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The Los Angeles 100% Renewable Energy Study

CHALLENGE: NREL partnered with the Los Angeles Department of Water and Power on a first-of-its-kind objective, rigorous, highly detailed, and science-based study to analyze potential pathways LA can take to achieve its goal of a 100% clean, equitable energy future.

RESULTS: The LA100 study shows LA's goal of reliable, 100% renewable electricity by 2045—or even 2035—is achievable and will entail rapid deployment of wind, solar, and storage technologies this decade.

Download the final report and dive into the data at LA100.org.





The Challenge



A 100% TRANSITION REQUIRES BRINGING EVERYONE ALONG

Even those that can't afford it. Los Angeles County is home to 30% of the state's population living in poverty.

THE CURRENT ENERGY SYSTEM IS INEQUITABLE

Disadvantaged communities experience more burdens and fewer benefits of the energy system. An equitable transition will require major shift in how investments are allocated.

LEGISLATION CONSTRAINS RATE AFFORDABILITY

Legislation prevents Los
Angeles Department of
Water and Power from
meeting investor-owned
utility affordability standards.

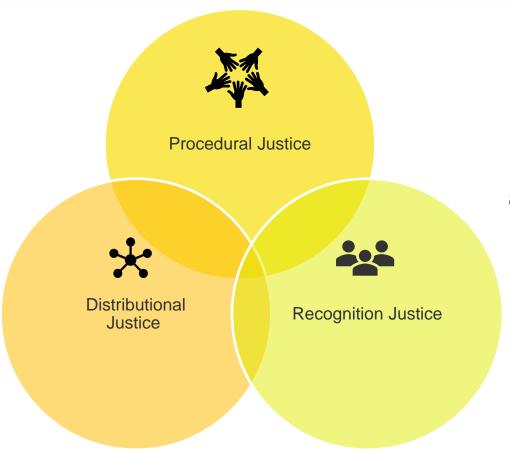
EQUITY REQUIRES COMMUNITY INVOLVEMENT

Underserved communities have not participated in decision making and are seeking greater involvement in solutions moving forward.

LA100 Equity Strategies is organized around three tenets of justice

Enable **community leadership** in the process

equitable
distribution of
benefits and
negative impacts
of clean energy
transition



Understand and address past and current energy inequities





Steering Committee: Community based organizations provide strategic and technical direction and ensure community members are involved in the process.

Governance and Community Engagement



Advisory Committee: City departments provide feedback on feasibility of strategies and potential partnerships with other City programs.



Community-specific listening sessions:
Community members provide input through focus groups, adapted to each local context, to understand the priorities of community members.

Community-Informed Strategies

Community Priorities		Strategy Development Pathways	Potential Future Outcomes
σ	Affordability & Burdens	 Low-income energy bill stability Reduced transportation energy burdens 	transportation energy debt relief
	Access & Use	 Weatherization and cooling for safe household temperatures Solar and efficiency access for renters 	 Increased access to cooling for future LA heat waves Increased participation in solar, energy efficiency, and electrification programs
	Health, Safety, & Resilience	 Truck electrification to mitigate air quality health impacts Resilience through grid upgrades and access to critical services 	 Cleaner air, especially for those located near power facilities or transportation corridors Equitable grid upgrades and reliability
	Jobs	Jobs and workforce development	 New clean energy jobs and workforce development.

Example Implementation Strategies



Procedural Equity

Engage residents in developing programs and services targeting community priorities



Low-Income **Energy Bill Affordability** Implement robust low-income assistance program to achieve reduction in bills for the lowest-income customers





Housing Weatherization and Resilience

Deploy cooling in low- and moderateincome, multifamily households with no cooling to reduce dangerous heat exposure



Expand near-home charging access for low-income households projected to adopt EVs by 2035 who lack home charging access



Truck **Electrification** for Air Quality

Establish a community-wide heavy-duty truck electrification goal, with a heavy-heavyduty truck carve out



Distribution Grid Upgrades for Resilience

Increase investment in underground cables in DACs to increase reliability and resilience to disaster events

Key Takeaways

- Equitable implementation requires long-term utility-community partnerships
 - Partnering with communities to transition everyone to clean energy-- including vulnerable populations-- is a new role for utilities that will take time to build.
- Funding the transition to 100% clean energy will be a challenge
 - Affordability and access are primary community concerns, especially in communities where people are already struggling with poverty.
 - Baseline investments are inequitable. Making the transition equitable will require a major shift in how investments are allocated.
- Despite these challenges, the study shows essential strategies to implementing a long-term path to an equitable clean energy transition.
 - The process guided by three tenets of justice and resulting strategies are applicable beyond Los Angeles.

Thank you!

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