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Senate Bill 49 Flexible Demand Appliance Standards

Amy Dryden

Amy Dryden

Director of Strategic Innovations

adryden@aea.us.org

Context: ESJ and DACs

Environmental and Social Justice (ESJ) Communities as communities where residents are:

- predominantly people of color or living on low incomes;

- underrepresented in the policy setting or decision-making process;

- subject to disproportionate impact from one or more environmental hazards, socio economic burden or both; and

- likely to experience disparate protections and benefits of environmental regulations and socioeconomic investments.
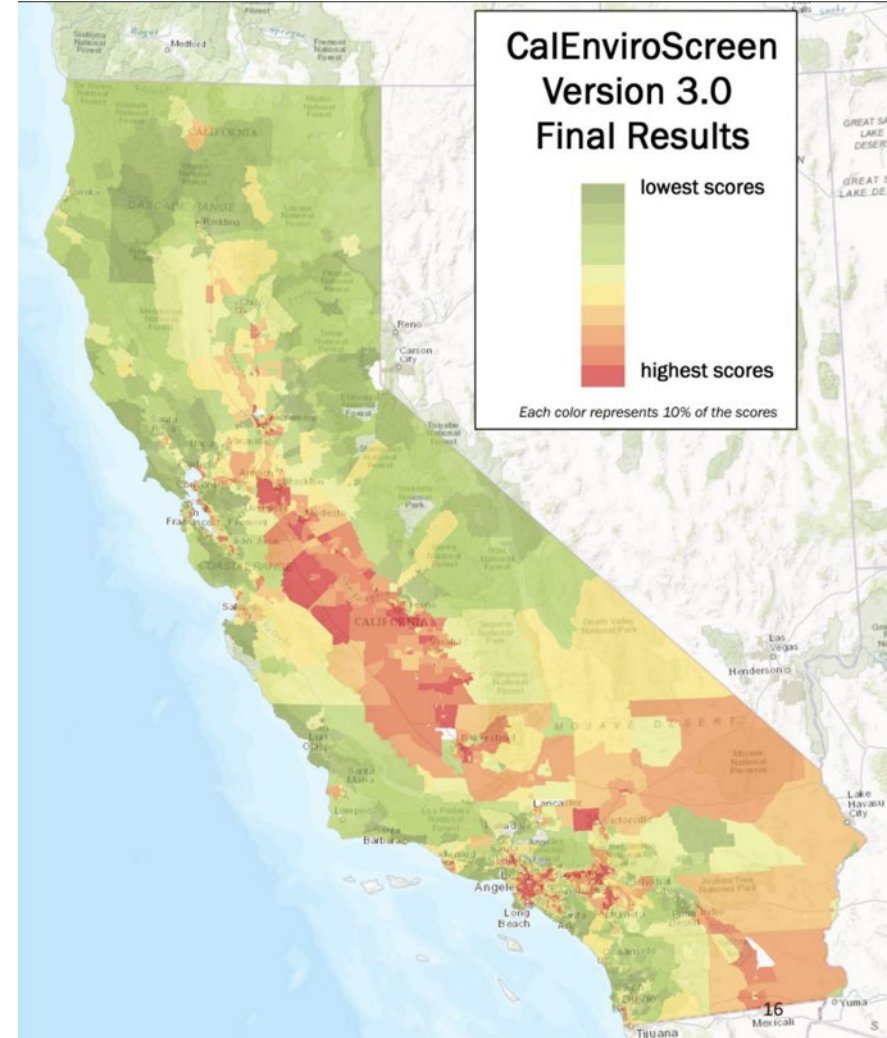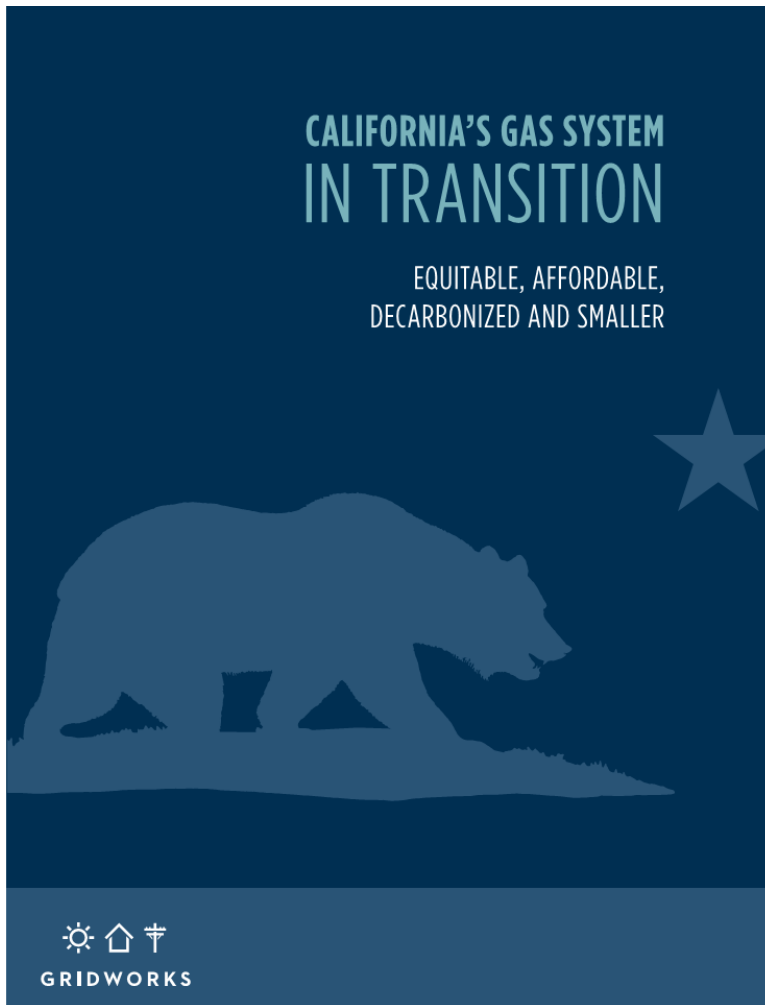
DACs

- 33% of California's are Low Income
- Approx 25% live within a DAC
- 26% of LI are owners and 74% are renters
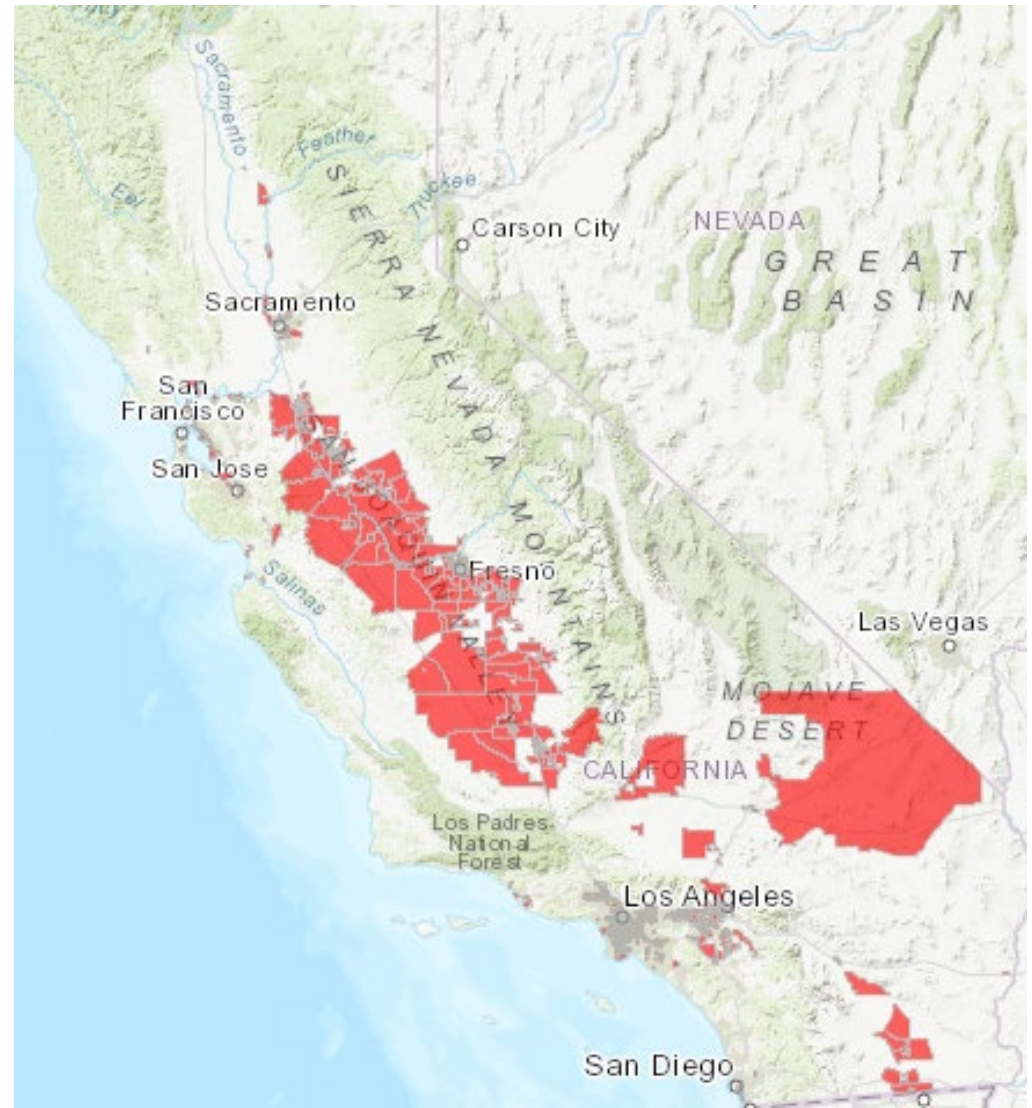
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	0%	1%	12%	9%	0%	11%	6%	36%	24%	29%	5%	18%	38%	7%	17%	1%

Framework: California's Gas System in Transition

CALIFORNIA'S GAS SYSTEM
IN TRANSITION

EQUITABLE, AFFORDABLE,
DECARBONIZED AND SMALLER

GRIDWORKS

- Comprehensive strategy to ensure LI are empowered and benefit

- Undertake barriers study for low – income electrification

- Bill Protections

- Develop programs to enable communities to electrify

- Aggregate resources to allow LI to layer efficiency, solar, storage, electrification

- Protections for renters

Gridworks: *California's Gas System in Transition Equitable, Affrodable, Deacrbonized and Smaller* **(2019)**
https://gridworks.org/initiatives/cagas-system-transition/

Framework: Equitable Building Electrification

Equitable Building Electrification
A Framework for Powering Resilient Communities

ELEC TRI FI CA TION
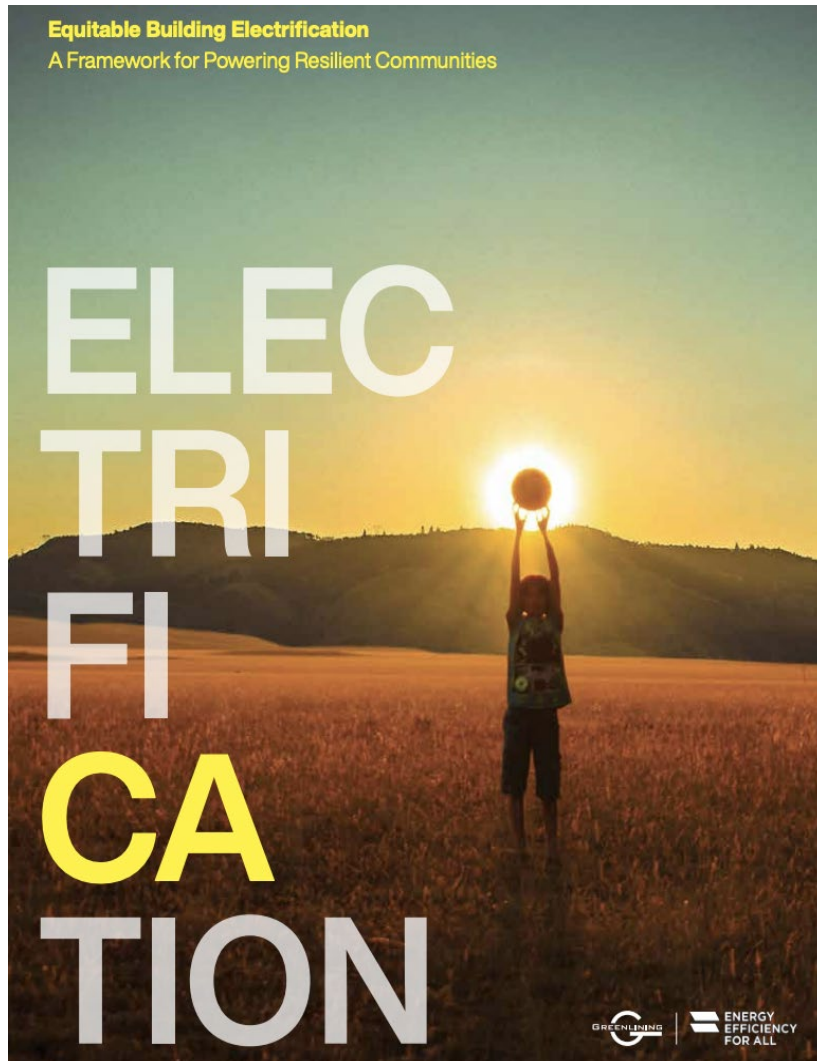
Equitable transition—must focus on health and resilience of all people.

All communities must have the opportunity to shape and benefit from the policies

- Step 1: Assess the Communities' Needs.

- Step 2: Establish Community-Led Decision-Making.

- Step 3: Develop Metrics and a Plan for Tracking.

- Step 4: Ensure Funding and Program Leveraging.

- Step 5: Improve Outcomes.

Considerations – System and Home

Support Complimentary and Comprehensive Scope to Maximize Benefits

- Align criteria with replacement programs
- Layer with programs to provide EE, PV, and Storage
- Address conditions to increase benefits (i.e. envelope)
- Poor systems or envelopes squander preheating and precooling benefits
- Refine for Renters vs Owners

Understand Opportunities and Challenges with Loads

- Prioritize shiftable loads and acknowledge less shiftable loads
- LI see higher proportion of in-home cooking – hard to shift
- Larger households and increased hours of occupancy
- Understand different work schedules- early morning & evening peaks (e.g evening –peak showers)
- Limited number of household appliances in homes or not controllable
- MELs are growing load in homes and water heating is significant load

Define Service Standards

- Address customer satisfaction, reduction in GHGs and minimize energy costs
- Consider how to minimize unintended energy use in shed or post shed

Considerations –

Engage with All Stakeholder is Key

- Meet folks where they are at for Meaningful Engagement
- Work with local agencies with relationships
- Reach out to landlords
- Consider renter protections
- Address split incentives so renters benefit

Create Accessible Technology

- Wifi may be unreliable, low quality or nonexistent
- 50% of homes receiving HPWH did not have access to wifi
- Smart phones are access to internet

Support Education

- Bring benefits to residents in accessible manner
- Assist LI with TOU optimization to help with less shiftable loads

Thank you.

Contact:

Amy Dryden

Director of Strategic Innovations

Association for Energy Affordability

adryden@aea.us.org