



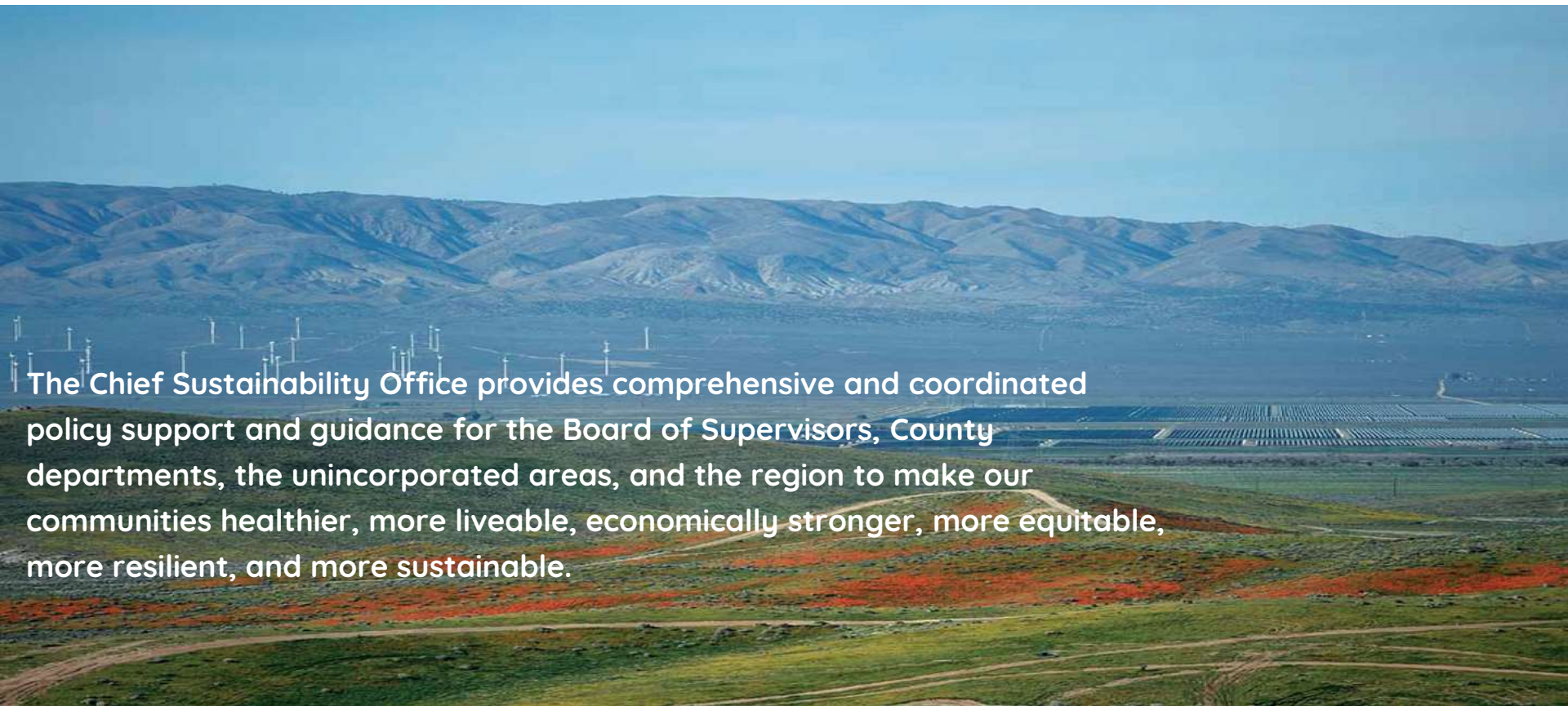
Our County

Energy and People: An 'Our County'  
Workshop

July 13, 2018

# The Team

# Los Angeles County Chief Sustainability Office



The Chief Sustainability Office provides comprehensive and coordinated policy support and guidance for the Board of Supervisors, County departments, the unincorporated areas, and the region to make our communities healthier, more liveable, economically stronger, more equitable, more resilient, and more sustainable.

# Consultant Team



Topic and data collection and analysis leadership and SE co-leadership



SE co-leadership



Topic expert: **open space**



Topic expert: **housing and economy and workforce development**

SE support



Advisors



Topic expert: **health and wellbeing**



Topic expert: **transportation**



Topic expert: **air quality**

# The Plan

# The County's Aims

The plan should be:

- Aspirational, Comprehensive, Long-Term, Regional, Actionable

The task:

- Develop a comprehensive framework for County and City sustainability initiatives
- Serve as template for local cities when preparing sustainability/climate action plans
- Prepare the region to be competitive for funding



# Organizing Principles



**Nurturing Healthy Communities**



**Cultivating a Just Economy**



**Fostering a Healthy Relationship with the Environment**



**Making It Happen**

# Stakeholder Process and Today's Agenda



# Stakeholder Engagement Equity Statement



## Equity

### Goal

Reduce disparities across geographies due to race, class, gender, and other social differences

### Strategy

Commit resources to include those often left out of policy and planning discussions

### Indicators

<b>Distributional</b>	Actions that repair current and historical imbalances
<b>Procedural</b>	Participatory decisionmaking with vulnerable communities
<b>Transformational</b>	Strategies securing future benefits for at-risk populations

# Stakeholder Engagement Plan



# Stakeholder Engagement Timeline



# Today's Team Leaders



## Stakeholder Engagement

- Liberty Hill: Michele Prichard & Ben Russak
- UCLA: Laurel Hunt and Ari Simon
- Estolano LeSar Advisors: Cynthia Guzman

## Data & Analysis and Topic Teams

- UCLA: Stephanie Pincetl, Sean Kennedy
- BuroHappold: Adam Friedberg

# Community-Based Anchor Organizations



- Supervisor District 1 (Solis): **East Yard Communities for Environmental Justice**
- Supervisor District 2 (Ridley-Thomas): **Strategic Concepts in Organizing and Policy Education**
- Supervisor District 3 (Kuehl): **Pacoima Beautiful**
- Supervisor District 4 (Hahn): **Communities for a Better Environment**
- Supervisor District 5 (Barger): **Day One**

# Today's Agenda



- 10:10 **Our County Energy Opportunities** (Sean Kennedy)
- 10:30 **Energy Goals Plenary Session** (Stephanie Pincetl, Adam Friedberg)
- 11:00 **Rotating Breakout Groups by Cross-Cutting Topics**
  - Public Health and Safety, Air Quality & Resilience
  - Housing & Land Use
  - Economy & Workforce Development
- 12:45 Lunch Break
- 1:30 **Small Group Discussions by Theme**
  - Nurturing Healthy Communities
  - Fostering a Healthy Relationship with the Environment
  - Cultivating a Just Economy
- 3:00 **Dot Voting – Goals & Strategies**
- 3:15 **Wrap Up and Evaluations**

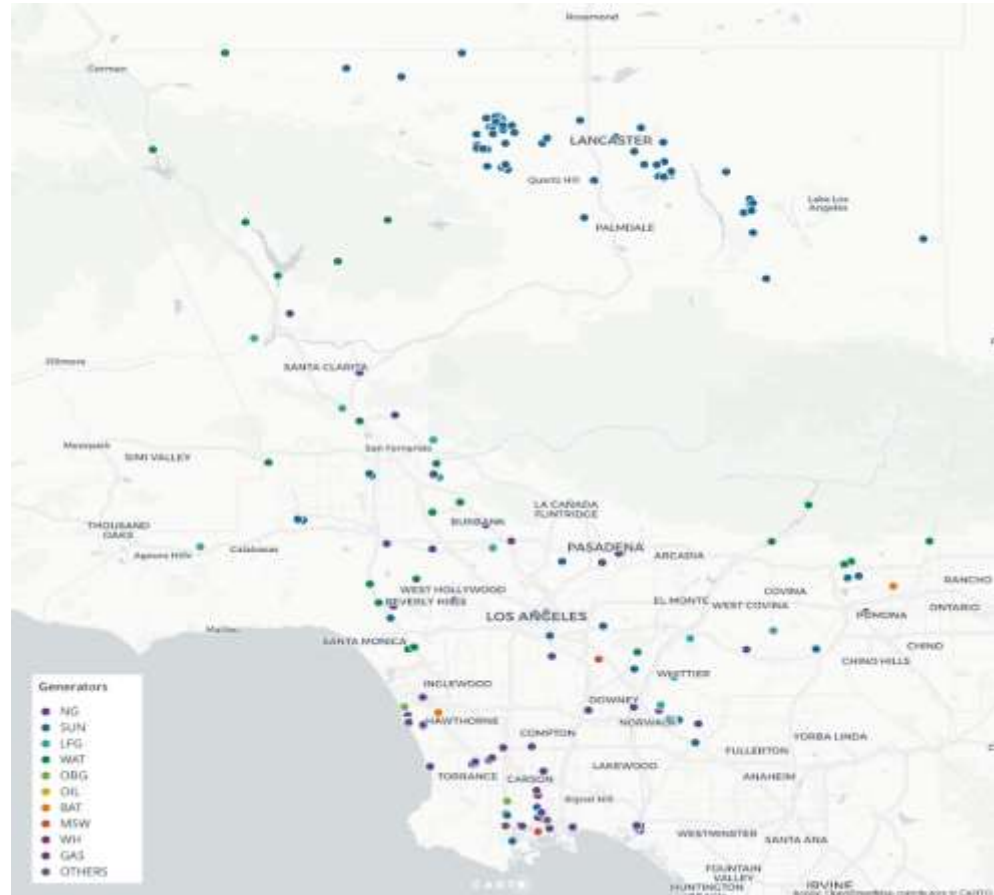


# LA County Energy Overview

# How and where we get our energy

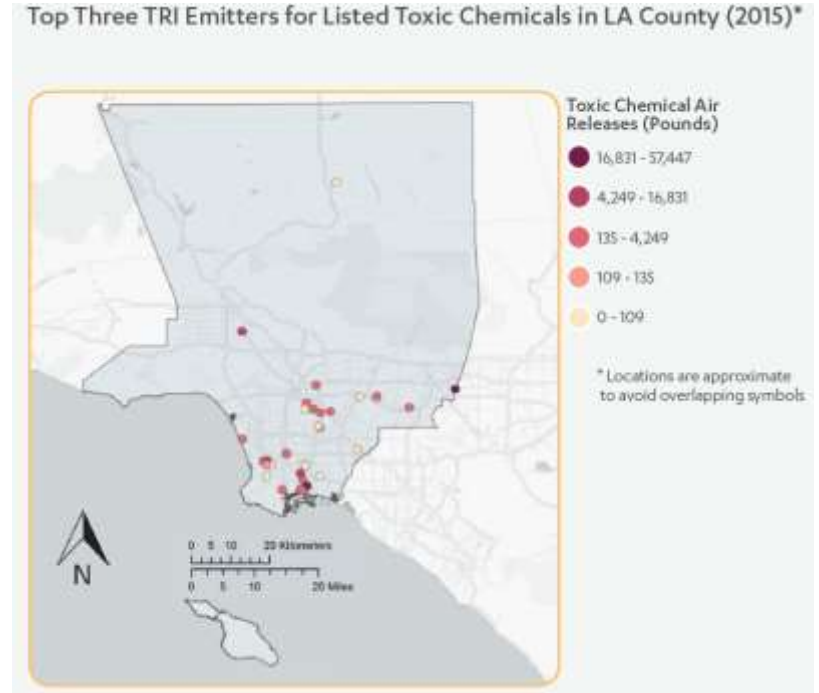


- Energy generation is distributed throughout Los Angeles County, with concentrations in Long Beach and Lancaster
- However, electricity is largely imported from outside L.A. County and a significant proportion of the energy consumed in the County comes from outside the State.



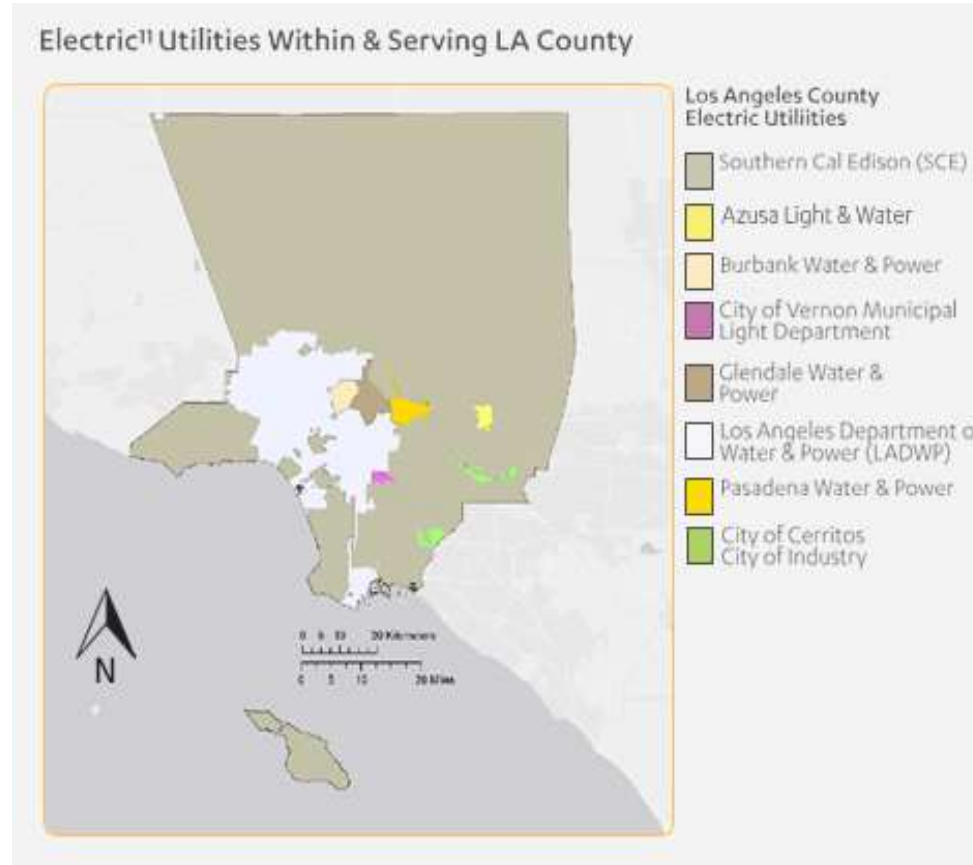
# Energy production

- L.A. County is the second largest oil producing county in California after Kern County.
  - There are currently 68 active oil fields in the Los Angeles Basin, and thousands of active and inactive oil and gas wells countywide.
- L.A. County is home of the two largest refineries in California (the Chevron Refinery in El Segundo and the Tesoro Refinery in Carson), as well as others (e.g., Torrance Refinery).



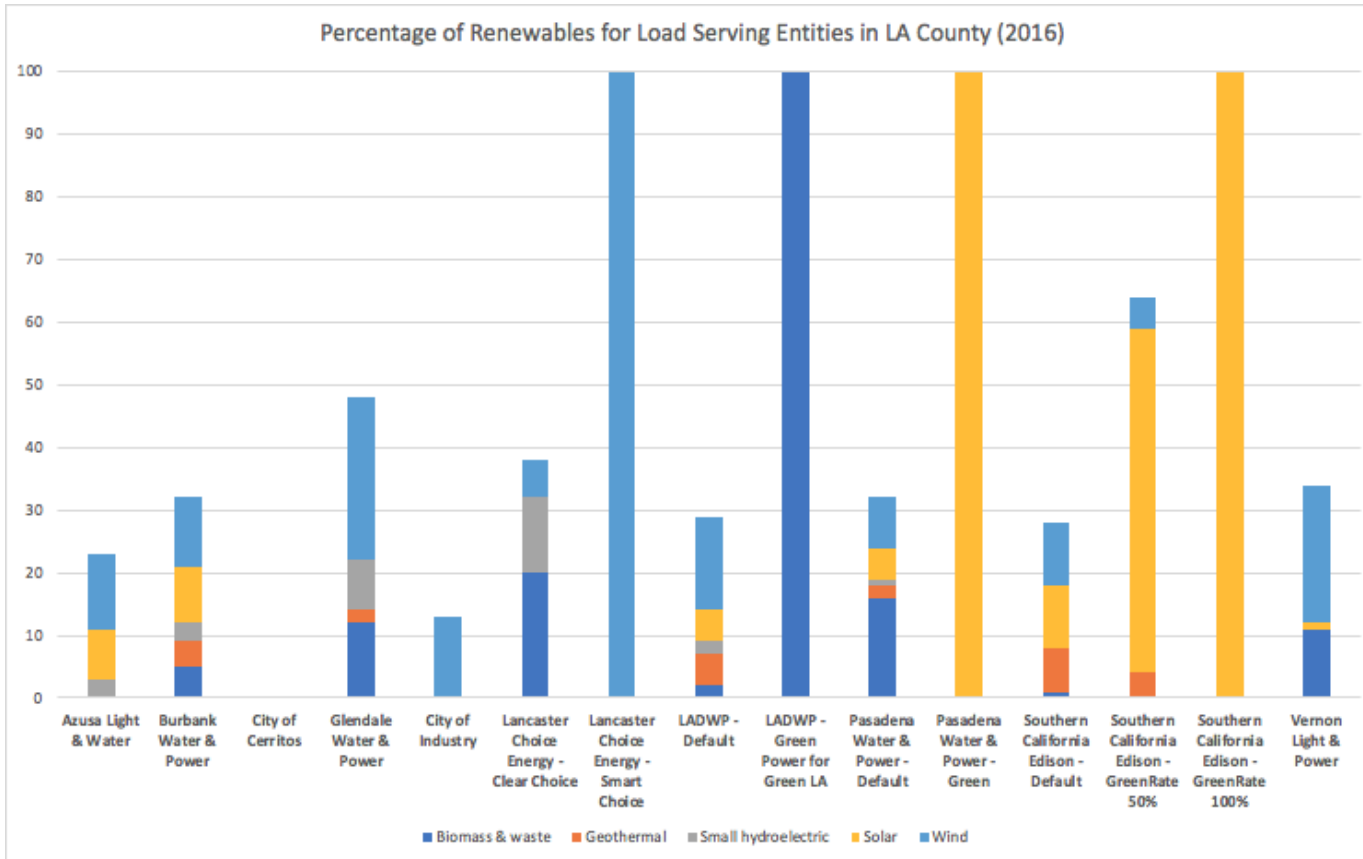
Federico, F., Rauser, C., & Gold, M. (2017). 2017 Sustainable LA Environmental Report Card for Los Angeles County: Energy & Air Quality

# How and where we get our energy



Federico, F., Rausser, C., & Gold, M. (2017). 2017 Sustainable LA Environmental Report Card for Los Angeles County: Energy & Air Quality

# LA County Renewable Energy Sources

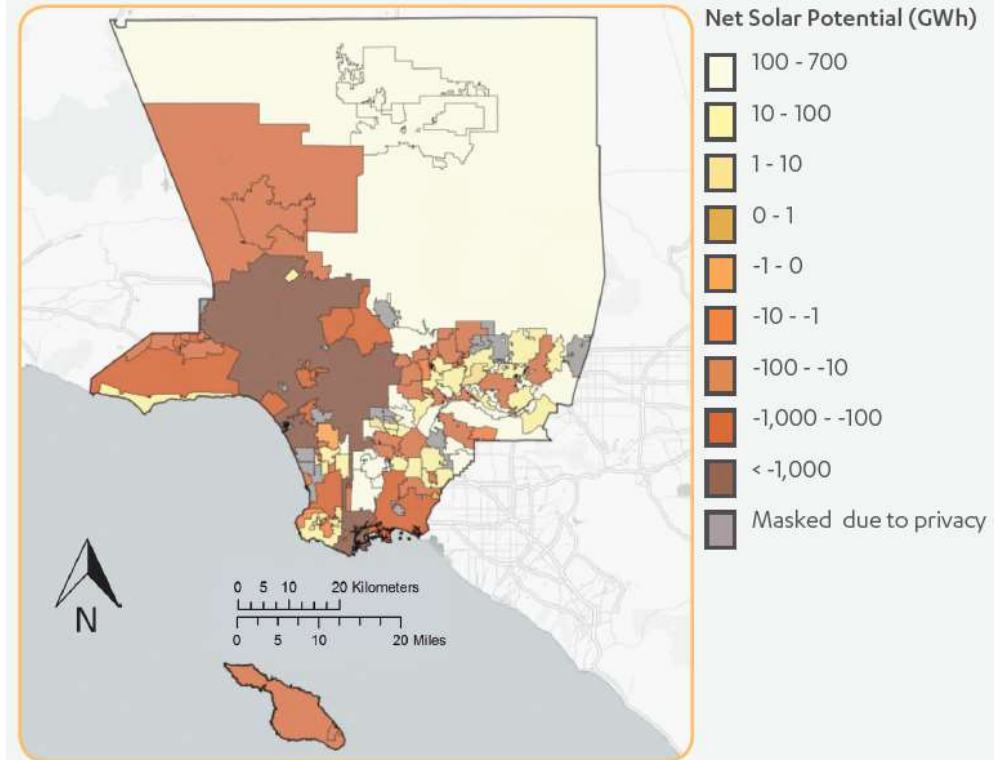


# Renewable energy generation within LA County



- L.A. County is a leader in solar generation
- Utility-scale solar generation increased by over one million Megawatt Hours (MWh) between 2012 and 2015 and reached over 575 MW of capacity in 2015

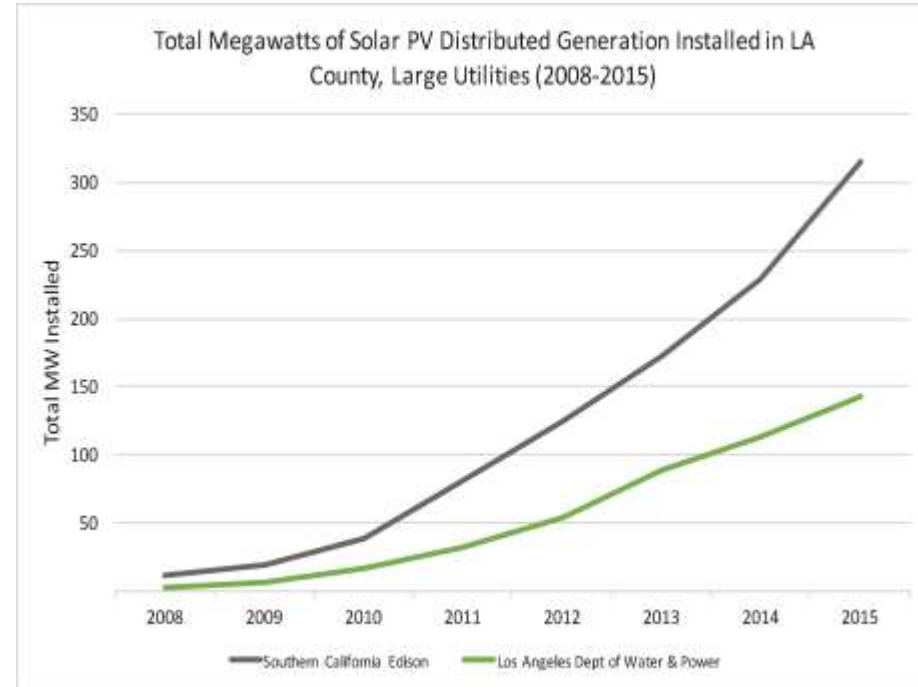
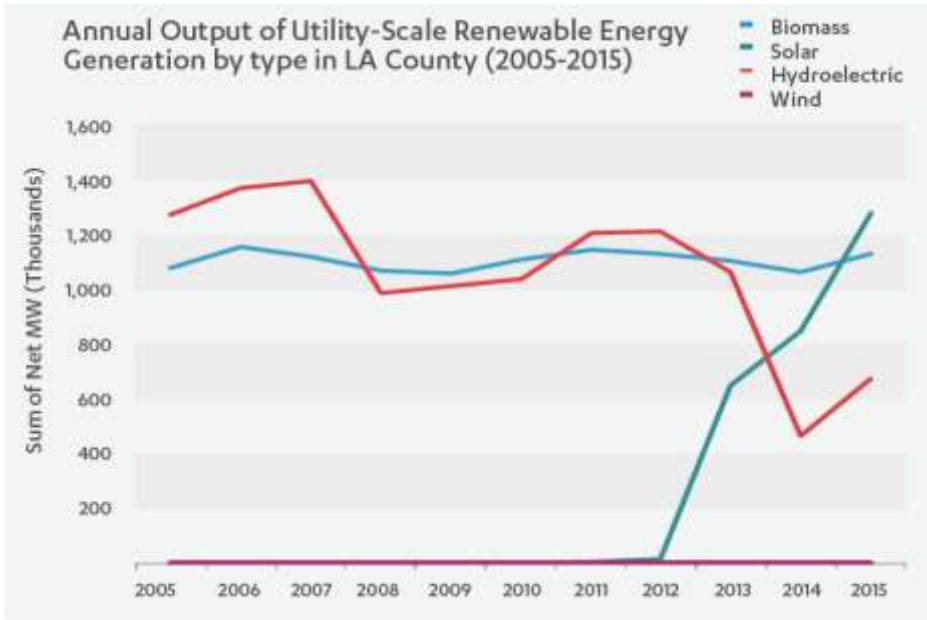
Net Solar Potential (GWh) by City in LA County (2010)



Federico, F., Rauser, C., & Gold, M. (2017). 2017 Sustainable LA Environmental Report Card for Los Angeles County: Energy & Air Quality

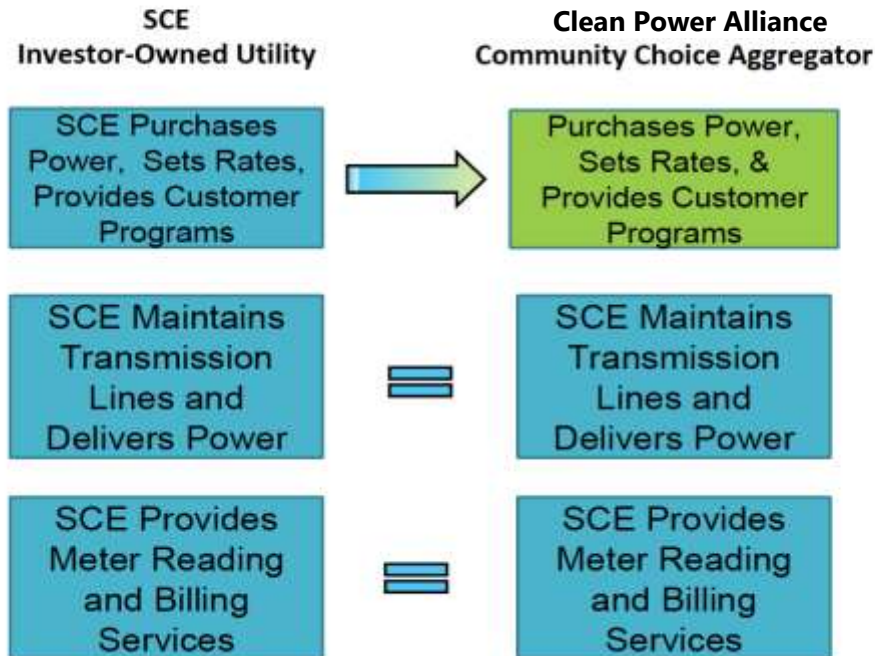


# Renewable energy generation within LA County



Federico, F., Rauser, C., & Gold, M. (2017). 2017 Sustainable LA Environmental Report Card for Los Angeles County: Energy & Air Quality

## Community Choice Aggregation (CCA): A Hybrid Approach to Utility Operations



# Building energy use

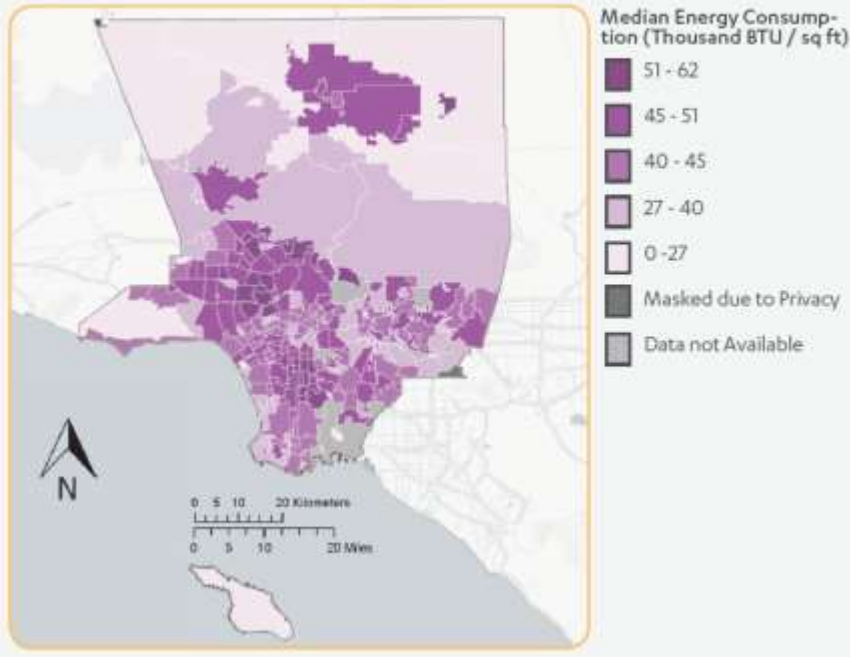


	Electricity Use			Natural Gas Use			Combined Consumption (Electricity + Nat. Gas)		
	(Thousand GWh)		Change from 2006-2010	(Billion Therms)		Change from 2006-2010	(Trillion BTU)		Change from 2006-2010
	2006	2010		2006	2010		2006	2010	
All Building Types	55.6	53.4	-4.2%	2.39	2.47	3.0%	428.9	428.6	-0.1%
Residential	20.3	20.0	-1.6%	1.31	1.24	-5.7%	200.4	191.8	-4.3%
Commercial	15.4	14.5	-5.5%	0.25	0.29	18.6%	77.0	78.8	2.2%
Industrial	11.4	10.2	-10.2%	0.59	xx	xx	98.0	xx	xx
Institutional	2.53	2.42	-4.6%	0.086	xx	xx	17.2	xx	xx
Other / Uncategorized / Mixed Use	6.02	6.23	3.5%	0.16	xx	xx	36.2	xx	xx

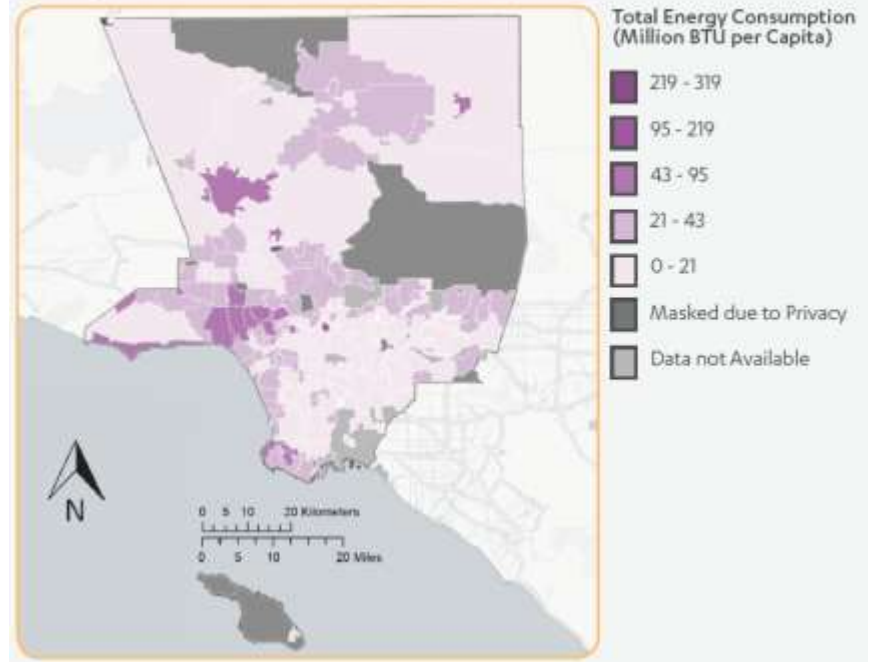
UCLA Energy Atlas

# Building energy use

Median Residential Building Energy Consumption by Neighborhood (Electricity and Natural Gas; thousand BTUs) per square foot in LA County, 2010.

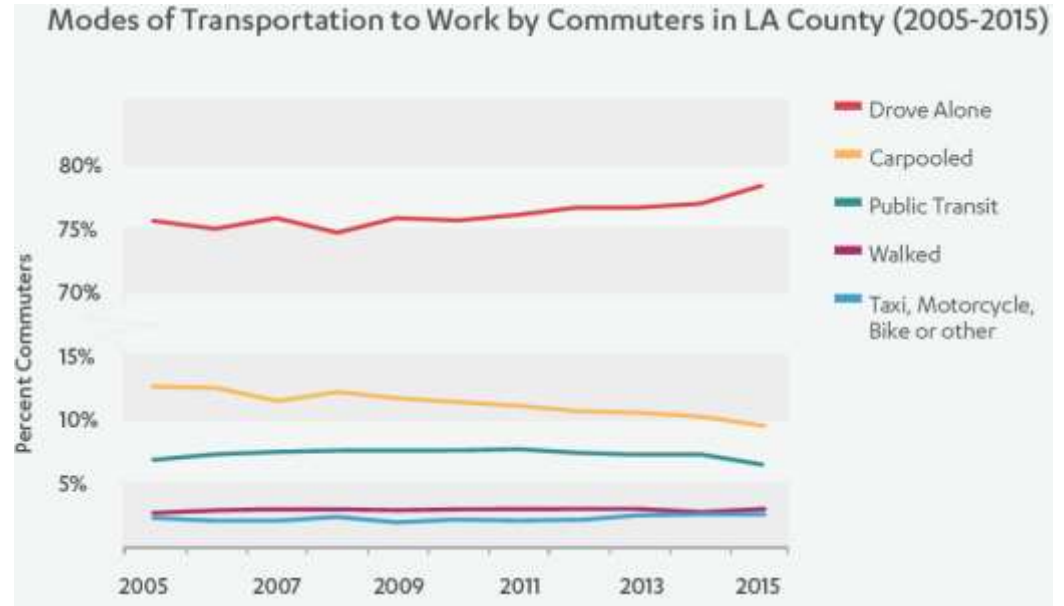


Total Residential Building Energy Consumption by Neighborhood (Electricity and Natural Gas; million BTUs) per capita in LA County, 2010



# Transportation energy use

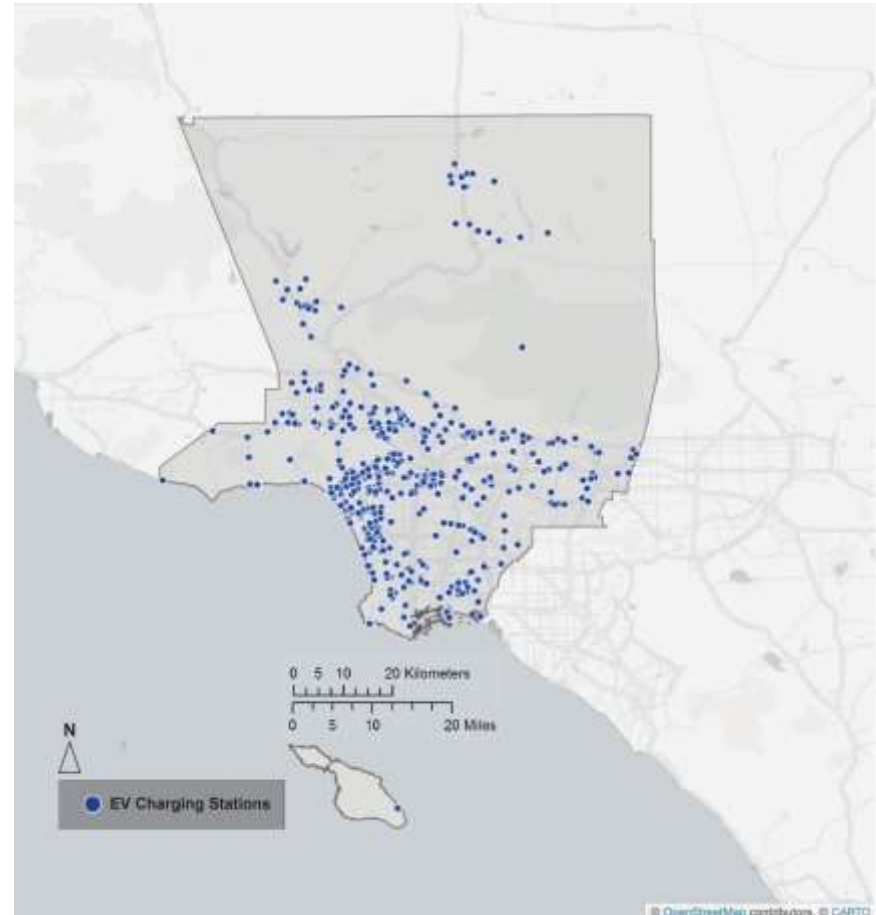
- On-road transportation accounted for **33.5%** of L.A. County's GHG emissions in 2010
- Transportation a major contributor to poor air quality across the Los Angeles basin



Federico, F., Rauser, C., & Gold, M. (2017). 2017 Sustainable LA Environmental Report Card for Los Angeles County: Energy & Air Quality

# Transportation energy use

- Electric vehicles (EV) on the rise, but ownership and charging infrastructure concentrated in wealthier neighborhoods





# Energy and air quality



- Air quality has improved significantly in the Los Angeles region since the early 1990s but the region continues to exceed Federal air quality standards and localized toxic air pollution remains a serious health threat.
- Heavy duty transportation sources such as trucks, trains, ships and aircraft have not seen the kinds of improvements as light duty vehicles.
- Many energy related facilities are a major source of toxic air pollution. Oil refineries rank in the top three of toxic emissions from stationary sources in L.A. County.

# Climate change and energy



Potential climate-related impacts include:

- Three to five more heat waves per year by 2050 (12 to 14 by 2100) and a decline in annual precipitation of two inches by 2050 in low lying, coastal areas (four to five inches in high elevation areas)
- Vulnerable populations – particularly the County’s significant homeless population and those living in poor housing conditions without access to air conditioning, weatherized buildings, or quality transportation to escape oppressive conditions – may be at greater risk for health impacts from extreme weather events.
- Increased energy demand during heat events can cause brownouts and blackouts, which creates additional vulnerability.

# Draft Plan Goals



- Goal A: Reduce health related impacts of energy on disadvantaged communities
- Goal B: Support access to clean and affordable energy
- Goal C: Decarbonize our fuel sources
- Goal D: Modernize the energy system and infrastructure.
- Goal E: Reduce energy consumption and improve demand management

# A Sampling of Local and Regional Energy Policies



<b>L.A. City Council</b>	The city council has charged LADWP with studying the possibility of reaching 100% renewable energy.
<b>L.A. City Cool Roof Ordinance</b>	Since 2014, Los Angeles Green Building Code requires that cool roofing material be used in residential buildings. Cool roofs lower roof temperatures on hot sunny days and therefore keep homes cooler inside, saving energy by reducing the need for running air conditioning systems.
<b>Santa Monica Sustainable City Plan (updated 2014)</b>	Santa Monica committed to a 10 percent reduction in overall energy use by 2020 in addition to its targets of 50% renewable energy production and installation of 7.5 MW of local solar generation in the same period.
<b>LADWP Coal Divestiture</b>	L.A. Department of Water and Power (LADWP) pledged to source no energy from coal by 2025.
<b>LADWP Feed-in Tariff</b>	LADWP operates a feed-in tariff program that pays small solar producers, including building owners who can produce between 30 kW and 3 MW from rooftop installations, for each kilowatt hour they generate
<b>LADWP Consumer Rebate Program</b>	LADWP offers rebates through its Consumer Rebate Program to promote energy-efficient housing installations, such as cool roofs.
<b>San Jose Green Vision</b>	Goal is for 2022. Reduce per capita energy use by 50 percent. Receive 100 percent of electrical power from clean renewable sources. Reduce per capita energy use by 50 percent. Install 1.6 MW of solar on municipal sites.
<b>San Francisco</b>	Former mayors Gavin Newsom and Ed Lee issued a challenge to the City: to have 100% of San Francisco's electricity demand be met with renewable energy. Current goal date is 2030.
<b>San Diego Climate Action Plan</b>	Increase the number of zero emissions vehicles in the municipal fleet to 50 percent by 2020 and 90 percent by 2035. Add additional renewable electricity supply to achieve 100 percent renewable electricity city wide by 2035.

# Plenary – Goals and Strategies

# Key Terms



## Vision

A core value or values at the heart of the plan – the “why”

## Goals

Broad, aspirational statement of what we want to achieve

## Strategies

Approach or approaches that we take to achieve a goal (strategies may support multiple goals)

## Actions

Specific policy, program, or tool we take to achieve a strategy

*PERFORMANCE MONITORING*

## Indicators

Quantitative measures used to assess performance on a regular basis

## Targets

Levels of performance that are sustainable

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# Today's Focus

# Key Terms (Examples)



## Vision

“Fostering a Healthy Relationship with the Environment”

## Goals

“Reduce Energy Use”

## Strategies

“Implement strong energy conservation measures”

## Actions

“Require energy efficiency retrofits at time of sale for large properties”

*PERFORMANCE MONITORING*

## Indicators

Energy consumption per capita

## Targets

Reduce regional per capita energy demand by 25% by 2030



# Goals



- Goal A: Reduce health related impacts of energy on disadvantaged communities
- Goal B: Support access to clean and affordable energy
- Goal C: Decarbonize our fuel sources
- Goal D: Modernize the energy system and infrastructure.
- Goal E: Reduce energy consumption and improve demand management



[lacounty.gov/sustainabilityplan](https://lacounty.gov/sustainabilityplan)

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