

Equity in State Energy Policy:
Why Does it Matter?
What Should it Look Like?
What Are Some Success Stories?

Basav Sen

Institute for Policy Studies

February 2019

First, a Few Disclaimers

- You'll be able to implement some of these ideas without regulation or legislation.
- But some will need rulemaking by your PUC.
- Some might even need legislation.
- I don't plan to cover the universe of energy policy.
 - Will draw my insights from renewables and energy efficiency policy.

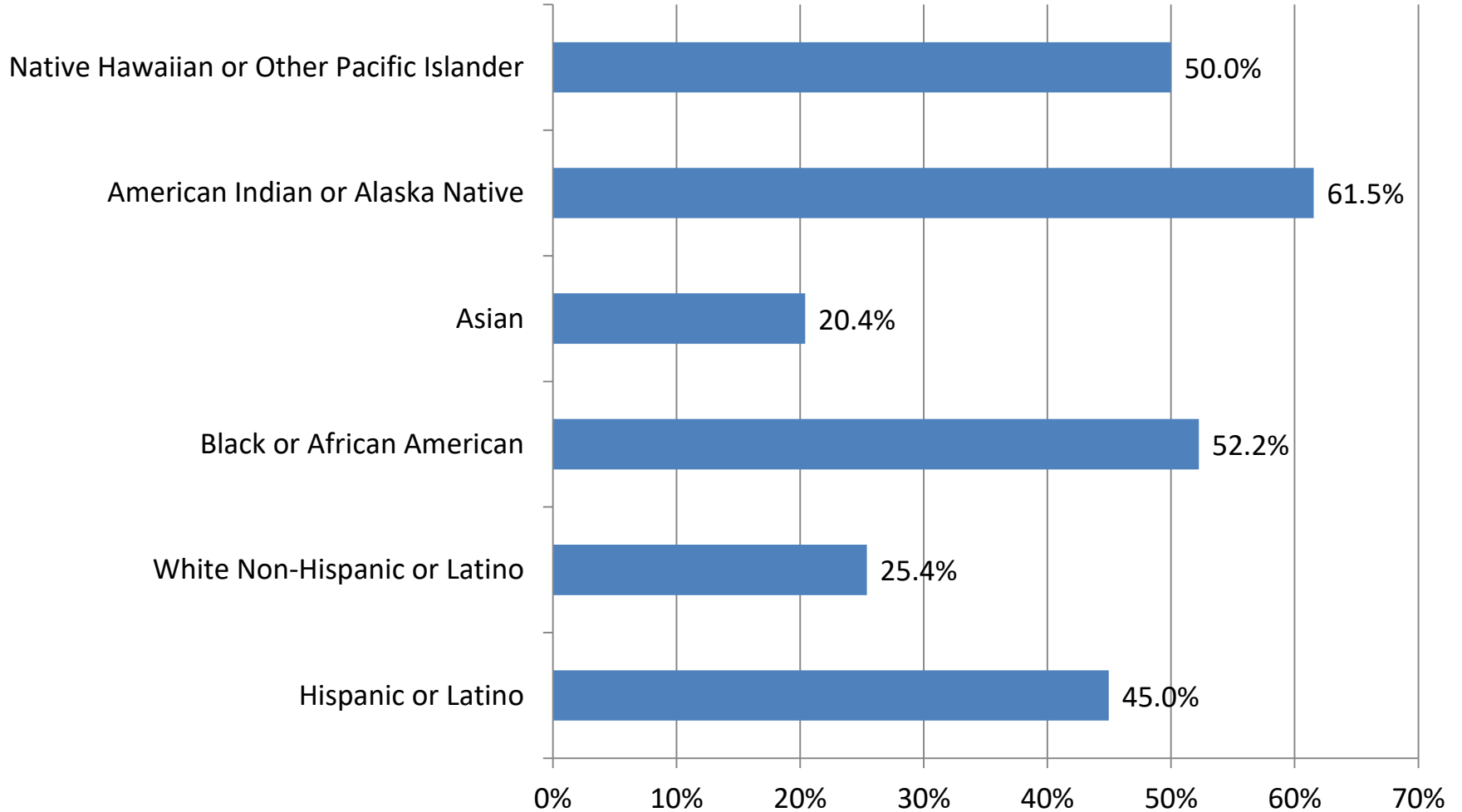
Why Equity Matters in Energy Policy

- Energy insecurity, energy burden – unequal by race and income.
- Disproportionate exposure to dirty energy and its environmental harms.
- Inadequate access to benefits of clean energy.
- Inadequate access to clean energy jobs.

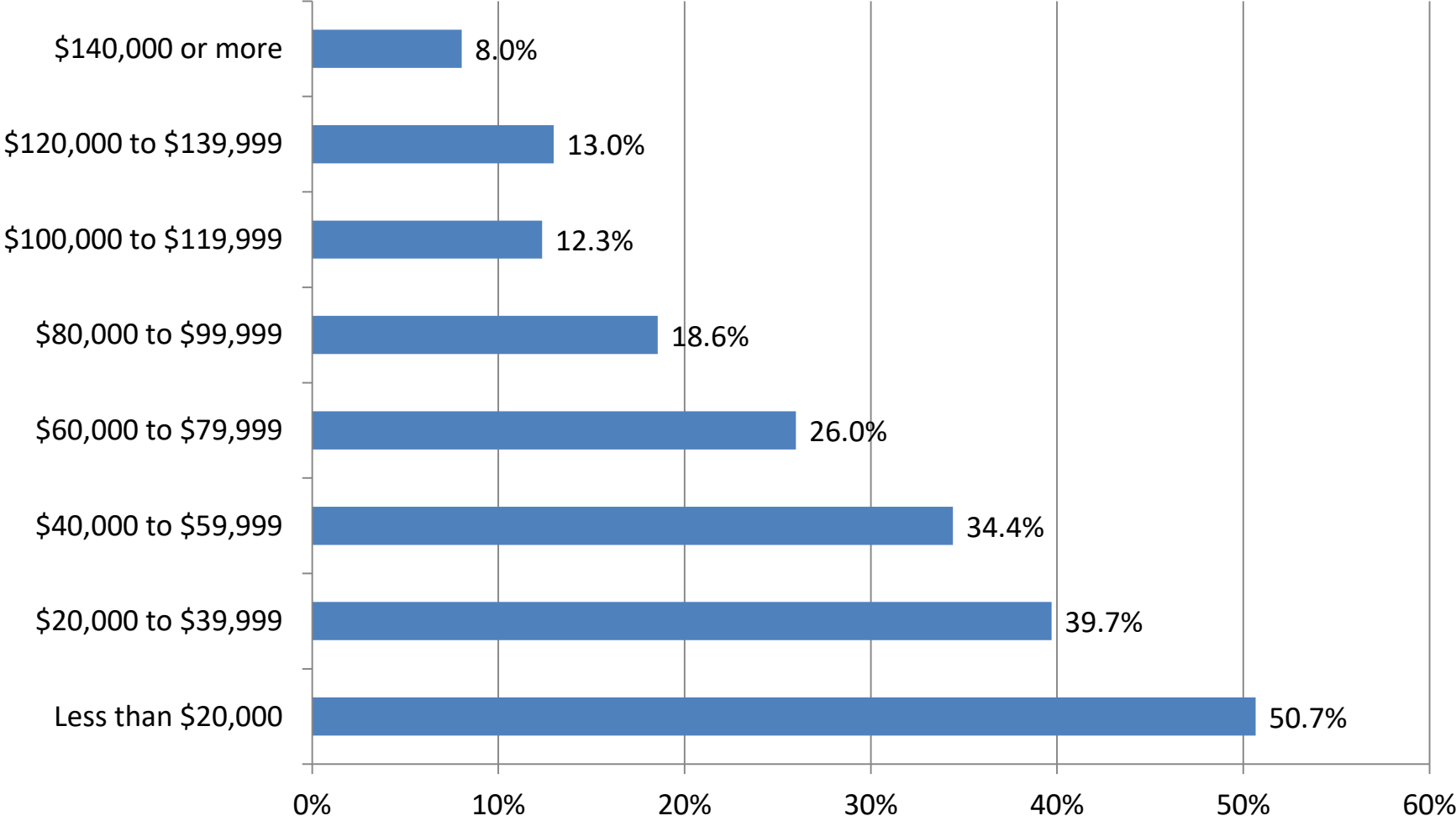
What Is Energy Insecurity?

- Being disconnected from energy utilities – or facing disconnection.
- Having to choose between paying for utilities or paying for food and medical care.
- Having to set the heat or air-conditioning to uncomfortable (potentially unsafe) temperature to keep bills low.
- Risking fires and CO poisoning by using unsafe fireplaces, wood stoves etc. to heat homes.

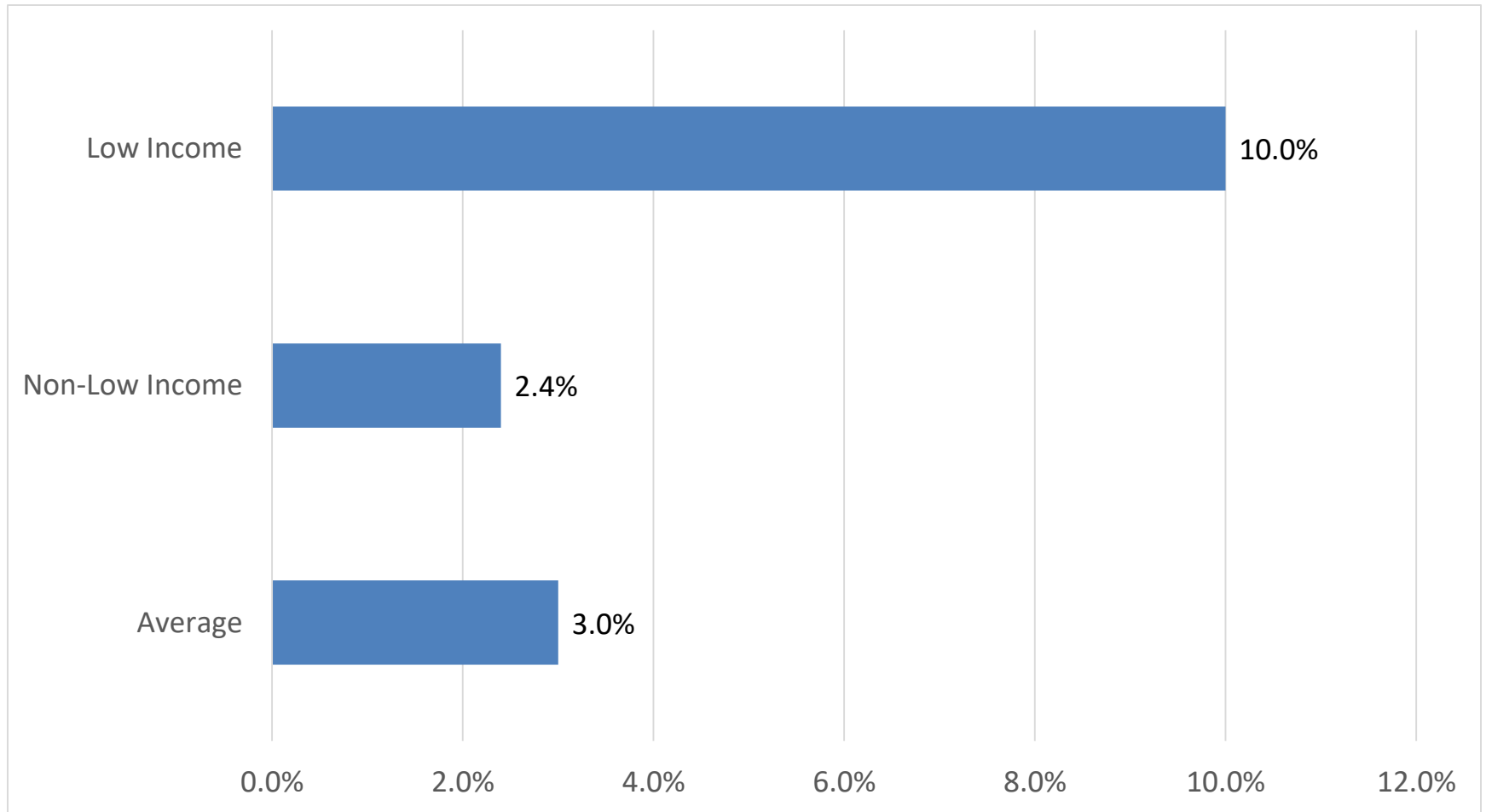
Energy Insecurity is a Racial Justice Issue



Energy Insecurity in an Economic Inequality Issue



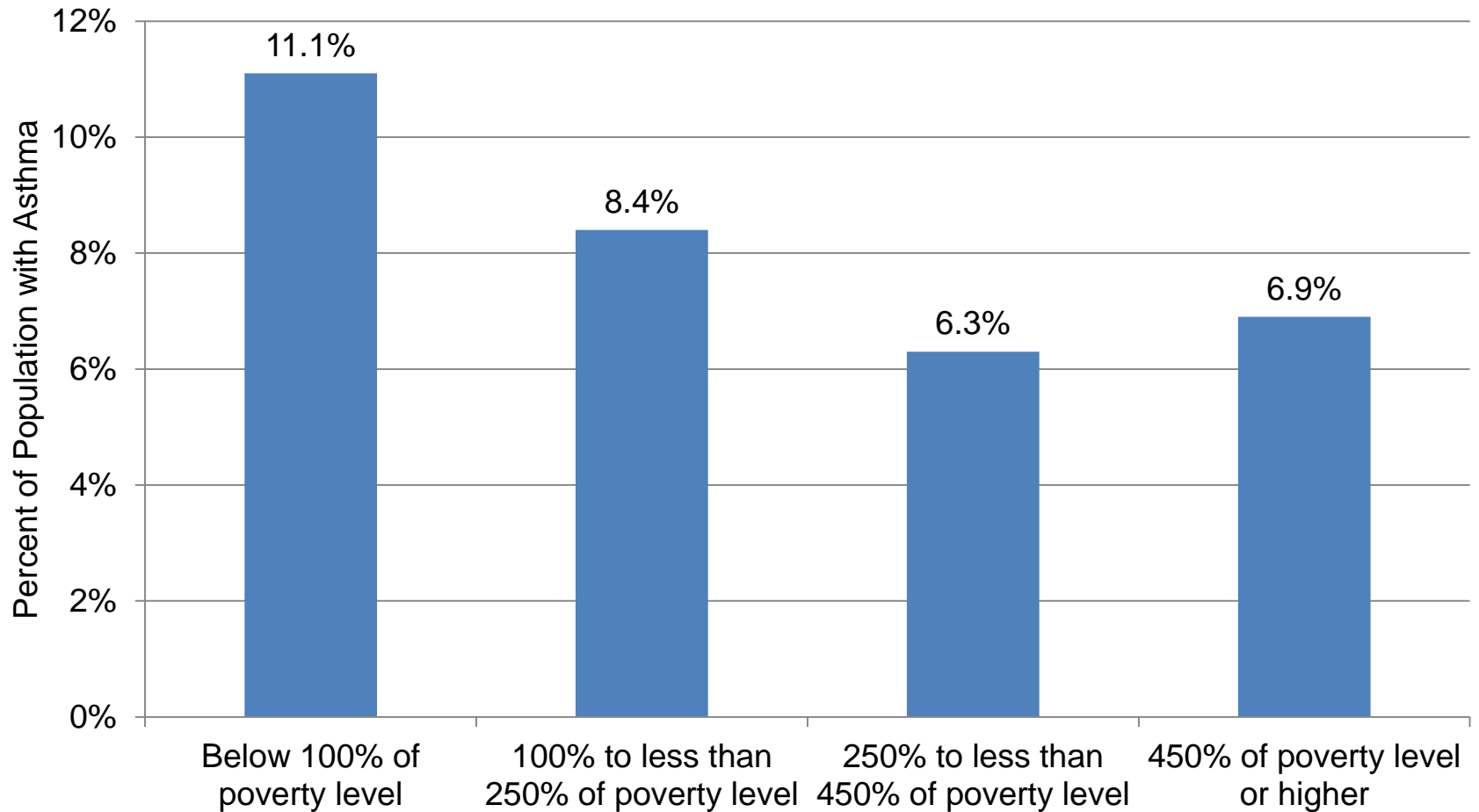
Low-Income Households Face Significantly Higher Energy Burden



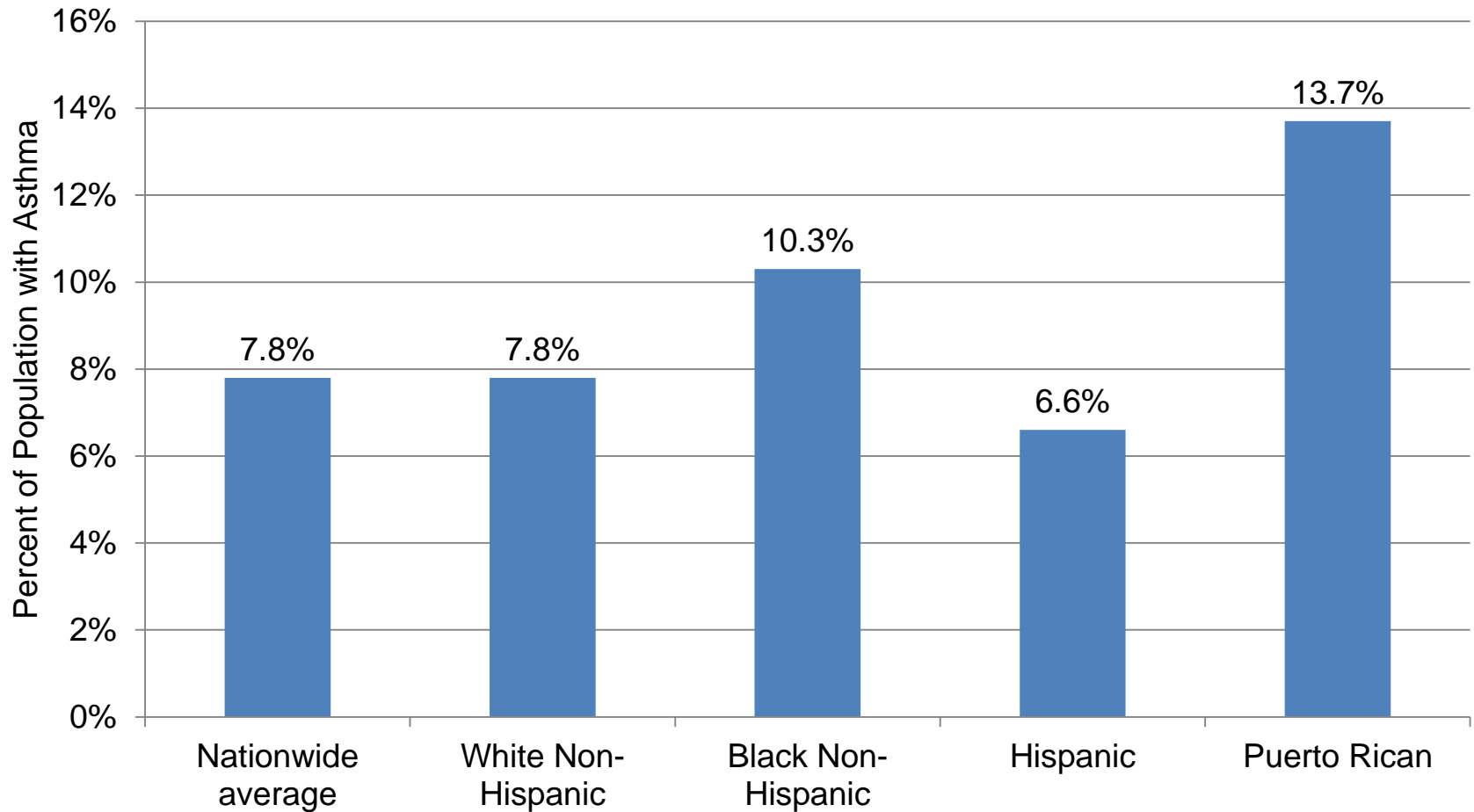
Unequal Exposure to Dirty Energy Emissions

- AJPB [paper](#) in 2018 found:
 - People in poverty exposed to stationary sources of PM_{2.5} 1.35 times national average.
 - People of color exposed 1.28 times national average.
 - Black Americans in particular exposed 1.54 times national average.

Dirty Energy Emissions Have Unequal Health Impacts by Income



Dirty Energy Emissions Have Unequal Health Impacts by Race



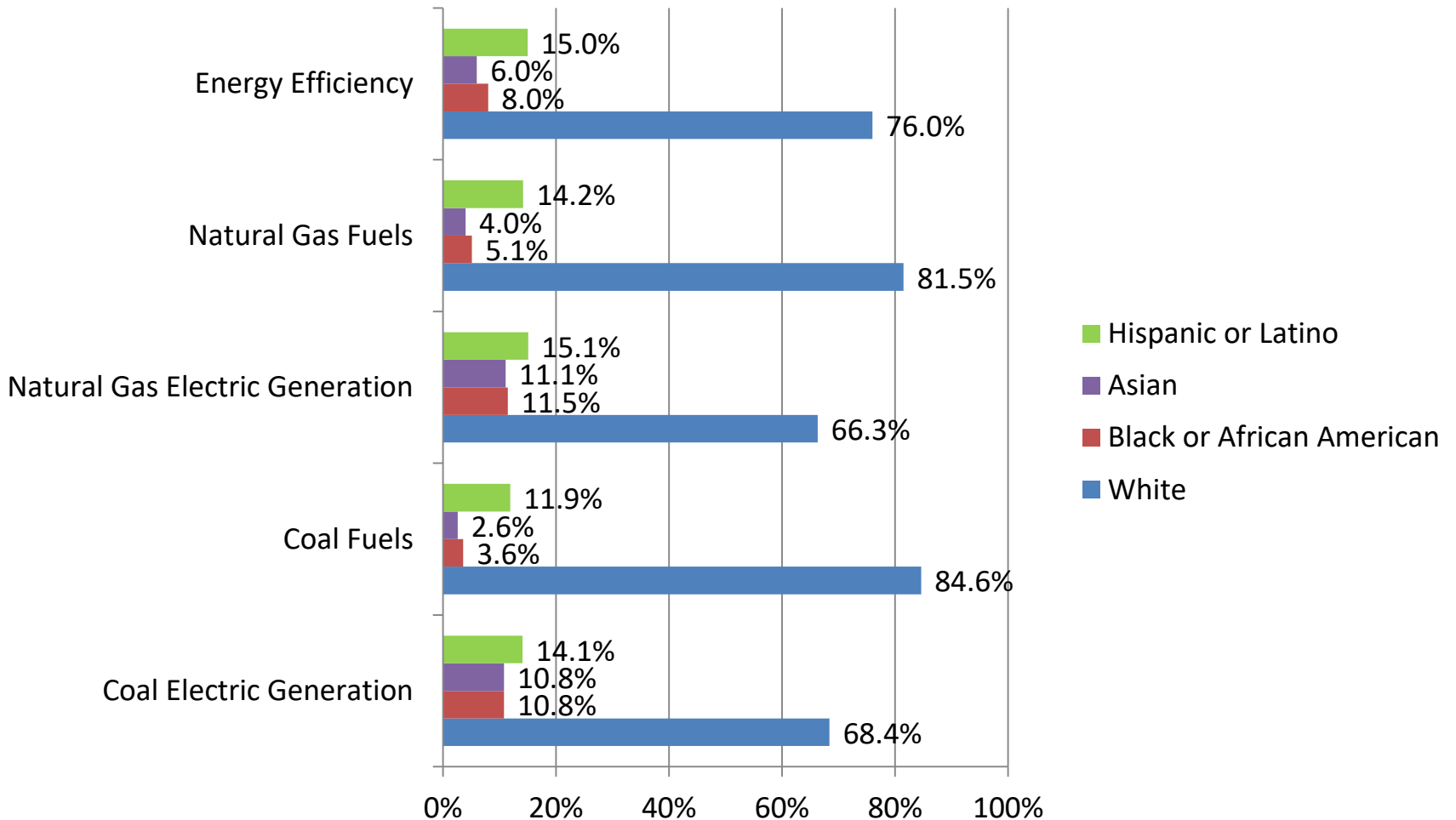
Greenhouse Gas Emissions Have Highly Unequal Impacts

- Heat waves have worst impacts on low-income inner-city communities and low-wage workers:
 - Less tree cover, “urban heat island”
 - Less ability to pay high air-conditioning bills.
 - Outdoor workers (construction, farmworkers) among the worst affected.
- Severe storms have the most devastating effect on vulnerable, marginalized communities.

Inadequate Access to Clean Energy Benefits

- Benefits of distributed renewables (rooftop solar) often available to homeowners alone.
- Likewise, home energy efficiency upgrades often available to homeowners alone.
- But there are large disparities in homeownership by income and race.
- High upfront cost of rooftop solar and many energy efficiency upgrades can be a barrier for lower income households.

Unequal Access to Clean Energy Jobs



Shared Renewables with Set-Asides for Low-Income Households

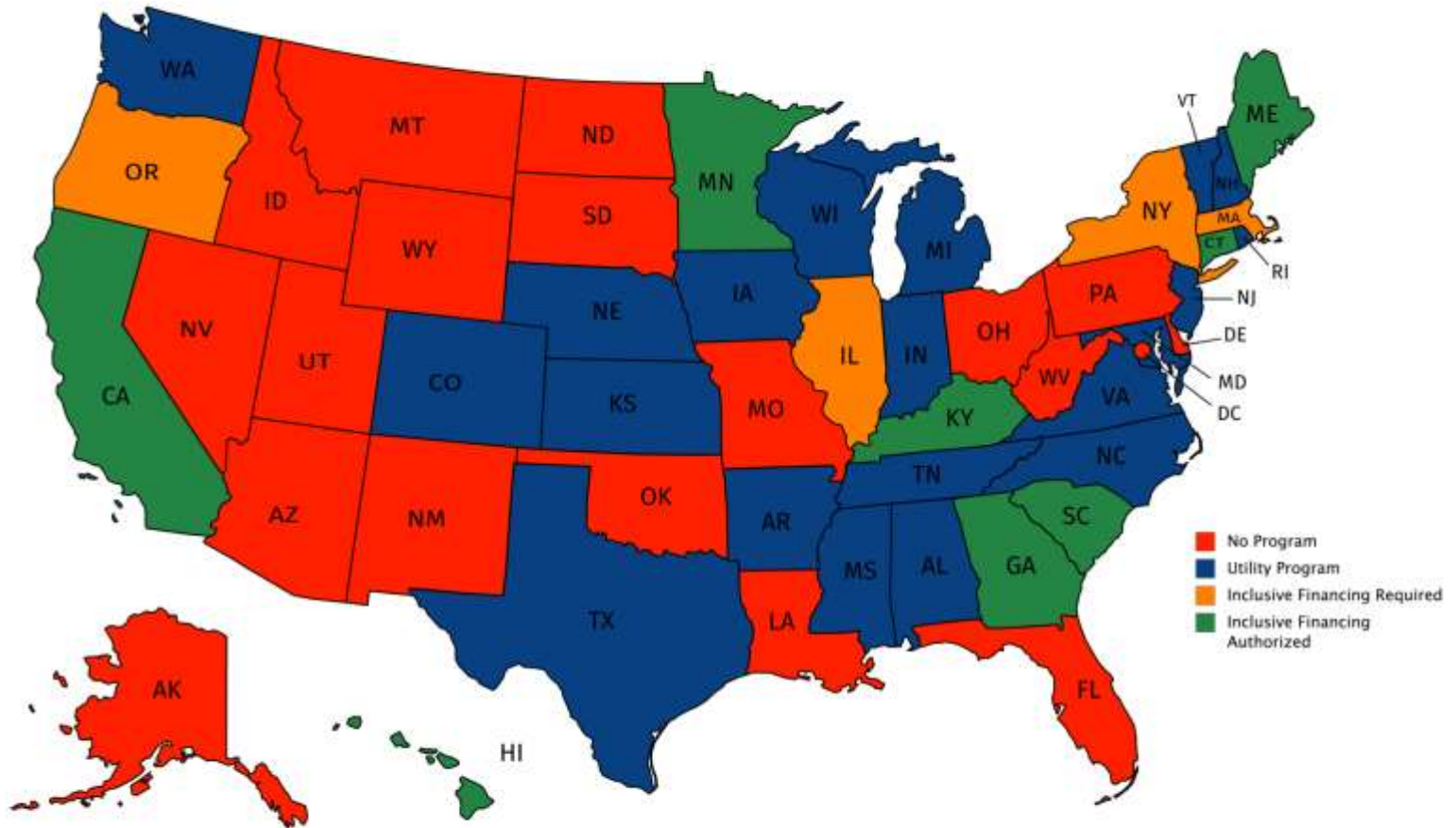


Two states set aside shared renewable capacity for low-income households: OR (10%) and CO (5%).

Inclusive Financing Tied to Utility Meters – What Is It?

- Utilities offer opt-in tariff (effectively a loan) to customers for energy efficiency upgrade.
- They recover the cost through utility bills.
 - Cost recovery charge is less than estimated savings (bill neutrality).
- Loan tied to meter rather than property.
 - Accessible to renters, low-income households.
 - Addresses “split incentive.”

Status of Inclusive Financing by State



Other Policy Tools

- Targeted incentives for rooftop solar for low-income homeowners:
 - CA SASH program, DC Solar for All program.
 - Leverages relationships of non-profits (GRID Alternatives, Solar United Neighbors).
- Rebates for energy efficiency equipment and upgrades for low-income households.
 - Can be funded by some combination of utility ratepayers and state funds.
 - Examples: EmPower New York, Efficiency Maine

Key Principle: Justice by Design

- Racial and economic justice should be equally important goal of clean energy policy as reduction of greenhouse gases and other pollutants.
- Considerations of justice should be incorporated into designing policies from the outset.
- Involving affected communities in policy design, implementation, and monitoring is key to ensuring that this happens.
- Involving communities also leverages local knowledge, makes policies more effective.

Key Policy Recommendations to Expand Clean Energy Access

- Funding and/or equitable bill-neutral financing to assist low-income households with upfront costs.
- Expand the definition of low-income households.
 - IL, VT use 80% of AMI threshold.
- Disconnection assistance.
- Targeted programs for specific populations (seniors, chronically ill, rural populations etc.)
- Language access.
- Use multiple media for outreach (not just digital).

Key Policy Recommendation: Require Job Accessibility, Training, and Quality

- Hiring goals for government-funded or mandated energy efficiency projects.
- Involving organizations based in communities of color and low-income communities, unions, etc. in policy design and implementation, including training, hiring, monitoring and evaluation.
- Setting wage standards and benefit requirements.

Success Story: IL Future Energy Jobs Act

- Mandates utilities to set aside funding for clean energy job training programs for underserved populations:
 - economically disadvantaged and environmental justice communities.
 - youth of color.
 - formerly incarcerated persons.
 - individuals who had been in the foster care system as children.

Success Story: OR Energy Efficiency Jobs

- Over 2-year period surveyed:
 - 47% of new hires were women and POC.
 - 55% of hours worked were by women and POC.
 - Median hourly wage was \$18.46, compared to statewide median of \$17.24.
 - 81% of prime contractors offered health insurance.
- What drove these results?
 - Setting goals intentionally.
 - Involving organized labor and affected communities in program design and outreach.