

LADWP EE Potential Study: Innovative Approach to Achievable Potential

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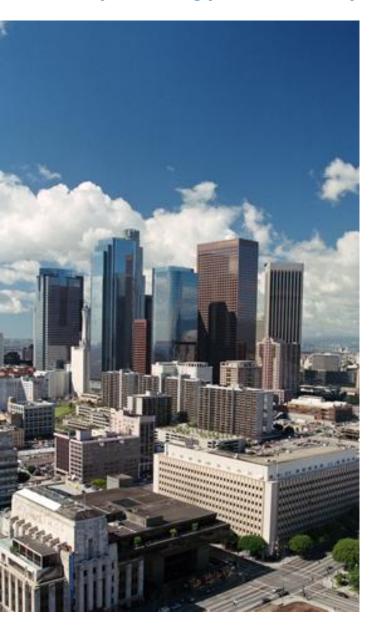








Next Century Water and Power: Why Energy Efficiency?



Drivers:

- LADWP plans to exit coal by 2025
 - -AB 32 Environmental Leadership
 - -Coal about 33% of power supply today
- Transportation Electrification
 - -AB 32
 - -100% conversion of LDV would double our load
- Other drivers: population growth, climate change, rising affluence (plug loads)

Options:

- New Power Sources
 - -Natural gas
 - -Renewables 33% State-mandated by 2020
 - -Energy Efficiency (EE) 15% goal by 2020
- How much more EE and Renewables by 2030? 2050?

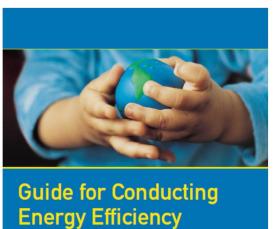






Study Overview

- Assessment of EE market potential
 - Long-term potential
 - Interim program goals in 2020 and 2023
- Align with industry protocols
- Avoid "one-size-fits-all" approach
- Produce customized, meaningful results



Potential Studies

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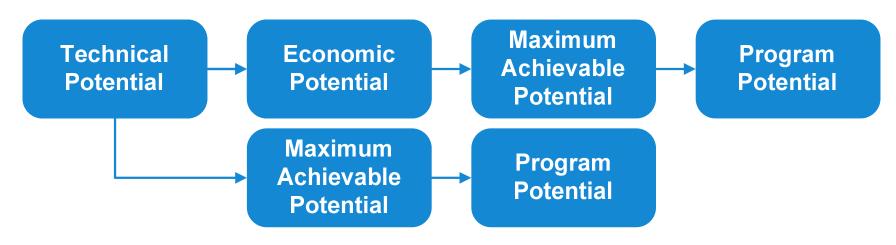






Research Objectives

- Realistic assessment of EE program potential
 - Program Planning
 - Confirmation/Updated EE Goals
- Consider specific characteristics of territory
 - Market maturity
 - Bundled offerings
- Focus on customer-level cost-effectiveness









Approaches Considered

- 1. Customer Measure Bundles
 - Current LADWP Programs
 - End-Use Segments
 - Sub-Sectors

- 2. Sector-Level Cost-Effectiveness
 - Relaxed measure screening
 - Target sector TRC ratio ≥ 1.0







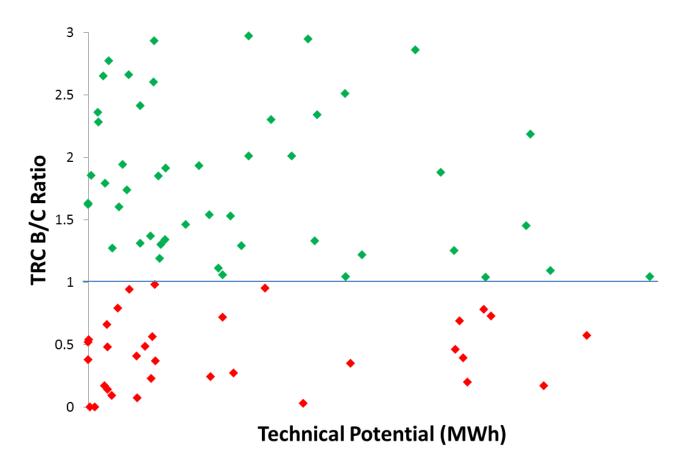






Final Methodology

- Including all technically feasible measure produced low sector-level TRC
- Iterative optimization process applied









Final Methodology

- Applied TRC threshold of 0.3 to measures in each sector
- Additional applicability factors needed for Residential

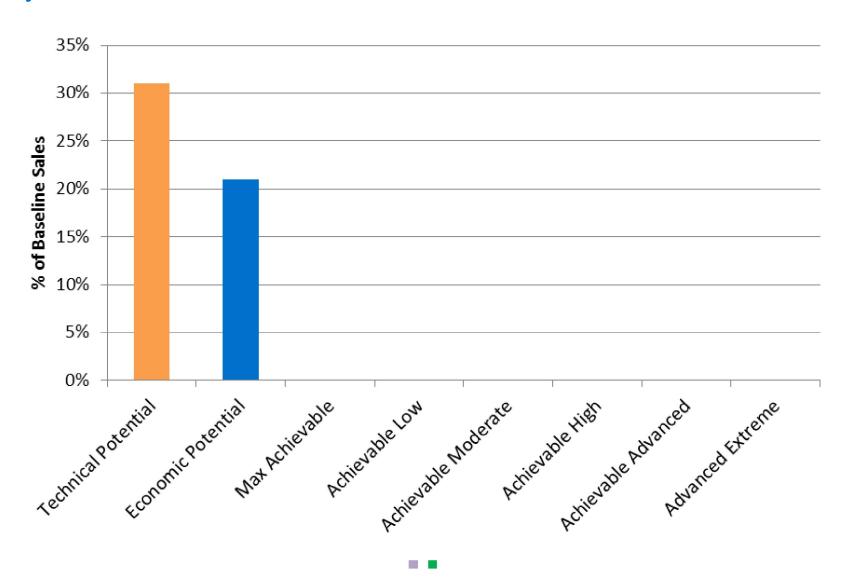
Residential Sector	
Benefit-to-Cost Ratio	Applicability Adjustment
Up to 0.3	0%
0.3 to 0.5	5%
0.5 to 0.8	15%
0.8 to 1.0	30%
1.0 and above	100%







Study Results



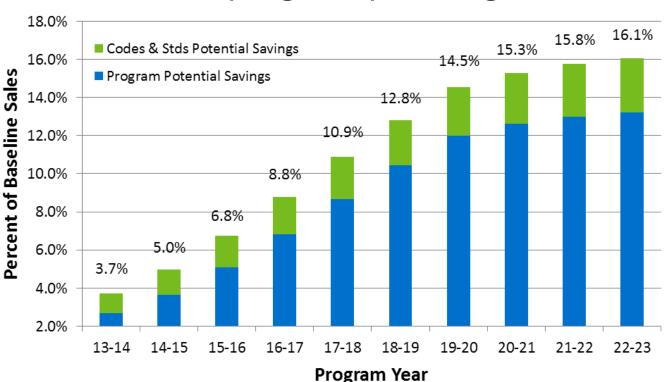






Conclusions

- Successfully adapted traditional approaches with utilityspecific characteristics
- Identified realistic program potential for LADWP's long-term and short-term EE program planning and development







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