LA100

The Los Angeles 100% Renewable Energy Study

Achieving LA's 100% Renewable Energy Goal

The City of Los Angeles recognizes climate change as the most significant issue facing the global environment today. To combat this crisis while also capturing health and economic benefits, LA leadership has set a bold goal to power the city with 100% renewable energy by 2045.

That's why the Los Angeles Department of Water and Power (LADWP)—the nation's largest municipal utility—partnered with the National Renewable Energy Laboratory (NREL)—the nation's leading renewable energy research lab—on **LA100: The Los Angeles 100% Renewable Energy Study**.

LA100 is the most comprehensive, detailed study to model an entirely renewable-based power system as complex as LA's. And it's only possible with the uniquely integrated, world-class capabilities of NREL, one of the U.S. Department of Energy's research laboratories.

What Is Renewable Energy?

Energy sources are either renewable, meaning they can easily be replenished (e.g., solar and wind energy), or nonrenewable, meaning they draw on finite resources (e.g., oil and coal). On NREL's website, you can learn more about different renewable energy resources: nrel.gov/research/learning.html

Complex Questions, Complex Analysis

For the multiyear study, a team of expert NREL energy analysts ran millions of simulations to evaluate a range of future scenarios for how LADWP's power system could evolve to a 100% clean energy future while maintaining reliable power for LA customers.

These complex, multifaceted analyses help inform objective answers to the big questions on the road to 100%:

- How might **demand for electricity** change as more Angelenos adopt energy technologies like electric vehicles and rooftop solar?
- And what could LA's future grid **look like**? Does reaching 100% mean big changes locally—like building new transmission lines or power plants?
- How can LA make sure that the new system is **reliable** under extreme events like fires and heat waves?
- What about **impacts** on jobs, air quality, health, the local economy, and environmental justice?
- And what might all of this **cost**?

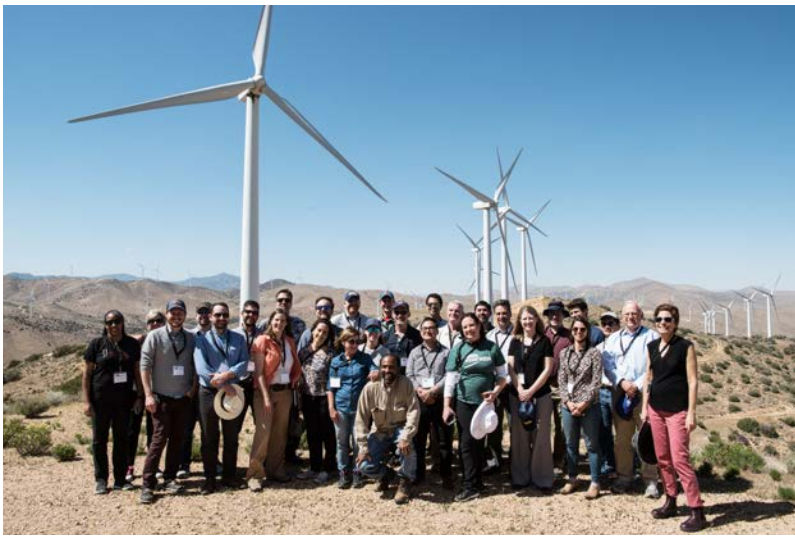
Along the way, LADWP's engineers are learning how to use NREL's high-tech tools and datasets for their own analyses, so they can convert the findings into workable, achievable plans best suited for LA.

> "What excites me most about the 100% renewable energy study we are partnering with NREL on is its unprecedented nature. We don't like to shy away from challenges, and neither does NREL."
>
> Lauren Faber O'Connor, Chief Sustainability Officer for the City of Los Angeles

The LA100 study looks at how rooftop solar initiatives like LADWP's Feed-in Tariff (FIT) program—the largest FIT program in the nation—could factor into LA's 100% renewable future. Shown above is a solar project built through FIT. *Photo courtesy of LADWP*

Community Driven, Community Tailored

LA100 isn't just about running models and crunching numbers. Every step of the way, the research has been guided by real people who live and work in LA—making sure the study represents those who know LA best. The study's Advisory Group includes a wide range of stakeholders, from neighborhood and business representatives to policy and clean energy experts. Discussions with the Advisory Group helped NREL to further tailor its analysis to LA's needs, bridging the relationship between research and community concerns.



Members of NREL, LADWP, and the LA100 Advisory Group touring LADWP's Pine Tree Wind and Solar Farm. *Photo by Dennis Schroeder, NREL 50703*

The result? Unbiased insights, driven by detailed data and tailored to LA's unique and diverse communities—ensuring LA's 100% clean energy future will benefit 100% of LADWP's customers.

Learn More from NREL and LADWP

Stay tuned for study results in early 2021, and learn more about LA100 on:

NREL.gov: nrel.gov/analysis/los-angeles-100-percent-renewable-study.html

LADWP.com: ladwp.com/CleanEnergyFuture

LA DWP Los Angeles Department of Water & Power | NREL Transforming ENERGY

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National Renewable Energy Laboratory
15013 Denver West Parkway, Golden, CO 80401
303-275-3000 • www.nrel.gov

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