

INTEGRATING EQUITY AND AFFORDABILITY INTO THE ENERGY TRANSITION IN CALIFORNIA

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About Just Solutions Collective and IEER

- Just Solutions works to broaden and deepen the understanding of equitable and effective policies and projects to build the capacity of communities to replicate, scale and build support for justice-centered solutions.
- The Institute for Energy and Environmental Research provides activists, policy-makers, journalists, and the public with understandable and accurate scientific and technical information on energy and environmental issues. IEER works to bring scientific excellence to public policy issues and promote the democratization of science for a safer, healthier environment.

Overview of presentation

- A Percentage of Income Payment Plan with very high enrollment should be an early part of the foundation of an equitable energy transition.
- Very high PIPP enrollment can allow a more economically efficient energy transition since it can be done with assurance that low-income households are protected from increasing utility bill conflicts with paying for rent, medicines, and food.
- Investments (including with grants) in weatherization, community solar at discounted rates, and efficient electrification can reduce assistance expenditures, maintain or improve affordability, save money and reduce emissions relative to an assistance only strategy.
- California's high electricity rates mean that specific procedures, such as prior enrollment in PIPP, are likely to be needed to ensure bills do not rise upon electrification of heating.

Energy burden levels

- Like other states, low-income households (less than 100 percent of Federal Poverty Level (FPL), but especially less than 50 percent of FPL – three-quarters-of-a-million California households – have very high energy burdens.
- Energy burdens in the <50 percent of FPL income bracket average more than 30 percent in 32 California counties. This is not uncommon in other parts of the country, but a special problem in California due to higher housing costs.
- Rising rates will likely exacerbate these severe burdens even as the amount of assistance in the California Alternative Rates for Energy (CARE) program increases (with attendant cost shifts).

Percentage of Income Payment Plan

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- Energy burdens in the <50 percent of FPL income bracket average more than 30 percent in 32 California counties. This is not uncommon in other parts of the country, but a special problem in California due to higher housing costs.
- Rising rates will likely exacerbate these severe burdens even as the amount of assistance in the California Alternative Rates for Energy (CARE) program increases (with attendant cost shifts).
- I am glad that California is doing a pilot PIPP in areas with the highest rates using four percent of income as an affordability limit.

Benefits of PIPP, **presuming high enrollment**

- **For low- and moderate-income households:** Problem of high post-assistance burdens is eliminated. More secure, healthier living with fewer utility-bill conflicts with paying for rent, food, and medicine.
- **For all other households and the energy transition:** A more technically and economically efficient business model can be devised (e.g., extensive aggregated demand response, real-time rates with vehicle-to-grid capacity) without fear of putting low-income families at greater risk of illness and homelessness.

What about cost and CO2 emissions?

- While high-enrollment PIPP will reduce energy burdens, it does not address the problem of continuing CO2 emissions and the needed energy transformation.
- The affordability gap in California between present energy cost burdens and six percent is on the order of \$4 billion per year, a large sum that may be difficult to raise or sustain.
- There are two implications:
 - a. Reliance on rates, with attendant cost shifts, for assistance funds is regressive, especially on the scale needed for PIPP; assistance should be funded with a progressive, non-rate-based system.
 - b. Full integration of low- and moderate-income households (with due attention to the greater needs of the former) into the energy transition should be designed so as to systemically reduce energy burdens and emissions and reduce the need for assistance to make energy affordable.

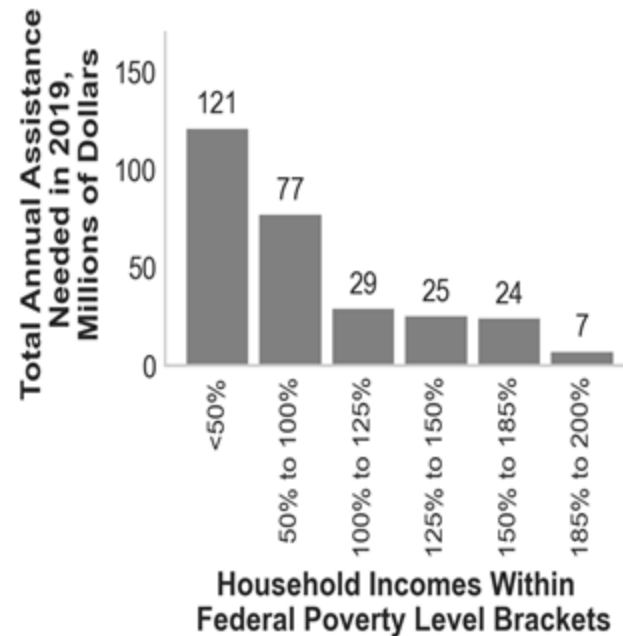
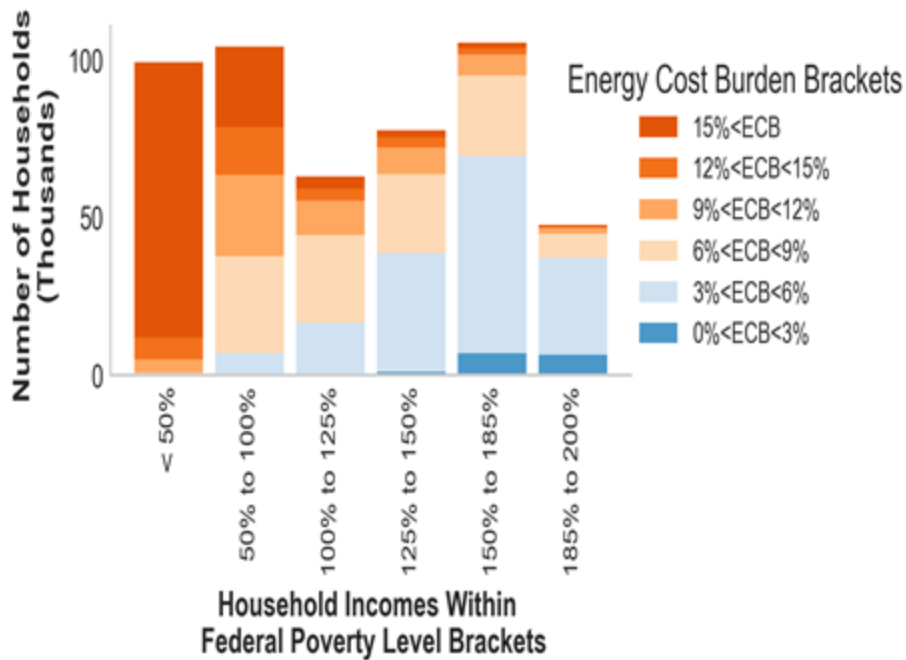
The Colorado Affordability Study: six-pronged approach to Affordability

1. **Bill Assistance.** Expand enrollment in assistance programs—notably using the new resources for PIPP—in the near term.
2. **Energy Efficiency and Weatherization.** Greatly expand weatherization grants for the lowest income households (<50% of Federal Poverty Limit, FPL), mostly grants (50-100 percent FPL), and mostly low- to no-interest loans for the rest, using a suitably graduated formula.
3. **Community Solar.** Expand community solar to supply renewable electricity and at prices guaranteed to be substantially below utility rates.
4. **Demand Response.** Expand demand response for additional economic opportunities to LMI households, including renters.
5. **Beneficial Electrification.** Heating electrification will decrease overall energy use, electricity demand will go up as fossil fuel use goes down, but need to ensure especially with gas-to-electric conversions that bills decline, for instance via electrification grants in the lower income brackets.
6. **Reduce Bill Assistance** over time as other measures start to effectively reduce energy cost burdens and less assistance is needed to maintain affordability.

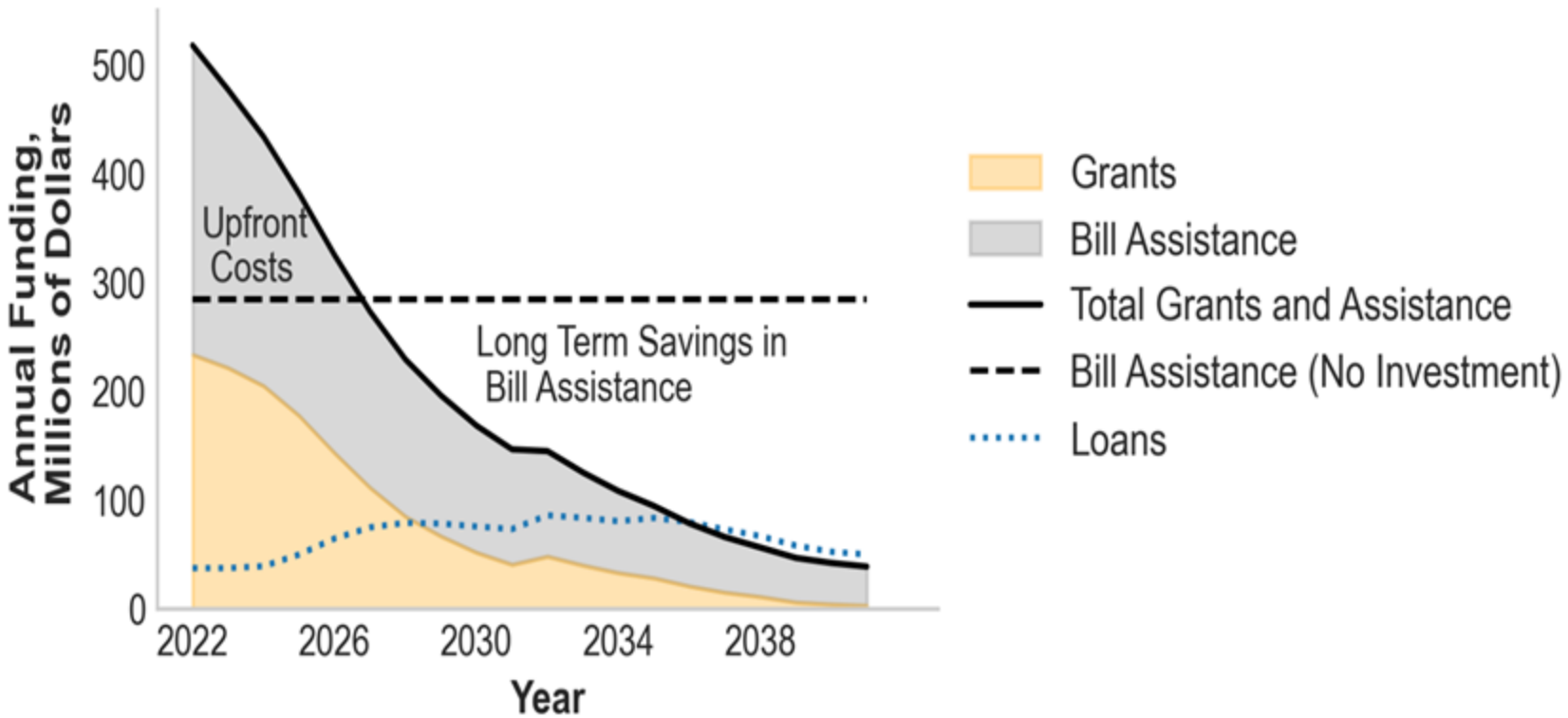
Colorado assessment – Funds needed for a 100% PIPP only scenario, and disbursement pattern by income group

**Assistance needed: \$280 mn/year;
70% below FPL households**

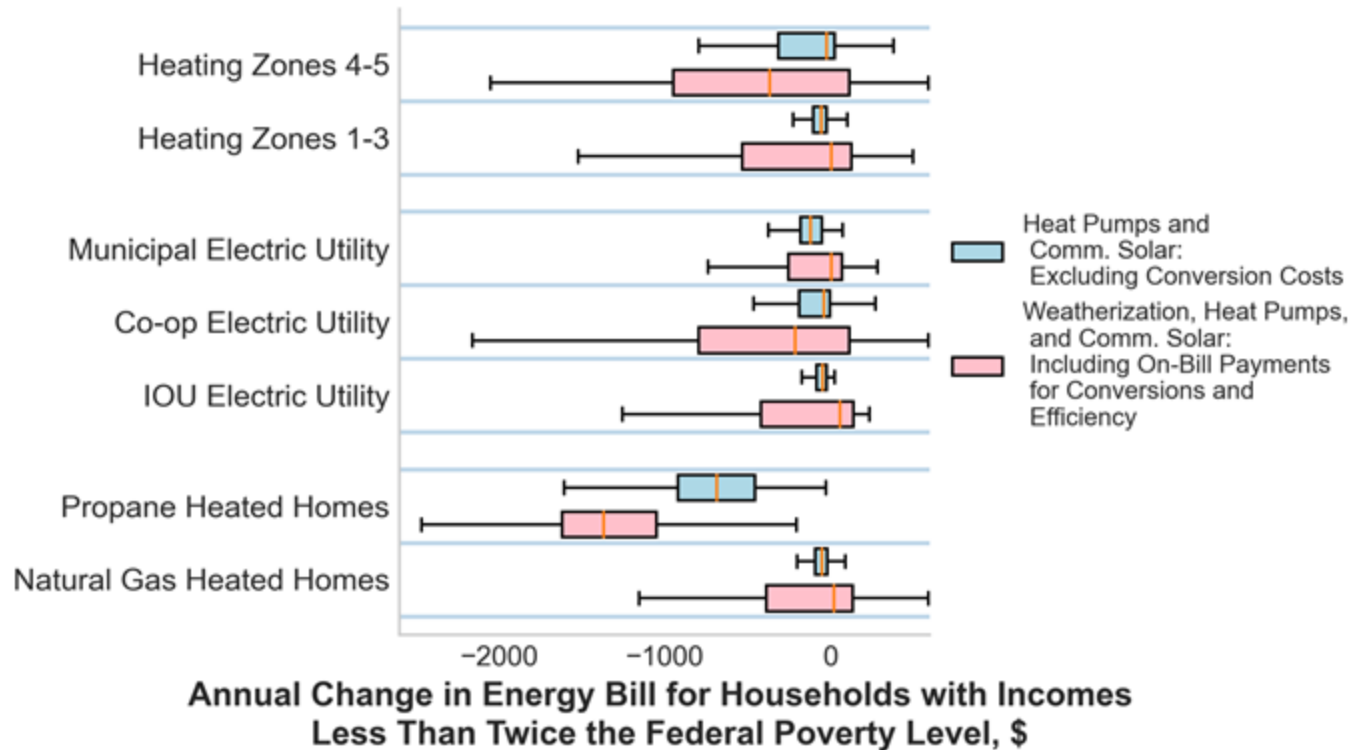
**Distribution of PIPP assistance
assuming 100% enrollment**



Investments + PIPP scenario: \$1.5 billion saved + emissions eliminated over 20 years relative to PIPP only (Colorado)



Bill impact of heating electrification (Colorado): Grants may be needed for lowest income tiers to ensure post electrification bill reduction



Implications for California

- Fully integrating energy assistance (via PIPP) and investments in the energy transition will make energy justice compatible with climate goals. California would likely save billions of dollars, have lower emissions, and better health relative to using assistance alone to reduce energy burdens.
- Given the differential between electricity and gas costs, it will be critical to properly sequence assistance, and investments and to verify the effectiveness of the measures. Policies and procedures should ensure energy burdens decline monotonically, including when natural gas heating is converted to heat pumps.

Recommendations – Slide 1

- Goal: All households should have zero emissions within the period of the energy transition and also have affordable energy through a combination of bill-payment assistance and investments, with the role of assistance declining over time.
- Fully integrate low- and moderate-income homes into energy transition planning and set rules accordingly to ensure a smooth transition **with monotonically declining energy burdens**; special consideration will be needed in converting heating from gas to efficient electric system, including grants for low-income households.
- Move from a CARE assistance model to PIPP with even higher enrollment and lower barriers for all Investor Owned Utilities.
- Move away from rate-based assistance to progressive funding mechanisms to eliminate cost-shifts.
- Ensure that rural co-op, municipal utility, and small multi-jurisdictional utility customers have PIPPs or equivalent programs. Using a non-rate based, state-wide progressive funding sources may facilitate providing funds for non-IOU utility PIPPs (in addition to the IOU PIPPs).

Recommendations – Slide 2

- Partition between grants and low-interest loans for weatherization should be carefully considered based on income, with priority for grants to households at or below 100 percent of the FPL.
- Partial or full grants for efficient electrification should be considered when converting from gas to electric heating, including when installing a heat pump in a low-income home which had gas heating and no air-conditioning.
- All households where investments take place should have prior enrollment in PIPP to ensure against bill increases.
- Net metering for solar (rooftop and community) should be maintained on favorable terms for low- and moderate-income families for 100 percent of energy use.
- A one-stop energy transition, after PIPP enrollment, should be considered as the standard approach: Weatherization, discounted community solar subscription, and efficient electrification.
- Incentives for landlords and regulations for rental housing should be developed, conditioned on an agreement that low-income renters would be able to take **the full benefits** of efficiency, renewable energy, electrification, and demand response opportunities (including in aggregation schemes).

QUESTIONS?

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