Los Angeles Department of Water & Power

POWER SYSTEM OVERVIEW & LA100 PLAN

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July 29, 2025

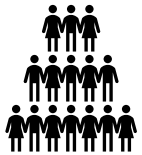
AGENDA

1. Power System Overview
2. LA100 Plan
3. Risks & Challenges
4. Customer Bill Impacts, Rates & Energy Burden


POWER SYSTEM OVERVIEW

BACKGROUND

LADWP is the nation's largest municipal electric utility. Power System reliability cannot be compromised.



LADWP maintains a diverse and vertically integrated power generation, transmission and distribution system that spans five Western states, and delivers electricity to more than 4 million people.

LADWP's LA100 Plan will drive the future of the electric grid.

RESOURCE DIVERSITY

1. **In-basin Generating Stations:** Natural Gas
2. **Pacific Northwest:** Wind & Hydro
3. **Owens Valley**: Wind, Solar, & Hydro
4. **The Intermountain Power Project (Utah):** Wind & Solar
5. **Hoover Dam:** Hydro
6. **Arizona and New Mexico:** Wind
7. **Palo Verde Nuclear Generating Station:** Nuclear
8. **Nevada**: Apex Gas-Fired Generating Station & Solar
9. **Castaic Plant:** Pumped-Hydro

RECENT ACCOMPLISHMENTS

Renewables & Energy Storage

25+ utility-scale projects are operational.

Milford Solar Phase II received City Council approval in June 2025. Eland Solar + BESS, Phase 2 is expected to be operational in July 2025.

Green Renewable Fuels & Coal Replacement

Approval of Intermountain Power Project (IPP) Green hydrogen is on track for commercial operation in 2025.

LADWP will be 100% coal-free by Summer 2025.

Distribution

Infrastructure Replacement in 2023-2024 Achievements.

Poles: 3700
Crossarms: 12,600
Transformers: 1255
Underground Cables: 60 Miles.

Transmission

$4 Billion investment to strengthen infrastructure for reliability, resilience, and renewable integration.

Rinaldi-Tarzana Line 1 and 2 Upgrade placed in service on April 11, 2025.

Electrification

45,000 Electric vehicle charging stations by 2025.

Demand Response (DRs)

The LA100 Plan has targets for 100 MW of demand response by 2025 and 815 MW by 2035.

Distributed Energy Resources (DERs)

$1.9 Billion investment to increase utility-owned local DER Capacity, EV chargers, and controllable assets.


LA100 PLAN

LADWP IS A LONGSTANDING LEADER ON POWER PLANNING

Formerly known as the Strategic Long-Term Resource Plan, the LA100 Plan is LADWP's comprehensive strategic integrated power system planning document and L.A.'s roadmap for achieving 100% carbon-free energy by 2035.

- Integrates LA100 Study findings
- Advances LA100 Equity Strategies
- Prioritizes reliability, resiliency, equity, affordability, and sustainability
- Utilizes stakeholder community input through an Advisory Group and public outreach for regular Plan updates

LA100 PLAN ADVISORY GROUP MEMBERS

6	ACADEMIA
17	BUSINESS & WORKFORCE
26	CITY GOVERNMENT
5	NEIGHBORHOOD COUNCIL
20	ENVIRONMENTAL COMMUNITY
10	PREMIER ACCOUNTS & KEY CUSTOMERS
6	UTILITIES

LA100 PLAN CITY GOALS

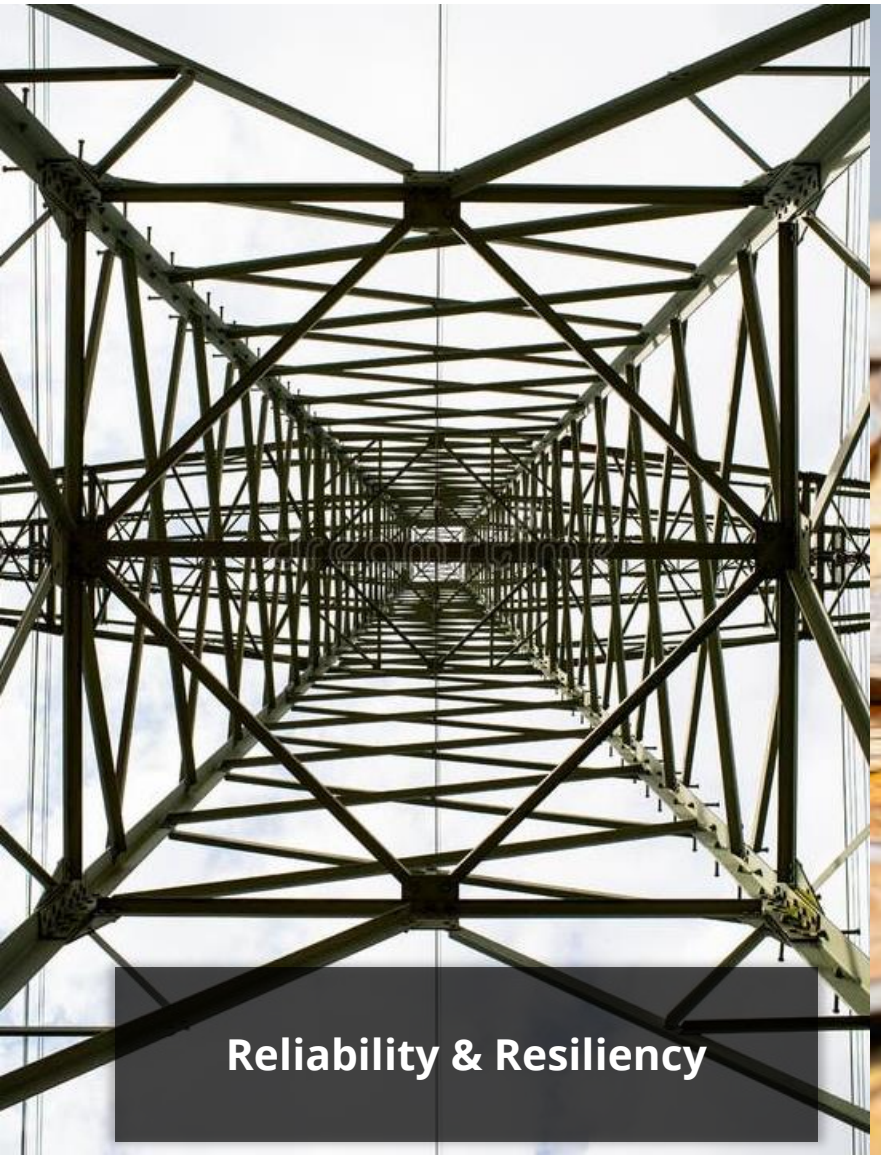
1 **Achieve LA100 Goal in Reliable, Affordable, Sustainable, and Equitable Manner.**

2 **Accelerated Renewable Goals.**

LA100 Plan meets the LA City Council Motion for 100% carbon-free energy by 2035 and builds upon assumptions from the LA100 Study.

LA100 Plan exceeds the 60% Renewable Portfolio Standard (RPS) state mandate, currently achieving 80% RPS by 2030. This includes large-scale and distributed resources, providing a balance between regional and local resources.

GUIDING PRINCIPLES



Reliability & Resiliency

Affordability & Rate Impacts

Environmental Benefits & Equity

LA100 PLAN – RESOURCE SELECTION PROCESS

LA100 Modeling seeks to find the least cost, best fit resources to meet our future load, while balancing decarbonization and reliability

Customer-Sided Resources (e.g. Rooftop Solar)

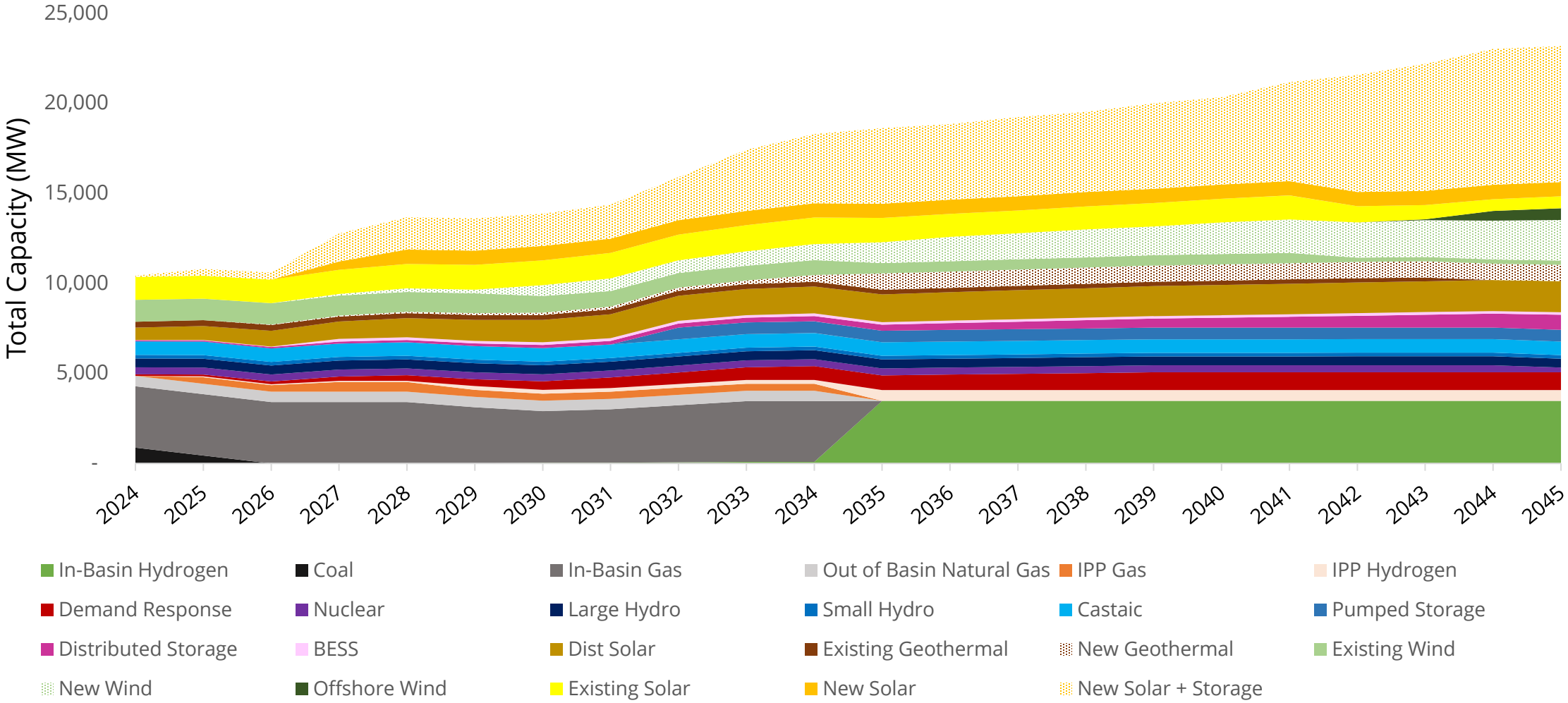
Renewable Energy

Energy Storage

Transmission, Distribution

Dispatchable Resource

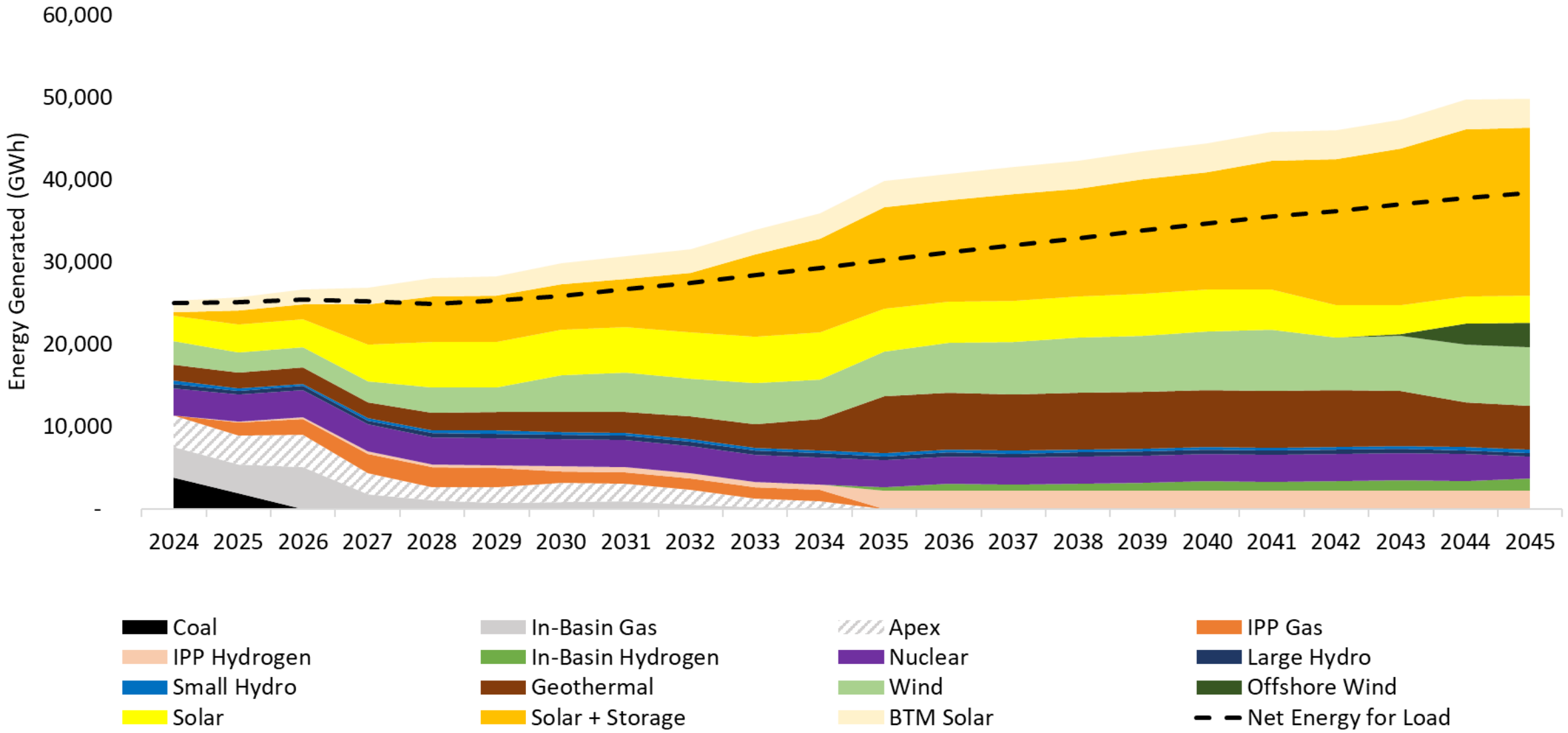
CAPACITY BUILD OUT – LA100



LA100 Plan Model Builds Significantly More Renewables and Storage

- Solar and wind will increase by factor of 2 by 2030
- DERs increase by factor of 2.25 by 2030
- Solar increases by factor of 4 by 2035

GENERATION BY YEAR – LA100 PLAN




RISKS & CHALLENGES

LA100 PLAN– POTENTIAL CHALLENGES FOR IMPLEMENTATION

Generation
A clean, reliable grid needs both renewables and steady local power sources.

Technology
Pacing investments with technology readiness is challenging, especially when innovations are still maturing.

Transmission
Limited capacity, interconnection requests, and climate resiliency are just few of the transmission system challenges.

Distribution
Distribution challenges and risks include ability to meet rapid load growth and aging distribution infrastructure.

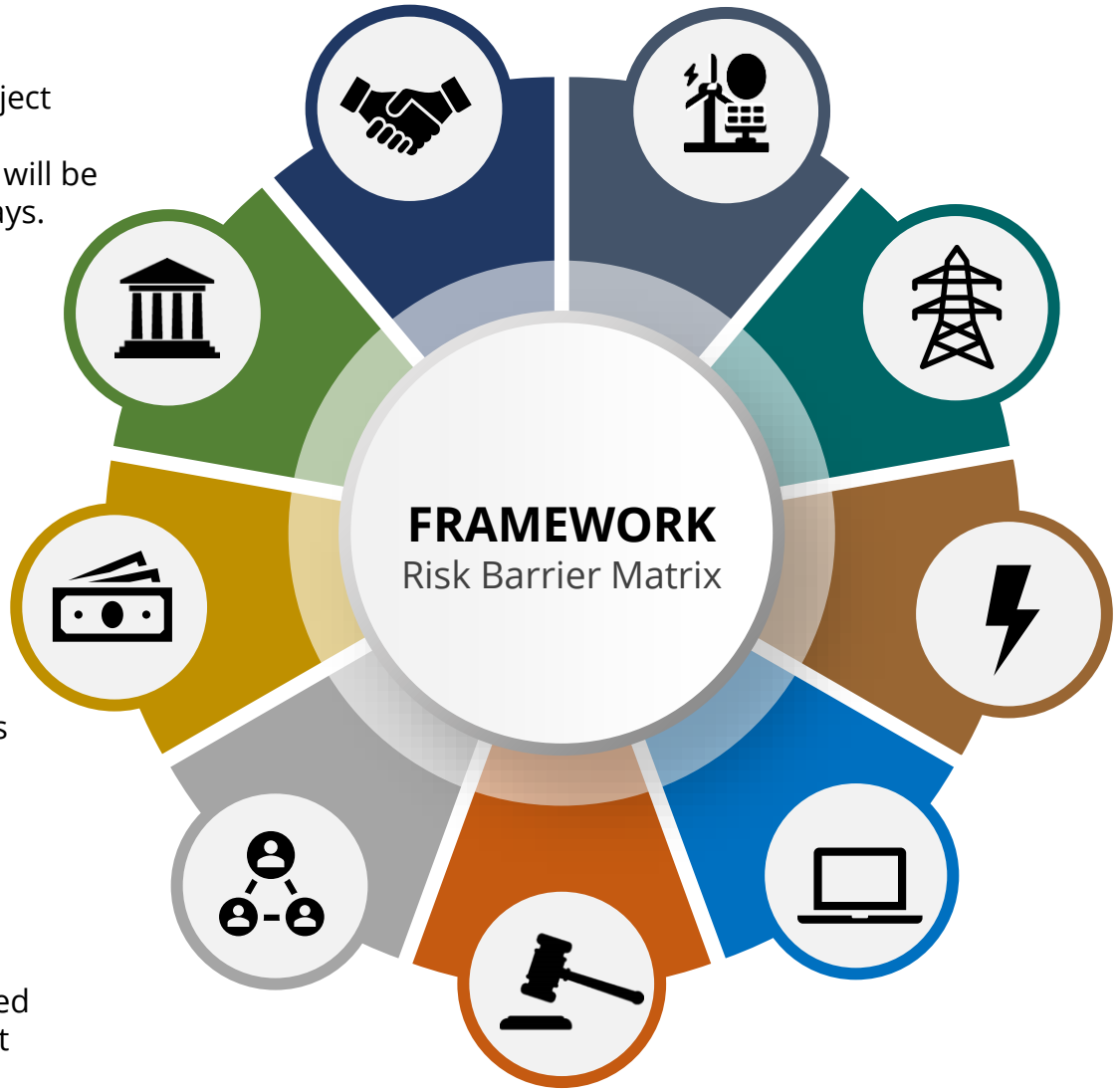
Staffing
Insufficient personnel resources can affect execution of Power System projects.

Permitting & Legal
Obtaining the permitting, project contracts, and all necessary approvals in a timely manner will be critical to prevent project delays.

Financial
Affordability rates, energy burden, inflation, and limited funding present huge risks.

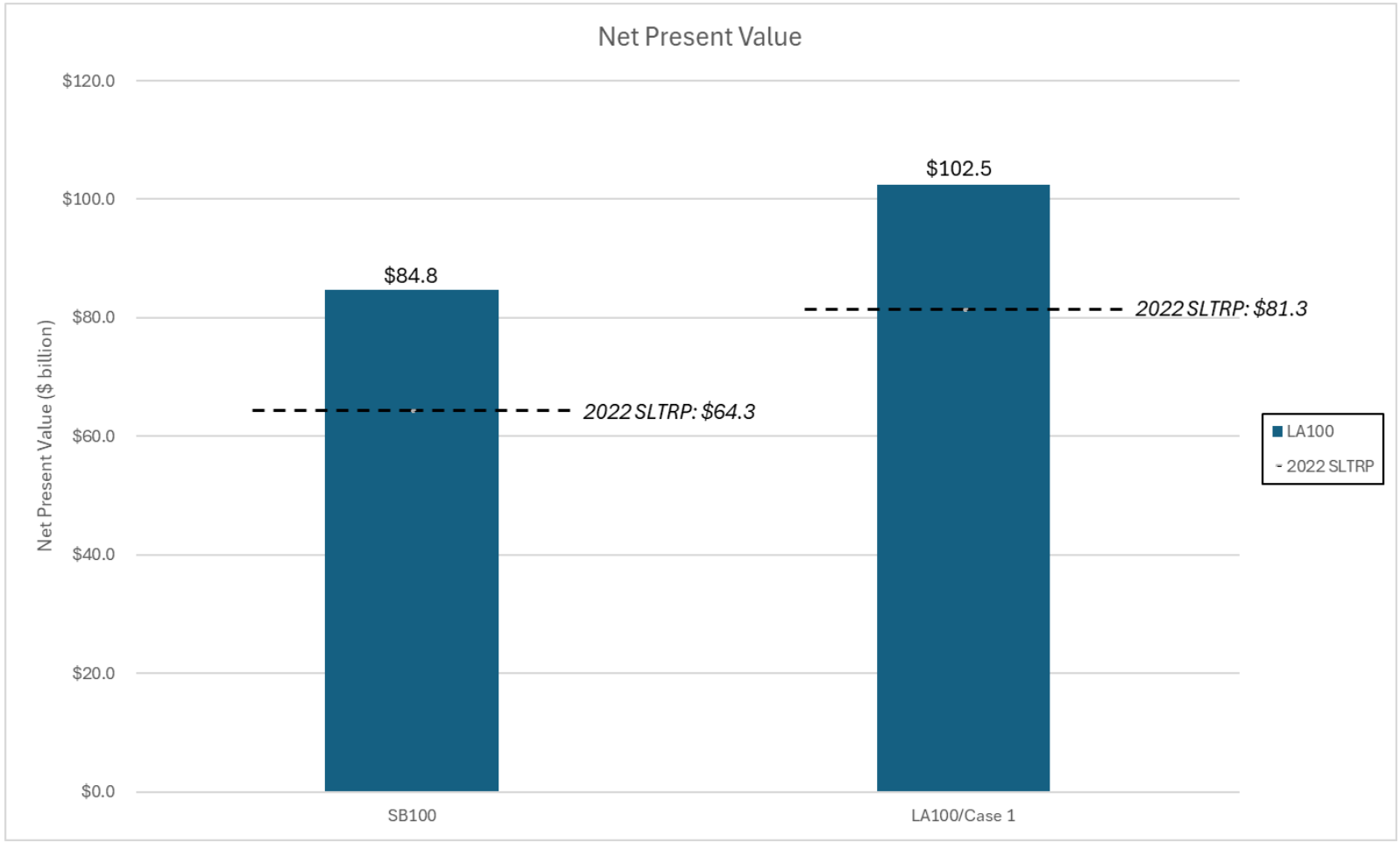
Federal Policy
Elimination of tax incentives for renewable energy projects may impact local and state decarbonization goals.

Procurement
US tariffs will provide increased costs for imported equipment and materials.



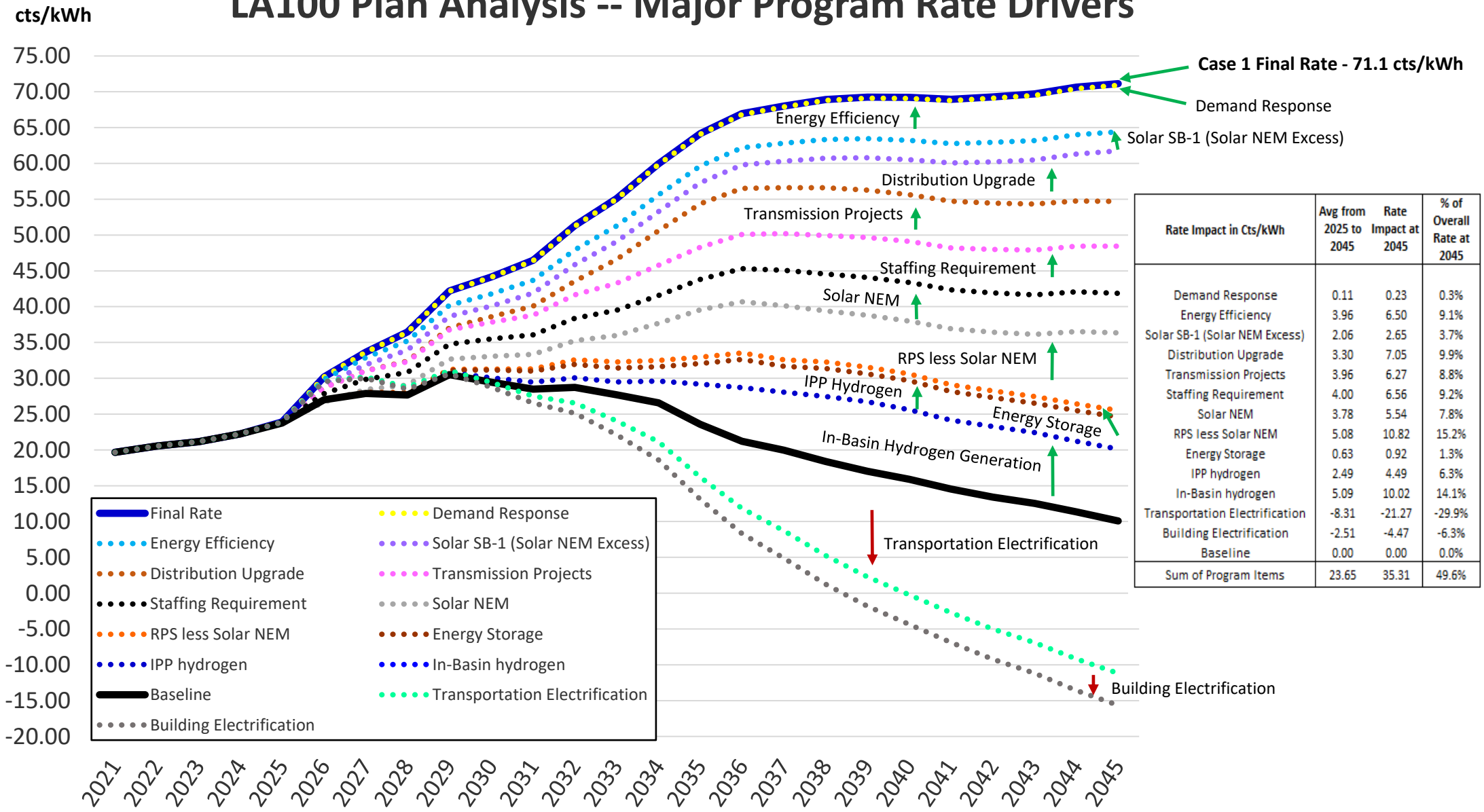

CUSTOMER BILL IMPACTS, RATES,
& ENERGY BURDEN

TOTAL COST IN TODAY'S DOLLARS

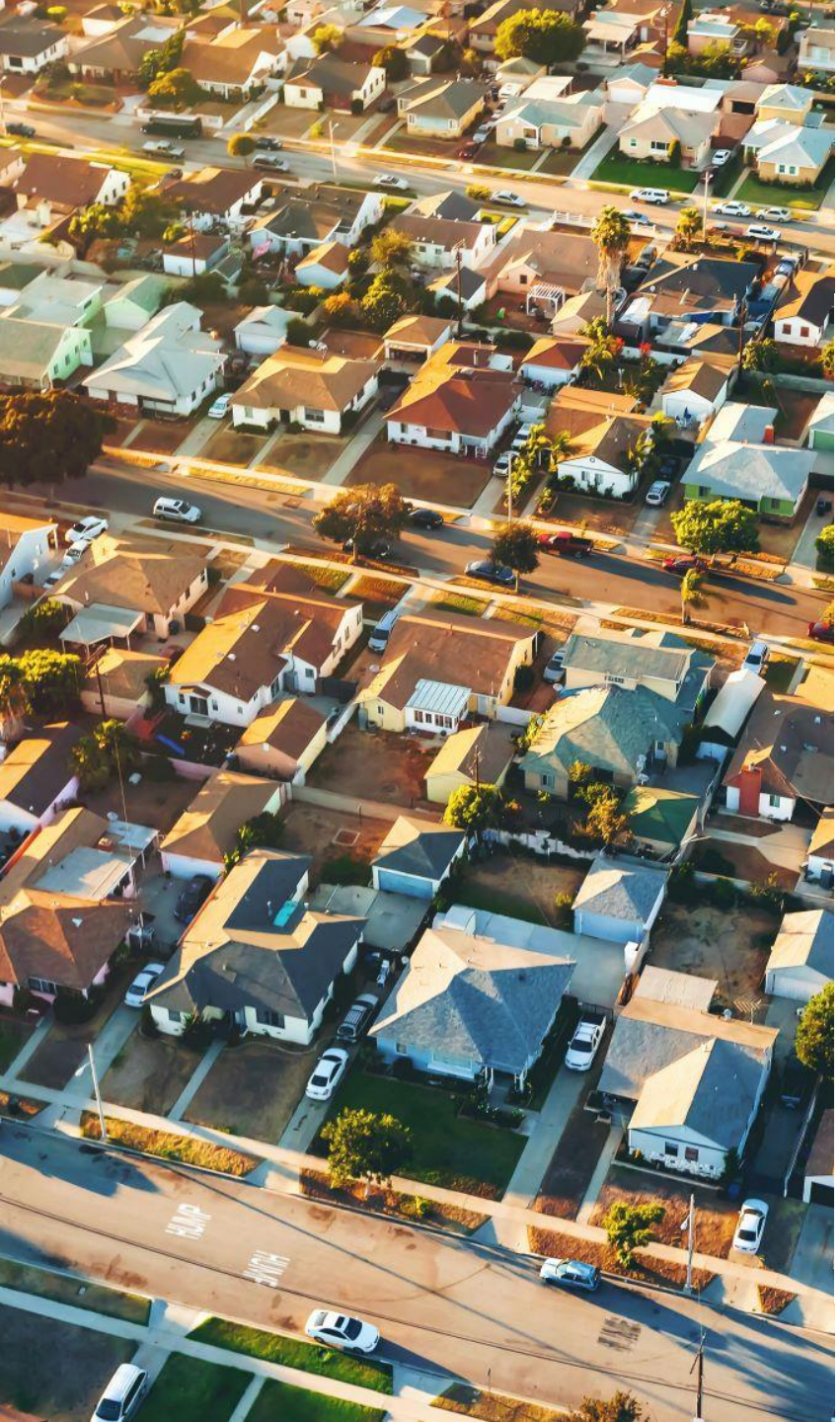


Note: Net present value of bulk power system cost (fixed and variable cost) from 2025 through 2045

LA100 Plan Analysis -- Major Program Rate Drivers



Rate Impact in Cts/kWh	Avg from 2025 to 2045	Rate Impact at 2045	% of Overall Rate at 2045
Demand Response	0.11	0.23	0.3%
Energy Efficiency	3.96	6.50	9.1%
Solar SB-1 (Solar NEM Excess)	2.06	2.65	3.7%
Distribution Upgrade	3.30	7.05	9.9%
Transmission Projects	3.96	6.27	8.8%
Staffing Requirement	4.00	6.56	9.2%
Solar NEM	3.78	5.54	7.8%
RPS less Solar NEM	5.08	10.82	15.2%
Energy Storage	0.63	0.92	1.3%
IPP hydrogen	2.49	4.49	6.3%
In-Basin hydrogen	5.09	10.02	14.1%
Transportation Electrification	-8.31	-21.27	-29.9%
Building Electrification	-2.51	-4.47	-6.3%
Baseline	0.00	0.00	0.0%
Sum of Program Items	23.65	35.31	49.6%

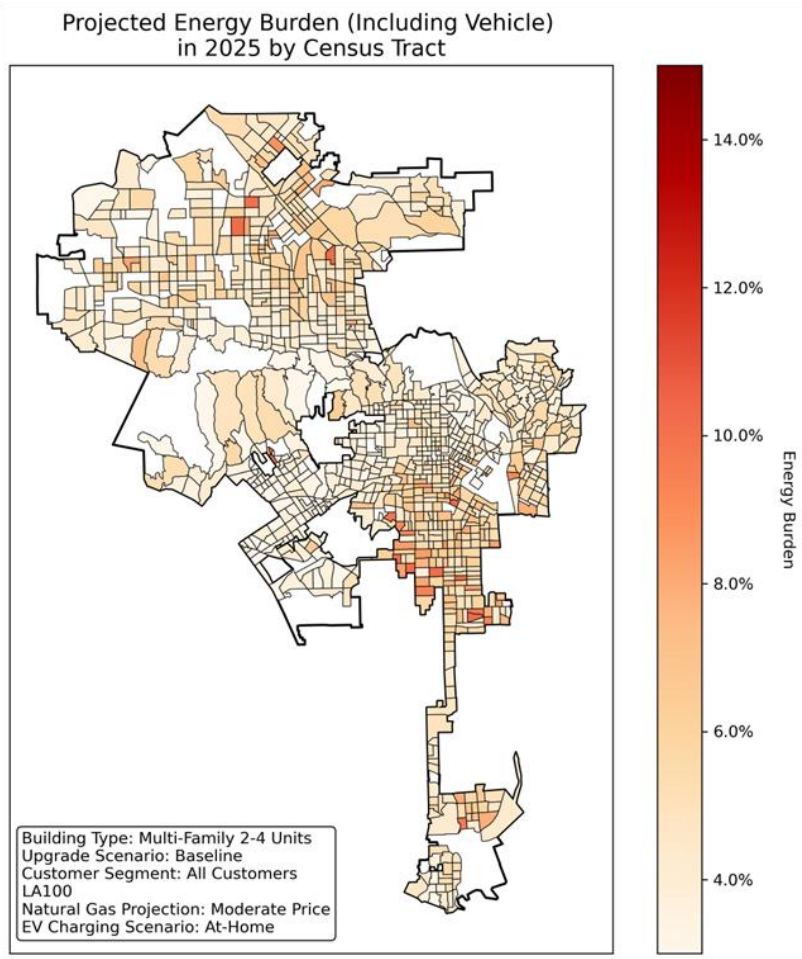


ESTIMATED MONTHLY ELECTRIC BILL

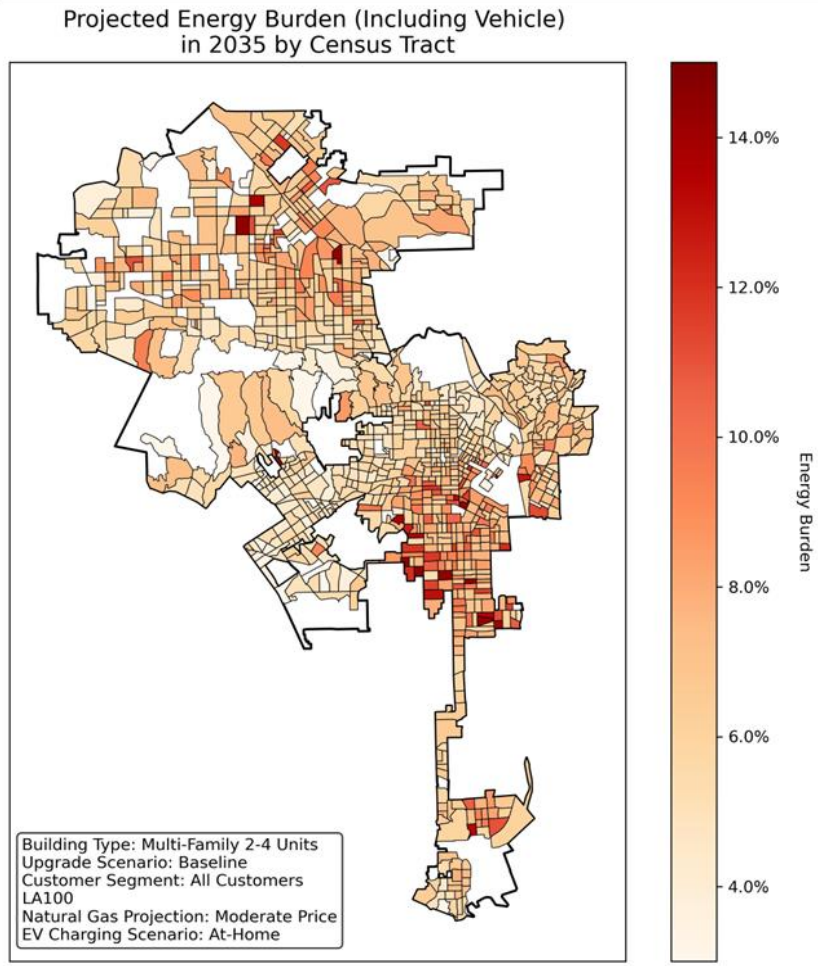
CUSTOMER ENERGY BURDEN

Energy Burden (%) = $\frac{\text{Total Annual Household Spending on Electricity, Gasoline, and Natural Gas}}{\text{Total Annual Gross Household Income}}$

2025
LA100



2035
LA100




QUESTIONS?
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