

THE POWER OF ENERGY EFFICIENCY

Building vibrant communities in North Carolina through energy savings

Investing and improving energy efficiency programs in North Carolina – which had one of the highest poverty rates in the nation in 2015 – could make energy more affordable, transform unhealthy buildings into comfortable homes, and create jobs to support communities in need.

Why Energy Efficiency?

Energy efficiency (EE) can bring much needed relief to low income households, households of color, and renting households, who experience a disproportionately high energy burden. Low income households – many of whom live in older housing with poor ventilation and aging, inefficient appliances and heating systems – spend, on average, 7.2% of their income on utility bills. **That is more than triple the 2.3% spent by higher-income households for electricity, heating, and cooling.**

Poverty and discrimination in rental and housing markets drive low-income households and households of color into older, less efficient buildings leading to higher energy costs. High energy burdens and poor housing quality then contribute to health problems, and families struggling to pay energy bills



may sacrifice nutrition, medicine and other necessities, which compound the effects of inequality. **Bringing low-income housing to the efficiency level of the average U.S. home would eliminate 35% of the energy burden for low-income households.**

EE is the most cost effective way to meet energy needs compared to both traditional fossil fuel energy and renewable energy. EE programs also provides families with more disposable income, increases the property value of their homes, and reduces maintenance costs and associated stress.

BARRIERS TO PARTICIPATION

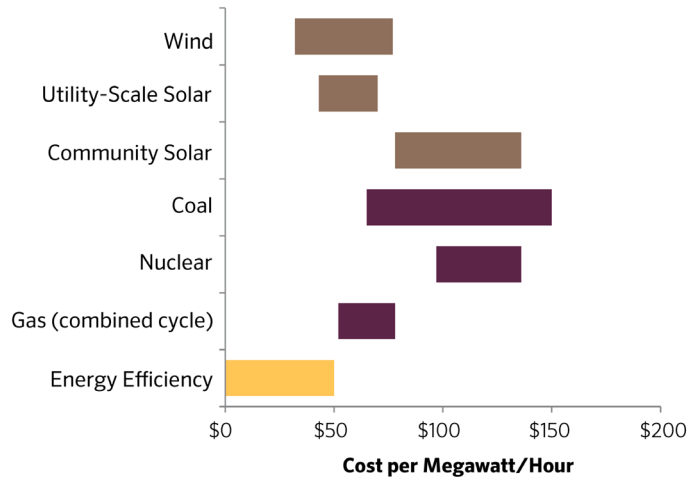
Various factors make it difficult for low-income households to access and benefit from existing energy efficiency programs, such as:

- ▶ Many low-income customers still lack the upfront capital to make investments in energy

upgrades for their homes, making rebate programs largely unaffordable.

- ▶ Many low-income customers rent, and are in residences where neither the building owner nor the renter have enough incentive to invest in energy efficiency.
- ▶ Investing in EE is complicated for multifamily housing, which have complex heating and cooling systems and differences in design and building structures that make it difficult to deploy programs at scale.

FIGURE 1: Efficiency Often the Most Cost Effective Way to Meet Energy Needs



SOURCE: Lazard. (2015). Lazard's Levelized Cost of Energy Analysis -Version 9.0

UNLOCKING ENERGY SAVINGS

North Carolina has the opportunity to unlock energy savings for disproportionately burdened low-income households by expanding and enhancing already existing EE programs. This includes but is not limited to:

- Supporting strong investment in EE for low-income customers through our North Carolina's Renewable Energy Portfolio Standard (REPS).
- Utility-administered programs, particularly with investment in EE for affordable housing.
- On-bill financing mechanisms that protect consumers while allowing households to pay back the cost of the EE improvements over time.
- Investing in programs designed for multifamily housing – a largely untapped EE market.
- Save taxpayer dollars through state and local lead-by-example programs.
- Strengthen or maintain robust energy efficiency codes for buildings.

OUR OPPORTUNITY

Bringing energy savings to low-income households, households of color, and renter households is possible with strong partnerships across the private and public sector. **Sign up for our email updates to learn more about supporting energy efficiency programs for all North Carolinians at www.ee4nc.org.**