



May 17, 2023

Honorable Judy Chu
Chairwoman, Congressional Asian Pacific
American Caucus
2423 Rayburn House Office Building
Washington, DC 20515

Honorable Stephen Horsford
Chair, Congressional Black Caucus
406 Cannon House Office Building
Washington, DC 20515

Honorable Nanette Diaz Barragán
Chair, Congressional Hispanic Caucus
2312 Rayburn House Office Building
Washington, DC 20515

Honorable Tom Cole
Co-Chair, Congressional Native
American Caucus
2207 Rayburn House Office Building
Washington DC 20515

Honorable Sharice Davids
Co-Chair, Congressional Native
American Caucus
2435 Rayburn House Office Building
Washington, DC 20515

Dear Chairwoman Chu and Chairs Horsford, Barragán, Cole, and Davids:

The Alliance to Save Energy, a bipartisan nonprofit coalition of business, government, environmental, and consumer leaders advocating to advance energy efficiency adoption, writes to urge your support for optimizing equity investments in the energy transition, by pairing energy efficiency with solar in low-income and disadvantaged communities, as part of the \$7 billion Greenhouse Gas Reduction Fund (GGRF) Solar for All program. Leading with energy efficiency and pairing efficiency with solar provides low-income households with a best possible result— positively impacting emission reductions, energy costs, peak demand, and desired health outcomes. Moreover, pairing energy efficiency with solar is consistent with professional recommendations provided to consumers in the traditional marketplace.

Earlier this year, the Environmental Protection Agency (EPA) announced that the first \$7 billion tranche of the GGRF would be reserved primarily for community and rooftop solar in low-income and disadvantaged communities, and we agree. The EPA issued subsequent guidance for the solar tranche in late April, but still did not yet include energy efficiency to precede solar installations. We interpret EPA's most recent guidance to contemplate that energy efficiency could be achieved through other GGRF competition programs, however because this approach does not require the standard tandem practice— energy efficiency then solar, low-income communities will be further disadvantaged.

As you know, it is not enough to simply provide at-risk communities with renewable energy, but we must also ensure that their homes are brought to a reasonable standard to avoid energy waste, and

that the building envelope is secured. Moreover, we should ensure that impacted families have access to and can experience the same benefits of most efficient products and equipment, similar to what is provided through various federal tax incentives.

As a general rule, various programs across the country advise that homeowners first conduct energy efficiency retrofits before installing solar. According to a recent study entitled *Building Residential Rooftop Photovoltaics with Energy Efficiency Upgrades: Does it Really Pay Off?*, “when efficiency retrofits are performed immediately before PV installation, the upfront cost of PV installation will be lower.”¹ This occurs “because the optimal PV size to meet the lower demand will decline.”² The author concludes that “households which combine energy efficiency and solar are expected to have higher savings because they can reduce electricity usage using [energy efficiency] and use [solar] to serve the lower energy demand.”³

In Minnesota for example, the Energy and Utilities division of the state’s Department of Commerce, in its guidance on installing solar recommends that before investing in solar, that homeowners first address energy efficiency improvements.⁴ The state’s recommendations include an energy audit, sealing air leaks and adding insulation, replacing old heating and cooling systems, and adding LEDs and smart thermostats. According to the guidance, “**after your home is energy efficient, you are ready to explore solar.**”⁵ Minnesota’s Department of Commerce concludes that “by making your home energy efficient first, you can reduce your energy consumption. A decrease in your energy demand will reduce the size of investment needed for your solar energy system, and maximize the returns on your system.”⁶ Similar recommendations can be found in other states.

The \$7 billion tranche is a direct response to the Administration’s objective to achieve equity and a just energy transition. However, solar alone absent energy efficiency, while providing access to renewable technologies, would treat low-income and disadvantaged communities differently than they would have experienced in the traditional marketplace, and would be unjust. In addition to providing a pathway to insulate and seal the building envelope— and reduce household energy consumption and burden, energy efficiency also provides direct benefits to residents by alleviating health concerns often associated with poorly insulated homes and low-income communities. According to Fikru, the author of the *Does it Pay Off* study, “air sealing, high-efficient windows, and insulation can reduce drafts and make temperatures more even throughout the home, as well as help prevent mold, mildew, fungal growth, and dust mites. Such benefits cannot be achieved by using solar alone.”⁷ That said, energy efficiency first is also a best energy transition policy because of efficiency’s ability to reduce carbon emissions; provide greater energy system reliability; achieve greater energy affordability; and because energy efficiency is a pathway for community and economic development.

¹ Fikru, G., Mahelet, (2021). *Building Residential Rooftop Photovoltaics with Energy Efficiency Upgrades: Does it Really Pay Off?*, 15.

² *Id.*

³ *Id.*

⁴ <https://mn.gov/commerce/energy/solar-wind/solar-for-homes/>.

⁵ *Id.*, emphasis added.

⁶ *Id.*

⁷ Fikru, G., Mahelet, (2021). *Building Residential Rooftop Photovoltaics with Energy Efficiency Upgrades: Does it Really Pay Off?*

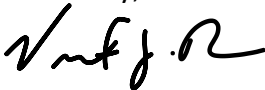
According to the International Energy Agency (IEA), energy efficiency alone has the ability to achieve 40% of the emission reductions required by the Paris Agreement.⁸ In fact, the U.S. already avoids 343 million metric tons of carbon emissions each year just through energy efficiency standards and labeling.⁹ More broadly, in 2021, the U.S. would have experienced 80% higher carbon emissions, or an additional 3,810 million metric tons of CO₂, but for energy efficiency investments.¹⁰

Without the energy efficiency investments made since 1980, energy consumption would have been 78% higher in 2020, removing that much demand off the nation's energy systems and avoiding capacity buildout. Also, because of the energy efficiency investments made since 1980, energy savings have been consistent year over year, and equaled approximately \$800 billion in 2020.

Energy efficiency investments in low-income and disadvantaged communities is also a pathway to community and economic development. Pairing energy efficiency with solar will not only provide desperately needed retrofits to secure homes in low-income and disadvantaged communities, but it will also provide a level of employment and economic development that solar alone will not. Leading with energy efficiency will provide employment and training opportunities related to construction to secure the homes foundation and roofing, install insulation, seal the building envelope, replace windows and doors, and to install heating and cooling equipment in targeted communities. Already, energy efficiency is the largest employer in the clean energy economy, representing 2,164,914 jobs in 2021, based on the 2022 U.S. Energy Employment Report (USEER).¹¹ Moreover, the median wage of an energy efficiency worker is [\\$24.44](#), 28% higher than the national median of \$19.14. The efficiency sector also has higher of union membership than the national workforce.¹² Additionally, [more than 80%](#) of efficiency employers contribute to healthcare, and [more than 78%](#) contribute to retirement accounts.

We thank you for your continued leadership on issues impacting low-income and disadvantaged communities and urge your support to ensure that these communities receive the full benefits of a just energy transition. Thank you again, and if you have questions or need additional information, please contact Vincent Barnes at vbarnes@ase.org.

Sincerely,



Vincent J. Barnes
Senior Vice President, Policy, Research, and Analysis
Alliance to Save Energy

⁸ <https://www.iea.org/commentaries/how-energy-efficiency-will-power-net-zero-climate-goals>.

⁹ <https://www.iea.org/reports/achievements-of-energy-efficiency-appliance-and-equipment-standards-and-labelling-programmes/executive-summary>.

¹⁰ <https://energyefficiencyimpact.org/general-insights/#Section2>.

¹¹ https://www.energy.gov/sites/default/files/2022-06/USEER%202022%20National%20Report_1.pdf.

¹² *Id.*