Low-Income Energy Efficiency

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Presentation to Coalition of Sustainable Communities New Mexico

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Energy Efficiency

- Energy efficiency = doing more with less
- Efficiency measures
 - LED lights
 - ENERGY STAR appliances
 - Better building insulation
 - Efficient HVAC systems
 - Heat pumps
 - Heat pump water heaters
 - Smart thermostats
 - Electric vehicles
 - And much more!



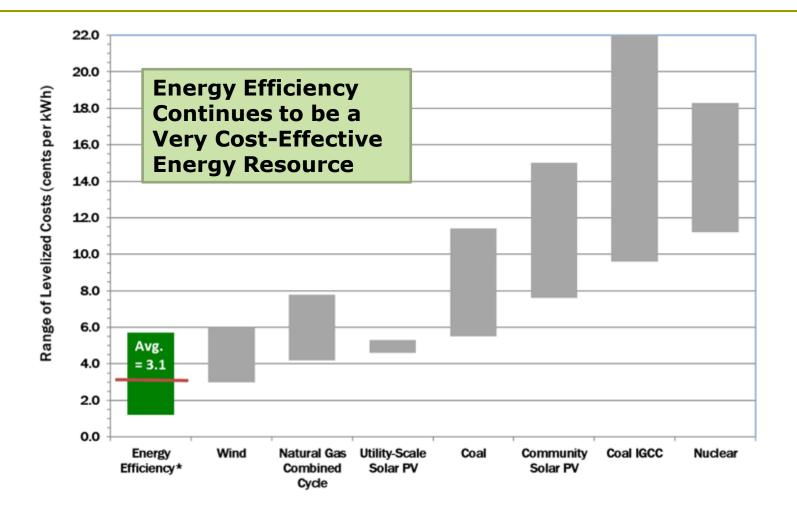




Energy Efficiency Characteristics

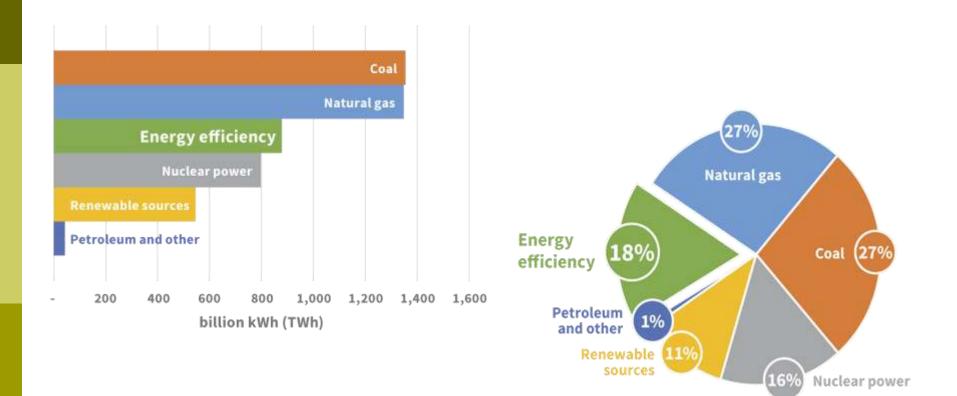
- Every home has energy efficiency opportunities
- Most homes can save 20% or more very economically
- Typical cost: 2-4 cents per kWh saved
- Increasing energy efficiency also cuts pollutant emissions
 - Less fossil fuel combustion
 - Reduced power generation

Cost of Different Electric Resources



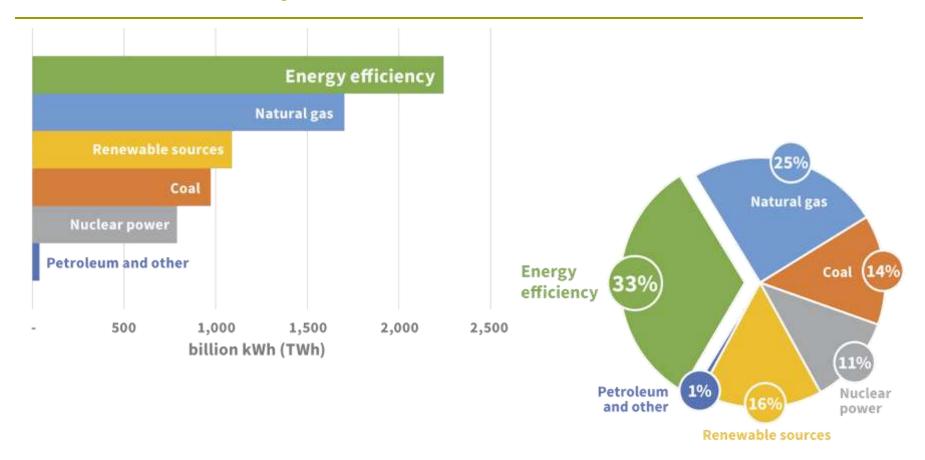
Source: American Council for an Energy-Efficient Economy, 2018

In the electricity sector, efficiency is now our 3rd largest resource...



Source: ACEEE 2016. *Greatest Energy Story You Haven't Heard.* <u>http://aceee.org/research-report/u1604</u>

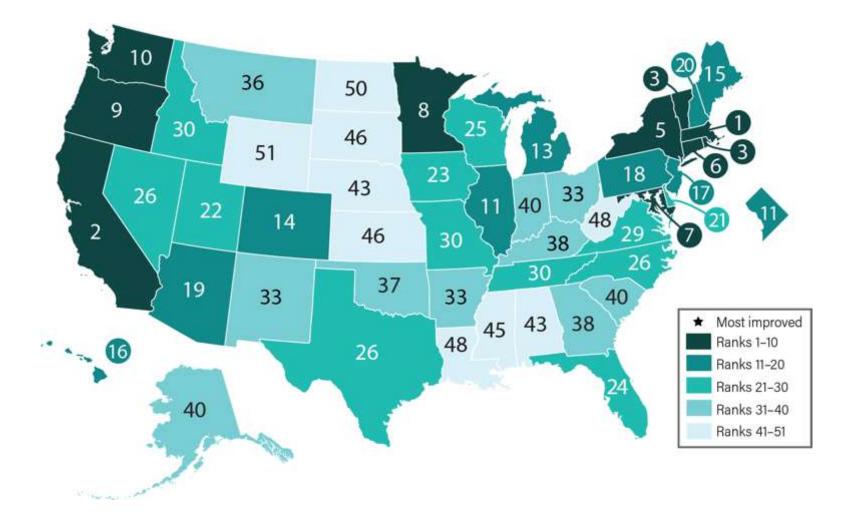
...and could become our largest resource by 2030



Source: ACEEE 2016. Greatest Energy Story You Haven't Heard.

<u>http://aceee.org/research-report/u1604</u>

State Energy Efficiency Scorecard 2019



Source: ACEEE 2019. http://aceee.org/research-report/u1908

Utility Energy Efficiency Programs

- Required by the Efficient Use of Energy Act (EUEA)
 - Requires EE programs for all rate classes
 - Special carve out for low-income customers
- Low-income programs can suffer from:
 - Lack of trust
 - Lack of information



Dedicated to More Efficient Energy Use in the Southwest

Resources available online at: <u>www.swenergy.org</u>

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Sustainability Office



Advance projects and policies to enhance environmental stewardship



Work alongside city departments to adoption of sustainable practices



Connect with the public to educate and enable community action

Why Energy Efficiency?

Inequity in Energy Burdens



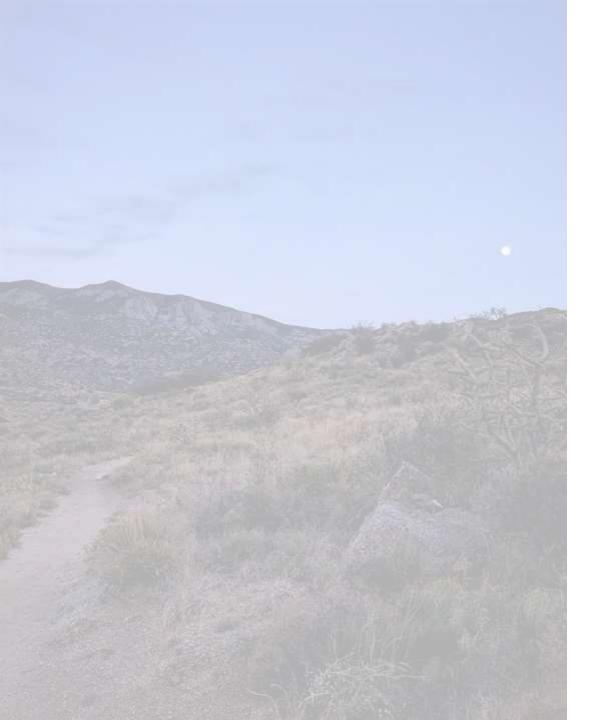
Meet Critical Needs



Reduce GHG in Stationary Sector



Economic Development Potential



Energy Efficiency and GHGe

3,189,800 metric tons of CO₂ total in 2017



Energy Efficiency

Complete

Citywide LED Street Light Conversion Mayor's Energy Challenge 2018 IECC Adoption

Ongoing

- 3% CIP City Building Upgrades
- Low Income Home Energy Audits and Upgrades

Upcoming

• Energy Savings Performance Contract





Equitable ENERGY Transition

NOVEMBER 2020

Zone Grant Planning



- Cooperating New Mexico Grant Makers + Turner Foundation
- Emerging Plan may be funded at \$100K per year for 2 years

Reaching those most in need

New Business model - Community to Community

- Partnership for Community Action
 - Identify
 - Qualify
 - Schedule
 - Accompany
 - Survey

Leveraging Available Resources

- Trained Parent Leaders
- PNM energy checkup in 50 LI homes
- ► EE Retrofits
 - Lighting
 - Aerators
 - Power strips
 - Refrigerators replacements (about 60%)
 - AUDIT REVIEWS

Reducing Use, Emissions and Cost

Presumptive Savings

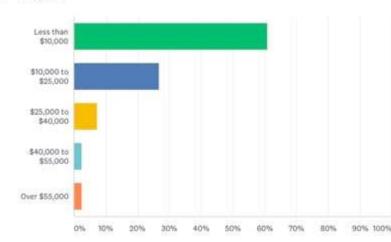
- Over \$100/yr savings per customer
- Emissions reduced by a half-ton per customer per year
- 943 kWh/yr energy savings

ENERGY EFFICIENCY SURVEY

SEPTMEBER 2019

Annual Incomes: 60% under \$10K 85% under % \$25K/year Household size 3-5

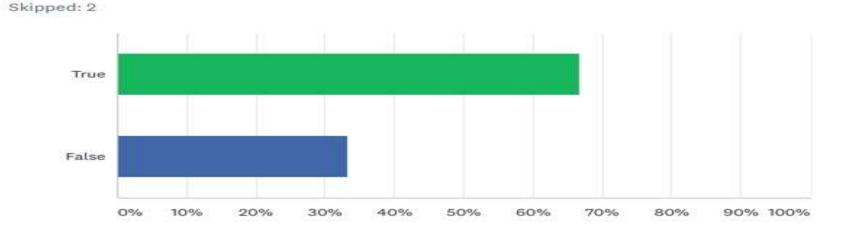
The monthly income for my household is:



Over 65% have to choose between energy and other basic survival expenses

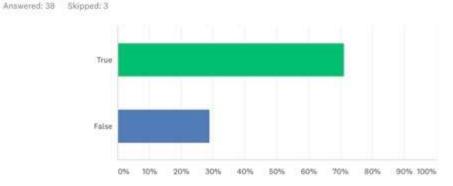
I am forced to make decisions between paying for gas and electricity and other essentials such as food, medicine, transportation, childcare or health care.

Answered: 39



Over 70% cannot afford regular maintenance

I cannot afford the cost of regular maintenance and repairs to my home.



Roughly 15% have furnaces in disrepair

I have a gas or electric heater or furnace, but cannot use it because it is in disrepair and could be dangerous.

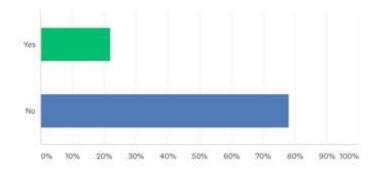
Answered: 41 Skipped: 0

True False 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Most do not know about available low-income programs

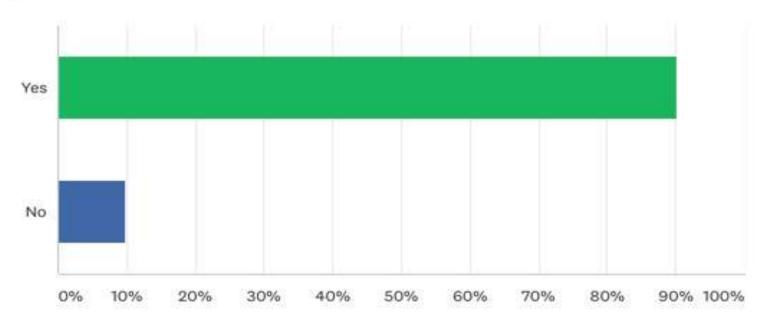
I know about several low-income energy programs that provide funds for home improvements / weatherization.





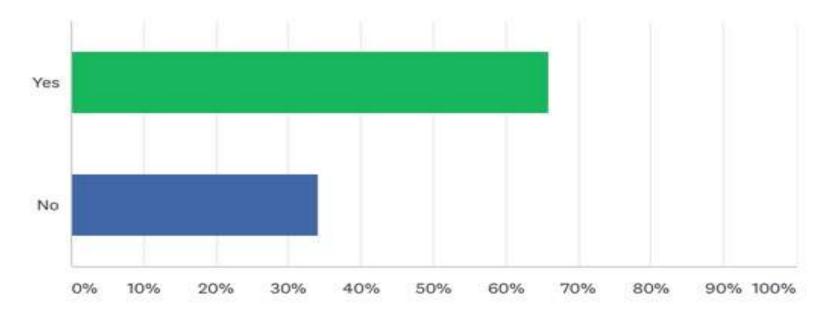
90% interested in home repairs & EE programs

I would like to participate in a program that provides homerepairs and energy efficiency improvements.



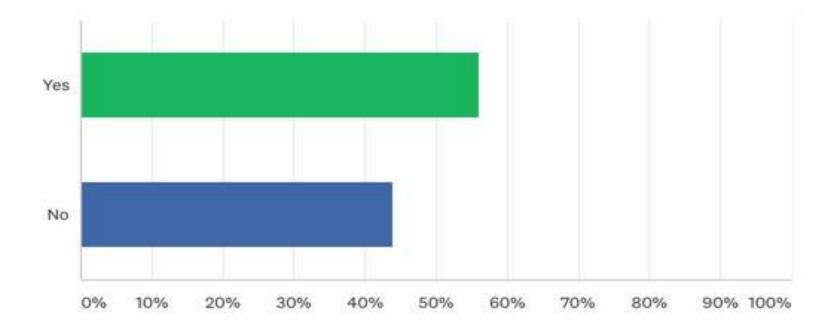
Over 65% want to install solar at their homes

I would like to participate in a program to install solar panels and equipment in my home.



Over 50% interested in RE job training

I would like to participate in a job training for work related to renewable energy.





Funding Follows Success

Scaling Opportunity

- Zone Implementation Grant \$200K
 - Add 300 Homes
 - Create funds for
 - ► EE Home Improvements
 - Solar Access
- Energy Foundation \$50K
 - American Cities Climate Challenge
- ► City of ABQ 100K
 - ► EE Home Improvements
- People for Places \$10K
 - Create a Proposal
 - Sustainable Community Demonstration
- Energy Foundation + WRA
 - ► EE budget and policy advocacy



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- Kelsey Rader City of Albuquerque <u>krader@cabq.gov</u>
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