

The background of the top half of the image is a stylized circuit board pattern. It features a grid of lines and circular nodes, transitioning from a light blue on the left to a light green on the right. The pattern is semi-transparent, allowing the landscape below to be seen through it.

INTERSECT 19

The New Energy Ecosystem

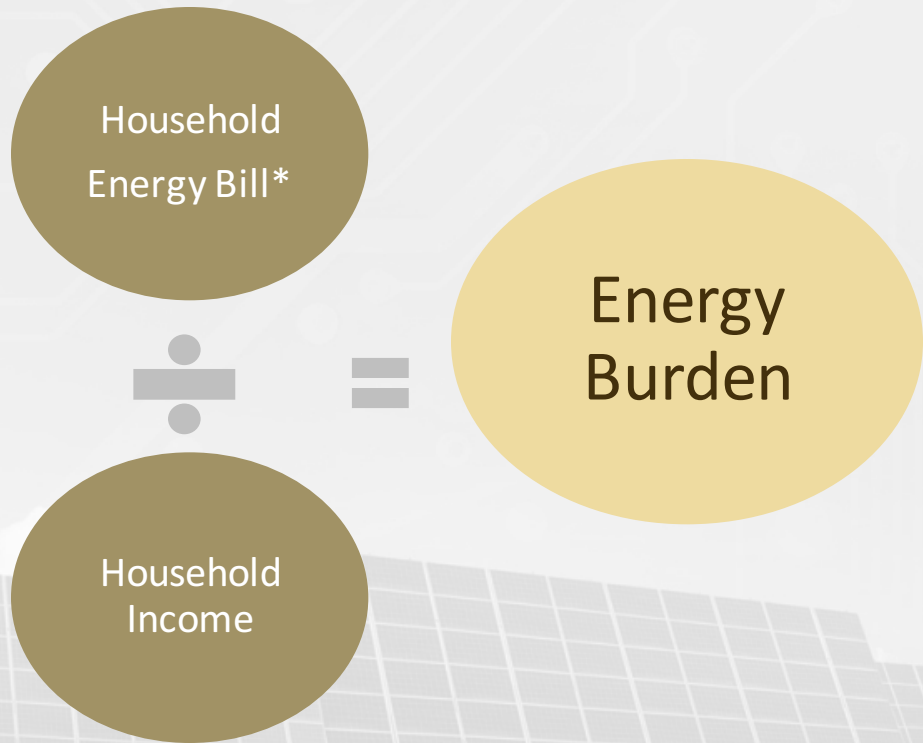


UNDERSTANDING ENERGY BURDEN AND ITS POTENTIAL SOLUTIONS FOR ATLANTA

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What is “Energy Burden”?



*Electric and Gas

The U.S. Department of Health and Human Services classifies an energy burden of above 6% as “unaffordable” (Colton, What is the Home Affordability Gap, 2017)

Atlanta is #4 in the nation with a median energy burden of 5%;
25% of households have an energy burden > 9.7%.

([ACEEE 2016](#))

Several factors contribute to high-energy burdens in GA

Numerator

- 35th in EE policies
- 2nd highest residential natural gas prices in country
- 5th highest average temperature in country
- Among highest in Air Conditioning and space heating use

Denominator

- 41st in per capita income
- 46% of Southern Co. customers at or below \$40K income (Southern Co.)



Investor ESG Expectations are shifting attention to “Material” Sustainable Business Issues

- **Energy affordability** has been flagged as a **material issue** for utilities by investors
- The ability of a utility to adjust rates is impacted by energy affordability



Energy burden is emerging as a “Material” issue for investor-owned utilities

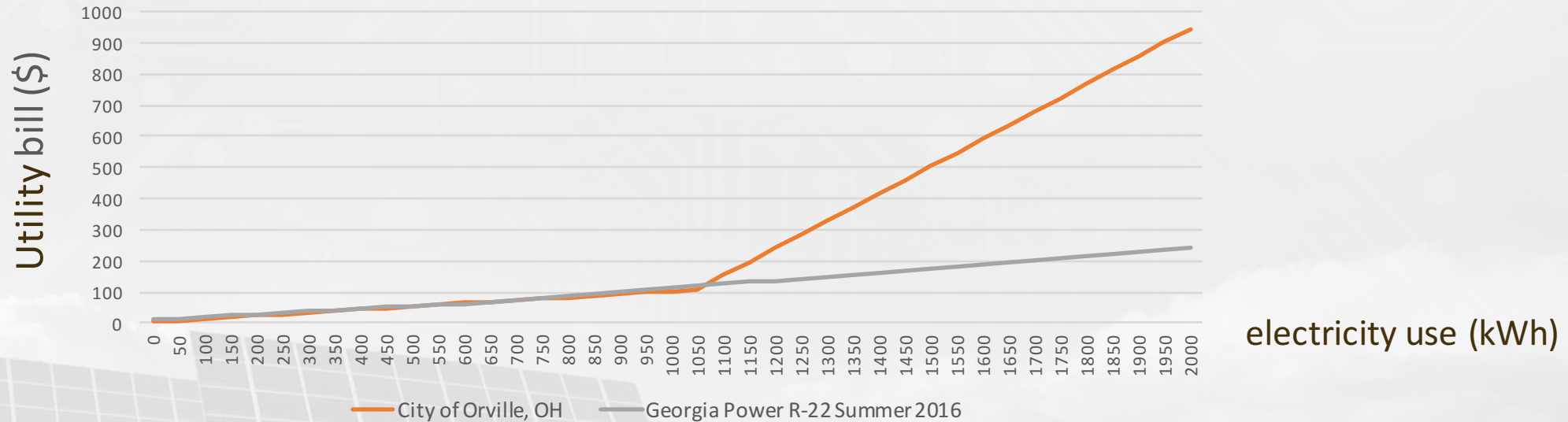
“Utility energy bills are widely perceived to be increasingly unaffordable for low-income customers (affordability is determined by both the net cost of energy bills and the underlying customer economics). Ensuring that utility bills are affordable is crucial for utilities working to build trust (intangible asset value) with regulators and customers.”
(SASB)

46% and 40%, respectively, of Southern Company and GP customers are at or below \$40 K annual household income



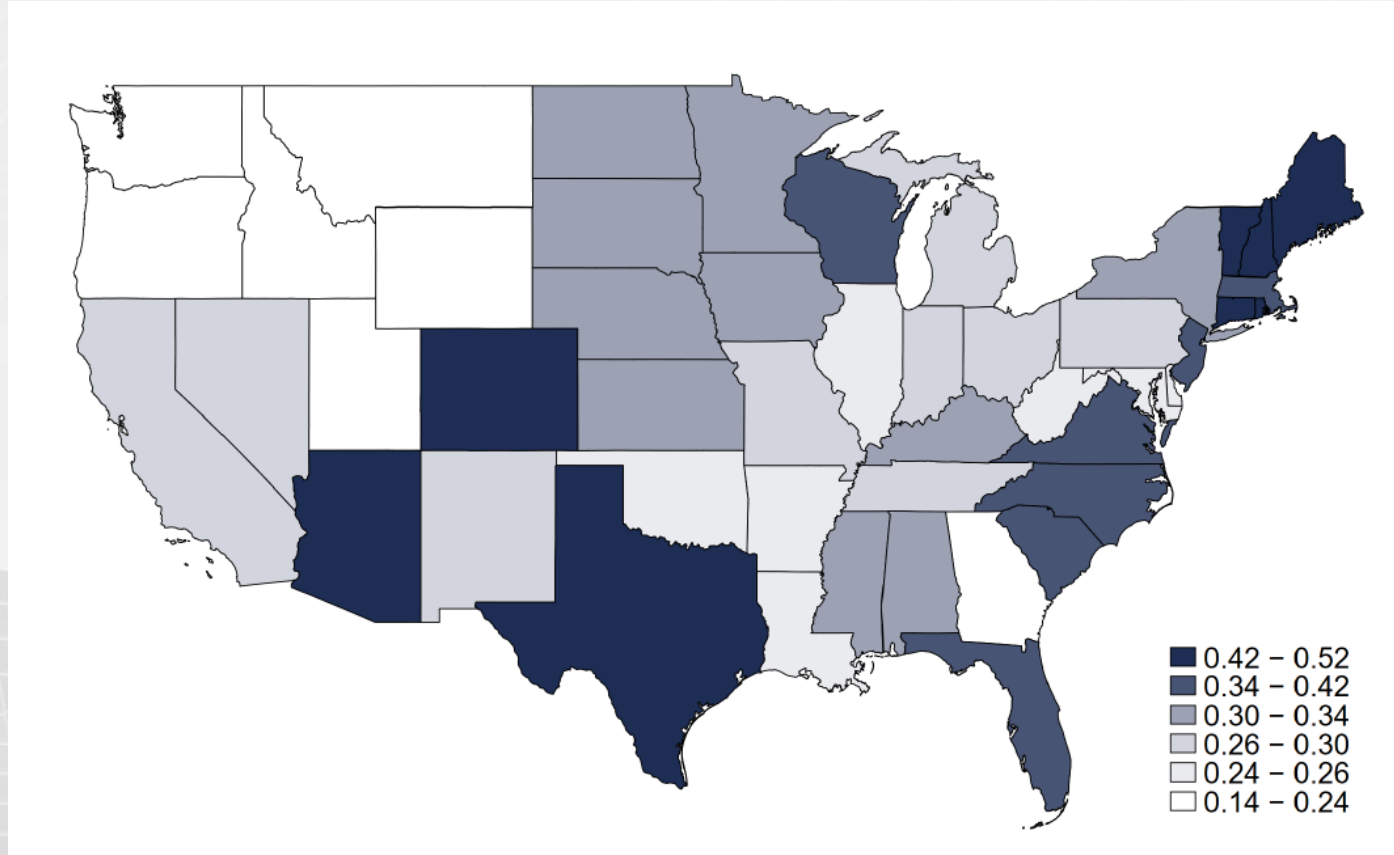
Can rate structure be a solution?

Rate Structures



Source: faculty.georgetown.edu/aml6/papers/ElectricGini.pdf
(based on <https://openei.org/apps/USURDB/>)

Correlation of income and energy expenditure can be weak



Source: faculty.georgetown.edu/aml6/papers/ElectricGini.pdf
(based on 2009 RECS)

Rate-payer funded low-income programs

State	Rate Assistance	Energy Efficiency	Households served
Georgia	\$23,489,716	\$2,750,000	75,000/550
Ohio	\$334,638,817	\$65,909,369	197,000/16,000

<https://liheapch.acf.hhs.gov/dereg/states/gasnapshot.htm>

<https://liheapch.acf.hhs.gov/dereg/states/ohsnapshot.htm>

Estimated electricity savings in GA is 2,380,000MwH for households under 200% of the federal poverty level (41% of households)

<https://emp.lbl.gov/sites/default/files/lbnl-1007114.pdf>

Scaling low-income utility programs requires coordinated, cost-shared partnerships

Stakeholder	Core Principle
<i>Utilities: Treat Affordable Energy as a “Material Issue”</i>	<i>Transition from philanthropic focus to core business focus</i>
<i>Public Service Commission: Align Incentives</i>	<i>Address root causes via public policy reform and incentives</i>
<i>Cities: Energy Benchmarking, Green Leases, and “Trusted Contractors”</i>	<i>Address the landlord/tenant problem</i>
<i>Low-Income Households: Expanded Community Partnerships & New Technologies</i>	<i>Improve awareness of link between consumer behavior and energy use</i>
<i>Housing service & weatherization providers: Fix the home “shell”</i>	<i>Connect causes of energy burden with potential solution providers</i>
<i>Health care providers: Tackle air quality & comfort issues</i>	<i>Reduce health care costs by addressing root causes</i>
<i>Policymakers & non-profits: Focus on poverty reduction</i>	<i>Address systemic social issues & barriers</i>

Thank you!

