



MEMORANDUM

September 28, 2020

To: Subcommittee on Energy Members and Staff

Fr: Committee on Energy and Commerce Staff

Re: Hearing on “Generating Equity: Improving Clean Energy Access and Affordability”

On Thursday, October 1, 2020, at 10:00 a.m. (EDT) via Cisco Webex online video conferencing, the Subcommittee on Energy will hold a hearing entitled, “Generating Equity: Improving Clean Energy Access and Affordability.”

I. ENERGY BURDEN

Energy burden is defined as the percentage of household income spent on energy bills. High energy burden, which according to some experts means a household pays six or more percent of its income on energy bills, and severe energy burden, where a household pays more than ten percent of income on energy, are persistent challenges in the U.S. A recent survey using data from 2017 found that 25 percent of all U.S. households face a high energy burden, and half of those face a severe energy burden. Additionally, two-thirds of low-income households, or nearly 26 million households, face a high energy burden.¹

Of the households with high and severe energy burdens, communities of color are disproportionately affected. On average, when compared with non-Hispanic white households, Black households pay 43 percent more of their income on energy costs, Hispanic households spend 20 percent more, and Native American households spend 45 percent more. Older adult households and renters also face higher energy burdens.²

The causes of higher energy burden are complex, but include housing age and type, construction materials, inefficient appliances, locational challenges like those seen in urban heat islands, chronic economic hardship, inability to afford upfront costs of upgrades, information barriers, and high fixed utility charges.³ Based on these variable factors, some areas in the U.S.

¹ American Council for an Energy-Efficient Economy, *How High Are Household Energy Burdens* (Sept. 10, 2020) (www.aceee.org/research-report/u2006).

² *Id.*

³ *Id.*

can experience energy burdens as high as 30 percent.⁴ Additionally, rural households face a larger energy burden compared with metropolitan households. These households often have limited access to utility efficiency programs. Many of these customers also rely on propane and fuel oil for heating, and may be subject to more volatile pricing, or may not qualify for electric utility efficiency programs and incentives.⁵

Households with high and severe energy burdens are at a higher risk of having their electricity shut off, a problem which is particularly relevant during the current global pandemic. A recent survey found more than one out of every six Americans at or below the federal poverty line was unable to pay an energy bill in April 2020, with communities of color disproportionately represented. The survey found that more than 26 percent of Native Americans, 18 percent of Latinos, and 16 percent of Black participants were unable to pay an energy bill.⁶ The findings suggest that 800,000 low-income customers are at risk of having their electricity shut off during the pandemic. These numbers may be further affected by continued job losses in the months following this study, and the potential for increased energy consumption while sheltering at home over summer and winter months. As of September 8, 2020, shut-off moratoriums are mandated in 22 states, while 28 states have allowed them to expire, were only voluntary, or never had shut-off moratoriums in place for electric, gas, and water utilities.⁷

II. ACCESS TO CLEAN ENERGY AND ENERGY EFFICIENCY

The benefits of clean energy – beyond helping to meet climate goals – include lower utility bills, decreased energy burden, and cleaner air. However, many of the benefits from clean energy are not available to low-income customers. For example, solar adoption by moderate-income households represents nearly half the market, while low-income households represent only 15 percent of solar adoption.⁸

The up-front costs of purchasing or installing distributed resources, such as rooftop solar, smart thermostats, energy efficient appliances, and battery storage systems, are often too high for low-income customers, and they may be limited by a lack of access to capital.⁹ Additionally, as many low-income customers rent their homes, they face space challenges or are not permitted to

⁴ U.S. Department of Energy, Office of Energy Efficiency & Renewable Energy, *Low-Income Community Energy Solutions* (accessed Sept. 20, 2020) (www.energy.gov/eere/slsc/low-income-community-energy-solutions).

⁵ American Council for an Energy-Efficient Economy, *The High Cost of Energy in Rural America* (July 2018) (www.aceee.org/sites/default/files/publications/researchreports/u1806.pdf).

⁶ *Electricity shut-offs hit 800K low-income homes, report warns*, E&E News (Aug. 10, 2020).

⁷ National Energy Assistance Directors Association (NEADA), *Summary of State Utility Shut-off Moratoriums due to COVID-19* (Sept. 8, 2020) (neada.org/utilityshutoffsuspensions/).

⁸ See note 4.

⁹ Rocky Mountain Institute, *Giving Low-Income Families Access to Clean Energy and Efficiency* (Oct. 12, 2015) (rmi.org/giving-low-income-families-access-clean-energy-efficiency/).

make upgrades. These customers also may not fall within qualifying tax brackets for renewable tax incentives or may lack access to clean energy information and outreach.¹⁰

Community solar installations that allow customers to purchase small amounts of solar, shared solar on multifamily dwellings, and increased energy efficiency programs all have the potential to increase clean energy access for these communities. While many low-income customers are renters or reside in multifamily dwellings, more than 40 percent of total U.S. residential solar technical potential is in low-income customer groups, and 60 percent of the technical potential for low and moderate income buildings exists at renter-occupied or multifamily buildings.¹¹ Microgrids and batteries can further help these communities build resiliency against the growing effects of climate change. Additionally, home weatherization can reduce the energy burden by 25 percent. However, of those who weatherize their homes, only 17 percent are low-income.¹²

The clean energy sector also has the potential to provide significant job opportunities. Currently, however, the clean energy and energy efficiency sectors under-employ some communities of color. In both the solar industry and the energy efficiency industry, Black employees make up only eight percent of the workforce, when compared with 12 percent of the total U.S. workforce.^{13,14} These jobs often require specialized skills and trainings, and many communities have no or limited access.

III. ENVIRONMENTAL JUSTICE

Emissions from traditionally generated power disproportionately affect low-income communities, communities of color, and indigenous communities.¹⁵ More Black Americans live near coal fired power plants, nuclear plants, or biomass plants than any other demographic, and 68 percent of Black Americans currently live, or have lived, within 30 miles of a coal-fired

¹⁰ U.S. Department of Energy, National Renewable Energy Laboratory, *Low- and Moderate-Income Solar Policy Basics* (accessed Sept. 20, 2020) (www.nrel.gov/state-local-tribal/lmi-solar.html).

¹¹ U.S. Department of Energy, National Renewable Energy Laboratory, *Rooftop Solar Technical Potential for Low-to-Moderate Income Households in the United States* (April 2018).

¹² American Council for an Energy-Efficient Economy, *How High Are Household Energy Burdens* (Sept. 10, 2020) (www.aceee.org/research-report/u2006).

¹³ National Resources Defense Council, *Clean Energy Jobs Still Lead, But Worker Diversity Needed* (Mar. 18, 2019) (www.nrdc.org/experts/lara-ettenson/clean-energy-jobs-still-lead-worker-diversity-needed).

¹⁴ The Solar Foundation, *U.S. Solar Industry Diversity Study 2019* (2019).

¹⁵ Low Income Solar Policy Guide, *Background* (accessed Sept. 25, 2020) (www.lowincomesolar.org/why-act/background/).

power plant.¹⁶ In communities located within three miles of a coal plant, almost 40 percent are people of color. Additionally, in these same areas, 17 percent of the population is below the poverty line, higher than the national average.¹⁷

Low-income Black communities face the highest risk of death from air pollution caused by electricity generation, with particulate matter from coal plants and natural gas plants especially prevalent.¹⁸ Particulate emissions can cause heart, lung, and brain damage. Proximity to energy production can also affect water quality or lead to the depletion of local water sources.¹⁹

In addition to the immediate air quality and health concerns of traditional generation, fossil fuel plant emissions contribute significantly to climate change. Low-income communities and communities of color in urban and rural areas disproportionately feel the effects of climate change, including damage from extreme weather events, disruptions to agriculture, and health impacts.²⁰

IV. WITNESSES

The following witnesses have been invited to testify:

Ariel Drehabl

Senior Research Associate, Local Policy
American Council for an Energy-Efficient Economy

Tony G. Reames, Ph.D.

Assistant Professor
School for Environment and Sustainability
University of Michigan

Robert Bryce

Visiting Fellow
The Foundation for Research on Equal Opportunity

¹⁶ National Association for the Advancement of Colored People, *Just Energy Policies and Practices* (accessed Sept. 22, 2020) (www.naacp.org/climate-justice-resources/just-energy/).

¹⁷ Oak Ridge National Laboratory, *Environmental Quality and the U.S. Power Sector: Air Quality, Water Quality, Land Use and Environmental Justice* (Jan. 4, 2017).

¹⁸ *Study: Black, low-income Americans face highest risk from power plant pollution*, Energy News Network (Dec. 11, 2019).

¹⁹ See note 17.

²⁰ *Climate change in the US will hurt poor people the most, according to a bombshell federal report*, CNBC (Nov. 26, 2018).

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