Centering Equity and Justice in Community Decarbonization

Johanna Partin
Building Decarbonization Coalition
Targeted Universalism

Source: Adapted from John A. Powell, Kirwan Institute for the Study of Race and Ethnicity
The Flipside Report: A White Paper on Targeted Geographic Electrification in California’s Gas Transition
Why Reducing Gas Isn’t Enough: The Case for Strategic Trimming of Gas Infrastructure

- Ratepayer Burden and Affordability
- Equity and Transition for Vulnerable Communities
- Environmental, Health and Safety Benefits

Untargeted Electrification (No Retirements)

Targeted Electrification (Targeted Retirements)

Mixed Fuel House (Natural Gas and Electric)

All Electric House

Challenges and Considerations for Geographic Electrification

Factors in Prioritizing Trimming Gas Infrastructure
- Level of Pipe: Transmission vs. Distribution
- Age and Maintenance
- Customer End-Uses
- Social and Equity Impacts

Existing Barriers to Geographic Electrification
- Obligation to Serve
- Early Replacement Cost Effectiveness
- Access to Gas Planning Information
Principles for Targeted, Geographic Electrification

**Targeted Whole-House Electrification**
Localized, comprehensive, integrated programs and policies.

**Community-Led**
Community leadership, robust stakeholder engagement, resourcing community-based organizations.

**Local High-Road Workforce Development**
Economic development, local workforce training, expanded access.
# Case Study: Light Tree Apartments

<table>
<thead>
<tr>
<th>Project Owners &amp; Developers</th>
<th>Eden Housing &amp; East Palo Alto Community Alliance and Neighborhood Development Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Residents</td>
<td>Low-income and extremely low-income families &amp; individuals, including 30-60% AMI units set-aside for formerly homeless, former foster youth, &amp; developmentally disabled</td>
</tr>
<tr>
<td>Location</td>
<td>East Palo Alto, CA</td>
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<tr>
<td>Site Details</td>
<td>3.38 acres</td>
</tr>
<tr>
<td>Units</td>
<td>94 existing units, 185 units under construction, 57 substantially rehabilitated units, 37 units demo’d</td>
</tr>
<tr>
<td>Est. Completion Date</td>
<td>January 2023</td>
</tr>
<tr>
<td>Est. Development Cost</td>
<td>$36.2M rehab portion, $44M new construction hard costs</td>
</tr>
<tr>
<td>Architect</td>
<td>Okamoto Saijo Architecture</td>
</tr>
<tr>
<td>General Contractor</td>
<td>Johnstone Moyer, Inc.</td>
</tr>
</tbody>
</table>
Light Tree Electrification

- New HVAC, mechanical, electrical systems
- New utility service
- Existing gas service discontinued
- New solar PV system
- New elevators for existing 3-story buildings
- EV charging stations
Cost and time savings in not having to reinstall gas infrastructure

Good incentives offset a lot of the cost of the install

AEA provided technical support throughout electrification process

Local construction bid phase incentive increased savings

HPWH was a 15% premium over gas water heater, but grants exceeded the cost of the premium

Extra coordination with sub for new equipment

Space limitations for indoor/outdoor HPWH equipment

Path of transporting/handling larger tank inside building, existing structural conditions, outdoor placement

Min. piping connections causing conflicts inside building

Title 24 modeling CHPWH

Noise levels of HPWH

Source: Eden Housing
Thank You

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