My name is William J. Barber III. I am a resident of Durham, North Carolina. I am Founder and CEO of the Rural Beacon Initiative, a small-consultation firm that works to advocate for climate and environmental justice by promoting community-based clean energy projects. I am also the co-chair of the North Carolina Poor People's Campaign ecological justice committee—a group that seeks to educate and elevate the plight of poor communities to the front of our social discourse and policy solutions. I have a B.S. in environmental physics and received my law degree from UNC School of Law in Chapel Hill.

I am tasked today to give an overview of the impacts that energy burden has on poor and low-income communities.

Energy burden is defined as the percentage of gross household income spent on energy costs. According to Department Of Energy's Low-Income Energy Affordability Data (LEAD) Tool the national average energy burden for low-income households is 8.6 percent--three times higher than for non-low-income households which is estimated at 3%. In some areas, depending on location and income, energy burden can be as high as 30%. Of all U.S. households, 44%, or about 50 million, are defined as low-income.

Those living in energy poverty who choose to prioritize warmth are often forced to make difficult decisions about household essentials which can lead to **poor** diets, known as the heat-or-eat dilemma.

In a 2020 publication, entitled High Energy Burden and Low-Income Energy Affordability, Marilyn Brown et al found that—and I quote-- despite decades of weatherization and bill-payment programs, low-income households still spend a higher percent of their income on electricity and gas bills than any other income group. Their energy burden is not declining, and it remains persistently high in particular geographies such as the South, rural America, and minority communities.

In a 2021 publication on Energy Impoverishment and Energy Insecurity in the United States by Dr. Elva Moleka—it was found that, alarmingly, despite energy abundance in the US coupled with the propagation of energy efficiency, bill-payment assistance programs, and weatherization programs, low-income households continue to pay high energy bills while their environmental, social, and economic conditions erode. Equitable energy distribution has long been an issue of concern when studying the prevalence of high energy burdens, and there is far greater eligibility and need to participate in existing bill payment assistance and weatherization programs than there is availability. Rather, many low-income households continue to live in older homes, which are often characterized by structural issues such as poor insulation, inefficient HVAC systems, leaky roofs, and inefficient and sometimes oversized appliances that increase energy costs

Additionally, many low-income households struggle to pay their utility bills due to the unprecedented economic, social, and health challenges of the COVID-19 pandemic that dramatically impacted the ability of households to meet their financial needs.

As a resident of North Carolina, I come from a state where 1.4 million people are sent energy bills every month they can't afford. Structural issues with the houses and apartments accessible to poor people often make it difficult to incorporate solutions such as solar arrays or energy efficiency measures, both of which also have high upfront costs.

Racial disparities exacerbate this energy poverty. Energy-burdened households are more likely to earn less than $20,000 annually and be of African-American or Latino descent. Compared to white households, Black households spend 43% more of their income on energy costs, Hispanic households spend 20% more; and Native American households spend 45% more.

Legacies of discriminatory policies like redlining have made households of color more likely to live in inefficient housing with old, energy-guzzling appliances and HVAC systems, Earther reported.

According to a recent report by the American Council for and Energy Efficient Economy, 25% of Americans pay more than 6% of their income on energy bills even before COVID-19 hit. Of those people, 13% pay more than 10% of their income on their energy bills. Nationally, 67% of low-income households face a high energy burden. And of those households, 60% have severe energy burdens.

The report found that the energy burden in four southern States: Alabama, Kentucky, Mississippi and Tennessee are the highest in the nation, 38% above any other region, with Alabama being the worst in the country.

This vicious cycle of poverty might best be described as what Dr. Sacoby Wilson, of the University of Maryland School of Public Health, describes as environmental slavery – when the environment that you are in keeps you locked in poverty and suffering.

There are many factors that might influence high energy burden. Examples include higher-cost fuels, such as propane or other bottled fuels, and energy-inefficient homes. Energy-inefficiency can be due to a lack of insulation in older homes or older appliances. For households that face these challenges, there is a greater opportunity for energy and cost savings. Low-income communities face barriers to accessing energy technologies which help make energy more affordable, such as solar photovoltaic (PV). Solar PV adoption by moderate-income households has increased since 2010, representing 48% of adoptions. Low-income households, however, represented just 15% according to a Lawrence Berkeley National Laboratory (LBNL) report.

There are factors that can prevent low-income households from accessing energy technologies, including a lack of qualifying credit and the inability to finance upgrades. LEAD Tool data estimates that 59% of low-income households are renters—not owners—of their homes. This predominance of renters further compounds the issue into a split incentive: landlords may not be motivated to pay for energy improvements, leaving potential energy bill savings out of reach for the low-income tenants.

There is hope if our leaders act. Funding weatherization and energy efficiency programs such as the installation of smart equipment could have the greatest impact in high energy burdened states. the introduction of energy efficiency programs in each state could lead to $600 or more cost savings per household per year, or approximately 25% reduction in energy burden. Electric bill savings delivered by Solar for All programs is another solution to the energy burden problem, in that this method could provide LMI families with the benefits of locally generated clean energy through efforts such as the DC Solar for All project (Daniel, 2019).

In addition to energy efficiency, investments in utility bill assistance programs such as the low income home energy assistance program and weatherization assistance program can help save low income families hundreds of dollars per year. (Oak Ridge National Laboratory).

Now, as we stand in this moment of collective impact from the pandemic of COVID-19 and a looming hunger crisis, made worse by accelerated climate disaster and rising poverty, we must seek bold, transformative solutions that uplift communities and work to advance social equity for all.