



MEMORANDUM

April 17, 2021

To: Subcommittee on Energy Members and Staff

Fr: Committee on Energy and Commerce Staff

Re: Hearing on “Generating Equity: Deploying a Just and Clean Energy Future”

On Tuesday, April 20, 2021, at 10:30 a.m. (EDT) via Cisco Webex online video conferencing, the Subcommittee on Energy will hold a hearing entitled, “Generating Equity: Deploying a Just and Clean Energy Future.”

I. HIGH AND SEVERE ENERGY BURDEN

Clean and renewable energy results in reduced carbon emissions and improved public health, and can stabilize and lower energy prices.¹ However, many of these benefits are not available to low-income customers. Access to clean and renewable energy can help reduce the energy burden that many households face.² 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 United States.

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.³ According to the Department of Energy’s (DOE) Low-Income Energy Affordability Data Tool, the average energy burden for low-income households is 8.6 percent, three times higher than for non-low-

¹ Union of Concerned Scientists, *Benefits of Renewable Energy Use* (Dec. 20, 2017).

² The Climate Reality Project, Energy Burden, *What It Is and How Renewables Can Help* (Mar. 10, 2020) (www.climaterealityproject.org/blog/energy-burden-what-it-and-how-renewables-can-help).

³ American Council for an Energy-Efficient Economy, *How High Are Household Energy Burdens* (Sept. 10, 2020) (www.aceee.org/research-report/u2006).

income households (three percent).⁴ Despite the data and those findings, as of 2015, low-income programs accounted for only six percent of energy efficiency spending.⁵

Access to clean energy and distributed energy resources can reduce energy burden. However, 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.⁶ Solar adoption by moderate-income households represents nearly 50 percent of the market, while adoption by low-income households represents only 15 percent.⁷ A recent study also found that the cost to upgrade from incandescent light bulbs to far more efficient LED light bulbs was greater in high-poverty areas, and that energy-efficient bulbs were less available in these areas.⁸ Additionally, almost 60 percent of low-income customers rent their homes and may not be able to make certain upgrades because they lack control over those assets and decisions.⁹

The causes of higher energy burden include housing age and type, construction materials, inefficient appliances, locational challenges like those seen in urban heat islands¹⁰, chronic economic hardship, unaffordable and upfront costs for upgrades, information barriers, and high fixed utility charges.¹¹ Competing incentives between renters and landlords, social barriers, and

⁴ U.S. Department of Energy, Office of Energy Efficiency & Renewable Energy, *Low-Income Community Energy Solutions* (www.energy.gov/eere/slsc/low-income-community-energy-solutions) (accessed April 12, 2021).

⁵ Environmental Defense Fund, *Low-Income Energy Efficiency, A Pathway to Clean, Affordable Energy for All* (Feb. 2018).

⁶ Rocky Mountain Institute, *Giving Low-Income Families Access to Clean Energy and Efficiency* (Oct. 12, 2015).

⁷ See note 4.

⁸ University of Michigan, Center for Sustainable Systems, *An Incandescent Ruth: Disparities In Energy-efficient Lighting Availability and Prices In An Urban U.S. County* (May 15, 2018).

⁹ See note 4.

¹⁰ Heat islands are urbanized areas that experience higher temperatures relative to outlying areas. Buildings, roads, and other structures absorb and re-emit the sun's heat. Urban areas can become areas of higher temperature due to a concentration of these structures. See www.epa.gov/heatislands for more information.

¹¹ See note 3.

incomplete data on energy burdens can also prevent customers from accessing resources such as energy efficiency programs.¹² Higher-cost fuels can also result in a higher energy burden.¹³

Rural households face a larger energy burden compared with metropolitan households. These households often have limited access to utility efficiency programs, rely on propane and fuel oil for heating. In addition, they may not qualify for electric utility efficiency programs and incentives.¹⁴

Of the households with high and severe energy burdens, communities of color are disproportionately represented. Black households spend 43 percent more of their income on energy costs, Hispanic households spend 20 percent more, and Native American households spend 45 percent more, when compared with non-Hispanic white households. Older adult households and renters also face higher energy burdens.¹⁵

II. CLEAN ENERGY DEPLOYMENT MODELS

Community solar installations that allow customers to subscribe to small amounts of solar from a locally-sited facility¹⁶, shared solar located on multifamily dwellings, and energy efficiency programs all have the potential to increase clean energy access for underserved 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.¹⁷ Microgrids and batteries can further help these communities build resiliency against the growing effects of climate change. Inclusive financing models, increased federal funding, partnerships with trusted community partners, and access to comprehensive energy consumption data can help address some of the obstacles to equitable clean energy deployment.¹⁸

¹² See note 5.

¹³ See note 4.

¹⁴ American Council for an Energy-Efficient Economy, *The High Cost of Energy in Rural America* (July 2018).

¹⁵ See note 3.

¹⁶ Solar Energy Industries Association, Community Solar (www.seia.org/initiatives/community-solar#:~:text=Community%20solar%20refers%20to%20local,is%20being%20rapidly%20adopted%20nationwide) (accessed April 12, 2021).

¹⁷ 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).

¹⁸ See note 5.

DOE offers several resources to support clean energy deployment in underserved areas. These resources are designed to assist State and Local governments, as well as other stakeholders, with clean energy project and program design in low-income and underserved areas. These resources include the National Community Solar Partnership, the Low-Income Energy Affordability Data Tool, the Low-Income Energy Library, and the Clean Energy for Low-Income Communities Accelerator Toolkit.¹⁹ Collaborations and public-private partnerships, such as those provided through DOE and State agencies, can help support projects like community solar and energy efficiency programs. Federally-supported deployment models include subsidized community solar subscriptions, low-income community solar integrated with energy efficiency, incentives for building owners to invest in solar installations, and partnerships with state housing finance agencies to support retrofits to low-income multifamily housing.^{20 21}

III. EXECUTIVE ACTIONS

On January 27, 2021, President Biden signed a series of Executive Orders related to climate change, environmental justice and decarbonization.²² Among other things, these Executive Orders:

- Formalize the commitment to make environmental justice a part of the mission of every federal agency by directing agencies to develop programs, policies, and activities to address the disproportionate impacts on disadvantaged communities;
- Establish a White House Environmental Justice Interagency Council and a White House Environmental Justice Advisory Council;
- Create a government-wide Justice40 Initiative with the goal of delivering 40 percent of the overall benefits of relevant federal investments to disadvantaged communities; and
- Initiate the development of a Climate and Environmental Justice Screening Tool to identify disadvantaged communities, support the Justice40 Initiative, and inform equitable decision making.

¹⁹ See note 4.

²⁰ U.S. Department of Energy, Better Buildings Solution Center, *Clean Energy For Low Income Communities: Community Solar* (www.betterbuildingsolutioncenter.energy.gov/CELICA-Toolkit/community-solar) (accessed April 12, 2021).

²¹ U.S. Department of Energy, Better Buildings Solution Center, *Clean Energy For Low Income Communities: Multifamily Housing Retrofits* (www.betterbuildingsolutioncenter.energy.gov/CELICA-Toolkit/multifamily-housing-retrofits) (accessed April 12, 2021).

²² The White House, *FACT SHEET: President Biden Takes Executive Actions to Tackle the Climate Crisis at Home and Abroad, Create Jobs, and Restore Scientific Integrity Across Federal Government* (Jan. 27, 2021).

IV. LEGISLATION

Chairmen Pallone (D-NJ), Rush (D-IL), and Tonko (D-NY) introduced H.R. 1512, the Climate Leadership and Environmental Action for our Nation’s (CLEAN) Future Act. The CLEAN Future Act includes several provisions that support the equitable deployment of clean energy technologies. The bill would formally establish an Office of Energy Equity at DOE to implement an agency-wide environmental justice strategy and promote continuing interagency collaboration. It also contains provisions to reduce or stabilize energy costs within underserved or disadvantaged communities, as well as increase the availability of energy conservation measures within such communities. Additional provisions that support energy equity include funding for microgrids in isolated communities, solar installations in low-income and underserved areas, a study on the distribution of clean energy benefits to frontline communities, and a pilot program for energy efficiency upgrades for nonprofits.²³

IV. WITNESSES

The following witnesses have been invited to testify:

Subin DeVar

Director
Initiative for Energy Justice

Chandra Farley

Just Energy Director
Partnership for Southern Equity

Donnel Baird

Chief Executive Officer
BlocPower

Kiran Bhatraju

Chief Executive Officer
Arcadia

José L. Pérez

President and Chief Executive Officer
Hispanics In Energy

Louise Carter-King

Mayor
City of Gillette

²³ House Committee on Energy and Commerce, *Summary of the Climate Leadership and Environmental Action for our Nation’s (CLEAN) Future Act* (Mar. 2021).