Los Angeles Department of Water & Power

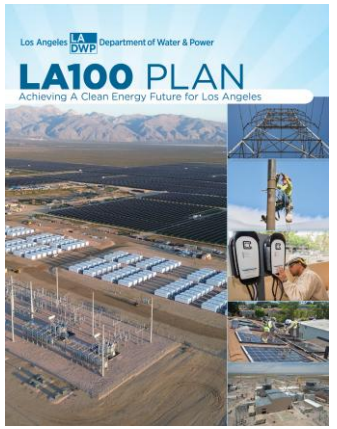
LA100 Plan Costs

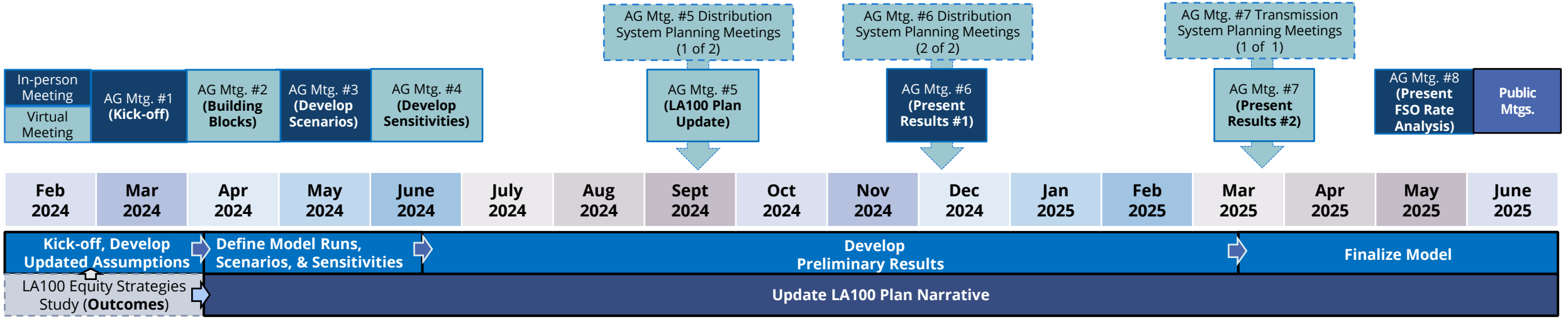
Power System Planning Division

December 06, 2025

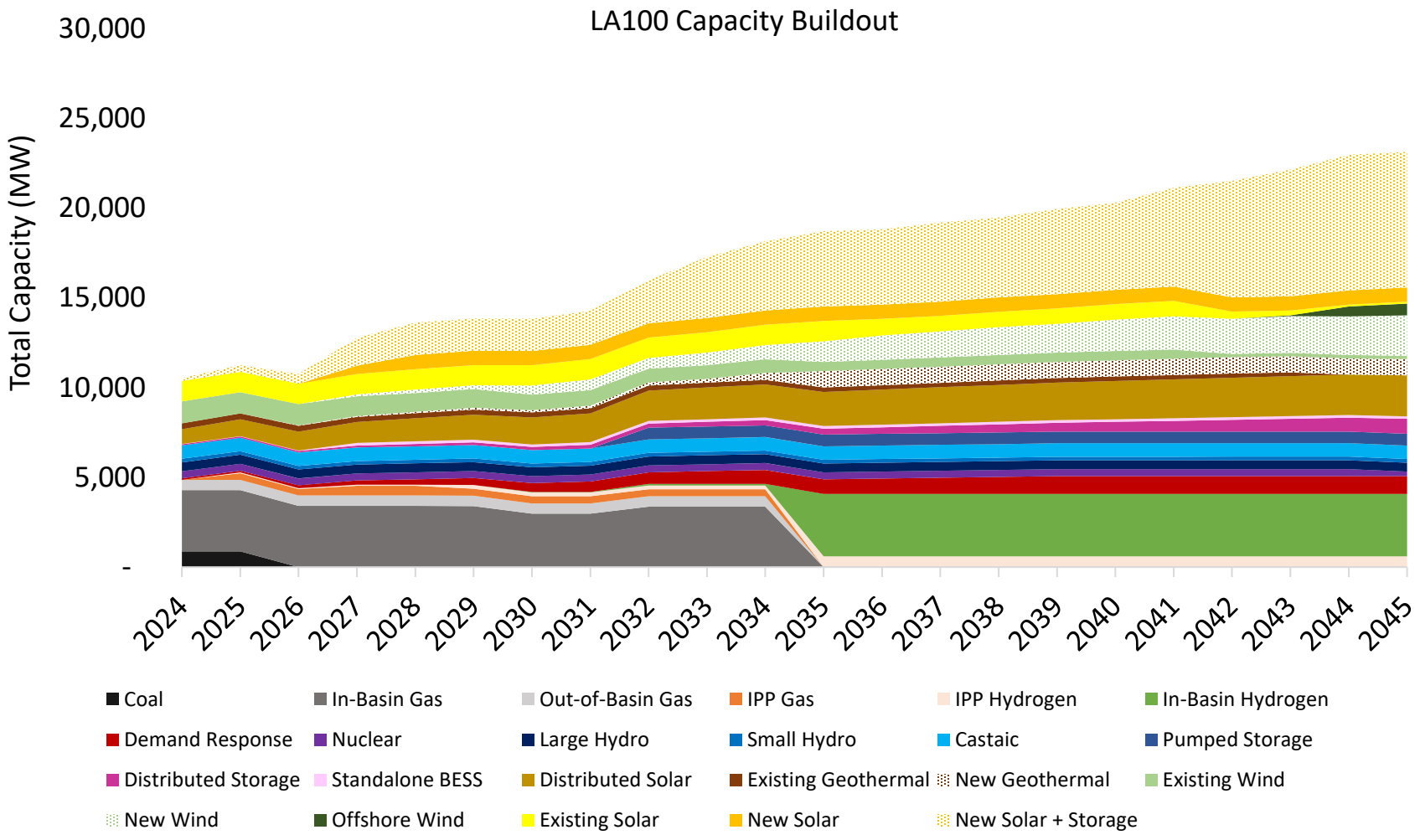
Background, Timeline, Framework

- **The LA100 Plan**, previously the Power Strategic Long-Term Resource Plan (SLTRP), is LADWP's comprehensive and strategic integrated power system planning document; **L.A.'s roadmap for 100% carbon-free energy by 2035 and future energy planning through 2045**
- **Guiding principles** of balancing reliability, resiliency, equity, affordability, and sustainability
- **Two year-long process**, including modeling, stakeholder engagement, and report writing



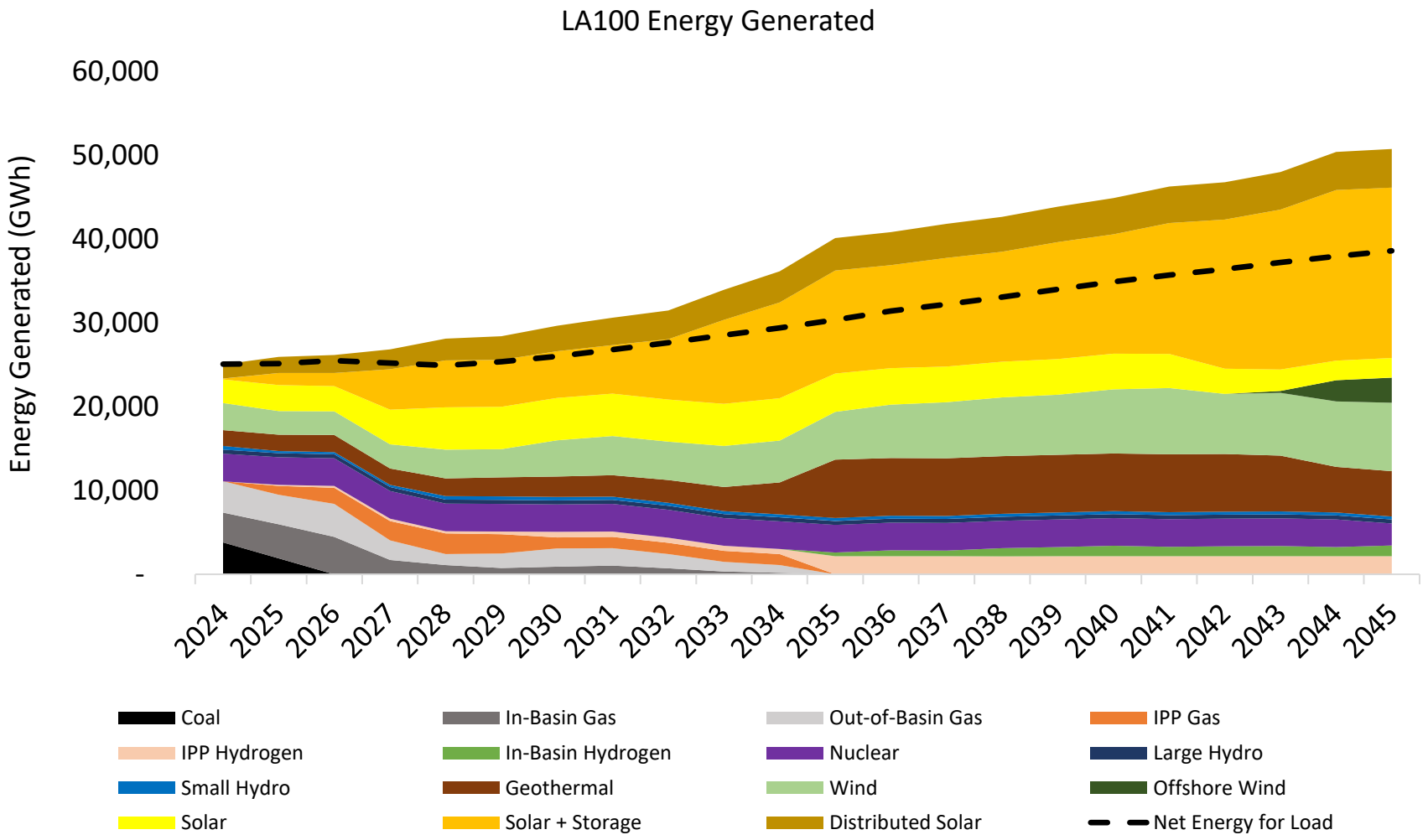


Power Capacity Resource Buildout



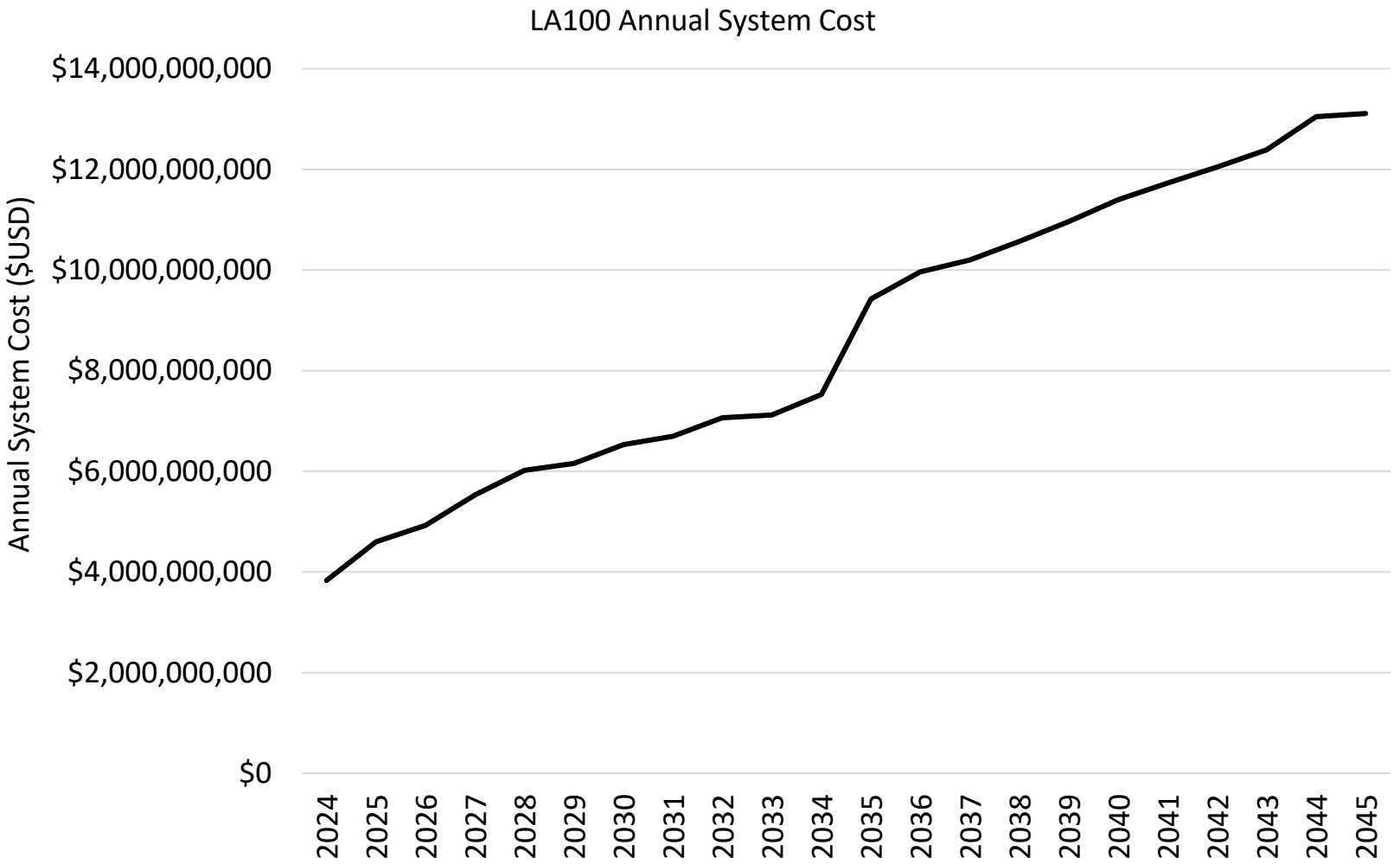
- **Modeling seeks to find the least cost, best fit resources** to meet our future load, while balancing decarbonization and reliability
- New resources are mainly renewable, with **fossil fuels retired by 2035** and replaced with carbon-free resources
- Total cumulative **nameplate capacity more than doubles** from present day through 2045
  - Low dependable capacity of renewables requires tremendous buildout to compensate
- **Balanced portfolio** informed by previous studies (i.e. NREL LA100 Study) **ensures reliability** even during low renewable output

Energy Generation Dispatch



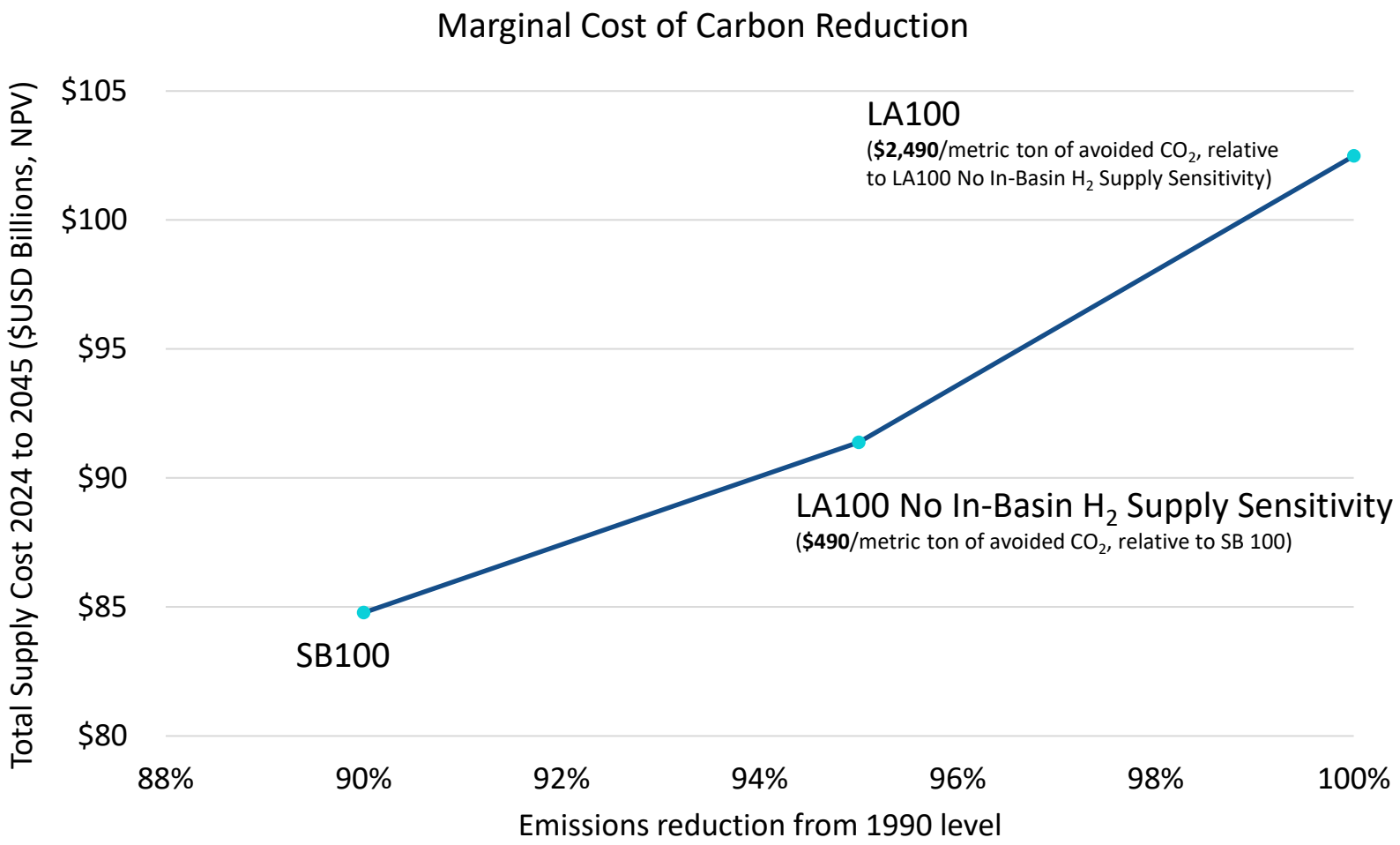
- **Energy generated** to meet customer electric consumption **is mainly supplied by renewables**, with additional contributions from carbon-free resources
- **Green hydrogen-fueled generation is used sparingly, mainly as backup** for reliability and resilience during low renewable output or system contingencies
- **At times, generation exceeds net load, which may lead to curtailment** or exports, though LADWP seeks to minimize these due to financial and contractual constraints

Cost



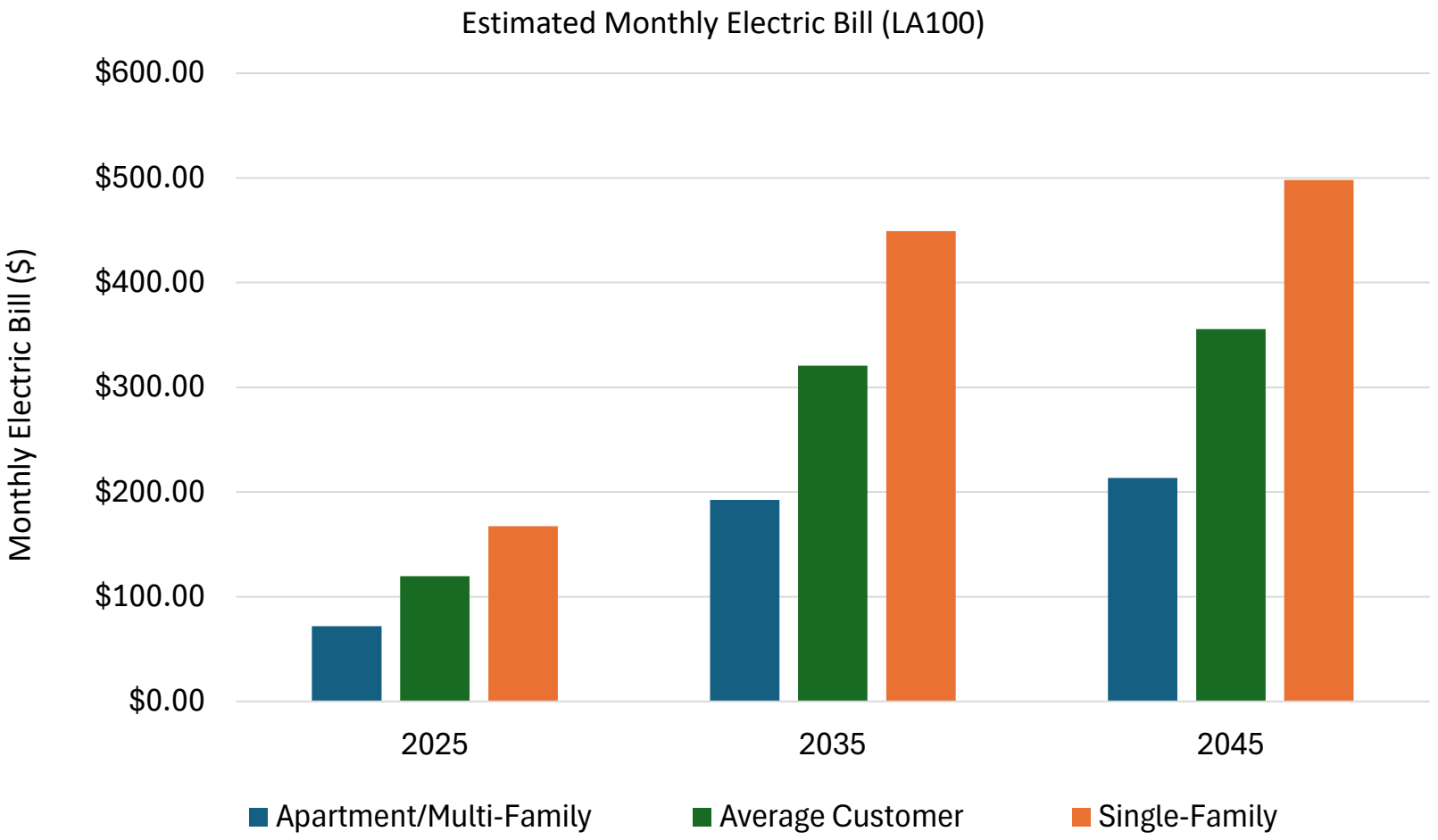
- **Annual system costs rise steadily through the 2020s** as LADWP invests in renewables, energy storage, and grid modernization,
- **Sharper increase around 2035** driven by major infrastructure to achieve 100% carbon-free energy, reliability upgrades, and transportation electrification charging infrastructure
- **Total net present value (NPV) cost of $102.5 billion** from 2024 to 2045 (The SB 100 benchmark, following the State mandate of 100% clean energy by 2045, costs ~$84.8B NPV)

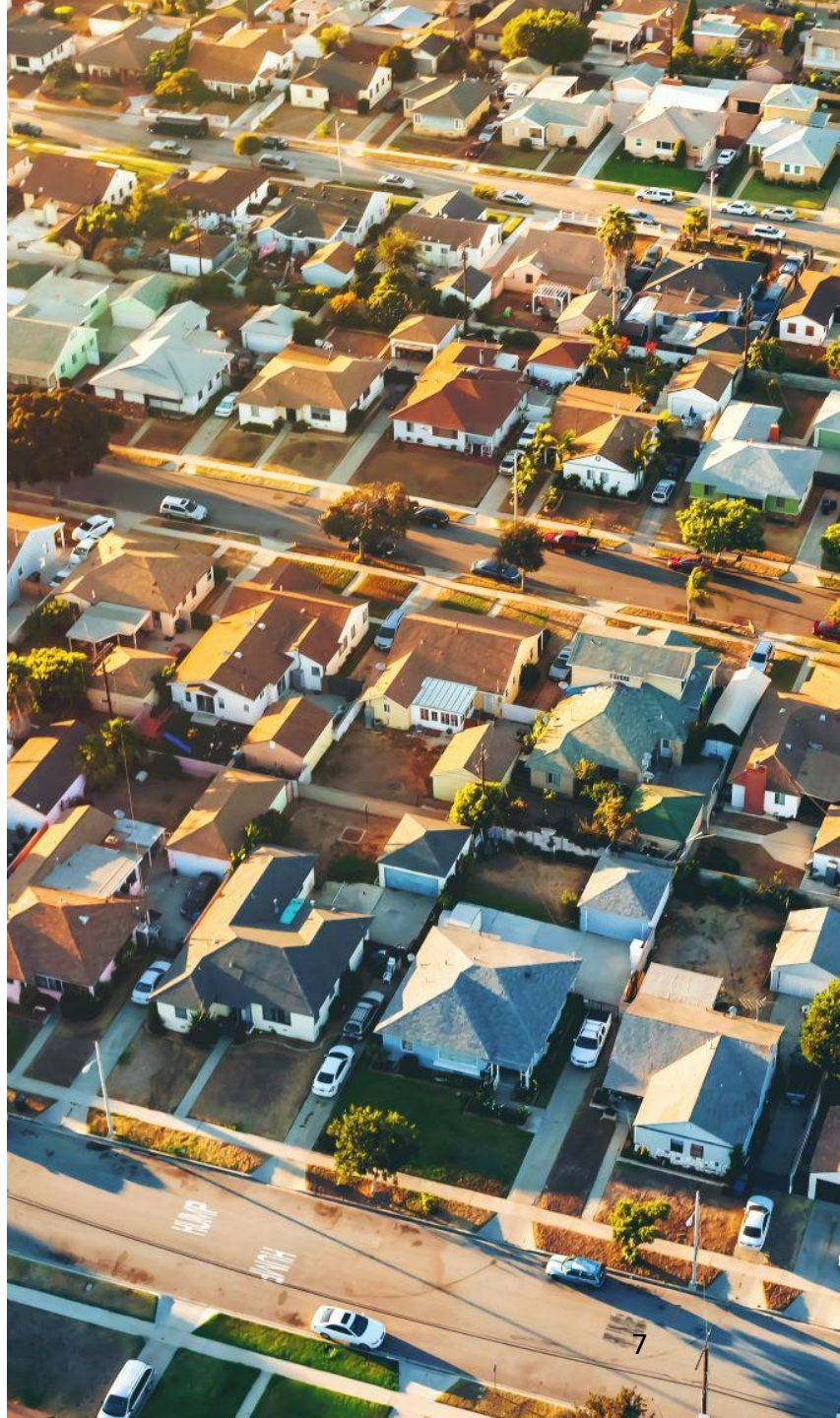
Marginal Emissions Costs Increase Along the Path to 100%



- **Assesses cost to reduce one additional metric ton of CO_2, for one scenario/sensitivity, relative to another**

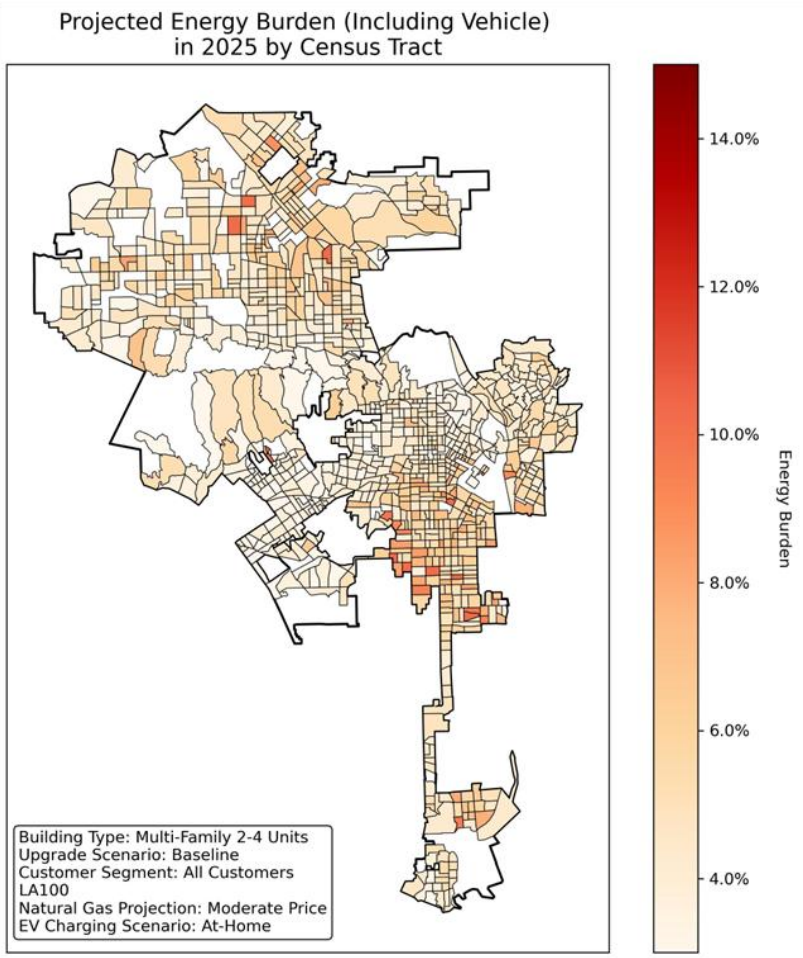
Estimated Monthly Electric Bill



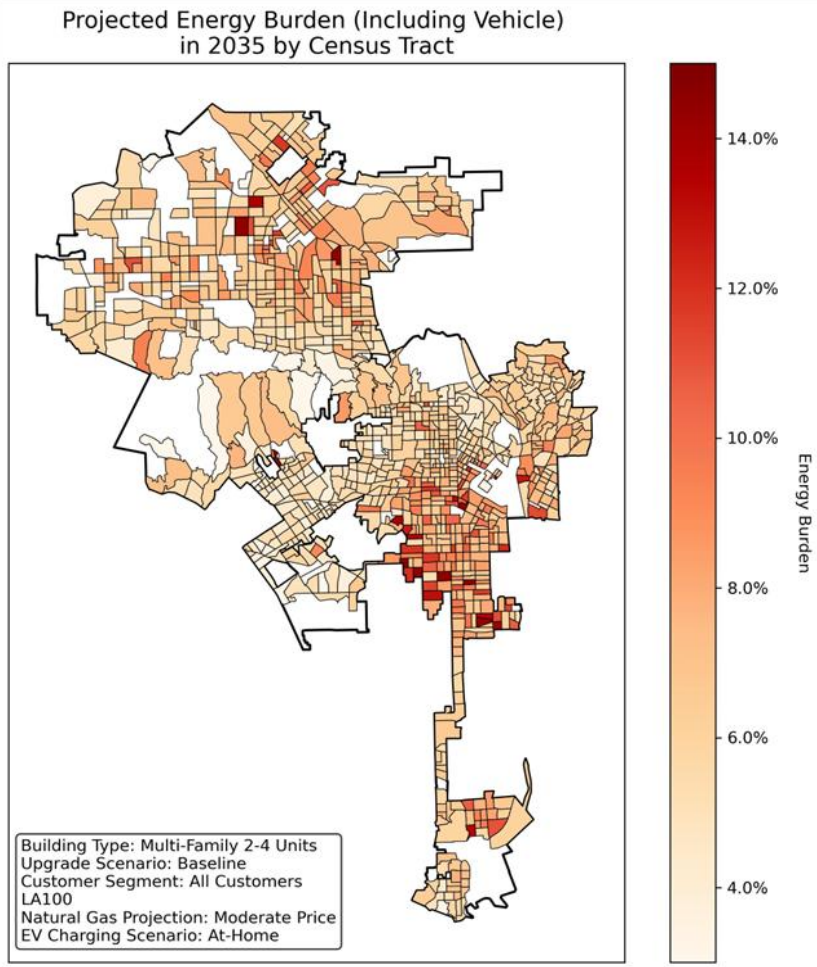


Energy Burden

2025
LA100



2035
LA100



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

- **LADWP partnered with UCLA** to develop a tool to evaluate customer energy burden under different building profiles
- **Energy burden ≥ 6% is considered "High" and potentially unaffordable**
- **Insights can help inform customer programs to assist with affordability**

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Questions/Discussion

www.ladwp.com/la100plan