



## Los Angeles 100% Renewable Energy Equity Strategies

### Steering Committee Meeting #12

October 19, 2022

### Summary<sup>1</sup>

#### Schedule and Location

Wednesday, October 19, 2022, 10:00 a.m. to 12:00 p.m.

Conducted virtually

#### Virtual Meeting #12 Attendees

##### Steering Committee Members

Climate Resolve, Jonathan Parfrey

Community Build, Inc., Robert Sausedo

DWP-NC MOU Oversight Committee, Tony Wilkinson

Esperanza Community Housing, Nancy Ibrahim

Move LA, Eli Lipmen (alternate)

Move LA, Gloria Ohland (alternate)

Pacific Asian Consortium in Employment (PACE), Celia Andrade

Pacific Asian Consortium in Employment (PACE), Susan Apeles (alternate)

Pacoima Beautiful, Annakaren Ramirez (alternate)

Pacoima Beautiful, Melisa Walk (alternate)

RePower LA Coalition, Roselyn Tovar (alternate)

The South Los Angeles Transit Empowerment Zone (SLATE-Z), Stephanie Ramirez (alternate)

South LA Alliance of Neighborhood Councils, Thryeris Mason

Strategic Concepts in Organizing and Policy Education (SCOPE), Agustin Cabrera

Strategic Concepts in Organizing and Policy Education (SCOPE), Tiffany Wong (alternate)

##### LADWP Board of Commissioners

Cynthia McClain-Hill, Board President

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<sup>1</sup> This summary is provided as an overview of the meeting and is not meant as an official record or transcript of everything presented or discussed. The summary was prepared to the best of the ability of the notetakers.

# LA100 EQUITY STRATEGIES



## LADWP Staff

Armen Saiyan  
Ashkan Nassiri  
Brian Wilbur  
Carol Tucker  
Dawn Cotterell  
Iris Castillo  
Jason Rondou  
Jay Lim  
Jorge Centeno  
Mudia Aimiuwu  
Nancy Sutley  
Pjoy Chua  
Ramon Gamez  
Robert J. Meteau  
Simon Zewdu  
Stephanie Spicer  
Steve Baule  
Vanessa Gonzalez

## Project Team

Ashreeta Prasanna, National Renewable Energy Laboratory (NREL)  
Eda Giray, NREL  
Megan Day, NREL  
Nicole Rosner, NREL  
Patricia Romero-Lankao, NREL  
Sonja Berdahl, NREL  
Abel Valenzuela, UCLA  
Cassie Rauser, UCLA  
Raul Hinojosa-Ojea, UCLA  
Stephanie Pincetl, UCLA  
Christian Mendez, Kearns & West  
Joan Isaacson, Kearns & West  
Robin Gilliam, Kearns & West



## Welcome Remarks

Joan Isaacson, facilitator from Kearns & West, welcomed members to the twelfth Los Angeles 100% Renewable Energy Equity Strategies (LA100 Equity Strategies) Steering Committee meeting. She introduced Simon Zewdu, Director of the Transmission Planning, Regulatory, and Innovation Division, to provide opening remarks.

Simon Zewdu welcomed Steering Committee members to the meeting and referenced the recent LADWP Board of Water & Power Commissioners meeting during which a management presentation was given on the Strategic Long-Term Resource Plan (SLTRP) highlights, and equity being a key element and desired outcome of the SLTRP. He introduced Brian Wilbur, the new Senior Assistant General Manager of Power System Construction, Maintenance, and Operations.

Brian Wilbur introduced himself and welcomed everyone to the meeting. He thanked Steering Committee members for their participation and contributions in this process and shared that LADWP is setting a new standard across the nation. Additionally, he expressed excitement about the collaborative opportunity and hopes to continue the stakeholder process far into the future.

## Meeting Purpose and Agenda Overview

Joan Isaacson noted meeting participation guidelines and the Steering Committee roster and then reviewed the meeting agenda (see slide 4 in Appendix). She shared that the Pacific Asian Consortium in Employment (PACE) would provide an organization spotlight. Next, the National Renewable Energy Laboratory (NREL) would present on community listening session updates, provide an update on additional air quality and health considerations based on feedback from the eleventh Steering Committee meeting, and present on potential community solar and storage siting options. UCLA would then present on green jobs workforce development. Joan Isaacson then overviewed agenda items for upcoming meetings.

## Steering Committee Spotlight

Joan Isaacson introduced Susan Apeles, alternate representative from PACE, to give the Steering Committee spotlight presentation on the organization (see slides 8-16 in Appendix). Susan Apeles shared that PACE is a non-profit community development corporation that served about 42,000 clients across Los Angeles County in 2021. PACE's community partners include the California Department of Community Services & Development (CSD), LADWP, Southern California Gas, and Southern California Edison (SCE). PACE reports that the COVID-19 pandemic impacted approximately 1.6 million households statewide who are late on water bills, and about 4 million customers statewide are behind on their energy bills.

Susan Apeles then overviewed PACE's impacts and related emergency programs and shared the following metrics:

# LA100 EQUITY STRATEGIES



- Emergency utility payment assistance – 12,335 clients
- Emergency utility payments – over \$6 million
- Home weatherization program – 13,964 clients
- Energy saving assistance program – over 5,000 households

Susan Apeles also highlighted PACE programs related to LA100 Equity Strategies, including:

- **Home Energy Assistance Program (HEAP)** – offers income-eligible residents of LA County a credit to their utility bill; eligible to LADWP, Southern California Edison (SCE), and SoCal Gas customers; along with utility credit, clients receive valuable information on energy conservation and practical tips on how to save and keep utility bill at manageable level.
- **Low-income Home Water Assistance Program (LIHWAP)** – assists eligible households in paying their water and wastewater bills, offering one-time payment assistance up to \$2,000.
- **LADWP Community Partnership** – community outreach and public education partnership to accomplish LADWP’s mission to actively help its low-income customers, particularly the most vulnerable, with their utility bills.
- **Weatherization Assistance Program** – assists income-eligible families by reducing their heating and cooling costs and addressing health and safety issues in their homes. Weatherization services provide energy efficiency services and household energy use reductions. Resulting energy cost savings are significant with an average annual savings estimate in excess of 20% per year.
- **Energy Savings Assistance (ESA)** – helps eligible customers of SoCalGas and SCE conserve energy and save money by providing energy efficiency services
- **American Rescue Plan Act (ARPA)** – Federally-funded program that provides utility bill payment assistance to qualified households who have been impacted by the COVID-19 pandemic. ARPA can provide qualified households one-time assistance of up to \$3,000 to settle their unpaid electricity or natural gas utility bills.

## Community Listening Sessions Update

Patricia Romero-Lankao from NREL presented updates on community listening sessions (see slides 17-20 in Appendix). Patricia Romero-Lankao recapped the first round, which consisted of five small groups of Angelenos who were asked what energy justice means to them. The second round, underway now, is intended to explore ways to address the challenges identified in the first round. She shared that the September listening sessions were co-hosted with Pacoima Beautiful (San Fernando Valley) and the South Los Angeles Transit Empowerment Zone (SLATE-Z; South Los Angeles). Patricia Romero-Lankao concluded by previewing the 10 scheduled in-person listening sessions.



## Major Themes from Steering Committee Questions and Discussion

- What information, ideas, or points of enlightenment came from the listening session with Pacoima Beautiful?
  - Patricia Romero-Lankao: NREL is reviewing the insights from community members and finding areas related to outreach. The community engagement team is working with modelers inside NREL to identify barriers and develop strategies to help LADWP address these issues from infrastructure or technological elements but also social and cultural barriers.
  - Simon Zewdu: Information gathered from these listening sessions will be added to the study as well as the implementation over the next 10-15 years. That's why these listening sessions where topics are discussed in-depth are extremely important. This input will be incorporated into the study.
- The input from the communities is very helpful. It sounds as if the major concerns are (1) continuing outreach, and (2) addressing the cultural barriers in the community (e.g., looking at the significant under-utilization of low-income billing programs).

## Air Quality and Health

Joan Isaacson introduced the short air quality and health agenda item, explaining that it would be a and report-back from the presentation and discussion at the October 17 Steering Committee meeting. Megan Day, Equity Strategies Project Manager and NREL Senior Energy Planner, spoke to the feedback received from Steering Committee members about insufficient representation among neighborhoods including Wilmington and the Los Angeles/Long Beach Port area, as well as the Los Angeles Airport (LAX) area and parts of Pacoima (see slide 22 in Appendix). Megan Day shared that the intersection of SB 535 and traffic-impacted communities will be studied, and that NREL will need to add the most recent definition of disadvantaged communities (DACs) to the LA100 Equity Strategies Study as indicated in SB 535.

Steering Committee members were then reminded by Joan Isaacson that meeting materials were sent out in advance of the Steering Committee meeting and that the slides presented during the meeting were attached in the email sent out by Dawn Cotterell at LADWP.

## Major Themes from Steering Committee Questions and Discussion

- It seems that small particulate matter from heavy-duty vehicles and diesel trains, which are health-important locally (within a mile or so) are overshadowed by NOx emissions, which get blown away by coastal breezes. Small particulate matter is also overshadowed by resultant smog which is not impacted as much by a thermal lid since it's near the ocean. This may underrepresent the health impact of small particulate matter in the harbor area.
- The presenter refers to individual customer buy-in to community solar, which is the current model for cost-savings, and questions were raised about the relevancy to the kind of community



solar that can be delivered to low-income neighborhoods during general power outages, which relies on the distribution grid.

- Ashreeta Prasanna: The way community solar programs usually operate, customers can subscribe to a fixed price. Sometimes this cost can be subsidized. In this case, customers have a set amount of electricity set aside at a subsidized rate that will then be distributed to them through the LADWP grid. Electricity rates keep increasing but these programs keep customers locked in at a fixed rate.
- Simon Zewdu: LADWP's model is different and Steering Committee members deserve more elaboration about it. NREL has given a great explanation here about what is possible. However, it is essential to talk about the restraints. One area covered in the LA100 Renewable Energy Study was solar. In a practical sense, constraints must be acknowledged from an equity perspective and more discussion is needed here. LADWP doesn't want to be overly optimistic about the findings at a potential level but instead talk about what can be done to expand community solar given constraints. LADWP will give a presentation on current community solar programs at some point, as well.

## Potential Community Solar and Storage Siting Options

Ashreeta Prasanna, Distributed Energy and Storage Analysis Researcher with NREL, presented on potential community solar sites (see slides 23-39 in Appendix). She shared that the focus is to understand, from the technical potential perspective (technical constraints i.e. available roof areas), how much solar can be sited in the City of Los Angeles. Additionally, the project team considers how community solar can be used to provide bill reduction and resilience for DACs. Another element is to use community and LADWP feedback to identify where community solar sites should be located. She stated that the outcome informs the ranking of potential community solar sites and their potential benefits. Lastly, Ashreeta Prasanna identified Steering Committee guidance on what neighborhoods and customer types to be prioritized, including an emphasis on multifamily and rental homes, and a consideration of age and income.

Ashreeta Prasanna shared that the goal of the presentation was to provide information on solar and storage siting data and methods and prioritize sites and other datasets. She recapped why this is an important topic, explaining that community solar helps with:

- **Community wealth-building:** Solar can support jobs and local workforce development as well as create educational opportunities, build wealth, and generate investments in under-resourced communities.
- **Mitigating environmental impacts:** Solar can be located on industrially contaminated lands that cannot accommodate other uses and are too often located in under-resourced communities.
- **Community resilience:** Solar can be paired with battery storage at critical facilities to offer frontline communities resiliency benefits in the event of an extended electrical outage.
- **Siting flexibility:** Utilities can help guide projects to optimal grid locations.
- **Economies of scale:** Community solar has the potential to be more cost-effective than smaller solar arrays.

# LA100 EQUITY STRATEGIES



- **Federal incentives:** Starting in 2023, small community solar projects (under 1 megawatt [MW]) will qualify for a base investment tax credit (ITC) of 30% through 2033. An example is the Clean Energy Coalition Prize.

Ashreeta Prasanna then presented findings related to rooftop solar and non-rooftop solar. All technical potential data (at potential solar sites) was obtained from Chapter 4 and Chapter 5 of the LA100 Study. Ashreeta Prasanna explained that additional processing and filtering of the data was carried out based on the following conditions:

- Sites which have the following land-use: multifamily, government-owned land, educational institutions, recreation centers, hospitals, religious institutions, other (e.g., airport, port).
- Sites with total capacity  $\geq 30$  kilowatts (kW) (using LADWP FiT program lower limit).
- Total capacity at each site could include rooftop, carport/parking, and ground-mount.

Ashreeta Prasanna discussed Local Solar and Storage Output Metrics and associated examples of enabled equity strategy analyses (see slide 32 in Appendix). For example, she stated that NREL identified a list of potential sites for community solar development with geospatial coordinates, along with key metrics such as capacity potential (kW and land area), number of potential subscribers by tract, tenure, income, and DAC status. The equity strategy analysis then identified potential community solar sites and their associated technical potential, net present value (NPV) for the project developer, NPV for subscribers, and the number of customers (subscribers) served by tract, tenure, DAC status, and income bins.

Another example, Ashreeta Prasanna shared, is a ranking of community solar sites based on benefits to LADWP (economic value) and benefits to the community (ability to serve a higher percentage of low-income customers in the same tract). The equity strategy analysis, she highlighted, ranks community solar sites based on metrics identified by the Steering Committee (e.g., type or usage of building and ease of access to community members), as well as metrics identified by LADWP subject matter experts (SMEs), such as the distributed energy resources (DER) priority map.

Ashreeta Prasanna presented significant findings of potential community solar site analysis which included: 27,477 potential community solar sites identified, 4,400 MW combined solar capacity potential, and 6,400 gigawatt-hours per year generation potential.

Also noted by Ashreeta Prasanna was that not all potential community solar sites can be developed due to regulatory, ownership, or other issues, and an important aspect to keep in mind when understanding the data takeaways. In further reviewing potential community solar sites, more than half of the potential solar sites are on multifamily buildings, followed by government-owned or other land and educational institutions, and 98% of the sites have a capacity of less than 1 MW. Ashreeta Prasanna then reviewed map images portraying data findings.

In reference to disadvantaged tracts from SB 535, Ashreeta Prasanna explained that 52% of potential sites are in disadvantaged tracts and the total potential solar capacity in disadvantaged tracts is 2,100

# LA100 EQUITY STRATEGIES



MW (49% of total capacity in LA) and a total potential solar capacity in historically redlined communities is 1,290 MW (29% of total capacity in LA of total capacity in LA). In reviewing map data on potential solar sites in tracts with high housing burdens and high poverty rates, Ashreeta Prasanna shared that 95% of households in disadvantaged tracts have a high housing burden ( $\geq 50\%$ ); 830 MW of potential capacity is located in disadvantaged tracts with high housing burden (greater than 80%) and high poverty rate (greater than 80%); and together this corresponds to 19% of the total potential capacity.

Ashreeta Prasanna discussed potential solar sites in LADWP Feed-in Tariff Priority Zones (FiT + Priority Zones) and recapped that 250 MW of potential solar capacity is in LADWP FiT+ Priority Zones which corresponds to 6% of the total potential capacity. An LADWP local solar “by the numbers” was then shared, including quantitative data pertaining to net energy metering/solar incentive programs (SIP), the Feed-in Tariff (FiT) program, the Feed-in Tariff Plus program, Solar Rooftops program, and the Shared Solar program.

Ashreeta Prasanna provided a demonstration of the [interactive map tool](#), choosing between different filters on the screen to yield various results.

## Major Themes from Steering Committee Questions and Discussion

- What is the viability and direction of the existing Community Solar proposals in terms of an "equity" benefit?
- Community solar siting will require extensive groundtruthing to discover which sites are truly appropriate for solar development.
- How does the location of community solar plants help with air pollution burdens? It is important to answer what specific benefits (versus detriments) do these locations provide to the local residents. Benefits in outages are only delivered if LADWP distribution system can isolate entire areas as community solar users.
  - Megan Day: The entire analysis will focus on providing bill savings and resilience benefits to underserved communities.
- Given the analysis, how viable is this for Southeast and Southwest Los Angeles? What challenges did the project team identify in terms of installation sites available?
- This exercise is using the current model for community solar. That only makes sense in a non-green grid where either greener energy or cheaper energy can be delivered to specific customers who "subscribe". But Los Angeles is planning a 100% green energy system, so low-income benefits can be delivered more economically with direct subsidies, rather than this effort to create "community solar farms" which have no real value to any individual customer, though they may help LADWP with its own distribution challenges.
- Has there been an analysis of the current solar programs i.e. customer experience and cost savings? There are significant barriers for customers to sign up, particularly the lack of financial incentives. In some cases, people were paying a higher rate to participate in the shared solar program.
  - Megan Day: UCLA has done extensive research on LADWP program participation and may have more insights to answer your question. NREL modeling will identify and





- prioritize sites and approaches that deliver bill savings and/or resilience benefits to DACs.
- Ashreeta Prasanna: We looked at community solar within Los Angeles as part of the City's Green New Deal (pLAN) to increase local solar to 1500-1800 MW by 2035 [https://plan.lamayor.org/sites/default/files/pLAN\\_2019\\_final.pdf](https://plan.lamayor.org/sites/default/files/pLAN_2019_final.pdf)
- Refineries and extraction sites are anticipated for closures. Regarding larger extraction sites there are competing interests such as Baldwin Hills where Supervisor Mitchell is interested in seeing affordable housing, and the Baldwin Hills Conservancy is interested in expanding parkland.

## Green Jobs Workforce Development

Abel Valenzuela, Professor of labor studies, urban planning and Chicana/o and Central American studies and Director of UCLA's Institute for Research on Labor and Employment and Interim Dean of UCLA's Division of Social Sciences, provided an introduction about the UCLA team's credentials and framework of the study. He then gave a preview of what would be overviewed during the presentation including the Green Jobs Historical Calculator, LADWP Jobs and Regional Equity, Protecting Green and LADWP Jobs, and Workforce Development and Community Engagement Challenges.

Raul Hinojosa-Ojea, Associate Professor in the UCLA Department of Chicana and Chicano Studies, talked in greater detail about the subject (see slides 41-56 in Appendix) and reported that the total number of green jobs has been growing more rapidly compared to that of non-green jobs in the City of Los Angeles since 2011, at 8.2% and 4.6% respectively between the years of 2011 and 2019. Raul Hinojosa-Ojea discussed demographic breakdowns of these figures and LADWP power sector employee data statistics.

In order to protect LADWP green jobs, Raul Hinojosa-Ojea specified that LADWP can focus on sustainable and equitable investments by estimating baseline inequality gaps, employment impacts of LADWP, projected demographic changes, and necessary workforce development investments. Raul Hinojosa-Ojea overviewed the methodology for estimating such investments and employment impacts by LADWP, and noted the Wilmington research is underway and can be used as a future case study for how to address workforce development challenges.

Raul Hinojosa-Ojea then discussed the principles of the High Road workforce system to target quality jobs that provide economic security for workers and communities. He then asked for Steering Committee feedback on the following questions:

- How does the Steering Committee envision an equitable (energy) green jobs workforce development, both for the future and in the context of historical inequalities?
- How should DWP distribute and train for a more equitable direct, indirect green job growth as well as the indirect and induce green jobs within and outside the LA basin?



## Major Themes from Steering Committee Questions and Discussion

### **How does the Steering Committee envision an equitable (energy) green jobs workforce development, both for the future and in the context of historical inequalities?**

- Similar to the community solar conversation, groundtruthing the to access these green jobs for communities of color is needed. For example, additional training or access to training programs. While also educating people about the opportunities for good jobs at LADWP, it would also be important to strengthen local and targeted hire within these efforts.
- Expand LADWP's Pre-Craft workforce training program, a pre-entry, leading path to trade class jobs). This gives jobs to mostly local residents who don't have existing LADWP or union connections and don't have many existing skills, and is especially applicable to local solar installation and individual building solar sites and farms.
- Considering someone who lives in the shadow of Scattergood and wants a high-quality green job is needed. What are the specific planned investments, spelled-out by line item, to accelerate the transition of these assets. What are those investments in green job growth and how are we linking them to prioritizing those in and around the facilities? It would be helpful to show how many of these workers don't often live in these communities. Many are driving and therefore contributing to GHG generation. People are driving to power plant jobs from far away communities that aren't directly impacted.
  - Simon Zewdu: Part of what we're trying to achieve in the Equity Strategies is not only the strategy but something that can be sustained over the years. Some of the projects that will take place will definitely be located in these communities. Project agreements often stipulate that employees come from specific zip codes. Secondly, LADWP has the utility pre-craft program which is being worked on in the human resources department to train people to be utility workers. At the end of this study, LADWP will come up with a list of strategies that will sustain Los Angeles communities.
  - Raul Hinojosa-Ojea: The goal here for this methodology and case study is to make it available to any communities to groundtruth the data and test with a community focus. Like Simon said, the commitment is important, as well as how communities are educated from K-12 and beyond in some to prepare for the green economy.
  - Abel Valenzuela: The UCLA jobs and workforce development team, including Raul and Abel, are committed to improving access to green jobs for DACs.
- Because LADWP says we need X amount of investment but the investment isn't one time. The investment occurs over 23 years until 2045. So how do we sustain that investment and accelerate it over time?
- NREL itself has declared that the 100% renewable energy goal cannot be achieved with system reliability without "combustion generation" in-basin at the locations of existing power plants. Green hydrogen would allow that combustion generation without net GHG creation.



## Major Themes from Steering Committee Questions and Discussion

### **How should DWP distribute and train for a more equitable direct, indirect green job growth as well as the indirect and induce green jobs within and outside the LA basin?**

- "Indirect" green jobs include those in the greening of transportation and buildings. Training for those skills might conceivably be within the scope of LADWP training subsidies in terms of increasing energy sales for buildings, as an example. More gross sales keep per-unit costs down for every customer.
- LADWP could take a look at the SEED workforce development program from LA Metro. The SEED School of Los Angeles County will be the nation's first boarding school for grades 9-12 to focus on Metro's future workforce needs. Some career/vocational pathways can be implemented in high school versus a community college.
- It's important to distinguish between produced vs. distribution. It is important to clarify that those things are separated in the jobs conversation. The generation and distribution sides are very different.
- Focusing on how to help improve the workforce in DACs is essential.
- LADWP should start a school (or advance the training programs as a school with IBEW-NECA). IBEW-NECA has an incredible training center but they work with private contractors. A public school is needed, especially in high schools.
- What's the next step? A lot of the questions posed are things that we would want to take back to frontline community members. So again, how can we take these conversations in a more direct way?
  - Simon Zewdu: This is a topic that will impact every community across the City of Los Angeles. The project team will have a framework for additional and expanded community engagement in this area and make sure that more information is gathered from community members in this area and that all of the concerns of the community are addressed.
- Most of LADWP's employees don't live in DACs but those that do are predominantly Black, Indigenous, or People of Color (BIPOC). So how do we ensure that green jobs are being created in communities that are impacted the most and even next to plants so that they can walk, bike, or take public transit to work (and not drive hours)?
- What are opportunities to look more holistically at job needs for a clean energy transition like water efficiency and customer outreach/engagement which can create additional utility job pathways?
- Does anyone have a model for Community Benefits Agreements for this transition? We are seeking one that benefits frontline communities.

## Wrap Up and Next Steps

Joan Isaacson reminded participants that there is a link to determine availability for a December 21<sup>st</sup> Steering Committee meeting. Simon Zewdu assured participants that the project team will figure out another option if there is not a critical mass for the December meeting.

# LA100 EQUITY STRATEGIES



Joan Isaacson stated that the next Steering Committee meeting will take place on November 16, 2022, and that subsequent meetings will occur monthly on the third Wednesday of each month from 10:00 am – 12:00 pm. Simon Zewdu closed the meeting by expressing thanks to the Steering Committee for their participation in the Equity Strategies process.

# LA100 EQUITY STRATEGIES



## Appendix

Steering Committee Meeting #12

October 19, 2022

Presentation Slides



**LA100 Equity Strategies  
Steering Committee Meeting #12  
October 19, 2022**



# Los Angeles Department of Water & Power (LADWP)

## Project Leads



**Simon Zewdu**

Director

Transmission Planning,  
Regulatory, and Innovation Division



**Pjoy T. Chua, P.E.**

Assistant Director

Transmission Planning, Regulatory,  
and Innovation Division



**Steve Baule**

Utility Administrator

LA100 Equity Strategies Oversight  
& UCLA Contract Administrator



**Stephanie Spicer**

Community Affairs Manager



# Brian Wilbur

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Senior Assistant General Manager of  
Power System Construction, Maintenance,  
and Operations at LADWP





# Agenda

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Start Time	Item
10:00 a.m.	Welcome
10:05 a.m.	Meeting Purpose and Agenda Overview
10:10 a.m.	Steering Committee Spotlight: Pacific Asian Consortium in Employment (PACE)
10:20 a.m.	Community Listening Sessions Update
10:25 a.m.	Air Quality & Health Response to Feedback
10:30 a.m.	Potential Community Solar & Storage Siting Options
11:10 a.m.	Green Jobs & Workforce Development
11:55 a.m.	Wrap Up and Next Steps

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# Our Guide for Productive Meetings



*Raise your hand*  
to join the  
conversation  
(less chat  
entries, more  
talking)



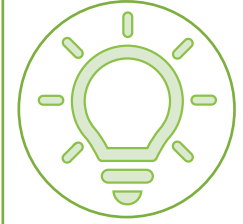
Help to make  
sure that  
everyone has  
*equal time* to  
contribute



Keep input  
*concise* and  
*focused* so that  
others have  
time to  
participate



*Actively listen* to  
others to  
understand their  
perspectives



*Offer ideas* to  
address others'  
questions and  
concerns



# Steering Committee Roster

Organization	Representative
Alliance of River Communities (ARC)	Vincent Montalvo
City of LA Climate Emergency Mobilization Office (CEMO)	Marta Segura, Rebecca Guerra
Climate Resolve	Jonathan Parfrey, Bryn Lindblad
Community Build, Inc.	Robert Sausedo
DWP-NC MOU Oversight Committee	Tony Wilkinson, Jack Humphreville
Enterprise Community Partners	Jimar Wilson, Michael Claproth
Esperanza Community Housing Corporation	Nancy Halpern Ibrahim
Los Angeles Alliance for a New Economy (LAANE)	Kameron Hurt, Estuardo Mazariegos
Move LA	Denny Zane, Eli Lipmen
Pacific Asian Consortium in Employment (PACE)	Celia Andrade, Susan Apeles
Pacoima Beautiful	Veronica Padilla Campos, Melisa Walk
RePower LA	Michele Hasson, Roselyn Tovar
The South Los Angeles Transit Empowerment Zone (SLATE-Z)	Zahirah Mann, April Sandifer
South LA Alliance of Neighborhood Councils	Thryeris Mason
Strategic Concepts in Organizing and Policy Education (SCOPE)	Agustín Cabrera, Tiffany Wong



# Including Future Agenda Items

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## Tentative Schedule

### This Meeting

- Steering Committee member check-in: PACE
- Listening sessions update
- Community solar and storage siting options
- Jobs & workforce development
- SLTRP update

### November 16, 2022

- CEMO – LA Equity Index
- Vehicle electrification and charging modeling
- Household energy modeling
- Rates and affordability modeling
- Legal and regulatory constraints around rates and affordability

### Future Meetings

- Grid reliability and resilience
- Listening sessions
- UCLA Energy Atlas and buildings

# Steering Committee Spotlight

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Pacific Asian Consortium in Employment  
(PACE)





**Energy & Environmental Service  
Celia Andrade, Director**

# About PACE

**Pacific Asian Consortium in Employment (PACE)** is a non-profit, community development corporation that creates economic solutions to meet the challenges of employment, education, housing, the environment and business development in the Pacific Asian and other diverse communities.

Our ethnically diverse staff reflects the multicultural diversity of our clients.  
PACE served about 42,000 clients from across LA County in 2020-2021.



# PACE Energy

**PACE Energy**, in collaboration with its community partners – the State of California Department of Community Services & Development (CSD), Los Angeles Department of Water & Power (LADWP), Southern California Gas Company (SoCalGas), and Southern California Edison (SCE) – provides outreach, energy and environmental conservation education, weatherization services, and assistance with utility bill payment to low-income individuals and families throughout the Greater Los Angeles Area under its designated service territories.





# Energy By The Numbers

As a result of the COVID-19 pandemic, the number of households struggling to pay utility bills has grown exponentially. Statewide, an estimated 1.6 million households are late on water bills and about 4 million customers are behind on energy bills. PACE Energy has been on the frontlines to provide financial assistance to low-income households disproportionately burdened by utility expenses.

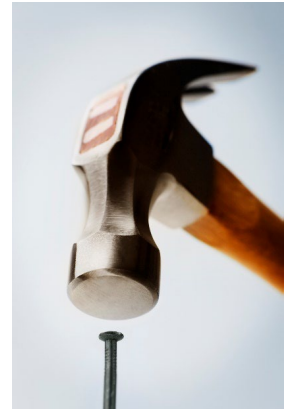
## **PACE Energy by the Numbers –**

12,335 - Clients receiving Emergency Utility Payment Assistance

\$6,144,155 - in Emergency Utility Payments

13,964 - Clients served through the Home Weatherization Program

5,213 - Households served by the Energy Savings Assistance Program



# PACE Programs

- Home Energy Assistance Program (HEAP)
- Low Income Home Water Assistance Program (LIHWAP)
- LADWP Community Partnership Outreach Program
- Weatherization Assistance Program (WAP)
- Energy Savings Assistance (ESA) Program
- American Rescue Plan Act (ARPA) Program

# PACE Energy Programs

## Home Energy Assistance Program (HEAP)

The Home Energy Assistance Program (HEAP) offers income-eligible residents of Los Angeles County a credit to their utility bill. HEAP is available for people who purchase energy from LADWP, SCE, or the SoCalGas. Along with the utility credit, clients will also receive valuable information about energy conservation and practical tips on how to save energy and keep your utility bill at a manageable level.



## Low Income Home Water Assistance Program (LIHWAP)

LIHWAP assists eligible households in paying their water and wastewater bills. This program offers a one-time payment assistance on their water bills up to \$2,000.00.

LIHWAP serves eligible customers at a first come, first served basis.

# PACE Energy Programs

## PACE/LADWP Community Partnership Program

This is a community outreach and public education partnership to accomplish LADWP's mission to actively help its low-income customers, particularly the most vulnerable, with their utility bills.



PACE reaches out to promote LADWP's rebate, discount, low-income/lifeline program and water and landscape conservation programs to its low-income and hard to reach customers.

## PACE Weatherization Assistance Program

The Weatherization Assistance Program assists income-eligible families by reducing their heating and cooling costs and addressing health and safety issues in their homes. Weatherization services provide energy efficiency services. Household energy-use reductions and resultant energy cost savings are significant, with an average annual savings estimated to be in excess of 20% per year.

# PACE Energy Programs

## Energy Savings Assistance (ESA) Program

PACE's Energy Savings Assistance Program helps eligible customers of Southern California Gas Company (SoCalGas) and Southern California Edison (SCE) conserve energy and save money by providing energy efficiency services like minor home repair and repair or replacement of appliances and equipment to heat and cool their homes.

## American Rescue Plan Act (ARPA) Program

ARPA is a Federally-funded program that provides utility bill payment assistance to qualified households who have been impacted by the COVID-19 pandemic. ARPA can provide qualified households a one-time assistance of up to \$3,000 to assist to settle their unpaid electricity or natural gas utility bills. Assistance is provided on a first come, first served basis.



# Community Listening Sessions Update

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Dr. Paty Romero-Lankao, NREL



# From the *What* to the *How*

## Listening Sessions

Spaces of  
Collaboration  
with Community  
Participants

### The What

#### First Round :

We asked five small groups of Angelenos ***what* energy justice means to them**, including their:

- (1) **vision** for a just energy future in their community
- (2) **understandings** of factors influencing energy inequities in their community
- (3) **suggested energy strategies** to redress these inequities.

### The How

#### Second Round :

The next 10 listening sessions aim to **understand *how* to:**

- (1) **rectify** the challenges shared in our last sessions
- (2) **achieve the energy equity goals** community members have outlined.



# Listening Sessions

## Highlights

### San Fernando Valley

- With Pacoima Beautiful
- 12 participants
- **Key highlights**
  - **Access & Use** | Rental conditions thwarting *access/eligibility* to LADWP benefits; financial institutions thwarting *use* of existing benefits
  - **Institutional Action** | Improve program design
  - **Collective Action** | Request for community-led program design
  - **Continuing the Loop** | Appreciated feedback loop

### South LA

- With SLATE-Z
- 6 participants
- **Key highlights**
  - **Fit** | Tailor engagement strategies to different groups; i.e., social media for the youth versus door-to-door for the elderly
  - **Access** | Request for educational opportunities for youth in schools + adults
  - **Safety** | Request for public street lighting and more shade
  - **Continuing the Loop** | Requested we return





# Listening Sessions

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## Round Two

## 10 In-Person Listening Sessions

- Two sessions in September 2022
  - Communities of Focus: San Fernando Valley, South LA #1
- Three sessions in October 2022
  - Communities of Focus: South LA #2, Two in Harbor
- Two Sessions in November 2022
  - Communities of Focus: South LA #1, East LA
- Three Sessions in December 2022
  - Communities of Focus: East LA, South LA #2, San Fernando Valley



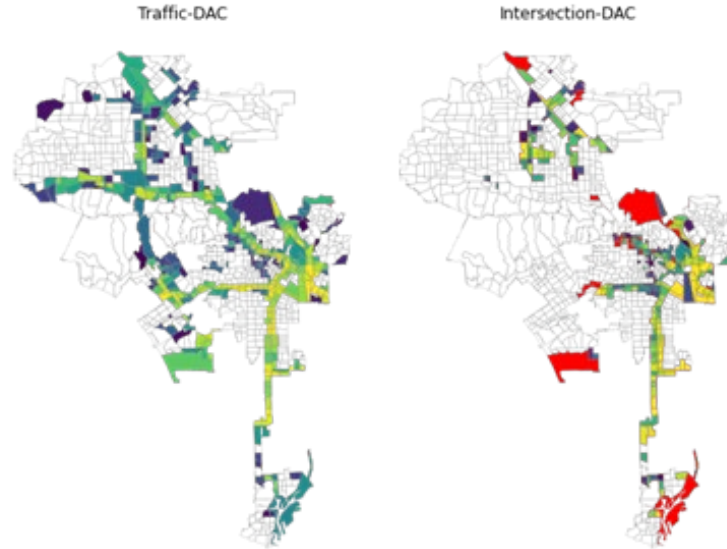
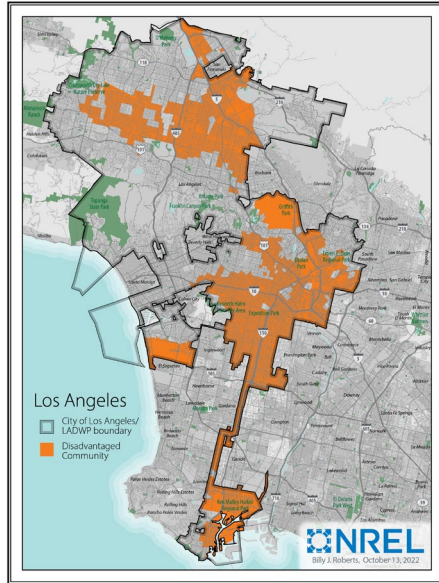
# Air Quality & Health

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Response to feedback from  
September meeting



# Air Quality & Health: Medium- and Heavy-Duty Vehicle Electrification Update



Based on Steering Committee and UCLA feedback, NREL revisited the traffic-impacted disadvantaged community mapping and realized new census tracts—designated by California Senate Bill 535—were missing. These census tracts have now been added, resulting in the additional census tracts **in red** and greater representation of the LAX area and Wilmington neighborhood for the analysis.

# Potential Community Solar and Storage Siting Options

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Ashreeta Prasanna, NREL

Jane Lockshin, NREL



# Project Overview

## Questions to be answered:

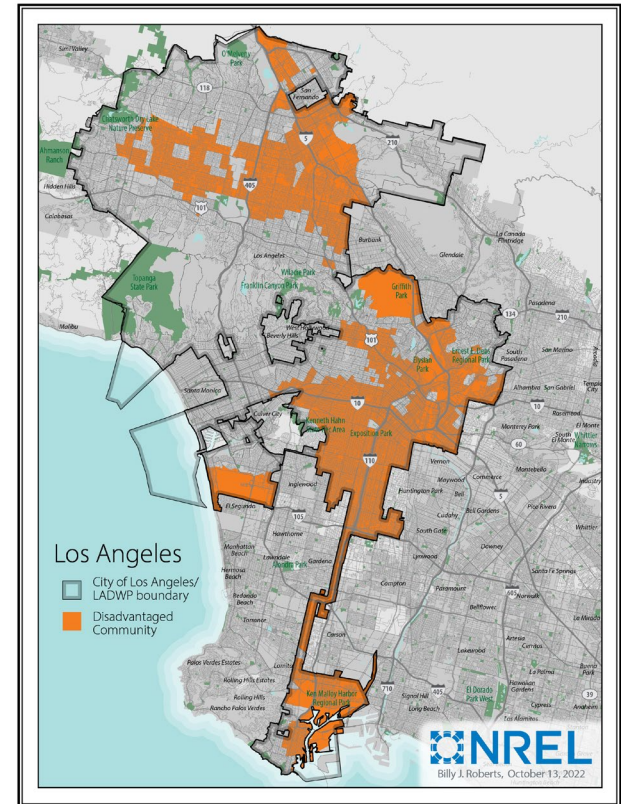
- How much community solar can be sited in the City of LA and how can it be used to provide bill reduction or resiliency benefits to underserved communities or low-income customers?
- Where should community solar be sited based on community priorities?

## Outcomes:

- Answers will inform ranking of potential community solar and/or resiliency centers based on their location and potential benefits provided to underserved communities or low-income customers.

## Steering Committee guidance:

- Which neighborhoods and customer types should be prioritized?
- Feedback from prior Steering Committee meetings:
- Recreation centers, other public buildings which are accessible to the public.
  - Multifamily and renters should be prioritized.
  - Age and income of customers should also be considered.



# Goals of Today's Presentation

- Provide information on solar and storage siting data and methods.
- Prioritize sites and other datasets.



# Importance of Local Community Solar



**Community wealth-building.** Solar can support jobs and local workforce development as well as create educational opportunities, build wealth, and generate investments in under-resourced communities.



**Mitigating environmental impacts.** Solar can be located on industrially contaminated lands that often cannot accommodate other uses and are too often located in under-resourced communities.



**Community resilience.** Solar can be paired with battery storage at critical facilities to offer frontline communities resiliency benefits in the event of an extended electrical outage.

# Importance of Local Community Solar



**Siting flexibility.** Utilities can help guide projects to optimal grid locations.



**Economies of scale.** Potential to be more cost-effective than smaller solar arrays.



**Federal incentives such as [Clean Energy Coalition Prize](#).** Starting in 2023, small community solar projects (under 1 megawatt [MW]) will qualify for a base investment tax credit (ITC) of 30% through 2033.

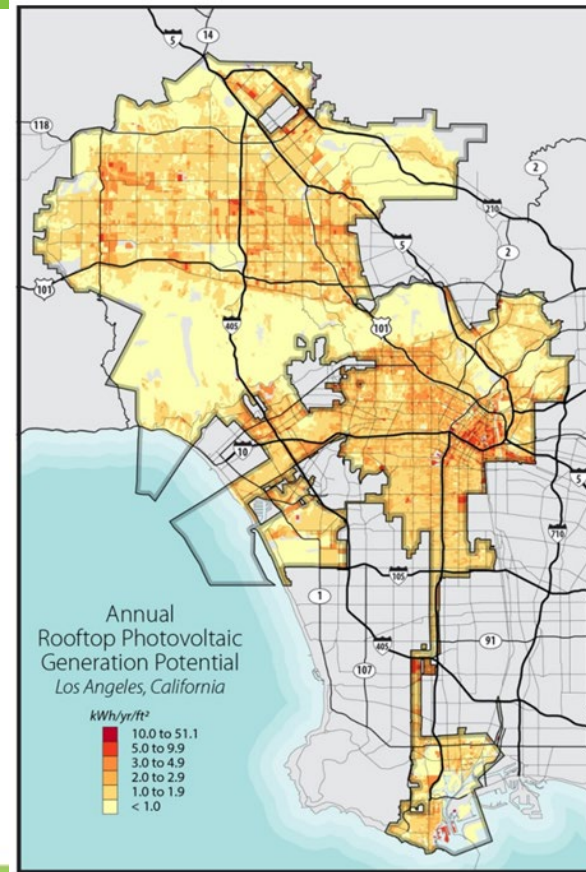
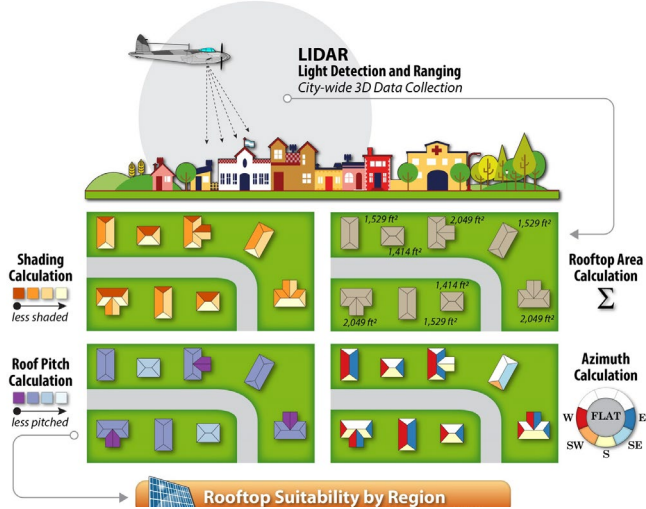
Additional Inflation Reduction Act (IRA) credits:

- + 10% for meeting domestic content specifications
- + 10% if at a brownfield site or in a community directly impacted by fossil fuels
- + 10% if in a low-income community or on tribal land (by application)
- + 20% if part of a Low-Income Residential Building Project or Qualified Low-Income Economic Benefit Project (by application)

Source: World Resources Institute, "[How Community Solar Can Benefit Low- and Moderate-Income Customers](#)," and DOE's Solar Energy Technology Office, "[Reaching for the Solar Future: How the Inflation Reduction Act Impacts Solar Deployment and Expands Manufacturing](#)."



# Data – Rooftop Solar



**Identification of solar rooftop potential** relies on lidar data sets provided by the U.S. Department of Homeland Security's Homeland Security Infrastructure program for the larger Los Angeles Metropolitan Area collected in 2007 and 2013.

**Technical potential estimates** are supplemented by parcel-level tax assessor data for Los Angeles County (Los Angeles County 2017).

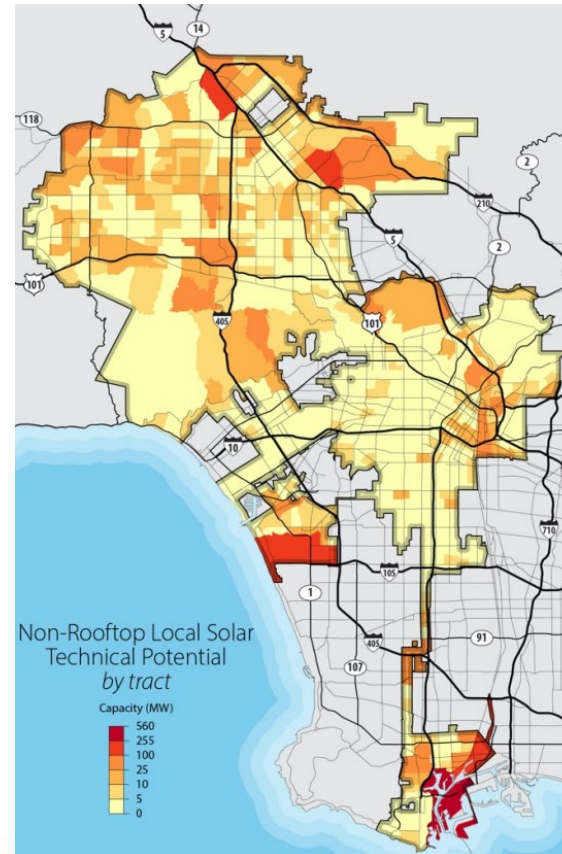
Source: [Chapter 4: Customer-Adopted Rooftop Solar and Storage in The Los Angeles 100% Renewable Energy Study.](#)



# Data – Non-rooftop Solar

**Identification of non-rooftop potential** relies on County-, City-, and LADWP-provided datasets. The technical potential for non-rooftop local solar is calculated by excluding land that is unsuitable for local solar development. Some of the criteria for exclusions are listed below, and additional exclusions are described in [U.S. Renewable Energy Technical Potentials: A GIS-Based Analysis](#):

- Existing developments (buildings, streets, bike paths, airport runways)
- Land cover (water, wetlands, forests, shrubland, farmland)
- Parks and recreational sites
- Steep terrain (slope greater than 10%)
- Landmarks (schools, cemeteries, stadiums, etc.)
- Excessively shaded areas
- Non-parking-lot lands.

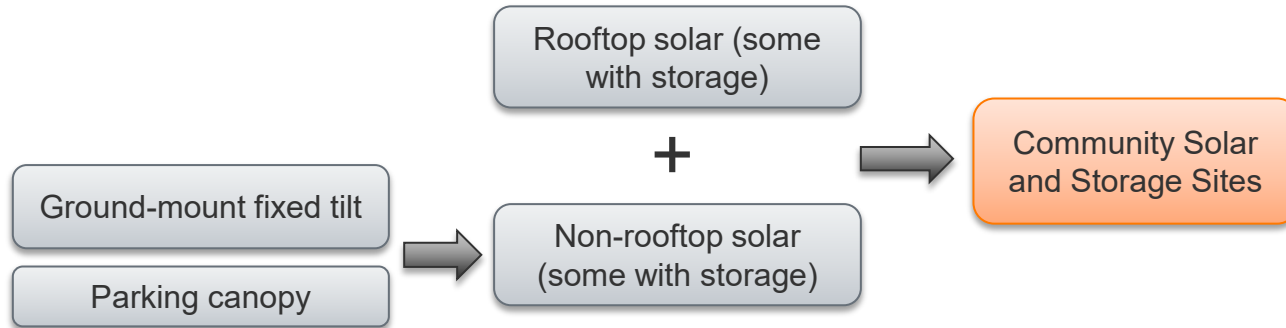


Source: [Chapter 5: Utility Options for Local Solar and Storage in The Los Angeles 100% Renewable Energy Study](#).

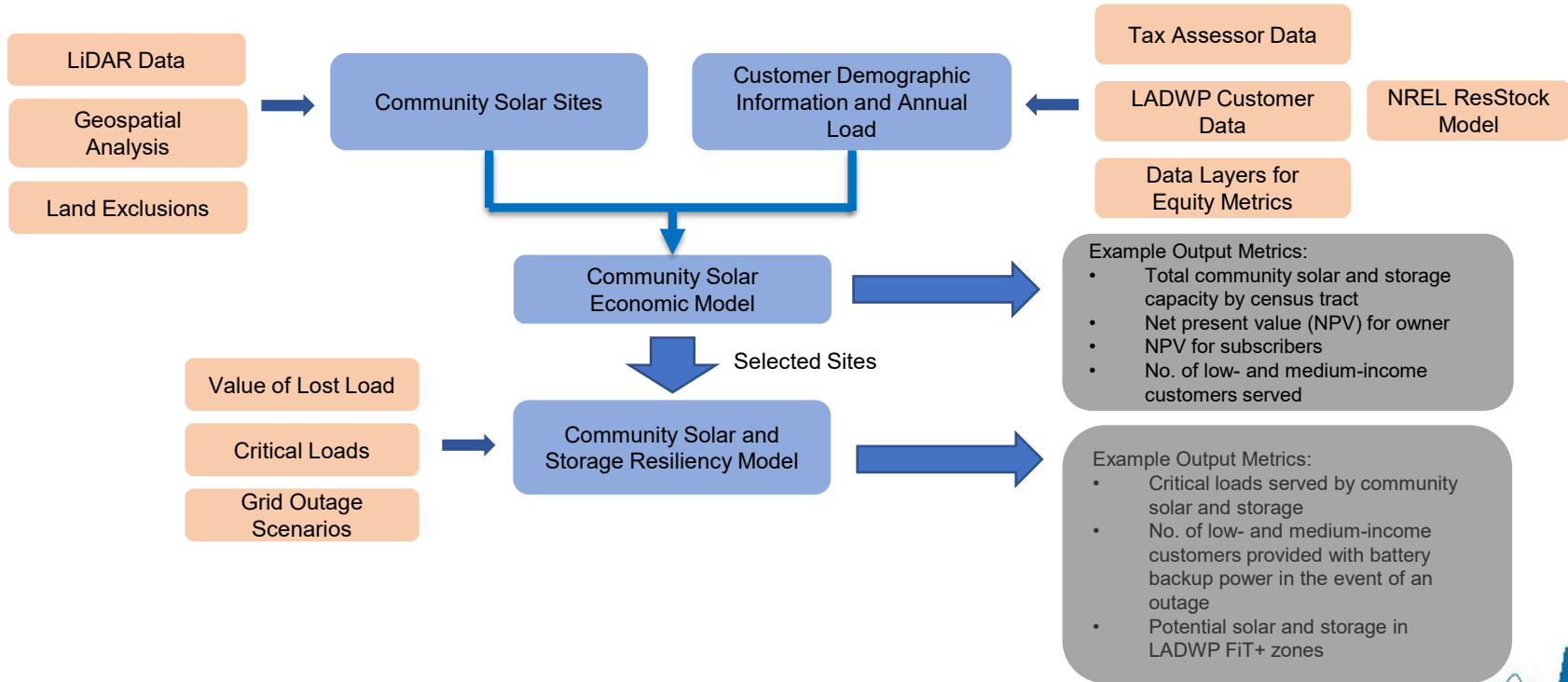
# Data

**All technical potential data** (at potential solar sites) is obtained from the LA100 Study (described in Chapter 4 and Chapter 5). Additional processing and filtering of the data is carried out based on the following conditions:

- Sites which have the following land-use: multifamily, government-owned land, educational institutions, recreation centers, hospitals, religious institutions, other (i.e., airport, port).
- Sites with total capacity  $\geq 30$  kilowatts (kW) (using LADWP FiT program lower limit).
- Total capacity at each site could include rooftop, carport/parking, and ground-mount.



# Project Overview



# Local Solar and Storage Output Metrics

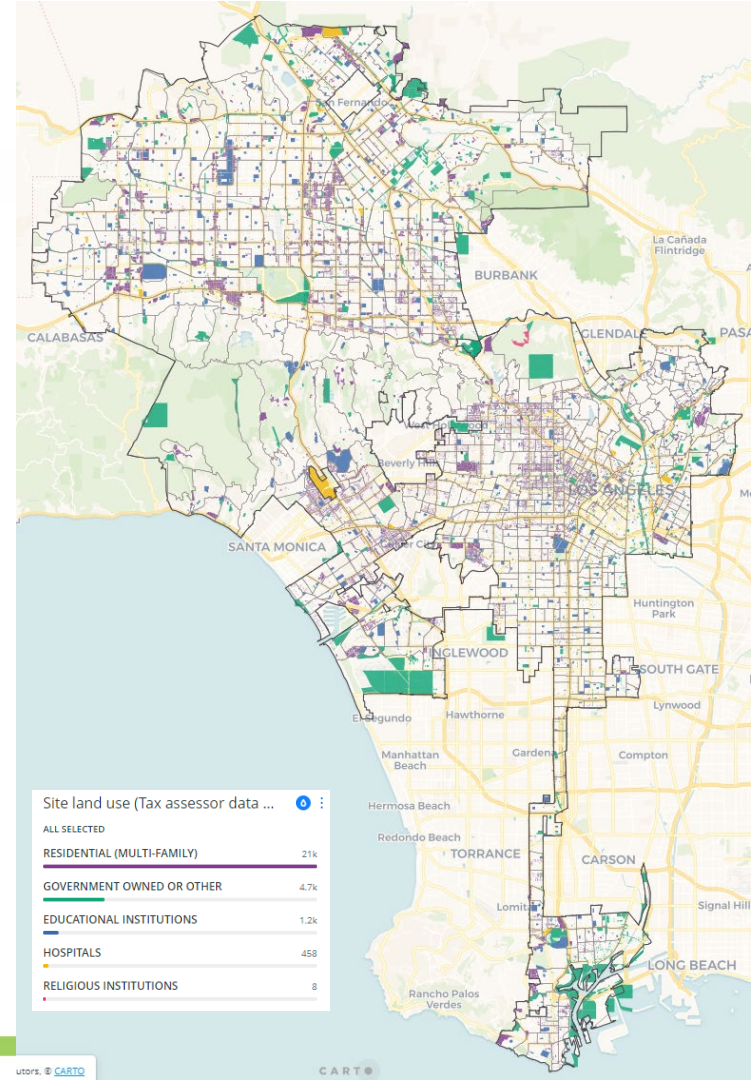
Local Solar and Storage Output Metrics	Example of Enabled Equity Strategy Analysis
<p><b>List of potential sites for community solar development with geospatial coordinates, along with key metrics such as capacity potential (kW and land area), number of potential subscribers by tract, tenure, income, and DAC status.</b></p>	<p>Identifying potential community solar sites and their associated technical potential, net present value (NPV) for the project developer, NPV for subscribers, and the number of customers (subscribers) served by tract, tenure, DAC status, and income bins.</p>
<p><b>Ranking of community solar sites based on benefits to LADWP (economic value) and benefits to the community (ability to serve a higher percentage of low-income customers in the same tract).</b></p>	<p>Ranking community solar sites based on metrics identified by the Steering Committee (e.g., type or usage of building and ease of access to community members), as well as metrics identified by LADWP subject matter experts (SMEs), such as the distributed energy resources (DER) priority map.</p>
<p><b>Storage potential for top-ranked community solar sites to provide backup power to connected customers in the event of a grid outage.</b></p>	<p>Identifying community solar sites that can provide backup power in the event of grid outages to the highest percentage of low-income customers and disadvantaged communities.</p>
<p><b>Critical loads and number of low-income customers served at a tract scale if community solar and storage are used to provide backup power.</b></p>	<p>Identifying community solar sites that can serve critical loads and higher numbers of low-income or disadvantaged customers to increase resiliency.</p>



# Potential Community Solar Sites

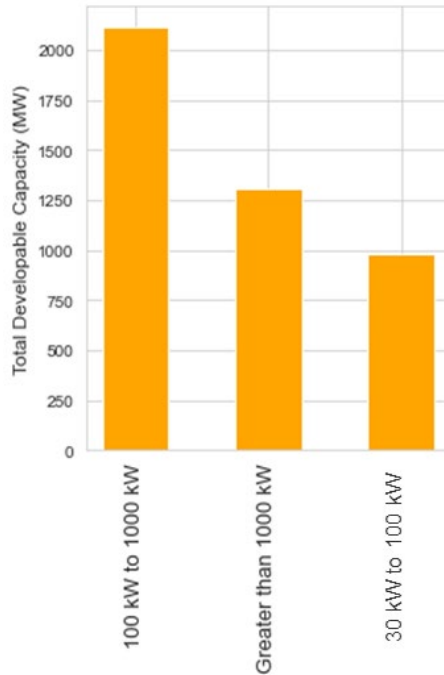
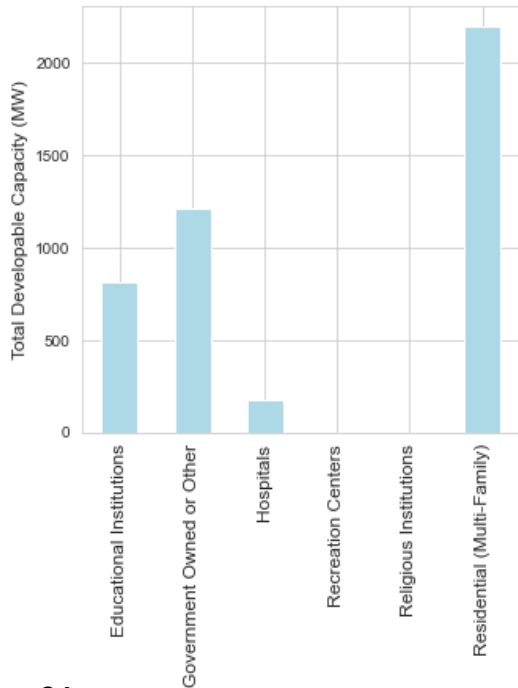
- 27,477 potential community solar sites identified
- 4,400 MW combined solar capacity potential
- 6,400 gigawatt-hours per year generation potential

*If all potential community solar sites were developed, they would produce the equivalent of 100% of annual electricity consumption of all renter occupied households in the city of LA (assuming an average consumption of 5,000 kWh per household). However, not all potential community solar sites can be developed due to regulatory, ownership, or other issues.*



# Potential Community Solar Sites

- More than half of the potential solar sites are on multifamily buildings, followed by government owned or other land and educational institutions.
- 98% of the sites have capacity less than 1 MW.

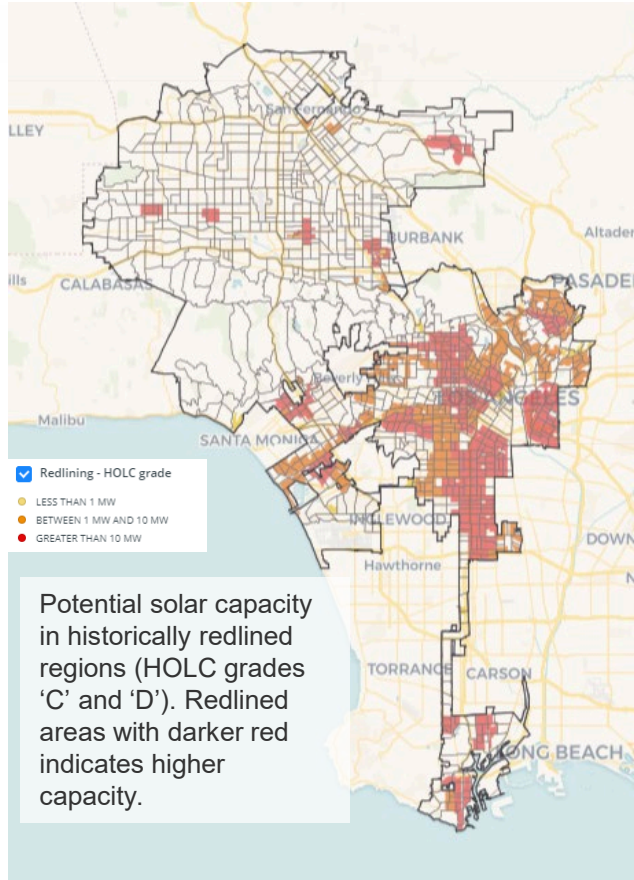
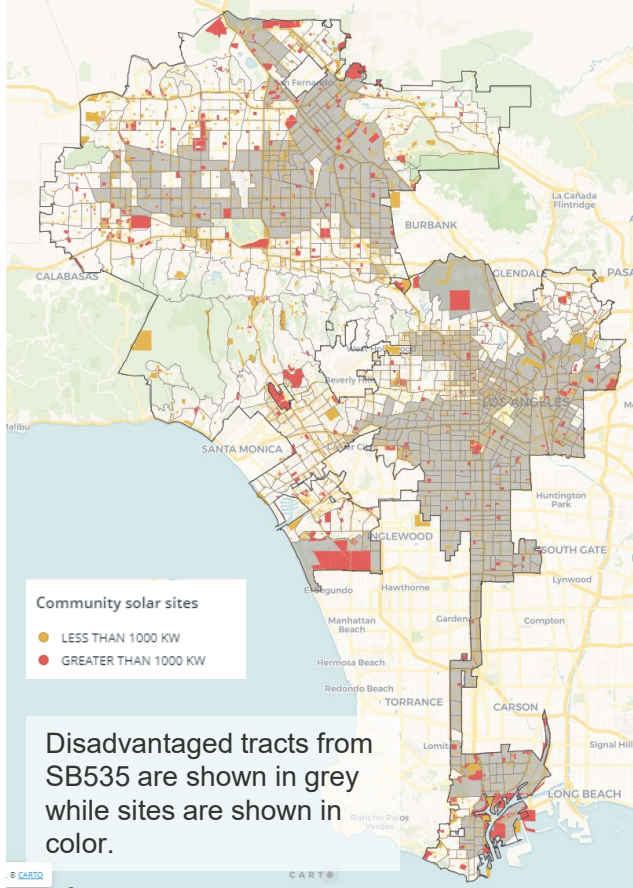


Land Use	No. of Sites	Capacity (MW)	Generation (GWh/yr)
Residential (Multi-Family)	21,077	2,195	3,329
Government Owned or Other	4,602	1,167	1,860
Educational Institutions	1,214	815	1,020
Hospitals	458	179	199
Recreation Centers	118	46	55
Religious Institutions	8	1.1	2.4
<b>Total</b>	<b>27,477</b>	<b>4,400</b>	<b>6,400</b>

Type of Installation	Capacity (MW)
Ground-mount solar	866
Carport solar	947
Rooftop solar	2,591
Storage (sited with solar)	524



# Potential Solar Sites in Disadvantaged Tracts & Redlined Areas



## Disadvantaged tracts (SB 535)

- 52% of potential sites are in disadvantaged tracts (SB 535).
- Total potential solar capacity in disadvantaged tracts is 2,100 MW (49% of total capacity in LA).

## Historically redlined areas

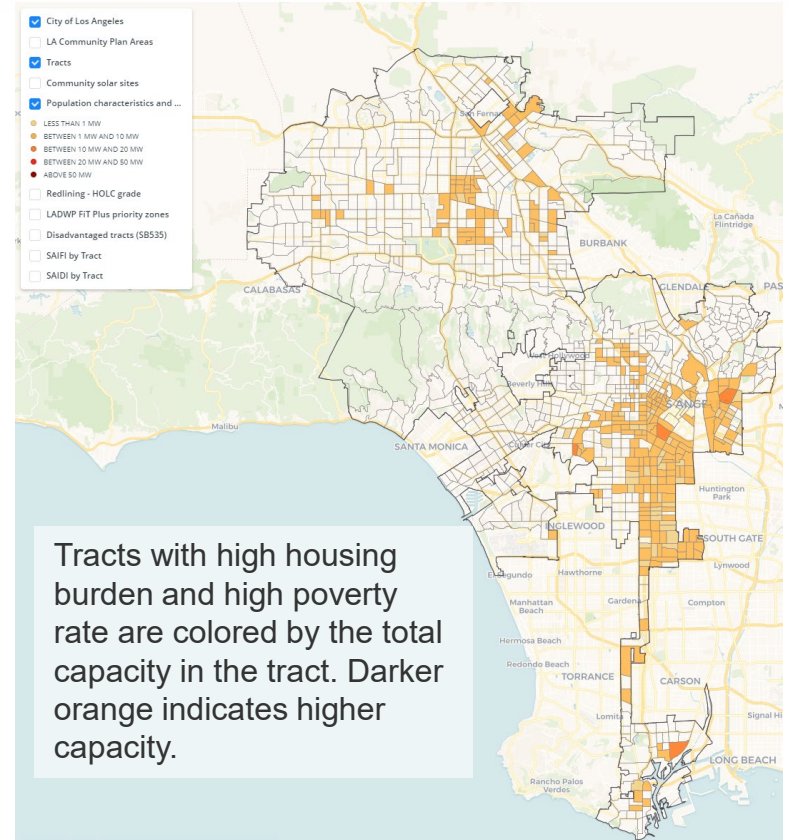
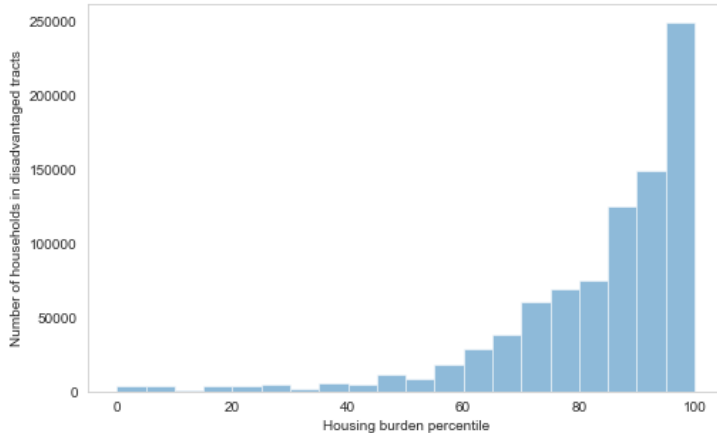
- 57% of the sites are in historically redlined areas (areas designated C or D).
- Total potential solar capacity in historically redlined communities is 1,290 MW (29% of total capacity in LA of total capacity in LA).





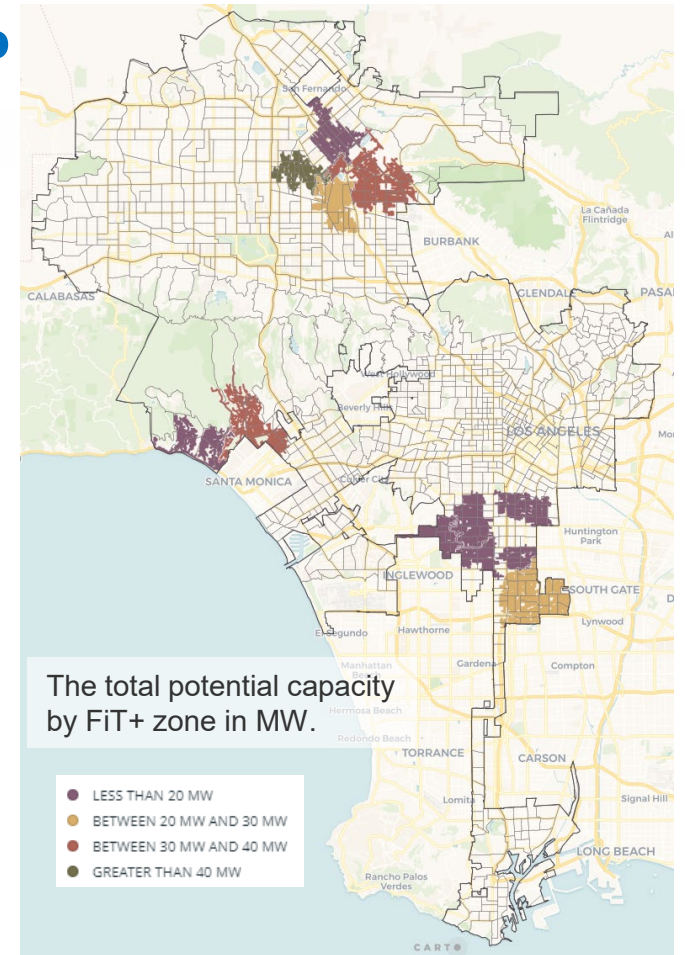
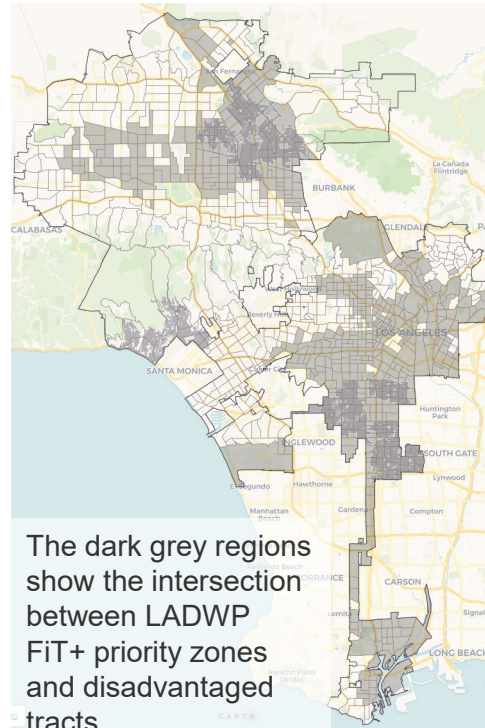
# Potential Solar Sites in Tracts with High Housing Burdens and High Poverty Rates

- 95% of households in disadvantaged tracts have high housing burden ( $\geq 50\%$ ). (Calculated from ACS 2019 data)
- 830 MW of potential capacity is in disadvantaged tracts with high housing burden (greater than 80%) and high poverty rate (greater than 80%).
- This corresponds to 19% of the total potential capacity.



# Potential Solar Sites in LADWP FiT+ Priority Zones

- 250 MW of potential solar capacity is in LADWP FiT+ priority zones which corresponds to 6% of the total potential capacity.



# LADWP Local Solar

## Local Solar – By the Numbers

(Updated as of December 31, 2021)

Total 60,237 customer-installed solar systems connected to the grid

### Net Energy Metering/Solar Incentive Program (SIP):

- \$338.9 million in solar incentives for 34,601 systems since the program launch in 1999
- \$288 million in incentives for 279.7 MW under state legislated program (SBI)\*
- Total net-metered solar (includes SIP): 454.81 MW from 60,074 systems, generating approximately 751,000 MWh per year

\*Includes incentives processed after the SIP program closed on December 31, 2018.

### Feed-in Tariff (FIT) Program:

- 131 solar projects in service in the city, totaling 83.4 MW
- Two additional projects in the Owens Valley totaling 4 MW of capacity and 1 renewable landfill gas project with a capacity of 2.95 MW
- Total installed FIT program capacity: 90.35 MW.
- The energy produced from these projects is enough to supply nearly 26,700 homes

### Feed-In Tariff Plus Program

- 5 projects submitted for evaluation totaling 1.78 MW

### Solar Rooftops Program:

- 32 installations completed
- 116.4 kW of solar power being delivered
- 16 projects totaling 66.9 kW are expected to be installed in 2022

### Shared Solar Program:

- 2,116 customers enrolled
- 177,850 kWh per month supplied

### Utility Built Solar (in-basin)

- 47 installations completed totaling 6.9 MW

Source: [LADWP 2021-22 Briefing Book](#)



# Interactive Map

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<https://nrel.carto.com/u/gds-member/builder/411ffd42-3873-42cb-8ae0-521d01f8f5b9/embed>



# Discussion

- [Which layers in the presented map](#) should be included in the ranking? Are communities interested in working with the data and curating the dataset—potentially identifying promising sites? Or providing rankings?
- Recreation centers have limited generation potential, while there is a much higher generation potential on multifamily buildings—how to address limitations with installing solar on multifamily buildings in low-to-moderate income (LMI) or disadvantaged neighborhoods?
- Can communities get involved in developing/initiating shared solar programs?
- Using parking canopies or solar carports for shading?
- Covered sidewalks with solar? (potential for future analysis)



Image source: [Singapore](#) sheltered walkway.



Image source: [BCIT Burnaby campus' "energy oasis" solar panels.](#) (BCIT).

# Green Jobs Workforce Development

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Dr. Raúl Hinojosa-Ojeda and Dr. Abel Valenzuela,  
UCLA



# Agenda

Part 1: Green Jobs Historical Calculator

Part 2: DWP Jobs and Regional Equity

Part 3: Projecting Green and DWP Jobs

Part 4: Workforce Development and  
Community Engagement Challenges



# Part 1: Green Jobs Historical Calculator

1

Green Job Historical  
Trends

2

Calculating Direct,  
Indirect and Induced  
Green Jobs

3

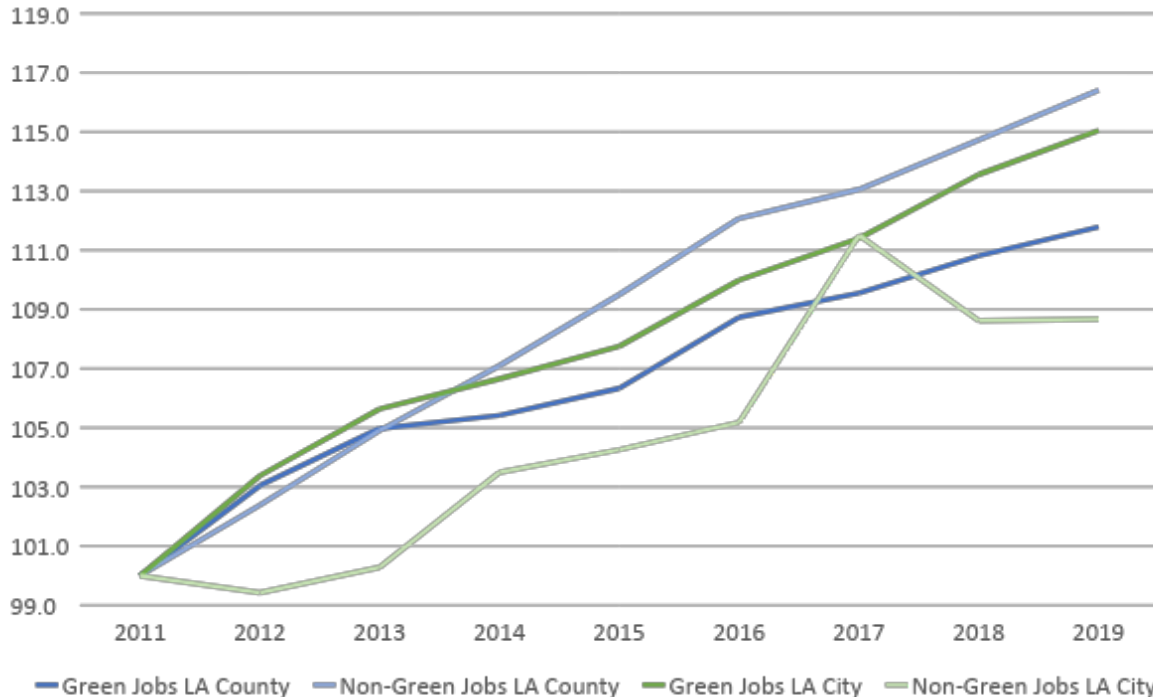
Regional/Racial Equity  
and Interdependence





# Total green jobs have been growing more rapidly compared to total non-Green Jobs in LA City since 2011

Figure 1: LA City and LA County, green and total non-green jobs growth index, 2011 = 100

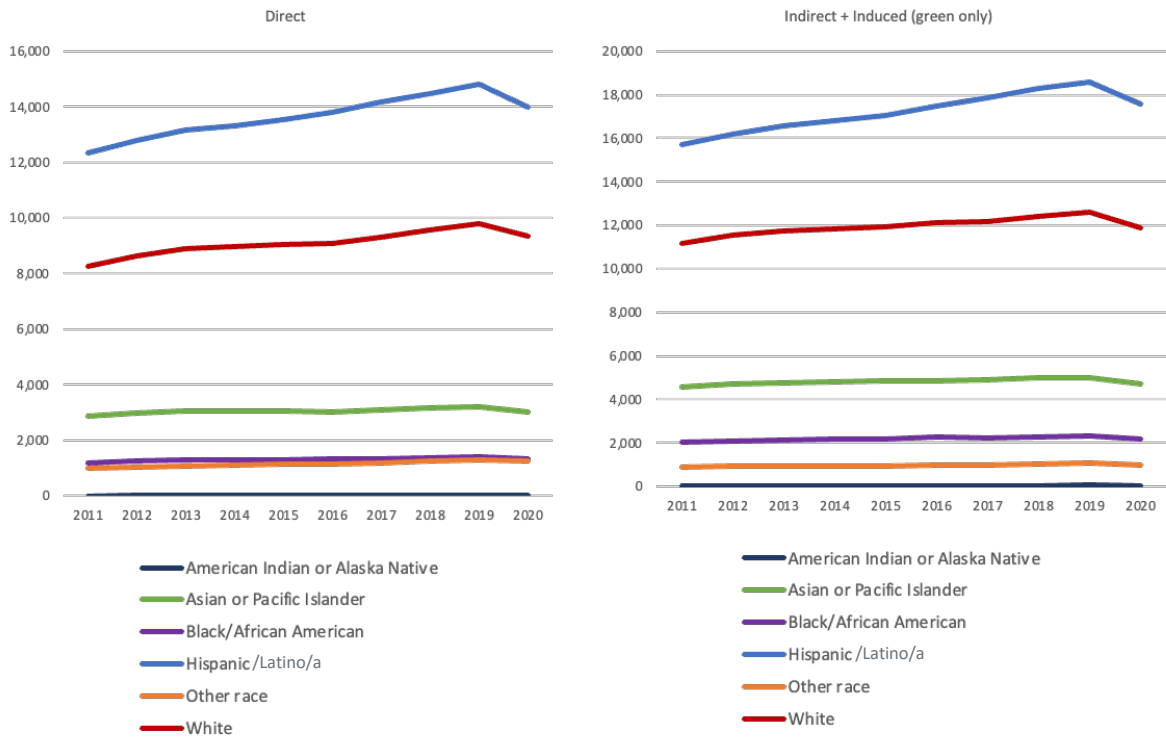


**Green jobs in LA City have grown 8.2% on average from 2011 to 2019 (base year = 2011), while total non-green jobs grew 4.6%.**



# The Growth of Hispanic Green Jobs is very complementary and beneficial to White and Black Green and non-Green workers

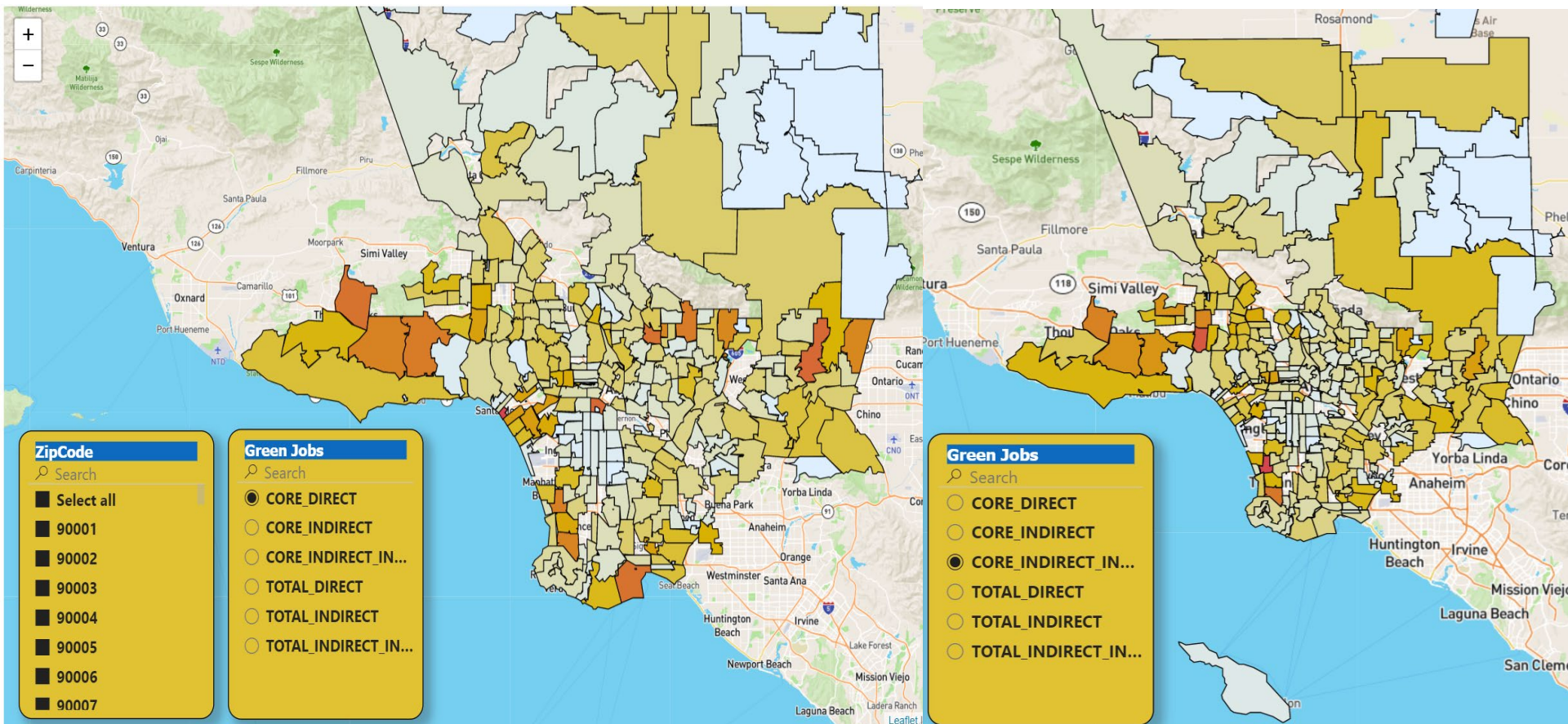
Figure 4: LA City Green Direct, Indirect and Induced Total Green Jobs by Ethnicity, Number of Jobs



Hispanic workers are the largest group with Direct Green Jobs, yet the indirect + induced Green Jobs growth effects for all other races is higher than for Hispanic workers.



# UCLA GIS MAPPING: Green Jobs by location of Work, Direct/Indirect+Induced



Part 2:  
DWP Jobs and  
Regional Equity

Income



Occupation



Race/Ethnicity/Gender



Geo-Residency DAC/non-DAC



Employment Impact of Investment

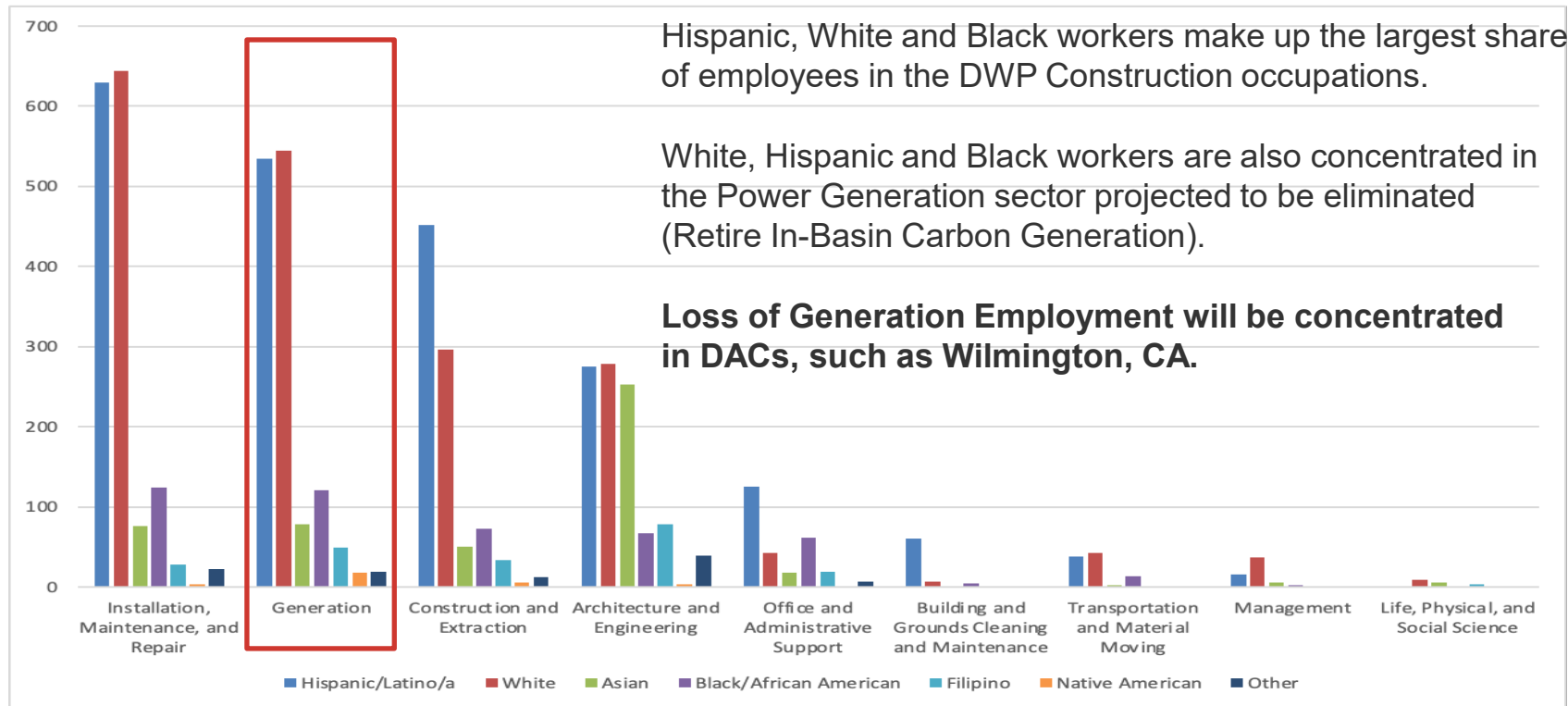


# Main Takeaways from LADWP Employee Data

- 1. Hispanic, White, Asian and Black workers make up the largest shares of employees in the DWP Power sector**
  - Hispanic workers are most represented in Construction, followed by White and Black workers
  - White workers are most represented in Generation, followed closely by Hispanic workers, and then Black workers
- 2. Most DWP Workers do not live in Dis-Advantaged Communities (DACs)**
- 3. However, Hispanic and Black workers make up the largest share of DWP employees living in DACs**
- 4. Hispanic and Black workers earn the lowest wages of DWP workers living in DACs and Non-DACs**



# LADWP Total Workers in Power Sector by Occupation and Ethnicity

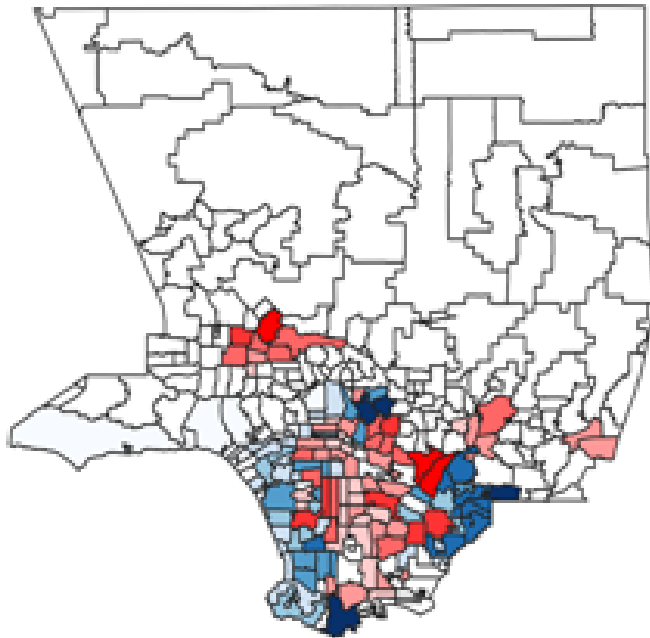


Source: Author's elaboration based on LADWP Administrative Data



# UCLA Mapping Tool: LADWP Workers Zip Code Residence by DAC / Non-DAC Density

LADWP's Workers Zip Code of Residence by DAC Density



LADWP Workers' Residence by Zip Code (DAC)

Non-DAC Zip-Code

- 0 - 2
- 2 - 7
- 7 - 12
- 12 - 19
- 19 - 29
- 29 - 45

DAC Zip-Code

- 0 - 3
- 3 - 8
- 8 - 15
- 15 - 24
- 24 - 39
- 39 - 51

LA DWP UCLA

**ZipCode**

Search

- Select all
- 90005
- 90008
- 90012

**Disadvantaged**

Search

- Select all
- Disadvantaged
- No Disadvantaged
- Out County

**Occupation**

Search

- Select all
- Architecture and E...
- Building and Grou...
- Construction and ...
- Installation, Maint...

LA DWP UCLA
INICIO

**ZipCode**

Search

- Select all
- 90001
- 90002
- 90003

**Disadvantaged**

Search

- Select all
- Disadvantaged
- No Disadvantaged
- Out County

**Occupation**

Search

- Select all
- Architecture and E...
- Building and Grou...
- Construction and ...
- Life, Physical, and ...
- Management

## Part 3: Projecting LADWP Green Jobs

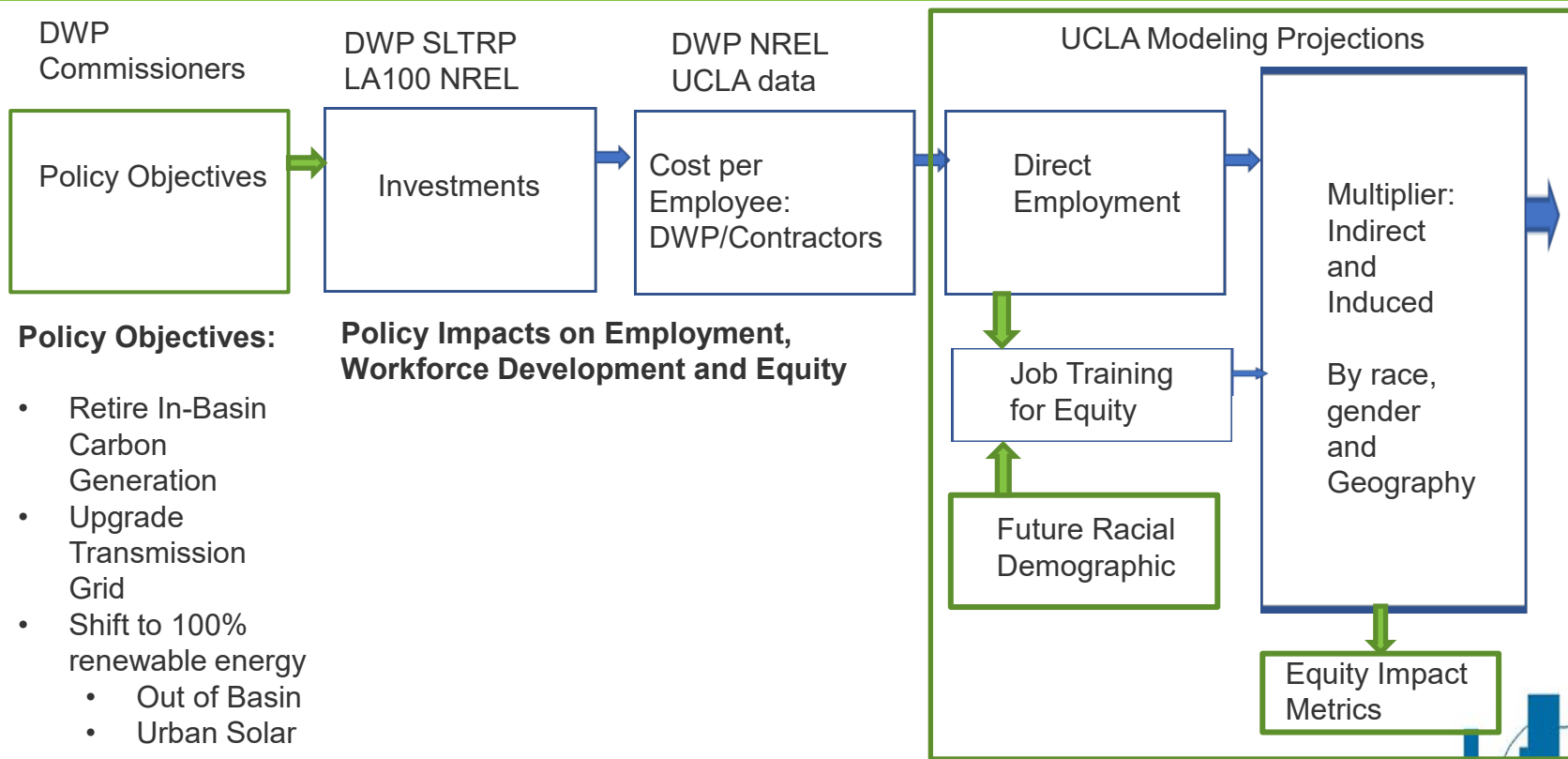
**To ensure investments in DWP employment are sustainable and equitable, we must:**

- 1) Estimate Baseline Inequality Gaps;
- 2) Estimate Employment Impacts of DWP;
- 3) Estimate Projected Demographic Change;
- 4) Estimate Necessary Workforce Development Investments.





# Methodology for Estimating DWP Investment and Employment Impact



## Policy Objectives:

- Retire In-Basin Carbon Generation
- Upgrade Transmission Grid
- Shift to 100% renewable energy
  - Out of Basin
  - Urban Solar

## Policy Impacts on Employment, Workforce Development and Equity



# Part 4: Community Engagement and Workforce Development Challenges

## CASE STUDY: Wilmington Community

### *Methodology*

- Historical Construction of Inequality, Projected Options
- Complementary Check to Equity Impact Modeling and Estimating Workforce Investment Requirements
- Community Resident and Organization Engagement of Data Evidence Usage for Future Strategic Investments for Workforce Training and Equitable Development
- Foundations for Equitable Workforce Trainings
- Principles of the High Road Workforce System



# DWP Workers Residence by Zip Code Los Angeles County

### ZipCode

Search

Select all

90001

90002

90003

### Disadvantaged

Search

Select all

Disadvantaged

No Disadvantaged

Out County

### Occupation

Search

Select all

Architecture and Engineering

Building and Grounds Maintenance

Construction and Extraction

Installation, Maintenance, and Repair

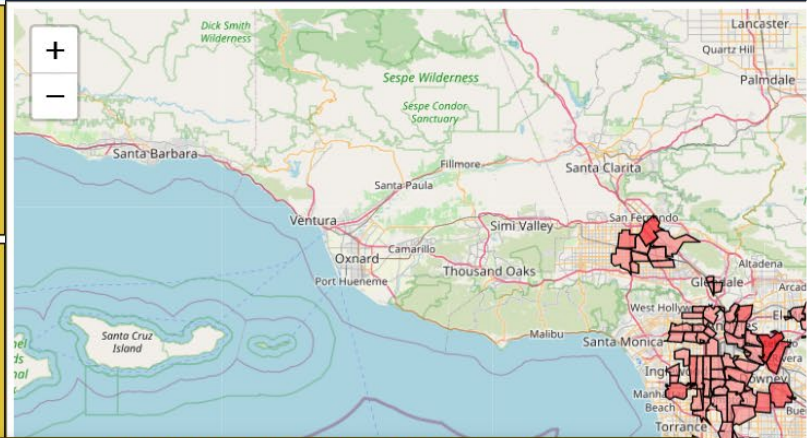
Life, Physical, and Social Science

Management

Office and Administrative Support

Production

Transportation and Material Moving



CALIFORNIA, LOS ANGELES COUNTY, 90744			
<b>General Indicators</b>			
Total Population	57,441		
Male Population	28,958		
Female Population	28,483		
Pop under 18 years	18,737		
Pop 18 to 34 Years	16,021		
Pop 35 to 64 Years	18,835		
Pop 65 and over	3,848		
Foreign Born	22,930		
Mexicans Foreign Born	18,931		
Salvadorans Foreign Born	1,046		
<b>Population by Race</b>			
Hispanics	45,953	5,787	Not Latina
Salvadorans	1,680	4,021	Other Latina
<b>Families with income below poverty level</b>			
2,739			
<b>Families with income above poverty level</b>			
8,896			
<b>Households by Income</b>			
Total Households	13,934	14 LADWP Workers	
Income less than \$10,000	759		
Income \$10,000 to \$29,999	4006		
Income \$30,000 to \$49,999	2919		
Income \$50,000 to \$199,999	6079		
Income more than \$200,000	171		
		13 LADWP Male	1 LADWP Female
<b>Green Jobs</b>			
T DIRECT	329	T INDIRECT	97
T IND IN...	478		
CO DIRECT	22	CO INDIRECT...	1
CO IND IN...	14		
<b>Mexican Migrants</b>		<b>Salvadoran Migrants</b>	
18,422		409	

## DWP Data on Wilmington

DAC Census Tracts in Zip Code	88%
LADWP Power Workers Residing in Wilmington	0.26%
LADWP Power Workers Reporting in Wilmington	2.4%
Green Jobs in Wilmington	807
Direct Green Jobs	329
Indirect + Induced Green Jobs	478

### Legacy pollution

At or above at least one threshold? **Yes**

Proximity to hazardous waste facilities  
 Count of hazardous waste facilities within 5 kilometers  
 95th ↑ above 90th percentile

Proximity to National Priorities List (NPL) sites  
 Proposed or listed NPL (Superfund) sites within 5 kilometers  
 73th ↓ below 90th percentile

Proximity to Risk Management Plan (RMP) facilities  
 RMP facilities within 5 kilometers  
 99th ↑ above 90th percentile

AND

At or above both associated thresholds? **Yes**

Low income  
 Household income is less than or equal to twice the federal poverty level  
 91st ↑ above 65th percentile

Higher education non-enrollment  
 Percent of the census tract's population 15 or older not enrolled in college, university, or graduate school  
 91% ↑ above 80% percent

# Wilmington Residents Community Engagement Meeting Approach

- 1. Community leaders have already identified the participants, all residents of Wilmington**
- 2. Our first approach is to understand their level of knowledge on:**
  - LADWP
  - Energy Consumption and Environmental Impacts
  - Wilmington Historical Background
  - Green Jobs Workforce Development
  - Justice 40 Funding Initiatives
- 3. Evaluate first resident's community engagement meeting to develop follow up meeting based on level of understanding.**



# Principles of the High Road workforce system — targeting quality jobs that provide economic security

Policy goals are to create job training and workforce pipeline to fulfill Green Economy needs, enabling upward mobility for Californians, while integrating all programs and resources into one effective community oriented strategy.

## Public investment

- funds should be provided to ensure the program succeeds

## Job quality

- green jobs that pay well, are secure, and contribute to valuable industries

## Equity

- bring green job workers to the table, enabling more voices to be heard

## Environmental sustainability

- work to increase green jobs that are environmentally sustainable

## Worker voice

- address systemic inequalities, bringing people to green jobs that have excluded them



# Discussion

- How does the Steering Committee envision an equitable (energy) green jobs workforce development, both for the future and in the context of historical inequalities?
- How should DWP distribute and train for a more equitable direct, indirect green job growth as well as the indirect and induce green jobs within and outside the LA basin?



# December Meeting Poll

## Link has been sent from LADWP:

Should there be a Steering Committee meeting in December? The meeting is currently scheduled for December 21st, 10:00 am - 12:00 pm?



# Going Forward

## *Tentative*

# Steering Committee Meetings

November 16, 2022

Virtual

- Climate Emergency Management Office (CEMO) – LA Equity Index
- Vehicle electrification and charging modeling
- Rates and affordability modeling
- Household energy modeling
- Legal and regulatory constraints around rates and affordability

## Subsequent Meetings

- **Third Wednesday** of each month, 10:00 a.m. – 12:00 p.m. PT
- **Virtual** for near-term

What would you like to discuss in upcoming meetings?  
*Drop your agenda suggestions in the chat!*





**Thank you!**

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