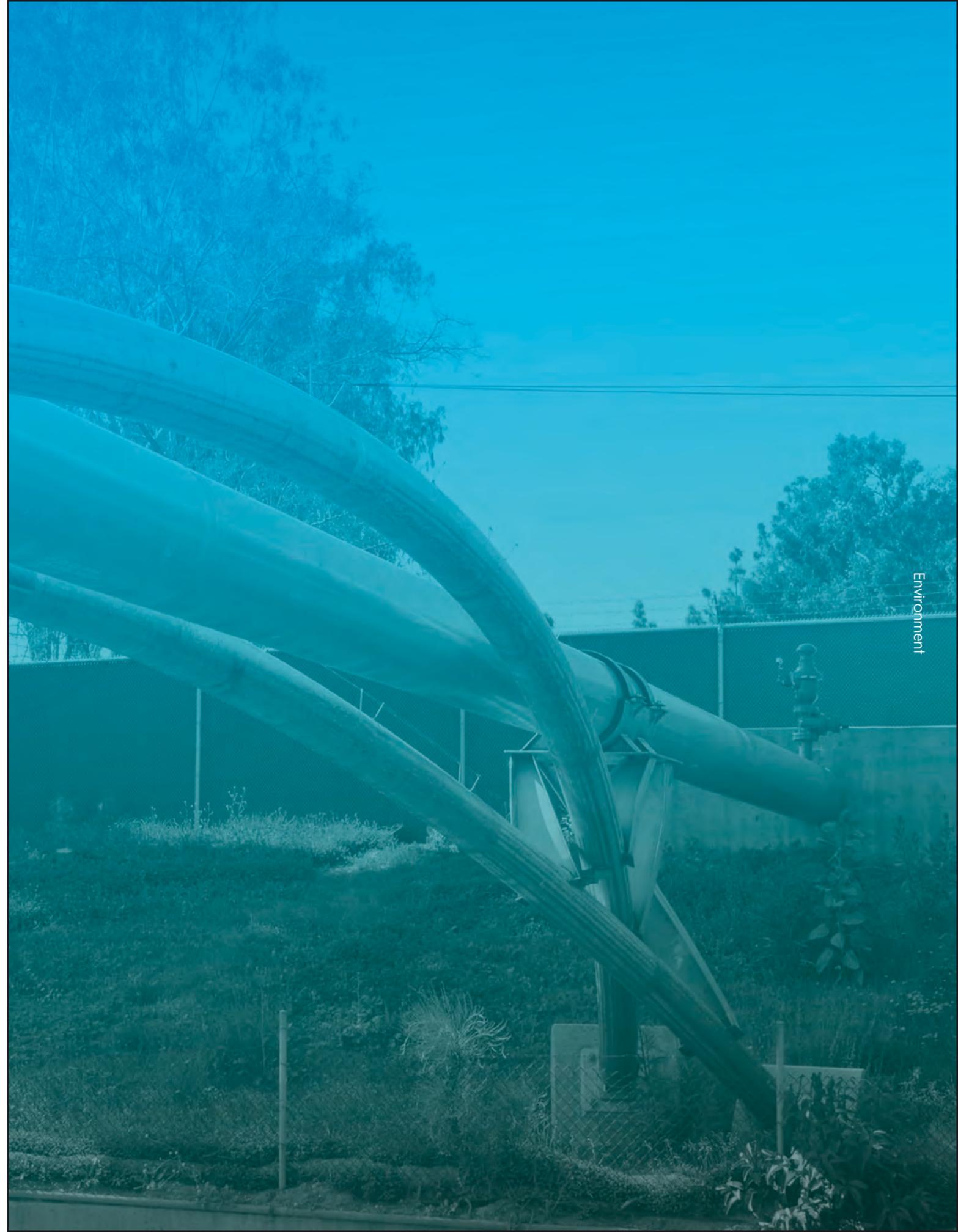
Environment

Environment

## How Much Water Did We Save?

Since November 2014, LA has saved 60.5 billion gallons of water. This is the equivalent to filling 91,700 Olympic-sized pools, which each contain 660,430 gallons of water.

(Source: L.A. Department of Water and Power, December 2016)





## City Wins



Photo credit: L.A. Department of Water and Power

### Encouraging 'Reasonable' Water Use and Sustainable Turf Removal

LADWP amended the City's Water Conservation Ordinance in May 2016, creating an Unreasonable Use of Water prohibition. The new rule incentivizes residents to conserve water or face hefty financial penalties. In September 2016, new rebate guidelines went into effect for Watershed-Approach Turf Removal, promoting sustainable landscaping by adding stormwater capture and other green requirements.

Environment



Photo credit: L.A. Department of Water and Power

### Pumping Out Free Recycled Water

Angelenos can now irrigate their trees and gardens with free recycled water from the City. So far, residents participating in the Residential Recycled Water Fill Station Pilot Program have received nearly 9,000 gallons of recycled water from the L.A. Zoo and L.A.-Glendale Water Reclamation Plant Fill Stations.

### H2O Number Cruncher

The City's new "Water Data Fellow" is developing tools to track stormwater capture and benchmark water use in municipal and commercial buildings. A public dashboard with updates on the City's progress toward its local water goals is also in the works. Funding for the one-year fellowship, a program of the Mayor's Fund for Los Angeles, comes from the S.D. Bechtel Jr. Foundation.



Photo credit: Jeremy Molayem



## Partner Wins



Photo credit: Nurit Katz

### Bruins Claim Victory in Water Reclamation

UCLA expanded its water reclamation program to 22 buildings, capturing clean water from air handling units, autoclaves and other systems for reuse as make-up water in cooling towers. Annual water savings currently stand at 28.6 million gallons, but continuing buildout of the system will add another 20 million gallons of savings annually by late 2017, making UCLA a model of water-wise efficiency.



Photo credit: L.A. Mayor's Office

### Many Drops in the Bucket

A fun, social media-driven competition invited Angelenos to showcase how they've saved water. Led by the Mayor's Fund for Los Angeles, and part of the Save the Drop campaign, the Drop Defenders competition rewarded one resident from each City Council district. Winners received a City Certificate, a Drop garden gnome, and other prizes from the L.A. Department of Water and Power.

Environment



Photo credit: Bureau of Sanitation

### A Stormwater Windfall in Watts

After years of litigation, the Natural Resources Defense Council, L.A. Waterkeeper and L.A. County agreed to a settlement addressing the high levels of pollution in stormwater flowing into the Los Angeles River. The deal calls for a \$2.8 million "green street" along 103rd Street in Watts, and \$1.2 million for small-scale stormwater capture, cleaning and reuse projects.

# Local Solar



Los Angeles enjoys an abundance of sunshine — 292 days a year, in fact. Collectively, Angelenos also own the largest municipal utility in the country. With these advantages, it's no wonder that the City's investment in solar is starting to pay off—generating clean power, reducing pollution, and creating jobs. In fact, jobs in the local solar industry in L.A. County now outnumber jobs in oil and gas drilling and refining combined. Today, Los Angeles has the most installed solar capacity of any American city and is committed to adding more solar infrastructure that drives innovation, creates local green jobs, and—when combined with back-up battery storage—offers grid reliability and keeps the city moving in the event of disaster.

Photo credit: Getty Images/53977181



We increase L.A.'s clean and resilient energy supplies by capturing the energy from our abundant sunshine.

## Progress on 2017 Outcomes

- ✓ **Reduce wait-time for residential solar PV interconnection to less than two weeks**

A minimum two-week wait-time was achieved ahead of schedule in March 2016, after L.A. Department of Water and Power (LADWP) streamlined and separated the processes for issuing solar permits and rebates\* and energizing new systems. Since the start of online PV permit issuance, 13,061 out of 23,237 PV permits were issued online.

(Source: LADWP, LADBS, January 2017)

(\*L.A. is the first city to enable smaller solar systems of 10 kW or less to be fast-tracked for interconnection via instant, online permitting; residential applicants are automatically entered in the queue upon submitting a rebate application, rather than waiting for a manual review.)

- ✓ **Launch a revised Integrated Resource Plan (IRP)\***

IRP process launched spring 2016 and concluded January 2017. It included several in-person advisory committee meetings with members representing ratepayers, large users, environment and clean energy, disadvantaged communities, and academia. The modelling of multiple IRP cases was the most comprehensive to date, with more scenarios modeled than any year past to include multiple options for increasing renewable energy, storage, and

electric vehicles, and decreasing reliance on natural gas. Public workshops were held in multiple locations in the fall in order to gather community input prior to making a final recommendation. LADWP's recommended case was announced in December for public comment and final IRP was presented to the Board in January 2017, which includes an RPS target that beats the state mandated 50%, higher levels of storage and vehicle electrification, and meeting the pLAn local solar goals.

(Source: LADWP, January 2017)

- ✓ **Upgrade Castaic Pumped-Storage Plant to accommodate intermittent renewable energy sources**

The Castaic upgrade has been completed, and accounts for 21 MW of the target set out in Assembly Bill 2514, a California law passed in 2010 requiring electric utilities to develop energy storage procurement plans.

(Source: LADWP, December 2016)

- ➔ **Increase total cumulative MW of energy storage capacity to 24 MW (excluding Castaic Pump-Storage Plant)**

Current storage capacity stands at 22.57 MW, which includes upgrades

to existing pumped hydro units, new thermal energy storage at LAX, and several behind-the-meter battery installations around the city. LADWP remains on track to meet 24 MW goal.

(Source: LADWP, December 2016)

- ➔ **Install at least 1 MW of solar on L.A. Convention Center roof**

Bids are currently under review with the planned installation increased to 2 MW, enough to power more than 550 homes.

(Source: L.A. Convention Center, December 2016)

- ➔ **Increase installed capacity of local solar photovoltaic (PV) power to 400 MW, with authority for an additional 200 MW**

Capacity reached 225 MW by end of January. Efforts to streamline permitting, cut interconnection wait-times, relaunch the FiT program, and rollout new solar incentives should bring capacity to 325 MW by late 2017.

(Source: LADWP, February 2017)

\*Launch a revised IRP process that includes in the 2015 and/or 2016 IRP a local solar scenario that achieves the long-term stretch goal outcomes. This scenario will include a robust analysis of reliability, pricing, overall greenhouse gas reductions, future RPS regulatory targets and definitions, and the potential need to shift away from planned investments in fossil fuel power generation. Technical studies on increased renewable penetration, commensurate renewable integration technologies, energy storage, and transportation electrification will be included in this IRP scenario.



## Feature Story

# City Sets New Record for Rooftop Solar

L.A. is now home to the largest rooftop solar installation in the country—a 2-million-square-foot array built atop four privately owned warehouses on Westmont Drive in San Pedro, adjacent to the Port of Los Angeles. With TruGreen Capital as the project developer, PermaCity teamed up with building owner Black Rock to lay down 16.5 MW of solar. Part of LADWP’s Feed-in-Tariff (FIT)

program, the Westmont project created 500 local green jobs, with a special focus on hiring veterans, and utilizes three different types of solar panels, including a double-sided design that captures up to 45 percent more power than conventional panels. When fully operational in early 2017, Westmont will generate enough clean electricity to power 4,500 Los Angeles homes.



Photo credit L.A. Department of Water and Power

*“The FIT program is a win for all parties and interests—it creates valuable jobs and compensates business owners while providing a huge environmental win of reducing greenhouse-gas emissions...and moving Los Angeles closer to its clean power generation goals.”*

**Jonathan Port**  
CEO, PermaCity

Environment

Environment

## Solar Grows by 25% in Past Year

Local solar in L.A. has grown by 25% over the past year. That’s equivalent to powering an additional 12,000 homes.

(Source: LADWP, February 2017)

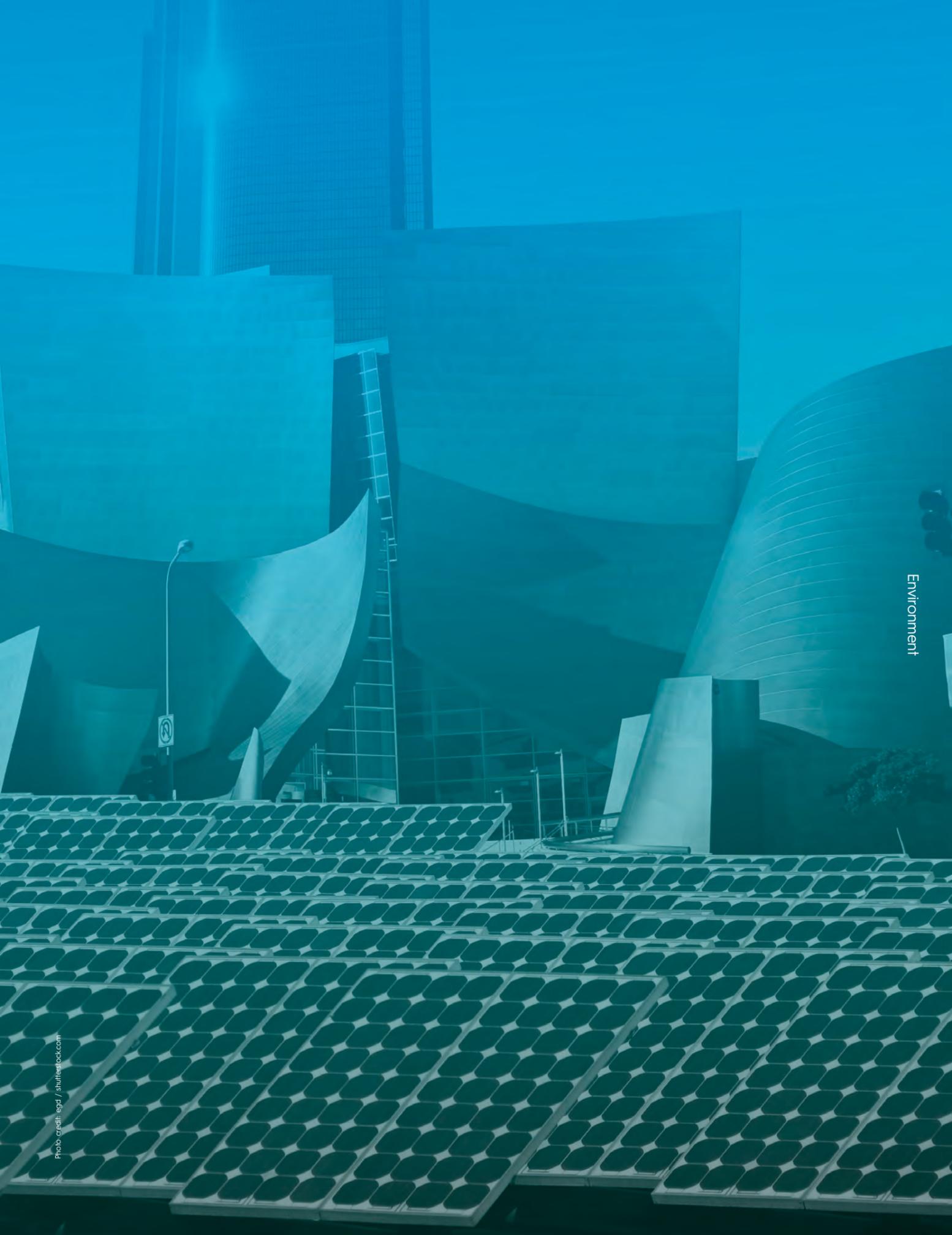


Photo credit: egd / shutterstock.com



## City Wins



Photo credit: L.A. Department of Water and Power

### Updated and Expanded Solar Incentive Program

Senate Bill 1, the legislation behind California’s \$288 million solar incentive program, sunset in 2016. But LADWP continues to incentivize net metered solar in 2017 with a remaining \$15 million. To encourage participation in areas with low solar penetration, the City now offers a 50 percent higher incentive in qualifying neighborhoods—mostly disadvantaged communities. In another tilt toward solar equity, all affordable housing projects are now eligible for the non-profit rate.

Environment



Photo credit: RePower LA

### Community Solar: Free Solar Rooftop Program

To bring solar savings to low-income Angelenos, LADWP announced its Solar Rooftops Program in January 2017. The three-year pilot program will install panels on 400 residential rooftops. With no up-front costs to customers and LADWP responsible for operation and maintenance of the installed panels, customers just see a credit on their electric bill. In addition, the program creates local jobs through LADWP’s Utility Pre-Craft Trainee Program.

### LADWP Offers New Energy-Conservation Incentive

As a direct response to the Aliso Canyon natural gas leak, LADWP launched SummerShift, a new demand response program, in June 2016. Over the summer months, LADWP gave large commercial and industrial customers a \$10 per kilowatt incentive to cut their power use between the critical hours of 3 p.m. and 5 p.m. The program paid out \$306,000 and saved 270 MW over the previous summer’s peak consumption levels.



Photo credit: L.A. Department of Water and Power



## Partner Wins



Photo credit: GRID Alternatives Greater Los Angeles

### Delivering Low-Income Solar

In 2016, GRID Alternatives Greater Los Angeles brought the benefits of free solar energy to 51 low-income families living in some of L.A.’s disadvantaged communities. Teams of GRID volunteers and job trainees donated 100 workdays to install solar electric systems on these families’ homes at no cost.



Photo credit: John Vande Wege, UCLA

### Renewables Roundtable Looks into California’s Future

UCLA’s Sustainable L.A. Grand Challenge hosted the Southern California Clean Energy Innovation Ecosystem roundtable in May 2016, where 28 leaders from academia, government, national laboratories, non-profits, and industry discussed the region’s immediate and long-term renewable energy needs and challenges with the Deputy Secretary of the U.S. Department of Energy. The meeting laid the groundwork for future collaborations on smart grid technology and energy storage, all key elements to decarbonizing L.A. and meeting the city’s greenhouse gas goals.

Environment

### PACE Speeding Up Solar for More Angelenos

More than 2,000 Los Angeles homeowners across the city have received rooftop solar systems through California’s Property Assessed Clean Energy (PACE) financing program since May 2015—saving \$63 million on their electric bills collectively over the life of their systems. PACE helps people who often don’t otherwise qualify for a loan to access clean energy, helping residents of all incomes go solar.

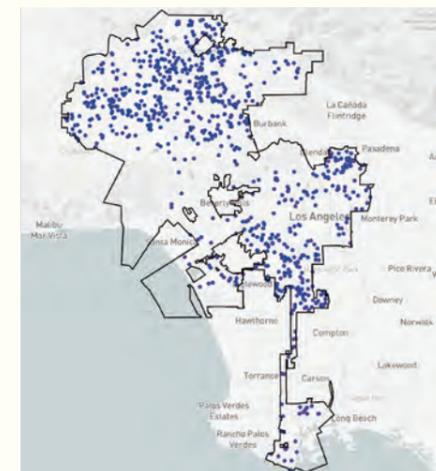


Photo credit: Renovate America

# Energy Efficient Buildings



Buildings are the City's largest consumer of electricity and a major source of greenhouse gas emissions. Cost-effective retrofits lower energy bills, create local green jobs and benefit residents in many ways. Energy-efficient buildings reduce L.A.'s contribution to global warming and create healthier, more comfortable spaces. Our mild climate enables us to significantly reduce energy consumption just by making our buildings more efficient, that's why we passed the most comprehensive energy and water efficiency for existing buildings ordinance in the U.S. L.A.'s vision is to significantly reduce energy consumption per square foot across all building types in the city.

Photo credit: <http://brighamyer.com/>



## We save money and energy by increasing the efficiency of our buildings.

### Progress on 2017 Outcomes

 **Avoid cumulative 1250 gigawatt-hours (GWh) of energy use through 2014-2017 thanks to efficiency programs**

L.A. Department of Water and Power (LADWP) energy-efficiency programs have saved 1,328 GWh of electricity through December 2016, exceeding the pLAN's 2017 outcome ahead of schedule. Total electricity savings are equivalent to annual needs of over 221,000 homes.

(Source: LADWP, December 2016)

 **Expand Los Angeles Better Buildings Challenge (LABBC) to 60 million square feet**

LABBC exceeded its 2017 outcome-- enough L.A. buildings to cover over 80 million square feet-- that is the equivalent of 80 Staples

Centers- are now committed to achieving 20% energy and water savings by 2020.

(Source: LABBC, January 2017)

 **Create benchmarking policy to monitor and disclose building energy-use**

A landmark, comprehensive benchmarking policy for existing buildings' energy- and water-use efficiency was signed into law in December 2016. Energy use data for municipal buildings is publicly available at [buildingefficiency.lacity.org](http://buildingefficiency.lacity.org).

(Source: Mayor's Office, December 2016)

 **Develop a policy package of audits and retro-commissioning to address energy consumption in the city's largest buildings (public and private)**

In December 2016 the City Council adopted the Existing Building Energy & Water Efficiency ordinance, the nation's most comprehensive energy and water efficiency law for existing buildings.

(Source: Mayor's Office, December 2016)

 **Retrofit 12,500 homes with residential Property Assessed Clean Energy (PACE) financing**

By year's end, 6,377 PACE projects were completed. Residential PACE started slowly, but continues to make progress toward the 2017 pLAN target.

(Source: Renovate America and California First, February 2017)

Environment

### Progress on 2025 Outcomes

 **Use energy efficiency to deliver 15% of all projected electricity needs by 2020, including through rebates, incentives and education**

LADWP has achieved 1,900 GWh in cumulative electricity savings since

2010-11, putting the City ahead of schedule to meet its 15% energy efficiency target for 2020 and saving nearly one million metric tons of CO2.

(Source: LADWP, January 2017)



## Feature Story

# Greening the Skyline

Two years ago, the City began exploring ways to reduce energy and water use from its largest consumers: buildings. The result is a policy that will transform L.A.'s skyline from the inside out. The Existing Building Energy and Water Efficiency ordinance (EBEWE) was signed into law by Mayor Garcetti on December 15, 2016. Under the new ordinance, all buildings larger than 20,000 square feet, and all municipal buildings larger than 7,500 square feet, must benchmark and publish their annual energy and water consumption levels. By creating transparency in the real estate marketplace, EBEWE lets buyers and renters

factor energy and water efficiency into their negotiations while helping the City understand the opportunities to help address consumption. The ordinance also requires owners of inefficient buildings to take specific action—from energy and water audits to retro-commissioning—that improves building performance. The City Energy Project, a joint initiative of the Natural Resources Defense Council and the Institute for Market Transformation, has estimated that by 2025 this ordinance alone will have reduced energy use by 7 percent, cut greenhouse gas emissions by 10 percent and saved Angelenos \$368 million on their annual utility bills.



Photo credit: L.A. Mayor's Office

*“Existing buildings in L.A. will never be the same. Thanks to EBEWE, buildings and their managers will be better stewards of the environment, be able to make smarter decisions around efficiency actions, save money, and make a transformative step forward to securing a sustainable future for Angelenos.”*

**Dominique Hargreaves**  
Executive Director  
United States Green Building Council – LA

Environment

Environment

## LADWP Delivers 2.4 million LEDs to Angelenos

2.4 million LED bulbs saves enough energy to power 3.2 million homes for a month. Last year, LADWP delivered two free LED bulbs to each of its 1.2 million residential customers. Those bulbs alone will save \$246 million dollars in customer payments and 1,640 gigawatt hours of energy, enough to power 3,280,000 homes for a month or 273,000 homes for a year.

(Source: based on LADWP estimates for average residential electricity consumption: 500 kWh/month, 6,000 kWh/ year)



Photo credit: egd / shutterstock.com



## City Wins



Photo credit: L.A. Mayor's Office

### Save Energy L.A.

In July 2016, Mayor Garcetti launched the Save Energy L.A. campaign, promoting energy conservation through helpful tips and rebate information. The campaign set a 5 percent energy-reduction target for municipal buildings during the months of August through October, a target the City came close to achieving in year one with a 3 percent dip in energy use.



Photo credit: Los Angeles Public Library

### Showcasing Real-Time Energy Monitoring

Last year, the Los Angeles Central Library was outfitted with Lucid's Building OS system. The platform lets the City monitor the library's energy-use in real time. To increase public awareness of consumption levels and potential savings, these live analytics will be on permanent display at the library entrance.



Photo credit: Bureau of Sanitation

### Better Plants Program

LADWP joined forces with the Bureau of Sanitation and the U.S. Department of Energy to identify energy saving opportunities in four water treatment and power plants. Industry experts analyzed and recommended performance improvements at each plant and City employees received training on implementation of specific energy-saving measures.



## Partner Wins



Photo credit: Informa

### Greenbuild Comes to Los Angeles and Leaves a Legacy

In October, the L.A. chapter of the U.S. Green Building Council (USGBC) hosted the nation's largest green-building conference and expo, drawing 500 exhibitors and 20,000 attendees. The host committee "greened" local hotels and businesses with free LEED certification gap assessments and unveiled the City's interactive LEED tracker, Eco-Map-L.A. The USGBC's Legacy Project gift to the city is building the Eco Tech Maker Space, dedicated to science, technology, arts and environmental education.



Photo credit: L.A. Department of Water and Power

### Upping Participation in Better Buildings

Last year, the L.A. Unified School District (LAUSD) was one of 20 new partners to join the L.A. Better Buildings Challenge (LABBC), bringing 170 properties and an additional 40 million square feet into the program. Eight multi-family-housing owners also signed on, folding 6,300 units and over 3 million kWh of expected annual electricity savings into the LABBC Affordable Housing Initiative. This is equivalent to saving over 1,500 metric tons of CO2.



Photo credit: Institute for Sustainability

### LADWP Brings on New Partners

The 2016 round of LADWP Community Partnership Outreach Grants brought five service organizations on board for increased energy efficiency outreach. Liberty Hill Foundation, Barrio Action Youth and Family Center, Pacific Asian Consortium in Employment, African American Leadership Organization and Clear Skies Ranch will use the grants to train businesses and residents, hold community events, run energy-saving workshops and launch media campaigns.

# Carbon & Climate Leadership



While cities contribute 70 percent of all greenhouse gas emissions, they are also leading the way on climate action and clean energy economy. The Sustainable City pLAN set out an ambitious vision for cutting greenhouse gas emissions, reducing the impact of climate change and building support for national and global initiatives. Los Angeles has moved to the forefront of climate innovation and leadership through bold actions on energy efficiency and electric vehicle as well as renewable energy and greenhouse gas accounting. L.A. has already reduced its greenhouse gas emissions by 20% below 1990 levels as of 2013, nearly halfway to our goal of 45% below by 2025. Mayor Garcetti's leadership of the Mayors National Climate Action Agenda has helped bring 75 cities together across the US to share successes, build political will for action, and work together on market transformation.

Photo credit: Gettyimages-53377191



As a proactive leader on climate issues, we strengthen L.A.'s economy by dramatically reducing greenhouse gas emissions and inspiring other cities to follow our lead.

## Progress on 2017 Outcomes

 Establish a pathway to derive 50% of L.A. Department of Water and Power's (LADWP) electricity from renewable sources by 2030

LADWP's 2015 Integrated Resource Plan (IRP) sets a path toward 50% renewable energy. The updated 2016 IRP scenario will beat the state mandate, hitting 55% renewable energy by 2030 and at least 65% by 2036.

(Source: LADWP, January 2017)

 Develop a comprehensive climate action and adaptation plan, including an annual standardized greenhouse gas (GHG) inventory

Expanding on the 2015 Climate Action Report, the Mayor's Office is developing pathways to meet 80% GHG reduction by 2050. L.A. was among the first cities to publish its GHG inventory (2013) in the C40/Compact of Mayors Global Protocol for Community-

Scale Greenhouse Gas Emissions Inventories (GPC) format, and will release 2014-15 inventories this year. The Resilient L.A. Strategy, set to launch in 2017, includes climate adaptation strategies and recommendations.

(Source: Mayor's Office, December 2016)

 Work with other cities to establish standardization of municipal and community-wide GHG inventory reporting in the U.S. and globally

Mayor Garcetti and former mayors of Philadelphia and Houston launched the Mayor's National Climate Action Agenda (MNCAA) to collaborate with cities, including on GHG inventory standardization nationally and internationally. This work has centered on the Compact of Mayors-adopted Global Protocol for Community-Scale Greenhouse Gas Emissions (GPC).

(Source: Mayor's Office, December 2016)

 Lead mayors of largest U.S. cities to sign onto the Mayor's National Climate Action Agenda

The MNCAA has grown to 75 member cities, representing 41 million Americans and including nine of the nation's 10 largest urban centers. The newest MNCAA members include Miami Beach, New Orleans, and Charlotte.

(Source: Mayor's Office, February 2017)

 Accelerate the decarbonization of the electricity grid, including ceasing delivery of power from Navajo Generating Station

With the July 2016 sale of LADWP's 21% share in Navajo Generating Station, Intermountain Power Plant remains the last coal-fired plant in the City's portfolio, now slated to close two years early, in 2025. LADWP has already reduced GHG emissions by 40% below 1990 levels, 13 years ahead of schedule

(Source: LADWP, January 2017)



## Feature Story

# LADWP Lays Out Bold New Path to Decarbonize L.A.'s electricity

LADWP's 2016 Integrated Resource Plan (IRP) charts an ambitious course for the City to move away from reliance on fossil fuels. This historic plan recommends that LADWP surpass the already ambitious, state-mandated renewable portfolio standard of 50 percent renewables by 2030 with a target of 55 percent by 2030 and 65 percent by 2036. The IRP demonstrates how DWP will cut the share of natural gas in its generation portfolio almost in half over 20 years while eliminating coal. It also sets out a clear course for meeting the pLAN's local solar and energy efficiency targets and exceeding targets for

energy storage and transportation electrification, thereby assuring better integration of renewables and electric reliability. The high electrification target alone is expected to decrease overall GHG emissions from the transportation sector by 38 million metric tons over 20 years, equivalent to taking 430,000 cars off the road each year. Even without the new IRP, LADWP is poised to reduce its GHG emissions to 40 percent below 1990 levels later this year, putting Los Angeles 13 years ahead of the state-mandated 2030 goal.



Photo credit: LA. Department of Water and Power

"L.A. Department of Water and Power will undergo an unprecedented transformation as we dramatically reduce carbon emissions while ramping up renewable energy, energy efficiency, battery storage, electric vehicle charging, and fostering other new technologies that support a clean energy future. The 2016 Power Integrated Resource Plan is our roadmap while continuing to provide reliable, low-cost electricity to our customers."

**David Wright**  
General Manager, LADWP

Environment

Environment

## 'Climate Mayors' Representing 38 Million Americans Urge President Trump to Act on Climate

In a letter to Donald Trump, Mayor Eric Garcetti and 70 other MNCAA mayors representing 38 million Americans- that's 12 percent of the U.S. population- reaffirmed their unwavering commitment to tackling climate change and urged the new president to join their efforts.





## City Wins



Photo credit: L.A. Department of Water and Power

### Barren Ridge Project Delivers Wind and Solar to the City

Construction crews completed the long-awaited Barren Ridge Renewable Transmission Project in September 2016, clearing the way for 1,000 megawatts of renewable wind and solar energy generated in the Tehachapi Mountains and Mojave Desert to power L.A. This complex engineering effort, including 62 miles of double-circuit transmission line, took eight years to plan, design and build. Barren Ridge is a major component of LADWP's IRP.



Photo credit: Office of Paul Krekorian

### City Council Greenlights a Fossil-Free Future

The City Council took a major step toward a green future when it threw its unanimous support behind a motion drafted by Councilmen Mike Bonin and Paul Krekorian. The motion, passed on September 16, 2016 calls for LADWP to assemble a team of academics, policymakers and technical advisors to create a roadmap for the path to a 100 percent renewable-powered city.



Photo credit: EPNAC.com

### Carbon Emissions Begin Their Descent at LAX

In September 2016, Los Angeles World Airports (LAWA) pledged to reduce GHG emissions from LAWA-owned and -controlled sources to 45 percent below 1990 levels by 2025, 60 percent below by 2035, and 80 percent below by 2050. This commitment qualifies LAX for Level 2 Airport Carbon Accreditation, the global standard awarded by the Airports Council International.



## Partner Wins



Photo credit: California State University, Los Angeles

### CSULA Takes Climate Action

Cal State Los Angeles (CSULA) signed on to Second Nature's Climate Commitment, endorsing the group's vision of integrating carbon neutrality with climate resilience and a systems approach to mitigation and adaptation. As a signatory, CSULA has committed to developing a comprehensive climate action and adaptation plan, including a joint campus-community resilience assessment and roadmap to carbon neutrality.



Photo credit: Nicolas Kaviani, NK Artography

### Teaching Neighbors to Care About Clean Energy

The Environment California Research & Policy Center kicked off a public education effort last summer promoting 100 percent renewable energy across the Southland. The group distributed literature to more than 68,000 households in Los Angeles and surrounding communities, demonstrating how ordinary citizens can help the city transition from dirty fuels to a clean-energy future.



Photo credit: Erica Hart

### Cool Blocks Engage L.A. Neighborhoods

Last year, the Neighborhood Council Sustainability Alliance (NSCA) launched Cool Blocks L.A., a one-year pilot program promoting climate- and water-friendly, disaster-resilient neighborhoods. Backed by \$150,000 in project funding from the City, NCSA-sponsored teams representing 29 neighborhoods and 10 Council Districts are now assessing household carbon footprints and taking action to reduce them by at least 25 percent.

# Waste & Landfills



Every household and business in the city generates waste, and our local landfills are filling up. By managing our waste in a smarter way through recycling and reusing materials such as packaging, food waste, and old electronics, we can turn this problem into an opportunity. Embracing resource recovery will provide opportunities for Los Angeles to use new technologies and methods, propelling us toward a cradle-to-cradle future, where most waste is ultimately reused locally rather than exported elsewhere. Recovering materials from the waste stream and reusing them locally will decrease our need for diminishing resources and stimulate green-job growth.

Photo credit: Thanaphol Kitchapboon / shutterstock.com



L.A. becomes the first big city in the U.S. to achieve zero waste, and recycle and reuse most of its waste locally.

## Progress on 2017 Outcomes

**✓** Designate a site and project parameters for an anaerobic digestion facility with at least 50 tons of capacity to process local organic waste

The Central L.A. Recycling and Transfer station (CLARTS) was selected to process 150 tons of commercial food waste a day, and an engineering study currently in its final stage will pave the way for the implementation of anaerobic digestion at Hyperion Water Reclamation Plant. The anaerobic digestion facility is expected to be operational in 2020.

(Source: Bureau of Sanitation, December 2016)

**✓** Implement a waste franchise system to increase commercial recycling rates, reduce pollution from heavy-duty waste-hauling vehicles, and enhance material recovery opportunities to reach an 80% diversion rate by 2020

The new waste franchise system, launching in July 2017, will increase the recycling rate to 90 percent by 2025. Cleaner air collection vehicles and optimized routing will reduce emissions while improving customer service.

(Source: Bureau of Sanitation, December 2016)

**➔** Expand local organic waste-collection program

Zero Waste L.A. has begun an effort to collect “green bin” organics from food service establishments, while the Bureau of Sanitation is expanding its capacity to donate edible foods. When the program begins in mid-2017, it will divert 124 tons of organic material per day.

(Source: Bureau of Sanitation, December 2016)

Environment

## Progress on 2025 Outcomes

**➔** Increase landfill diversion rate to at least 90% by 2025 and 95% by 2035.

The landfill diversion rate currently stands at 76.4 percent. By 2019, the Bureau of Sanitation will conduct a comprehensive waste characterization study to identify areas where the City can improve waste diversion.

(Source: Bureau of Sanitation, December 2016)

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

The Bureau of Sanitation is negotiating a contract with Zero Waste L.A. haulers in order to allow blue bin commodities to

stay local. The Recycled Materials Development Zone will help businesses that can use recycled materials find city sites and funding.

(Source: Bureau of Sanitation, December 2016)



## Feature Story

# Zero Waste L.A. Goes Live

In 2016, Los Angeles became the nation’s largest city to adopt a plan to move toward zero waste. Under the \$3.5 billion Zero Waste L.A. Franchise System, which is the largest commercial franchise in the U.S., 11 commercial waste franchise zones will be served by seven contract haulers, each collecting solid waste from all commercial, industrial and multi-family customers in that zone, and submit monthly tonnage reports by waste stream.

The new system advances the pLAN’s goal of diverting 90 percent of waste from landfills by 2025, and becoming a zero waste city by 2035.

Program goals include reducing landfill disposal by 1 million tons annually by 2025, setting transparent and predictable solid-waste and recycling service rates, investing more than \$200 million in local waste-management and recycling infrastructure, and putting more clean-fuel solid waste collection trucks on L.A. streets. The ambitious plan has the backing of Don’t Waste L.A., a coalition of environmental, community, faith-based and workers’ rights groups dedicated to improving the commercial waste hauling system. The 10-year contracts start July 2017.



Photo credit: Bureau of Sanitation

**“By bringing together community, environmental and worker rights organizations, Don’t Waste L.A. proved that real change begins at the local level. This local coalition has achieved tremendous environmental benefits for all Angelenos.”**

**Robert Nothoff**  
Director, Don’t Waste LA

## Waste Diversion’s Important Greenhouse Gas Benefit

By 2025, Zero Waste L.A. will divert 1.1 million tons of waste from landfills annually, eliminating more than 2 million metric tons of GHG emissions. That’s the equivalent of taking 440,308 cars off the road annually.

(Source: EPA GHG Equivalencies Calculator)



Environment

Environment

Photo credit: ego / shutterstock.com



## City Wins



Photo credit: Bureau of Contract Administration

### Diversion Rate of Construction Waste Skyrockets

Last year, 8,360 tons of asphalt and 5,293 tons of concrete were diverted from landfills. That's an average diversion rate of 80 percent—significantly better than the pLAN target of 65 percent. The Bureau of Contract Administration requires contractors to submit monthly reports on the construction waste they collect and the recycling facilities where they deliver waste.



Photo credit: Bureau of Sanitation

### Cloud-based Tech Means Quicker Cleanups

Reporting potholes, illegal dumping and other nuisances got a whole lot easier, faster and cheaper as the Bureau of Sanitation rolled out SANSTAR. The cloud-based app uses geographic information system (GIS) technology to pinpoint and respond to complaints in real time. City analysts also use GIS data to red-flag chronic illegal dumping sites and fine-tune scheduled cleanups.



Photo credit: Bureau of Street Services

### Turning Asphalt Green

Asphalt recycling made inroads in Los Angeles last year, as the Bureau of Street Services broke ground on the City's Asphalt Plant 1 Modernization Project. The modernized plant, set to open in late 2018, will produce 700,000 tons of asphalt with 50 percent recycled content annually. Recycling old asphalt reduces landfill waste and cuts emissions related to transporting rocks and sand from quarries.



## Partner Wins



Photo credit: USC Sustainability

### Zero Waste Scores Big Win at Coliseum

Los Angeles Memorial Coliseum, partnering with USC Sustainability, became the largest NFL stadium and second-largest college stadium to meet the "zero waste" standard by repurposing more than 90 percent of the trash generated by 1.2 million patrons last year. That's 233 fewer tons of waste in City landfills—enough to fully load nine 53-foot semi-tractor trailers.



Photo credit: Informa

### Greenbuild Expo Hits 90-percent Waste-diversion Mark

Organizers of Greenbuild resolved to practice what they preach when L.A. hosted the world expo last October. By adding compost bins, recruiting haulers for the new waste stream, and tweaking the back-of-house sorting process, they achieved a record-breaking 90.03 percent waste-diversion rate. That's 18 percent better than the L.A. Convention Center's baseline of 72 percent diversion.



Photo credit: L.A. SHARES

### Finding New Uses for Used Things

Last year L.A. SHARES handed over 3.2 million pieces of used office furniture, business electronics, office supplies, arts and crafts materials, and personal care products to 1,200 City schools and nonprofit organizations. The free stuff didn't just benefit thousands of needy and deserving recipients, it also diverted more than 1 million pounds of materials from City landfills.

# Housing & Development



Los Angeles has the nation's largest population of chronically homeless people—13,000, according to the U.S. Department of Housing and Urban Development. Ninety-five percent of them live outdoors—in cars, tents and encampments. Housing availability and affordability are among the most visible and important economic issues facing the City today. The pLAn aims to ease housing costs, lower utility bills, promote appropriate development, encourage housing around transit and increase the production and preservation of affordable units. Together, these steps benefit all Angelenos.

Photo credit: tharaphol.kitchapboon / shutterstock.com



We address L.A.'s housing shortage, ensure that most new units are accessible to high-quality transit, and close the gap between incomes and rents.

## Progress on 2017 Outcomes

 Issue permits for 17,000 new units of housing within 1,500 feet of transit

The City permitted 15,006 new housing units within 1,500 feet of transit as of December 15, 2016. This puts L.A. on track to beat its goal.

(Source: Department of Building and Safety, December 2016)

 Increase the combined amount of federal, state and local funds dedicated annually to affordable housing development by at least 33% compared to 2014 levels

Funds doubled in 2015. With passage of Measure HHH in 2016, the City can issue \$1.2 billion in housing bonds. This source alone increases annual affordable housing funds by 263% over next decade.

(Source: Housing and Community Investment Department, February 2017)

 Minimize the loss of existing affordable housing units through density bonus revision and implementation of Assembly Bill 2222

The Housing and Community Development Department implemented Assembly Bill 2222, requiring one-for-one replacement of affordable, rent-stabilized housing when using the density bonus program.

(Source: Housing and Community Investment Department, December 2016)

Economy

## Progress on 2025 Outcomes

 Increase cumulative new housing unit construction to 100,000 by 2021

Over 50,000 new units permitted as of July 2013, putting L.A. 50% of the way to 2021 goal.

(Source: Department of Building and Safety, December 2016)

 Ensure proportion of new housing units built within 1,500 feet of transit is at least 57% by 2025

56% of new housing development was built within 1,500 feet of transit in 2016.

(Source: Department of Building and Safety, December 2016)

 Reduce by 10% the number of rent-burdened households by 2025

While the percentage of rent-burdened households dropped from 61.7% to 60.7% between 2012 and 2015, the actual incidence of rent burden rose from 494,736 to 504,034 households, a 1.8% increase.

(Source: American Community Survey, 2015)



## Feature Story

# Cap-and-Trade Fuels L.A. Housing Fixes

Nearly \$64.6 million in California greenhouse gas cap-and-trade revenue is headed for Los Angeles, earmarked for six environmentally friendly affordable housing projects. The funds come from California's new Affordable Housing and Sustainable Communities program, overseen by the California Strategic Growth Council. Over the past two years, the City has received almost \$100 million through this innovative program, which supports housing and transportation projects to reduce greenhouse gas emissions through mixed-use designs that encourage

walking, bicycling and the use of mass transit. The \$64.6 million awarded to the City of Los Angeles is the largest sum for any jurisdiction in the state. In 2015, Mayor Garcetti successfully lobbied to lift a prior \$15 million ceiling on awards. The new funding provides gap financing for four permanent supportive housing developments (348 units) for formerly homeless Angelenos and two affordable housing complexes (205 units) for low-income residents.

**"Affordable housing development can be about more than building four walls and a roof for people who need them. It can also give everyone—regardless of income—a chance to be part of L.A.'s green, connected future."**

**Mayor Eric Garcetti**



Photo credit: Los Angeles Housing + Community Investment Department

## City has Permitted over 50,000 Housing Units in 3 Years

The City has permitted more than 50,000 new units of housing in 3 years, an average of nearly 14,000 units a year. That means 38 new homes a day to help increase affordability

(Source: Department of Building and Safety, December 2016)



Economy

Economy





## City Wins



Photo credit: Department of City Planning

### Affordable Housing Gets Fast-tracked

Last year the Department of City Planning launched its Priority Housing Project (PHP), offering streamlined processing services to qualified affordable housing projects (i.e. minimum 20 percent rent-controlled). Twenty developments—for a total of 1,883 units—were filed last year and are now being monitored through PHP. The Mayor’s Executive Directive 13 Quarterly Report tracks progress.

Economy



Photo credit: Los Angeles Housing + Community Investment Department

### Getting the Word Out on Rent Stabilization

In May, Mayor Garcetti joined Los Angeles housing inspectors on a systematic code enforcement check of a multifamily rental property. The visit marked the kickoff of the City’s Rent Stabilization Ordinance (RSO) Awareness campaign. During the inspection, the Mayor personally delivered RSO literature to residents and touted the L.A. Housing and Community Investment Department’s “Gateway to Green” conservation efforts.

### New Rules for Tenant Buyouts

Los Angeles came one step closer to curbing its housing affordability crisis when Mayor Garcetti signed into law the Tenant Buyout Ordinance. The measure requires landlords to inform residents of their relocation rights. Previously, renters could be offered a lump sum to vacate units without any mention of other options. Landlords must now file buyout agreements with the City, and tenants have 30 days to withdraw from the deal.



Photo credit: Los Angeles Housing + Community Investment Department



## Partner Wins



Photo credit: Los Angeles Housing + Community Investment Department

### A Boon for Housing the Homeless

Proposition HHH authorizes the City to issue up to \$1.2 billion in general obligation bonds to finance up to 10,000 affordable housing units to end chronic homelessness. The funds target supportive housing for the homeless, affordable units for very low-income Angelenos at risk of becoming homeless, temporary shelters, storage and shower facilities, and related infrastructure.

### Excellence in Sustainable Supportive Housing

The Washington D.C.-based Hanley Foundation honored the Skid Row Housing Trust with its 2016 Hanley Award for Community Service in Sustainability. The honor, which comes with a \$25,000 prize, recognizes excellence in the host city of the annual Greenbuild expo. The trust earned special praise for its innovative Star Apartments, winner of a 2016 American Architecture Award from the Chicago Athenaeum and European Centre for Architecture.



Photo credit: Skid Row Housing Trust

### Rolling Out the ‘Welcome Home’ Mat

Homeless Angelenos are not a statistic—they’re real people with stories, families and dreams. The Welcome Home Project (WHP), a new effort spearheaded by Mayor Garcetti and supported by Lyft, the Honest Company, Uber and others, promotes a cultural shift toward greater compassion. WHP hosts private and public gatherings where guests assemble housewarming baskets for homeless neighbors. Welcome Home baskets were delivered to 1,000 displaced families in 2016.



Photo credit: LA Mayor’s Office

Economy

# Mobility & Transport



Rush-hour traffic and congestion are an unfortunate part of Los Angeles' image, and present significant quality-of-life and economic challenges. A new transit network being built out in L.A. is beginning to change that image. Thanks to voters across L.A. County, the transformative Measure M will provide \$120 billion for transportation projects over the next 40 years, including the complete build-out of a world-class transit network. That's important as L.A. is expected to add 500,000 more residents over the next 20 years. Other pLAN targets are being advanced via City of L.A. and private sector investments in EV car share, bicycling, walking, as well as the convergence of residential and communal life around mobility hubs and Great Streets.

Photo credit: Thanaphol Kichanphoon / shutterstock.com



We invest in rail, bus lines, pedestrian/bike safety, and complete neighborhoods that provide more mobility options and reduce vehicle miles traveled.

## Progress on 2017 Outcomes

✔ Complete L.A. County Metropolitan Transportation Authority (L.A. Metro) regional integrated bike share system plan

The Bike Share Regional Implementation Plan was adopted June 25, 2015 and implementation is ongoing.

(Source: L.A. Metro Regional Bike Share Implementation Plan, 2015)

✔ Establish bike share system in L.A. starting with at least 65 stations and 1,000 bikes

Since July 2016 launch, 1,090 bikes have been deployed at 65 stations.

(Source: L.A. Metro Countywide Sustainability Annual Report, 2016)

✔ Introduce multimodal connections at 10 rail stations

L.A. Metro completed multimodal connections at 10 rail stations, including 42 car share vehicles via Zipcar.

(Source: L.A. Metro Countywide Sustainability Annual Report, 2016)

Economy

## Progress on 2025 Outcomes

➤ Reduce daily vehicle miles traveled (VMT) per capita by at least 5% by 2025

L.A. is transitioning to VMT in its travel demand forecasting model, used to measure environmental impacts. This is a critical step toward reducing VMT per capita.

(Source: L.A. Department of Transportation)

➤ Increase percentage of all trips made by walking, biking or transit to at least 35% by 2025

Measure M will fund new transit lines, improvements to existing lines and continued bus and rail maintenance and operations. Programs and policies to reduce VMT continue. Vision Zero and Great Streets programs promote walking and biking safely.

(Source: Southern California Association of Governments using 2012 data)

➤ Increase number of trips through shared services, including car share, bike share and ride share to at least 2% by 2025

Since pLAN adoption, the City has launched a car sharing pilot for disadvantaged communities and a bike sharing program in downtown L.A., as well as private-sector EV car sharing.

(Source: CalTRANS using 2012 data)



## Feature Story

# Voters Pass Measure M for Historic Investment in Transit and Mobility

Angelenos spent an average of 104 hours stuck in traffic in 2016. With the population growing and more cars on the road, L.A. County voters signaled their support for increased and improved transportation options by passing Measure M with an overwhelming 71.2 percent majority. Led by Mayor Garcetti, the successful ballot initiative creates a half-cent sales tax to raise \$120 billion for transportation improvements over the next 40 years. Implementation of the resulting Los Angeles County Traffic Improvement Plan will fund 38 major transportation projects, including digging out a transit

tunnel under the Sepulveda Pass, extending the foothill Gold Line to Claremont, finishing the Purple Line subway to Westwood and the Crenshaw Line to LAX, running a new light rail from Artesia to Union Station and improving the Orange Line Bus Rapid Transit in the San Fernando Valley. Measure M also provides new resources for fixing potholes, building bikeways and upgrading L.A. Metro and Metrolink operations and maintenance. Taken together, these projects are expected to reduce traffic delay by 15 percent while creating 465,000 jobs in the region—a significant boost to the economy.



Photo credit: L.A. Mayor's Office

**“This is the boldest, most comprehensive transportation investment initiative in North America.... Among our chief goals is to create an infrastructure inheritance for our children and theirs.”**

**Phillip A. Washington**  
 CEO  
 Los Angeles County Metropolitan Transportation Authority

## DTLA Bike Share Riders Burn 6,491,010 Calories

With the rollout of up to 1,090 bicycles and 65 docking stations across downtown, Angelenos are reaping health and mobility rewards as the city sees less traffic and cleaner air. The result of the 90,987 trips and 113,000 rides using bike share (as of 12/31/2016): 234,281 miles traveled; 222,567 pounds of CO2 emissions reduced; and 6,491,010 calories burned.



Economy

Economy





## City Wins



Photo credit: Los Angeles World Airports

### New Milestone for LAX People Mover

Angelenos will have new and better ways of reaching the airport as the Landside Access Modernization Program (LAMP) gets approved. A draft environmental impact report released in 2016 paves the way for an automated people mover system (APM) linking LAX to the L.A. Metro rail system. The six-station APM will service two “intermodal transportation facilities” for easy passenger pick-up and drop-off away from congested terminals.



## Partner Wins



Photo credit: L.A. Mayor's Office

### Bike Sharing Pedals into Downtown

The City's first bike sharing pilot rolled into downtown last year with a fleet of 1,090 bicycles, 65 multi-unit docking stations, and over 90,000 trips taken. This makes L.A.'s bike share the biggest system in the county. Phase two of the \$11 million program – a joint effort of L.A. Metro and LADOT – will add 300 more bikes and 11 additional stations by July 2017. Future expansions are slated for the Venice, Hollywood and USC neighborhoods.

Economy



Photo credit: Department of City Planning

### Mobility Hubs Move Ahead

Transit stations come in different shapes and sizes, and the City has released a guide to help Angelenos navigate them all. *The Mobility Hub Reader Guide* is a primer on the amenities passengers can expect to find at different categories of “Mobility Hubs” – for example, real-time arrival information, EV chargers, bike sharing, Wi-Fi service, retail stores and green spaces.



Photo credit: Metro

### Crenshaw/LAX Line Passes Midpoint

L.A. Metro's Crenshaw/LAX Line celebrated its “halfway there” milestone with community events aimed at raising awareness of the light rail project. The route, which is expected to be operational in 2019, will link the nation's third-busiest airport to L.A.'s growing transit network. The first of the twin tunnels for the underground section was completed in October 2016.

Economy



Photo credit: Los Angeles Department of Transportation

### Mapping L.A.'s Transportation Future

In 2016, the Los Angeles Department of Transportation released the City's first transportation technology strategy, *Urban Mobility in a Digital Age*. It prepares L.A. for big changes: fleet electrification, shared mobility and the advent of automated vehicles with on-demand services for smart transit options. With 30,000 sensors, 4,500 signals and 500 cameras already sharing transit data, the city is poised for an interconnected driverless future.



Photo credit: Chun Leung

### Green Locomotives Make Their First Whistle Stop

Metrolink has brought three Tier 4 locomotives into service, and 37 more are slated for phase-in by 2018. The powerful, fuel-efficient engines will gradually replace Metrolink's aging diesel fleet at a total cost of \$280 million. Tier 4s emit 85 percent less air pollution than the older engines while delivering 57 percent more horsepower.

# Prosperity & Green Jobs



Green jobs are the backbone of a sustainable city. Whether it's installing solar panels, weatherizing homes, farming organics or building new rail lines, these jobs improve the lives of everyone they touch. Prosperity through green jobs is a major goal of the City's drive toward sustainability. Done right, it can yield triple returns—bringing economic benefits even as it improves equity and strengthens the environment. The City has already passed a landmark minimum-wage law. The pLAN sets goals for increasing the number of green jobs through water and energy efficiency, solar and transit investment, while improving our national and global competitiveness in the clean-tech sector.

Photo credit: Thanaphol Kitamphoon / shutterstock.com



## Vision

We strengthen and grow our economy including through increased green jobs and investments in clean technology sectors.

### Progress on 2017 Outcomes



**Attract \$100 million of private-sector investment through the L.A. Cleantech Incubator**

LACI portfolio companies raised \$121 million through the end of 2016.  
(Source: Los Angeles Cleantech Incubator, January 2017)



**Increase minimum wage to \$13.25/ hour**

The first of six annual step-increases toward a \$15 minimum

wage went into effect July 2016.  
(Source: Bureau of Contract Administration, July 2016)



**Achieve annual parity between incoming and outgoing entitlement cases (i.e. no additional case backlog)**

The Department of Planning has nearly achieved parity, processing 96% of entitlement cases from 2016.  
(Source, L.A. Department of City Planning, January 2017)



**Create 20,000 green jobs**

21,036 green jobs were created in Los Angeles through January 2017, achieving the Mayor's goal nearly one year ahead of schedule.  
(Source: L.A. Mayor's Office, January 2017)

Economy

### Progress on 2025 Outcomes



**Reduce the unemployment gap between City of LA and LA County to .35%**

By the end of 2016, the unemployment rate gap between the City and County had been reduced to 0.2%.  
(Source: Bureau of Labor Statistics and California Development Employment Department, January 2017)



**Increase green jobs in L.A. by at least 72,500**

Based on current rate of green job creation from investment in the energy efficiency, solar, water, recycling, and transit sectors-- including the recently passed Measure M-- we are on track to meet our 2025 target.  
(Source: L.A. Mayor's Office)



## Feature Story

# Cleantech Flourishes in Arts District

The Los Angeles Cleantech Incubator (LACI) celebrated its new home last October with the grand opening of the La Kretz Innovation Campus (LKIC). The 3.2 acre campus is designed as a space where entrepreneurs, engineers, scientists and policymakers can collaborate and promote and support the development of clean technologies and L.A.'s green economy. The centerpiece of LKIC, located at 5th and Hewitt Streets in the dynamic Arts District of Downtown Los Angeles, is a fully renovated 60,000-square-foot, LEED Platinum-designed building.

The facility features state-of-the-art green technologies such as a 175-kilowatt photovoltaic solar canopy, level 2 EV charging stations, bioswales that naturally filter storm water into the ground, a greywater filtration system and islandable microgrid capability. Owned by the Los Angeles Department of Water and Power, the La Kretz Innovation Campus also houses collaborative workspace, an advanced prototyping center, a training center, event space and LADWP laboratories.



Photo credit: L.A. Mayor's Office

*"The La Kretz Innovation Campus embodies the ambition and forward thinking that make Los Angeles a world center for green industry. This campus will foster innovation, create jobs, and set an example for cities everywhere."*

**Mayor Eric Garcetti**

Economy

Economy

# Over 20,000 New Green Jobs Boosts Employment

141,287 jobs were created over the last three years, including over 21,000 green jobs — that's nearly 4,000 new jobs a month. This has contributed to reducing the employment gap between the City and County of Los Angeles to a new low.

(Source: L.A. Mayor's Office)





## City Wins



Photo credit: smartmanufacturingcoalition.org

### Clean Energy Institute Lands in L.A.

The U.S. Department of Energy chose Los Angeles for the headquarters of its new, \$70 million grant-funded Clean Energy Smart Manufacturing Innovation Institute, tasked with spurring advances in smart sensors and digital process controls to improve the efficiency of advanced manufacturing. Run by UCLA and housed in a municipal facility in the Promise Zone, the institute will bring \$140 million in public-private investment to the City.



## Partner Wins



Photo credit: Los Angeles Cleantech Incubator

### LACI Spearheads Regional Clean Energy Network

In August, Los Angeles Cleantech Incubator won a \$5 million grant from the California Energy Commission to establish a regional energy innovation cluster. One of four clusters statewide, the new Los Angeles Regional Energy Innovation Cluster is tasked with supporting the region's clean energy entrepreneurs and connecting them with the critical business and technical services needed to bring ideas to market.



Photo credit: Tesla Foundation, Workforce Development Board City of Los Angeles, Los Angeles Community College District

### Drone Tech Program Takes Flight

A groundbreaking program is set to train Angelenos to build, pilot and monitor a growing fleet of drones filling the nation's skies. The L.A. Workforce Development Board invested \$300,000, partnering with the L.A. Community College District and Tesla Foundation to create this first-of-its-kind training program at East Los Angeles College. Students take courses in cinematography and photography, real estate, security, emergency response, agriculture, surveying, and unmanned aerial vehicle programming and maintenance.



Photo credit: Ashley Perez, GRID Alternatives Greater Los Angeles

### GRID Giving Trainees a Leg-up in Green Jobs

GRID Alternatives Greater Los Angeles isn't just greening people's homes, it's also creating meaningful green-job opportunities for people in the communities they serve. In 2016, the non-profit trained 814 volunteers in the Greater Los Angeles area to install solar systems, resulting in the installation of 203 systems for local low-income homeowners. Seventy-one of those trainees have found permanent jobs in the solar industry.

Economy

Economy



Photo credit: L.A. Mayor's Office

### Taking the Guess-work Out of Minimum-wage Compliance

The Office of Wage Standards implemented the City's minimum-wage enforcement program—easing transition to the first incremental increase July 2016, and smoothing the way for the full \$15 minimum wage that comes into force in 2021. A key accomplishment was creation of an on-call list for community outreach services, including multilingual consultants and support materials in a dozen languages.



Photo credit: Los Angeles Cleantech Incubator

### All-Electric Roadrunners

Hollywood Electrics has sold more electric motorcycles than any other dealership in the world, helping the Burbank Police Department transition to an all-electric motorcycle fleet. These low-maintenance, gas-free two-wheelers can hold a charge for up to 185 city miles in range. The company, which is affiliated with the L.A. Cleantech Incubator, has developed expertise in building EV performance kits, which improve the range, acceleration, top speed, handling and technology integration of the electric vehicles.

# Preparedness & Resiliency



Los Angeles is susceptible to increasingly frequent and intense natural- and human-caused shocks and stresses. We must continue preparing for more climate disruption, bigger wildfires, longer and hotter heatwaves, rising sea levels, and stronger earthquakes. It's not a matter of if, but when. We need distributed water solutions to boost local supplies—ones that can be easily accessed in times of crisis. We need integration of grid-tied, solar-powered backup systems to keep critical infrastructure like hospitals and fire stations running. And we need to deploy multiple strategies to protect Angelenos from extreme urban heat. Having proactive solutions at the ready is an absolute necessity for the environmental, social, and economic prosperity of the city.

Photo credit: L.A. Department of Water and Power



We are prepared for natural disasters, and we decrease our vulnerability to climate change.

## Progress on 2017 Outcomes

- Implement enhanced mass notification system to incorporate mobile phones and alerts**

L.A.'s official mass emergency notification system, now called NotifyLA, securely alerts residents and businesses via voicemail, text messages and emails. Nearly 90,000 subscribers have signed up to receive alerts and preemptive warnings on landlines and mobile devices.

(Source: Emergency Management Department, January 2017)

- Pilot installation of "cool slurry" pavement**

After an initial parking lot pilot was completed in 2015, the L.A. Bureau of Street Services (BSS)

staff training for the on-road application phase of the project began in November 2016. Fifteen first-of-their-kind pilot projects are due to begin in April 2017, with one 7500-to-10,000-square-foot installation, primarily in cul-de-sacs, planned for each city council district.

(Source: Bureau of Street Services, December 2016)

- Develop comprehensive climate action and adaptation plan**

An analysis of additional climate pathways to achieve 80 percent greenhouse gas reduction by 2050 is set to begin in 2017. A new Resilience Strategy Working Group on climate adaptation was formed in 2016 and will inform strategies recommended in forthcoming

Resilience Strategy, due for release in 2017. These actions address the pLAN outcomes, strategies, and initiatives for L.A.'s climate action and adaptation plan.

(Source: L.A. Mayor's Office)

- Install 10,000 new cool roofs**

Since an ordinance went into effect in 2015, nearly 7,000 residential cool roofs have been installed, covering about 10 million square feet and saving about 4.5 million kilowatt hours annually — enough to power 750 L.A. homes. L.A. Department of Water and Power (LADWP) has issued \$430,000 in rebates.

(Source: LADWP January 2017)

Economy

## Progress on 2025 Outcomes

- Reduce urban/rural temperature differential by at least 1.7°F in 2025 and 3.0°F in 2035**

Top experts from a dozen universities, non-profits, and government agencies gathered for a July 2016 Urban Heat Island and Extreme Heat Symposium hosted by the Mayor's Office and Climate Resolve. Key strategies

identified: increase tree canopy and green infrastructure in vulnerable communities; implement and expand cool roof program; ramp-up cool pavements; coordinate public communication efforts.

- Improve preparedness and resiliency so the City can quickly "Return to Normal" after a disaster**

L.A. Emergency Management Department leads monthly trainings and emergency response drills for Emergency Operations Center (EOC) responders and hosts annual functional EOC exercise. Similar drills are performed by L.A. World Airports, Department of Recreation and Parks, and LADWP.



## Feature Story

# L.A. is Developing First-Ever Resilience Strategy

Los Angeles is releasing its first comprehensive Resilience Strategy in 2017. The document addresses a series of potential shocks and stresses and identifies actions that can be taken at the individual or neighborhood level, as well as on a broader scale—for example, along the L.A. River, citywide or across the region. Produced in partnership with 100 Resilient Cities – pioneered by the Rockefeller Foundation, the strategy builds on the

Mayor’s award-winning Resilience by Design report and Sustainable City pLAN. The Resilience Strategy grew out of a yearlong stakeholder engagement process led by L.A.’s first Chief Resilience Officer Marissa Aho. Universities, non-profits, companies and city departments offered their input, ideas and partnership to enhance the City’s long-term resilience, cohesion and prosperity.



Photo Credit: L.A. Mayor’s Office

**“Los Angeles is taking critically important steps with our partners to develop and implement resilience-building measures that are strengthening our city, so we are better equipped to survive, adapt and even thrive in the face of the increasing risks and vulnerabilities presented by climate change, earthquakes, aging infrastructure and other challenges.”**

**Marissa Aho**  
Chief Resilience Officer

Economy

Economy

## 18,000 New Trees Planted

In 2016, more than 18,000 trees were planted in Los Angeles. That’s enough to span along 100 miles of street, which is the distance from Pacoima to San Pedro, and back.

(Source: City Plants, January 2017)





## City Wins



Photo credit: L.A. Mayor's Office

### Another Step Forward for Seismic Retrofits

In January 2016, the Mayor and City Council approved a new program that lets landlords pass through 50 percent of mandatory seismic retrofit costs, capped at \$38 per month. Since then, working with the Mayor's Seismic Implementation team, L.A. Department of Building and Safety has notified more than 5,000 owners and begun processing more than 1,200 retrofit plans, with 150 soft-story retrofits completed in 2016. An educational campaign from the L.A. Housing + Community Investment Department is aimed at assuring tenant habitability during retrofitting.



Photo credit: L.A. Department of Water and Power

### H2O Resilience in Case of Fire

In 2016, LADWP's Water Resilience Program partnered with the L.A. Fire Department (LAFD) to increase water supply and reliability, focusing particularly on fire hazards after an earthquake. The program is establishing new local and national standards, which also helps to foster a market for seismic-resilient pipe products. LADWP also expanded its Resilience Expert Panel to include T.D. O'Rourke of Cornell University, Charles Scawthorn of UC Berkeley, and Ken Hudnut of the U.S. Geological Survey.

Economy



Photo Credit: Bureau of Sanitation

### From Hot Blacktop to Leafy Green

Thanks to a \$750,000 grant from California cap-and-trade funds, the Bureau of Sanitation has removed 15,000 square feet of concrete and planted 625 large shade trees in the Vermont Corridor. Youth employment groups are lending a hand alongside L.A. Conservation Corps and Koreatown Youth and Community Center leading on construction and maintenance. When fully complete in June 2017, the project will have added 1,175 more trees and distributed 1,500 saplings to residents at tree-adoption events.



## Partner Wins



Photo Credit: IntuArch

### A Building's Almanac in Resiliency

The Los Angeles chapter of the U.S. Green Building Council (USGBC-LA) published *Building Resilience: LA: A Primer for Facilities*, a new guidebook aimed at local building owners and operators. The book outlines best practices in building safety with respect to disaster preparedness. USGBC-LA also partnered with Strategic Concepts in Organizing and Policy Education (SCOPE) to develop a neighborhood resilience center in South L.A.



Photo credit: TreePeople

### Beating Extreme Heat

TreePeople spearheaded a multi-disciplinary partnership aimed at speeding up the mitigation of extreme heat in Los Angeles. The L.A. Urban Cooling Collaborative brings together the newest climate- and behavioral-change science and policy. Members include the L.A. Mayor's Office, L.A. County Public Health Department, Climate Resolve, Global Cool Cities Alliance, Cal State Northridge, UCLA Center for Public Health and Disasters, University of Miami and Yale University.

Economy



Photo Credit: L.A. Fire Department

### Cash at the Ready for Victims of Natural Disaster

A new aid program puts emergency cash cards in the hands of first responders. Supplying Aid to Victims of Emergency (SAVE) is a collaboration between the LAFD, United Firefighters of Los Angeles City, and the California Fire Foundation. By carrying SAVE Cards with a cash value of \$100, firefighters can deliver both emergency services and immediate financial relief to disaster victims.

# Air Quality

Los Angeles has made great strides in improving air quality since the 1970s, when it was known as the world capital for smog. But there's still more we must do. L.A. has some of the dirtiest air in the nation. Vehicles emit 90 percent of the region's air pollutants. Non-attainment days—days when air pollutants exceed federal standards—are still too frequent. The long-term solution lies in transitioning to zero-emission transportation. By making electric vehicles (EV) more convenient and practical, continuing to build out our region's high-quality transit system, and moving to zero-emissions goods movement, we can drastically boost the city's air quality.

Photo credit: Thanaphol Kitchanboon / shutterstock.com



We all have healthy air to breathe.

## Progress on 2017 Outcomes



**More than 1,000 publicly available EV charging stations, with at least 100 (including DC fast chargers) on City property**

As of January 2017, the City had 1,390 publicly accessible EV chargers, including 45 DC fast chargers—the most of any city in the U.S.

(Source: U.S. Department of Energy, January 2017)



**Execute four zero-emissions or PZEVs goods movement pilots within the Port of Los Angeles**

The Green Omni Terminal Project has launched. Meanwhile multiple other pilots using EV yard tractors,

EV trucks, ShoreCat emissions treatment systems, microgrid controls, 2.6 MWH battery storage, and 1 MW solar PV deployment are in progress.

(Source: Port of Los Angeles, January 2017)



**Develop and complete Clean Air Action Plan 2.0 at the Port of Los Angeles**

The San Pedro Bay Ports Clean Air Action Plan Discussion Document was released for public comment in November 2016. Mayor Garcetti urged the POLA board to set aggressive deadlines in order to ensure the ports meet the 2035 zero-emissions goal.

(Source: Port of Los Angeles, December 2016)



**Expand alternative maritime power (AMP) and alternative low-emission compliance mechanisms (e.g., stock on the stack) to 70% of ships calling at the Port of Los Angeles**

Through the end of 2016, the AMP percentage was at 56% of regulated calls.

(Source: Port of Los Angeles, January 2017)

Equity

## Progress on 2025 Outcomes



**Increase the percentage of electric and zero emissions vehicles in the City to 10%**

In addition to growing consumer interest and demand for EVs, several City and private sector actions are moving LA toward this target, including LADWP's EV rebates up to \$4,000, increased publicly available chargers in LA to

over 1,300, City fleet procurement of BEVs, private sector EV car share in Downtown LA, and EV car share for disadvantaged communities.

(Source: L.A. Mayor's Office, January 2017)



**Increase percentage of Port-related goods-movement trips that use zero-emissions technology to at least 15%**

The Mayor has created the Sustainable Freight Advisory Committee which is advancing proposals for new zero emissions pilots at the Port, and the current draft joint Clean Air Action Plan has set a 2035 target of zero emissions goods movement.

(Source: L.A. Mayor's Office, January 2017)



## Feature Story

# A Biofuel Breakthrough at LAX

Last year, LAX became America's first airport to use pollution-reducing biofuels as part of its everyday operations. On March 11, 2016, United Airlines flight 708 departed Terminal 7 powered by a mix of 30 percent biofuel and 70 percent traditional fuel.

The San Francisco-bound flight marks a milestone in commercial aviation—moving the industry beyond demonstrations and test programs to the commercial use of lower-carbon jet biofuel. LAX is only the second airport in the world to make the jump, the first being Oslo Airport in Norway.

In late 2016, KLM Airlines also began using biofuel on commercial flights out of LAX. Refined from sustainable feedstock, such as agricultural wastes

and non-edible natural oils, the AltAir blend reduces carbon dioxide emissions by 60 percent on a lifecycle basis, yet is priced competitively with conventional, petroleum-based jet fuel.

Going forward, United has agreed to purchase up to 15 million gallons of the sustainable biofuel over the next three years from refiner AltAir Fuels, based in from Paramount-based refinery. Los Angeles World Airports (LAWA), the City department that operates LAX, plans to evaluate the benefits associated with the use of jet biofuel and share the information with other airports.



Photo credit: Los Angeles World Airports

**"LAX and United Airlines have broken new ground with fuel that reduces carbon emissions by as much as 60 percent when compared to standard jet fuel. Today, we set a new standard for sustainability in aviation."**

**Mayor Eric Garcetti**

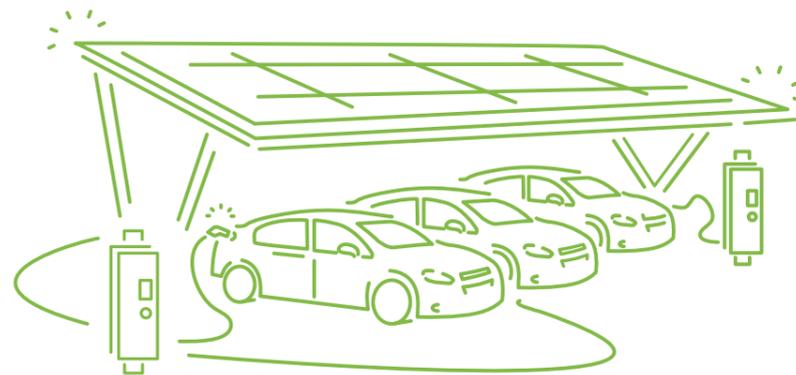
Equity

Equity

# L.A. Ahead of the Pack in EV Chargers

With 1,390 installed throughout the city, Los Angeles has the most publicly available EV chargers of any city in America. In fact, LA has more than double the next closest city.

(Source: U.S. Department of Energy, January 2017)





## City Wins



Photo credit: Bureau of Street Lighting

### Plugging into the City Lights

Streetlights across Los Angeles are turning into curbside EV chargers. Last year the Bureau of Street Lighting installed 30 EV chargers in otherwise ordinary streetlights, believed to be the first such installations in the U.S. Fifty more will come online in mid-2017, the majority in high-traffic areas and locations close to the Great Streets.



## Partner Wins



Photo credit: California State University, Los Angeles

### No Charge for Charging at Cal State

Cal State LA's EV Charging Policy now allows free charging with a valid parking permit at any Level 2 electric vehicle charging port. Currently the campus has 19 chargers, but 100 more are slated to come online over the next two years.

Equity



Photo credit: BlueIndy

### EV Car-sharing Comes to L.A.

BlueCalifornia, a subsidiary of French company Bolloré, was chosen to run the City's EV car-sharing pilot program in Los Angeles. One hundred EVs and 200 dedicated charging stations will go into downtown, Westlake, MacArthur Park and parts of Koreatown. Users can check out and return electric vehicles at any charging station.



Photo credit: Environment California Research & Policy Center

### EV Incentives Educators

Thousands of low- and moderate-income Angelenos learned how they could afford to join the EV revolution thanks to incentives training sessions led by the Environment California Research & Policy Center at such events as National Drive Electric Week in Exposition Park and Eastside Sol in Boyle Heights.

Equity



Photo credit: L.A. Department of Water and Power

### Watts Powers Up with Utility Poles

The L.A. Department of Water and Power (LADWP) installed a utility pole-mounted EV charger in Watts as part of a pilot program to expand EV infrastructure citywide. The curbside station is believed to be the first power pole-mounted EV charger in the country.



Photo credit: Nurit Katz

### UCLA BruinBus Goes All Electric

In September, UCLA replaced the last two diesel buses in its BruinBus transit fleet with zero-emissions electric buses. Five times more efficient and half as noisy as diesel, each EV bus represents a six-figure savings in yearly fueling and maintenance costs, say UCLA Transportation officials. The move is in step with the University of California's system-wide goal of reaching carbon neutrality by 2025.

# Environmental Justice



Underserved, low-income individuals and communities often bear a far heavier burden of environmental pollution, health impacts and economic health challenges than more affluent neighborhoods. Environmental justice means no group of people should bear a disproportionate share of the negative environmental consequences in our communities. The pLAN calls for specific improvements and investments to help remedy this disparity, including eliminating “food deserts,” raising air quality and improving neighborhood conditions while delivering benefits from the green economy to low-income communities.

Photo credit: Thanaphol Kitchanboon / shutterback.com



We ensure that the benefits of the pLAN extend to all Angelenos.

## Progress on 2017 Outcomes

- ✓ **Implement and expand Clean Up Green Up program by targeting the highest scoring (i.e., most impacted) CalEnviroScreen census tracts, including South L.A.**

Following years of advocacy and support from community groups, the Clean Up Green Up ordinance was adopted by the City Council and signed by Mayor Garcetti in April 2016. The City hired an ombudsperson to

implement the policy in June 2016. Similar environmental and land use standards are included in South L.A. Community Plans now in development.

(Source: L.A. Department of City Planning, February 2017)

- ✓ **Implement neighborhood-level air quality monitoring**

A pilot program was developed and implemented with Aclima and Google in late 2016. data is currently being analyzed.

(Source: L.A. Mayor's Office, January 2016)

- ✓ **Require all city farmers markets to accept EBT**

An ordinance requiring all City farmers markets to accept EBT passed in May 2016, and 55 now accept the debit card. Farmers markets that accept EBT went from 46% in 2015 to 96.4% in 2016, including those in the process of converting.

(Source: L.A. Food Policy Council, December 2016)

Equity

## Progress on 2025 Outcomes

- ➔ **Reduce the number of annual childhood asthma-related emergency room visits in L.A.'s most contaminated neighborhoods to less than 14 per 1000 children in 2025**

In the target's baseline year of 2010, L.A.'s most-impacted zip codes had 31.4 emergency room visits per 1,000 children. The City-wide average was 9 visits per 1,000 children. Working with the County Department of Public Health, efforts are underway to more

regularly assess progress toward this target.

(Source: Plan for Healthy Los Angeles, Department of City Planning and, Office of Statewide Health Planning and Development and the California Health and Human Services Agency)

- ➔ **Ensure all low-income Angelenos live within half mile of fresh food by 2035**

EBT access at farmers markets, along with the Healthy Neighborhood Market Program, is helping more Angelenos access fresh food.

(Source: L.A. Food Policy Council, February 2017)

- ➔ **Reduce the number of census tracts in the top 10% of CalEnviroScreen by 25% in 2025**

In 2016, the State of California's Transformative Climate Communities (TCC) program committed \$35 million in cap-and-trade revenues to L.A. for strategies to improve the top 5% of CalEnviroScreen neighborhoods. Progress on this target will continue to grow as the City pursues additional Greenhouse Gas Reduction funds and implements other pLAN initiatives.

(Source: California Strategic Growth Council, February 2017)



## Feature Story

# A Fossil Fuel Watchdog for L.A.

In September 2016, Mayor Garcetti named Uduak-Joe Ntuk as the City’s new Petroleum Administrator, responsible for enforcing technical and environmental requirements of urban oil and gas operations. No one has held the job since the 1980s, though the City Charter specifically mandates it. Mayor Garcetti and the City Council moved to fill the vacancy in response to last year’s Aliso Canyon methane leak disaster and related concerns around neighborhood drilling.

with negotiating and overseeing the City’s pipeline franchise agreements; tracking and reporting on fossil fuel extraction, refining and transportation within the City; and monitoring compliance with City, county, state and federal regulations. Part of the Public Works Department, the petroleum office also coordinates with regional regulators, such as the South Coast Air Quality Management District and County Department of Public Health, to address concerns, nuisances and violations.

Ntuk oversees the newly created Office of Petroleum and Natural Gas Administration and Safety, tasked



Photo credit: Uduak-Joe Ntuk

“He has the skills and background to work with our residents, industry and regulators – to help manage oil and gas activities in our neighborhoods, and play a role in steering L.A. toward a cleaner, more sustainable future.”

Mayor Eric Garcetti

# First Ever EV Low Income Car Sharing Pilot to Reduce 4,700 Tons of CO2 a Year

The City’s EV car sharing pilot program for disadvantaged neighborhoods will help avoid the purchase of 1,000 cars--the equivalent of cutting up to an estimated 4,700 metric tons of CO2 annually--while providing critical benefits for low-income communities.

(Source: Mayor’s Office of Sustainability and EPA, February 2017)



Equity

Equity



## City Wins



Photo credit: Liberty Hill Foundation

### Beating Pollution with Clean Up Green Up

Clean Up Green Up (CUGU) is turning three pollution-plagued neighborhoods into “green zones.” This set of groundbreaking ordinances imposes special land-use restrictions on businesses in Boyle Heights, Wilmington and Pacoima—communities the Los Angeles Times calls “toxic hot spots.” Citywide, CUGU requires higher-rated air filters near freeways. CUGU ombudsperson Daniel Hackney mediates between stakeholders.

Equity



Photo credit: L.A. Mayor's Office

### Exide Clean Up in Los Angeles

Mayor Garcetti is pushing on multiple fronts to mitigate the 2015 Exide lead contamination crisis. Spanish-language PSAs, a website and library drop-in centers were created to educate residents about existing dangers, soil sampling methods and blood testing options. About 1,400 access agreements were gathered at a Boyle Heights community health fair. Expedited cleanup permits and LADWP landscaping rebates are coming soon.

Photo credit: L.A. Food Policy Council



### Good Food Purchasing Policy Takes Off

It was a good year for Good Food Purchasing Policy (GFPP). Los Angeles World Airports, with \$7 million in food contracts, adopted the five-pronged purchasing standard built around sustainability, nutrition, local economies, fair labor and animal welfare. GFPP also got incorporated in the Department of Recreation and Park's Summer Lunch Program and its Greek Theater concessions, impacting a half million meals in 2016.



## Partner Wins



Photo credit: Aclima

### Creating Partnership in Neighborhood-Level Air Quality Monitoring Pilot

From August to October, two Google Street View cars equipped with Aclima's Environmental Intelligence sensors measured air quality in select L.A. communities. The “hyper-local” readings tracked particulate numbers, black carbon, nitrogen dioxide, nitric oxide, carbon dioxide, carbon monoxide and ozone. Aclima and Google will share insights and maps later in 2017.

Equity



Photo credit: Leadership for Urban Renewal Network (LURN)

### Healthy Neighborhood Market Network

Fruits and vegetables are sprouting in neighborhood markets across the City, with a helping hand from the Healthy Neighborhood Market Network. The City-sponsored project hosted three training events for 40 neighborhood market owners. Eighteen of them went on to reconfigure their shelves to focus on healthy food, with the network's assistance.

### A Climate Action Windfall for Low-Income Neighborhoods

Disadvantaged Los Angeles communities will receive \$35 million in cap-and-trade revenues to spend on greenhouse gas reduction and other climate-related projects at the neighborhood level, thanks to the state's Transformative Climate Communities Program (TCC). California's Strategic Growth Council is now developing guidelines to implement Assembly Bill 2722, which created TCC. Fresno and a not-yet-designated city will receive similar grants.



Photo credit: Strategic Growth Council

# Urban Ecosystem



Research shows access to nature keeps people mentally and physically healthy. L.A.'s "wild places" and parks improve all residents' quality-of-life and increase the economic, physical and social well-being of our communities. Efforts to revitalize urban ecosystems, including the Los Angeles River, go hand-in-hand with prioritizing public access to outdoor spaces—which requires balance in developing the richness of those spaces in terms of services, amenities, biodiversity and urban agriculture.

Photo credit: Thanaphol Kitchanboon / shutterstock.com



We all have access to parks and open space including a revitalized L.A. River watershed.

## Progress on 2017 Outcomes

**➤ Achieve 56% of Angelenos living within a half mile of a park or open space**

55% of Angelenos currently live within a half mile of a park or open space.

(Source: Trust For Public Land ParkScore®, January 2017)

**➤ Develop city biodiversity strategy**

Experts and community groups are assessing L.A.'s biodiversity to identify key strategies for enhancement. The City is working with stakeholders on initial focus areas, including urban tree canopy, watershed protection and wildlife habitat.

(Source: L.A. Mayor's Office, January 2017)

**✔ Develop strategy for funding Park Stewardship Alliance with nonprofits and other partners**

Revision of the City's Quimby ordinance in September 2016,

together with new County-wide parks funding measure passed in November 2016, increases much-needed public funding for parks and park improvements to an estimated \$20-25 million annually.

(Source: L.A. Mayor's Office, January 2017)

**✔ Pass legislation allowing for and encouraging urban agriculture in open space (e.g., medians, vacant lots, etc.)**

New ordinance passed in 2016 allows urban agriculture in parkways and establishes the Urban Agriculture Incentive Zone.

(Source: L.A. Mayor's Office, February 2017)

**➤ Initiate tree and tree-canopy registry to document L.A.'s urban forest to guide tree-planting investments**

The Bureau of Engineering hired a consultant to assemble a street tree inventory. Due in late

2017, the inventory will leverage various image sources to pinpoint the location of the City's entire street-tree population. Additional information about each tree will be provided by Bureau of Street Services historic records and updated as tree inspections are performed for sidewalk repair. The Mayoral Water Cabinet established a tree sub-committee to coordinate management of the urban tree canopy.

(Source: L.A. Mayor's Office, January 2017)

**➤ Create additional 5 miles of L.A. River Public access**

The City and County jointly allocated \$6 million to design L.A. River greenways and bicycle and walking paths along 12 miles of gaps in San Fernando Valley. As of late 2016, 1.8 miles are completed or under construction.

(Source: L.A. Mayor's Office, February 2017)

Equity

## Progress on 2025 Outcomes

**➤ Complete 32 miles of L.A. River public access within the City by 2025**

All 32 miles of riverbank within the City are in planning, design,

construction or operational phase. 20.2 miles are open. Bike path funding for the entire 51-mile riverbank approved under Measure M, passed in November 2016.

(Source: L.A. RiverWorks, February 2017)



## Feature Story

# A Watershed Moment for L.A. River

Ten years in development, the Los Angeles River Ecosystem Restoration Plan got the green light from the L.A. City Council and the U.S. Congress in 2016. The approved plan, called Alternative 20, envisions an 11-mile stretch of river, from Griffith Park to downtown, replete with terraced banks, native vegetation, open spaces and increased opportunities for public recreation. Wildlife restoration recommendations include creation and reestablishment of historic riparian strand and freshwater marsh habitats, reconnecting the river to its historic flood plain, restoring confluences with major tributaries and, for the first time since channelization, removing

concrete. Prepared in partnership with the U.S. Army Corps of Engineers, L.A. County and stakeholders, the plan calls for the City to acquire and repurpose key parcels along the river. In January 2017, the City Council unanimously approved the nearly \$60 million purchase of the G2 parcel – commonly referred to as the River’s “crown jewel.” The 42-acre parcel, on the River’s east bank north of Downtown, will open up more than one mile of direct riverfront access and will provide much-needed open space and habitat restoration. Engineering and design activities are slated to begin later this year.



Photo credit: L.A. RiverWorks

**"The river is the heart and soul of Los Angeles."**

**Councilman Mitch O'Farrell**

## 51-mile LA River Bike Path On its Way

The Passage of Measure M means a bike path will run the full 51-mile length of the L.A. River, including 12 miles connecting Canoga Park to Glendale and 8 miles connecting the Elysian Valley to Maywood through downtown. Angelenos are expected to bike 97,335 miles per year along the river – the equivalent of nearly four trips around the entire globe.

(Source: L.A. RiverWorks)



Equity

Equity



## City Wins



Photo credit: Department of Recreation and Parks

### Fee Increase Spurs Investment in Parks

The new Parks Dedication and Fee Update ordinance modernized, streamlined and improved the City's Quimby Fee program to better support critical expansion of the City's public parks and open spaces. The new ordinance, in combination with Measure A funding, provides \$20-25 million a year for parks starting in 2019 and creates incentives for developers to build on-site parks for residents.



## Partner Wins



Photo credit: Department of Recreation and Parks

### A Vote for Parks

A coalition of cities and community groups worked with L.A. County to pass Measure A in November, providing much-needed investment in green spaces. County beaches, parks and recreational areas will get \$94.5 million annually for safety repairs and upgrades. Last year's "Park Needs Assessment" noted glaring access disparities, leading to a strategy to prioritize Measure A funds for low-income communities.

Equity



Photo credit: Department of Recreation and Parks

### Schools Become Parks in Creative Time-sharing Arrangement

The L.A. Department of Recreation and Parks (RAP) worked with L.A. Unified School District in February 2017 to establish three new community school parks at Cahuenga Elementary School, Harvard Elementary School and 75th Street Elementary School. On weekends, holidays and during summer vacation, these schools will provide public access to their playgrounds, play yards and fields. The clever time-sharing arrangement increases walkable park access to these otherwise park-deficient neighborhoods.



Photo credit: Pacoima Beautiful

### Grassroots Group Sows Seeds for a Greener Pacoima

Pacoima is one of California's most park-poor, environmentally impacted areas. That's changing thanks to the Pacoima Urban Greening Plan. Funded by the California Strategic Growth Council, the plan identifies investment opportunities for open spaces and mobility infrastructure. Grassroots environmental justice group Pacoima Beautiful teamed with urban planning, landscape architecture and environmental science professionals to draft the document.

Equity



Photo credit: Department of Recreation and Parks

### Augmented-reality App Turns Kids into "Agents of Water"

Water conservation got a boost with the 2016 launch of "Agents of Water," a mobile gaming app that uses move-to-play and augmented-reality technology to spread best practices among younger Angelenos. The first of its kind in the U.S., the app was developed by the Discovery Agents in partnership with RAP. It features gameplay elements similar to last year's blockbuster Pokémon Go.



Photo credit: People for Parks

### People for Parks

People for Parks (PFP) grew the number of community-school parks it operates from eight to ten in 2016. Now 50,000 Angelenos in Pico-Union, Westlake, Central Alameda, South Park, Hollywood and Koreatown have a safe place to play on weekends. PFP is also training residents to take ownership of their community-school parks and organizing with fitness classes, gardening clubs and team sports.

# Livable Neighborhoods



A neighborhood is more than the place you happen to live. It's a source of pride and self-identification. A communal epicenter. The pLAN and its strategic initiatives help create the conditions for neighborhoods to thrive—by building Great Streets that can become local destinations, by providing safe transit and access to City services, and by stoking opportunities for social engagement and outreach. Advancing Vision Zero is also key to helping our residents feel safer as they bike and walk across the city.

Photo credit: iStockphoto.com / shutterback.com



## We all live in safe, vibrant, well-connected and healthy neighborhoods.

### Progress on 2017 Outcomes

✓ **Implement improvements on 15 commercial corridors/ Great Streets**

Completed corridor-long infrastructure improvements on three streets -- with three more slated for installation in 2017 -- and spot improvements on six more. All fifteen corridors were served with enhanced street and sidewalk

maintenance, small business support and cultural resources.

(Source: LA Mayor's Office, January 2017)

✓ **Achieve designation as an Age-Friendly City by the World Health Organization's Global Network of Age-friendly Cities and Communities**

The designation was received in 2016. The Mayor launched Executive Directive 17: Age-Friendly City Initiative: Purposeful Aging L.A., prompting key City departments to develop strategic plans to better serve aging population.

(Source: Department of Aging, January 2017)

### Progress on 2025 Outcomes

➤ **Increase L.A.'s average Walk Score to 75 by 2025**

The Score is now 66, up from 64 in 2014. L.A. is the 13th most walkable large city in the U.S. with 3,792,621 residents. The City's Transit Score stands at 51, and the Bike Score is 56.

(Source: [www.walkscore.com/CA/Los\\_Angeles](http://www.walkscore.com/CA/Los_Angeles))

➤ **Implement Vision Zero policy to reduce traffic fatalities**

The Vision Zero Action Plan and Safety Study was released in January 2017. The goals include reducing fatalities 20% by the end of 2017 and eliminating traffic deaths by 2025. The Action Plan identifies 40 priority corridors with the highest concentration of fatal severe injury collisions.

(Source: LADOT, February 2017)



## Feature Story

# New Legal-Aid Fund Defends Immigrants

A new public-private partnership provides legal assistance to immigrants facing deportation proceedings without a lawyer. The \$10 million L.A. Justice Fund pools resources from the City (\$2 million) and L.A. County (\$3 million) with \$5 million from the California Community Foundation, the Weingart Foundation and the California Endowment. Two-thirds of people appearing in immigration courts in Los Angeles County face a judge and federal prosecutor without legal representation. An estimated 3,700 immigrant detainees are currently in custody in the Southland, and thousands more are at risk of detention in the future.

Los Angeles has long affirmed its character as a welcoming and inclusive place, and today many

neighborhoods are strongly shaped by their immigrant populations. The pLAN promotes safety and access to services for all Angelenos.

Last year, Mayor Garcetti convened immigration forums to address community concerns about deportation policy. He and Police Chief Charlie Beck announced that the L.A. Police Department will continue to uphold Special Order #40—meaning officers will not initiate investigations solely to determine a person’s immigration status. Mayor Garcetti has joined municipal leaders from around the country in calling for President Trump to extend the Deferred Action for Childhood Arrivals policy.



Photo credit: L.A. Mayor’s Office

**“The L.A. Justice Fund will reach out to people who are American by every measure except the papers they hold—our family members, friends, neighbors and co-workers. They are part of our community, and we will fight for them.”**

**Mayor Eric Garcetti**

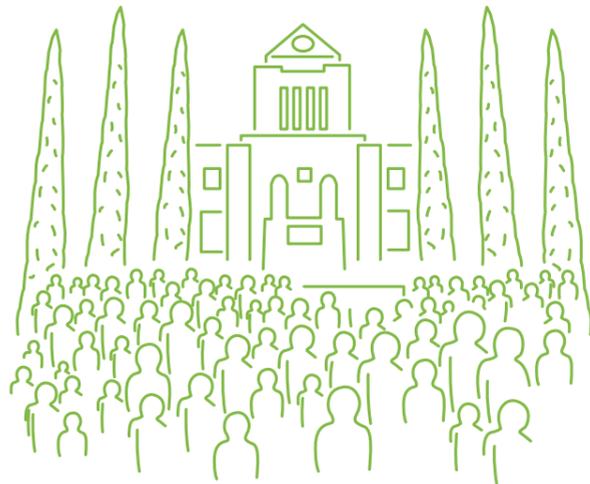
Equity

Equity

## Central Library Providing Citizenship Services to 34,000

34,000 people came through L.A. Central Library’s citizenship and workforce development services, including in-person services for 1,700 job seekers.

(Source: L.A. Public Libraries, January 2016)





## City Wins



Photo credit: Great Streets Initiative

### Safer Cruising Down Van Nuys Boulevard

Since the Great Streets Initiative launched, the Pacoima stretch of Van Nuys Boulevard has gained an entrepreneur center, an open-air art gallery and 11,000-square feet of new sidewalk. Other fixes include high-visibility crosswalks, buffered and protected bike lanes and street resurfacing. Van Nuys Boulevard is part of Vision Zero's High Injury Network—streets most plagued by severe and fatal traffic collisions involving pedestrians and bicyclists.



## Partner Wins



Photo credit: LACBC

### Bikers Coalition Kicks into High Gear

The L.A. County Bicycle Coalition (LACBC) put its pedal-hardened muscle behind two great programs last year. The Active Streets L.A. project focused on bicycle lanes for South Los Angeles. And with the City's Vision Zero Alliance, the coalition pushed for deeper engagement in low-income communities. Operation Firefly (Operación Luciérnaga), a program designed to educate Angelenos on nighttime bike safety, distributed 2,600 bike lights in 2016.

Equity



Photo credit: Great Streets Initiative

### Is Your Main Street a Great Street?

Get ready for round-two of the Great Streets Challenge. With eight community-led projects completed in 2016, dozens of other L.A. thoroughfares have a shot at greatness. The \$2 million program encourages Angelenos to transform neighborhood streets into vibrant, walkable spaces reflecting their unique communal character. The City reviewed 37 applications for \$13,000 grants, and seven winners were announced in February 2017.



Photo credit: Watts ReImagined

### Main Street Watts Moving Forward Sustainably

Just one year since its launch, Watts Re:Imagined has already begun revitalizing the neighborhood's core. The Natural Resource Defense Council-backed group won a grant to create a Health Action Plan at Watts Park Gateway, a proposed mixed-use urban living development. Another grant from the Rivers and Mountains Conservancy promotes water quality and green infrastructure. LEED Homes certification and high-level health metrics are built into the plan.

Equity



Photo credit: by Panic Studio LA, courtesy of City of Los Angeles Department of Cultural Affairs

### Art Hits the Streets in Biennial Debut

A wave of cool art splashed across the City with last summer's CURRENT:LA Public Art Biennial. The month-long, water-themed festival brought temporary installations and free events to outdoor sites across 15 L.A. neighborhoods. Sponsored by the L.A. Department of Cultural Affairs with funding from Bloomberg Philanthropies, CURRENT:LA Water reached 156 million viewers and attracted global media coverage in its inaugural year.



Photo credit: Ed Crowe/ West Valley News

### Neighborhood Council Network Expands

The Neighborhood Council Sustainability Alliance is growing fast. With 35 neighborhood councils on board, its supporter base more than doubled in 2016. Collectively the alliance represents roughly 1.6 million Angelenos. New working groups and issues committees have formed, holding citywide and community forums, sharing best practices, and organizing sustainability and resilience education, action and advocacy efforts.

# Lead By Example



The City of Los Angeles has long been a leader on environmental, economic, and social equity issues. When the City leads by example, we not only inspire 4 million Angelenos, we help set the bar for cities near and far to take action. The pLAN lays out leadership goals in energy efficiency, water conservation, greenhouse gas reduction and more. One such example is the pLAN outcome to have 50% or more of all annual fleet procurement be pure battery EVs, which has created a wave of collaboration throughout the City as well as with other cities across the nation.

Photo credit: Thanaphol Kitchanploen / shutterstock.com

Lead By Example



We have a municipal government that leads by example throughout every department in the City of Los Angeles.

## Progress on 2017 Outcomes



**Reduce water use at city facilities and proprietary departments by 20%**

City and proprietary departments have reduced water consumption by 25% at their facilities, exceeding the 2017 target by 5%. This also meets early the 2025 25% water reduction target.



**Ensure that 50% of the City's light-duty vehicle purchases are EVs, and analyze conversion of other vehicle types to EVs**

The City met the purchasing goal of 50%— the nation's most aggressive EV procurement target—in the current and previous fiscal years, bringing our total current BEV and PHEV count to more than 300.



**Be a Top 10 city as rated by the American Council for an Energy Efficient Economy (ACEEE)**

The City has made big strides on a wide range of energy efficiency efforts with facilities as well as city-wide. Initial indications show that Los Angeles will continue improving its rating in the next ACEEE City Energy Efficiency Scorecard.



**Establish a pLAN working group of key City departments, business leaders, local universities and major stakeholders**

The Sustainable L.A. Leadership Council will be co-chaired by Mayor Garcetti and UCLA Chancellor Gene Block, and first convened in April 2017.



**Achieve 4-STAR Community rating**

The City has begun the data collection needed to complete the STAR Community certification and rating.



**Create a city-to-city partnership in L.A. County to establish a baseline sustainable city plan for adoption**

L.A. County hired its first-ever chief sustainability officer, Gary Gero, in October 2016. Regular collaboration between the City and County is underway as the County develops its first-comprehensive sustainability plan, and engages in discussions with other cities on partnership opportunities.

(Source: Mayor's Sustainability Office, February 2017)

Lead By Example



## Feature Story

# The DASH Toward Clean Bus Leadership

In January, the L.A. Department of Transportation (LADOT) rolled out the first of four new zero-emission fully electric buses that will be joining the DASH Transit fleet in 2017. Customers can ride the initial 35-foot electric bus on the DASH Downtown A line. With a range of up to 150 miles on a single charge, the new bus represents a 90 percent emissions decrease and a \$16,000 annual savings in gas and maintenance costs compared to a diesel bus. The addition of pure electric buses is in line with LADOT's long-standing commitment to environmental

sustainability. It also demonstrates how the City's actions to green its fleet can benefit the regional economy and local jobs, while helping the EV sector grow.

These buses are manufactured in northern L.A. County by BYD at its Lancaster, California factory. Funding for the buses came from a California Energy Commission grant, a great example of Los Angeles working with State partners to test and deploy cutting-edge clean technologies.



Photo credit: L.A. Department of Transportation

**"LADOT Transit continues to be a source of innovation and inspiration for Los Angeles County. We are adding the cleanest technology available in public transit to our fleet of 400 vehicles to continue to thank our riders for choosing to ride LADOT Transit."**

**Seleta Reynolds**  
General Manager  
L.A. Department of Transportation

## 13,000 New LED Lights Help Green City Hall

City Hall's 13,000 fluorescent lamps have been swapped out with energy-efficient LED bulbs, reducing electricity costs and greenhouse gas emissions. This lighting conversion will save 1.42 million kilowatt-hours annually, the equivalent of powering 200 homes each year.

(Source: General Services Department)



**13,000**  
Lights swapped out  
for efficient LEDs



Lead By Example

Lead By Example





## City Wins



Photo credit: Institute for Sustainable Infrastructure

### Aiming High with Infrastructure

The City's Bureau of Engineering, together with L.A. County, is adopting an Envision rating certification policy for its infrastructure projects. A motion was introduced in October and went to full-council hearing in November 2016. Envision is a 60-point sustainable infrastructure rating system and best-practice resource developed by Harvard University and the non-profit Institute for Sustainable Infrastructure.



## City Wins



Photo credit: Michael Samulon

### Smart Tech for Historic Houses

The City's General Services Department is testing innovative nano-coating technologies that promote energy efficiency and limit the slow release of volatile organic chemicals, or "off-gassing." Nano-coating could be particularly useful for insulation of single-pane windows in historic buildings, which frequently are restricted from upgrading to more efficient double-pane glass.

Lead By Example



Photo credit: Los Angeles Public Library

### Central Library Steps Up Citizenship Advocacy

Some 34,000 Angelenos received citizenship and workforce development services through the L.A. Public Library's 2,708 related programs. The library's Path to Citizenship is a national model and a key component of L.A.'s Cities for Citizenship partnership with New York and Chicago. Besides launching the robust WorkSource@Central Library portal, staff personally assisted 1,700 job seekers and enrolled 112 people in JobsLA.org.



Photo credit: Michael Samulon

### City Hall Gets Re-Lamped

City Hall's 13,000 lights got swapped out for efficient LEDs in a conversion project carried out by the General Services Department last October. Switching to LEDs, which use half the energy of conventional fluorescent lamps, we will save an estimated 1.42 million kilowatt-hours annually. That's enough electricity to power 200 single-family homes.

Lead By Example



Photo credit: Michael Samulon

### Charging Forward with an EV Fleet

The City continued its push for more EVs in 2016. The L.A. Police Department now has 150 battery electric vehicles, and the L.A. Department of Water and Power added 45 EVs, with plans for 115 more in 2017. Electric cars went into service in the City's motor pool and executive fleets, and Parking Enforcement and the Information Technology Agency both launched EV pilot programs.



Photo credit: L.A. Department of Water and Power

### Recycled Water's on the Way

In December 2016, the LADWP Commission approved the final environmental impact report for the L.A. Groundwater Replenishment Project. When implemented, it will funnel 30 million gallons a day of purified, recycled water from the Donald C. Tillman Water Reclamation Facility to the San Fernando Groundwater Basin, advancing the City's goals of doubling local groundwater use and sourcing 50 percent of water locally.

---

## Acknowledgements

---

### Core Team

#### Mayor's Sustainability Team

Matt Petersen / Lauren Faber O'Connor / Liz Crosson / Susana Reyes / Jeanalee Obergfell / Hilary Firestone / Michael Samulon / Elena Guevara / Elliott Wezerek / Angel Ibañez / Micah Sperling

#### Editor

Diane Krieger

#### Designers

Terry Diamond / Danielle Elkind

#### Web Designers

Melissa Zalinski / Jeremy Molayem

#### Department Chief Sustainability Officers

Marco Perez / Dana Brown / Osama Younan / Chris Smith / Danielle Brazell / Stella Catanzarite / Mahmood Karimzadeh / Chief Fred Mathis / Lisa Gabriel / Laura Guglielmo / Jeanne Holm / Stephen Box / Shana Bonstin / Commander Sean Malinowski / Christopher Cannon / Eloisa Sarao / Matthew Rudnick / Doug Walters / Norma Isahakian / Greg Spotts / Marcel Porras / Nancy Sutley / Samantha Bricker/ Darryl Pon

#### City Family

Matt Szabo / Mayor's Office of Budget & Innovation / Barbara Romero / Greg Good / Ted Bardacke / Miguel Sangalang / Dan Rodman / Marissa Aho / Saira Gandhi / Jennifer Pope / Emmett McOsker / Ryan Carpio / Sabrina Bornstein / Enrique Zaldivar / Adel Hagekhalil / Alex Helou / Lilly O'Brien / David Wright / Louis Ting / Jason Rondou / Marty Adams / Carter Rubin / Ashley Atkinson / Ben Winter / Seleta Reynolds / Naomi Seligman / Paul Kadzielski / Carl Marziali / Andre Herndon / Edgar Garcia / Uduak-Joe Ntuk / Tamara McCrossen-Orr / Gerald St. Onge / Richard Malvino / Ron Gallegos / Michael Affeldt / Matt Crawford / John Chavez / Vartan Yeghyan / Richard Harasick / David Pettijohn / Shahram Kharaghani / Diego de la Garza / Karen Coca / Pamela Perez / Jose Lozano / Marjorie Phan / Amanda Daflos / Ajay Menon

#### Community Stakeholders

Heal the Bay / The River Project / TreePeople / Omelet / Mayor's Fund of Los Angeles / UCLA / Los Angeles Waterkeeper / Building Owners and Managers Association of Greater LA / SEIU / USWW / Kilroy Realty Corporation / Climate Resolve / Enterprise Community Partners / Los Angeles County Metropolitan Transportation Authority (Metro) / MetroLink / Los Angeles Cleantech Incubator / IBEW 11 / GRID Alternatives Greater Los Angeles / Renovate America / U.S. Department of Energy / Trust for Public Land / LA Food Policy Council / Leadership for Urban Renewal Network (LURN) / Clean Up Green Up Coalition / American Lung Association / Liberty Hill Foundation / Communities for a Better Environment / Pacoima Beautiful / Union de Vecinos / The Sierra Club / Los Angeles Alliance for a New Economy / Repower LA / SCOPE / People for Parks / National Parks Service / U.S. Forest Service / City Plants / Western National Parks Association / NRDC / Environment Now / LAUSD / L.A. Better Buildings Challenge / Watts Re:Imagined / TruGreen Capital / PermaCity / Black Rock / U.S. Green Building Council / Cal State Los Angeles / Environment California Research and Policy Center / Neighborhood Council Sustainability Alliance / USC Sustainability / L.A. SHARES / Los Angeles Memorial Coliseum / Hanley Foundation / Skid Row Housing Trust / Hollywood Electrics / USGBC-LA / United Firefighters of Los Angeles City / California Fire Foundation / Google / Aclima / Healthy Neighborhood Market Network / Strategic Growth Council / Los Angeles County / California Community Foundation / Barrio Action Youth and Family Center / Pacific Asian Consortium in Employment / African American Leadership Organization / Clear Skies Ranch / Weingart Foundation / S.D. Bechtel Jr. Foundation / California Endowment / L.A. County Bicycle Coalition / Chiat\Day