Los Angeles 100% Clean Energy Equity Strategies

Megan Day and Kate Anderson, National Renewable Energy Laboratory (NREL)

LADWP Leads Energy Equity Effort

The Los Angeles Department of Water and Power (LADWP), the nation's largest municipal utility, partnered with NREL and the University of California, Los Angeles to identify strategies to improve energy equity in LA's transition to 100% clean energy.

Guided by a Steering Committee of community-based organizations and informed by listening sessions with compensated constituents of these organizations in disadvantaged communities (DACs) throughout LA, NREL modeled multiple scenarios to identify strategies that best achieve community energy equity goals.

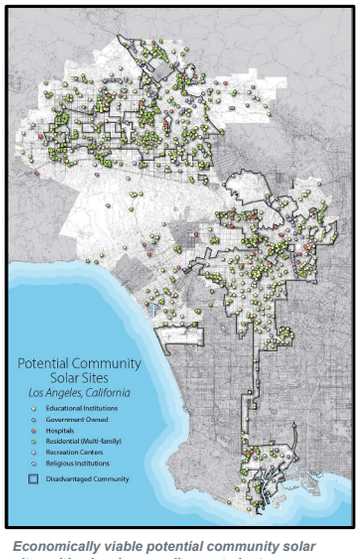
Baseline Energy Equity

Clean energy incentives and investments in Los Angeles have disproportionately benefited non-disadvantaged, mostly White, mostly non-Hispanic, higher-income homeowners.

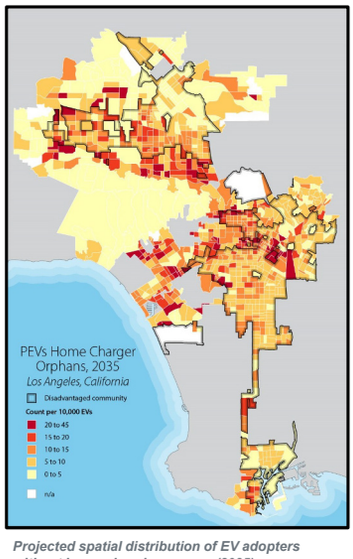
LADWP RESIDENTIAL INVESTMENTS 1999–2022		NUMBER OF YEARS	TOTAL AMOUNT SPENT	AVERAGE AMOUNT PER CUSTOMER DAC/Non-DAC	% OF INCENTIVES Normalized by number of customers DAC/Non-DAC	WHICH COMMUNITIES DISPROPORTIONATELY BENEFITED FROM PROGRAMS? DAC /Non-DAC	Mostly Non-White /White	Mostly Hispanic /Non-Hispanic	Mostly Renters /Owners	Below /Above Median Income
SOLAR INSTALLATION (1999–2022)	Net Energy Metering Programs	22	$340,604,541	0.25 kW / 0.41 kW	38% / 62%	Non-DAC	White	Non-Hispanic	Owners	Above
ENERGY EFFICIENCY (2013–2021)	Home Energy Improvement Program	3	$3,378,869	$3 / $2	61% / 39%	DAC		Hispanic	Owners	
	Refrigerator Turn-In and Recycle Program	5	$2,667,307	0.010 refrigerators / 0.014 refrigerators	42% / 58%	Non-DAC	White	Non-Hispanic	Owners	Above
	Consumer Rebate Program	6	$93,248,144	$64 / $74	46% / 54%	Non-DAC	White	Non-Hispanic	Owners	Above
	Other Non-Low-Income-Targeted Programs	15	$36,343,548	$178 / $196	35% / 65%	Non-DAC	White	Non-Hispanic	Owners	Above
	Energy Savings Assistance Program*	5	$7,897,260	$11 / $1	92% / 8%	DAC	Non-White	Hispanic	Renters	Below
ELECTRIC VEHICLES (2013–2021)	Incentive Programs	8	$5,361,426	$41 / $64	23% / 77%	Non-DAC	White	Non-Hispanic	Owners	Above
CUSTOMER DISCOUNTS (2006–2021)	Low-Income Program*	15	$173,633,204	$195 / $64	73% / 27%	DAC	Non-White	Hispanic	Renters	Below
	Lifeline Program*	15	$313,424,782	$302 / $164	65% / 35%	DAC	Non-White	Hispanic	Renters	Below

* Low-Income Targeted

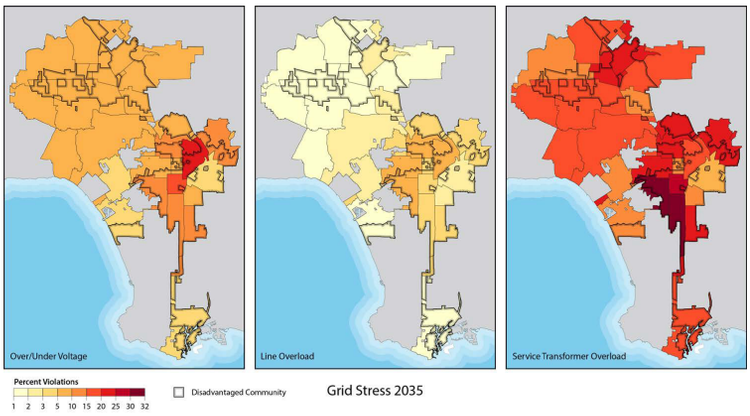
Statistical analysis of equity in LADWP residential program investments (1999-2022)



Economically viable potential community solar sites with a low-income discounted rate



Projected spatial distribution of EV adopters without home charging access (2035)



Grid stress estimates with equitable access and use of distributed energy resources (2035)

Energy Affordability

Continuing current rate and net metering solar compensation structures will increase electricity bills 50% more for low-income customers than higher-income customers by 2035.

Bill affordability and equity strategies may involve rate reform, shifting from solar net metering to solar net billing, on-bill tariffs for heat pump water heaters and enhanced insulation, and robust bill assistance programs.

Solar

The Shared Solar program requires a premium to enroll and has higher participation among non-disadvantaged, non-Hispanic, and wealthier households.

Compared to low-income rooftop solar installations, Shared Solar with a low-income discount rate can support five times more capacity for the same investment and deliver average annual savings of $480 to low-income households, most of whom are renters living in multifamily buildings.

Transportation Electrification

Increased used electric vehicle (EV) purchase incentives for low-income households could increase adoption among these households by 50,000 vehicles, making most EV adopters in LA moderate- or low-income households by 2035. However, 150,000 of them will lack home charging access.

Strategies include at- and near-home EV charging infrastructure and charging vouchers. Shared EV and electric bicycle programs can reduce transportation costs and time for transportation disadvantaged communities.

Distribution Grid

LA's disadvantaged communities are projected to experience higher grid stress and lower access to critical services that depend on electricity, like grocery stores and hospitals, in modeled disaster events.

Prioritizing equity in grid infrastructure investments, upsizing transformer capacity during replacement, and pursuing resilient electricity upgrades for critical emergency services will improve equity in grid reliability and access to clean energy technologies.

LA100 EQUITY STRATEGIES

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