May 18, 2022

**Re:** Response to Request for Information (RFI) on Energy Improvements at Public School Facilities: DE-FOA-0002715

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**Via Email Transmission:** SchoolsRFI@doe.gov

The Alliance to Save Energy is a bipartisan, nonprofit coalition of business, government, environmental, and consumer leaders advocating to advance energy efficiency adoption and is a leading voice informing federal and state energy efficiency policies and standards. We thank the U.S. Department of Energy (DOE or Department) for the opportunity to provide response and comment to the *Request for Information on Energy Improvements at Public School Facilities*.

On April 4, 2022, DOE issued a Notice of Request for Information (RFI) on public school energy performance improvement, which is authorized under the Infrastructure Investment Jobs Act (IIJA), Section 40541 (Public Law 117-58). IIJA appropriates $500 million to DOE to make funds available to eligible entities for the purpose of facilitating public school energy efficiency investments—prioritizing schools and local education agencies (LEAs) with some of the highest demonstrated need. In implementing the IIJA mandate, DOE is seeking to maximize the impact equitably, minimize administrative burdens, and build lasting and sustainable capacity. The Alliance to Save Energy provides response and comment as follows:

***Category 3 Questions – Criteria and Metrics***

***(1) What metrics, data, methods, screening tools, etc. are available for identifying the LEAs and schools most in need of energy improvements?***

DOE has a number of tools at its disposal to assist in identifying schools most in need of energy improvements, in addition to targeting entities that serve high percentages of students eligible for free or reduced-price lunch, as required by the Infrastructure Investment Jobs Act (IIJA). However, as a foundational matter DOE should first seek to ensure that released funds are deployed consistent with the White House Environmental Justice Advisory Council's implementation of Justice 40.

In general, Justice 40 seeks to (1) Decrease energy burden in disadvantaged communities (DACs); (2) Decrease environmental exposure and burdens for DACs; (3) Increase parity in clean energy technology (e.g., solar, storage) access and adoption in DACs; (4) Increase access to low-cost capital in DACs; Increase clean energy enterprise creation and contracting (MBE/DBE) in DACs; (5) Increase

clean energy jobs, job pipeline, and job training for individuals from DACs; (6) Increase energy resiliency in DACs; and (7) Increase energy democracy in DACs.[1] By leading with Justice 40 to facilitate energy efficiency improvements in schools, the Department better ensures that equitable impacts are maximized.

DOE should also rely on data identifying LEAs where schools are in greatest disrepair, and where energy improvements are needed most. According to the National Equity Atlas, these are often schools in high poverty areas where students of color are more likely to attend.[2] These are also schools in greatest need of federal funding assistance to address deferred energy improvements, when considering that property taxes and surrounding wealth often dictate the levels of funding available for school maintenance, operations, and capital projects. U.S. Census data and information from the National Center for Education Statistics are useful resources.

DOE should also target LEAs and schools in high poverty areas receiving funds connected to other federal funding opportunities, including but not limited section 50110 of the IIJA— Lead Contamination in Drinking Water, and ESSER I, II, and the American Rescue Plan (ARP) ESSER, particularly when EESER funds are to improve ventilation and to address deferred maintenance.

By coordinating or combining funds DOE enhances the chances of overall program success and more fully meets energy efficiency readiness concerns where assistance is needed most— high poverty areas where schools are in greatest disrepair. This is particularly important considering the limited available funding amount.

***(2) What metrics are available to measure the fiscal capacity of LEAs, including raising funds and issuing bonds; and how should DOE establish prioritization criteria for the fiscal capacity of the LEA?***

While fiscal capacity of LEAs is an important and critical criterion, including their ability to raise funds and issue bonds, the Alliance to Save Energy would caution against providing this metric too much weight, particularly when awarding funds to LEAs and schools in high poverty areas. Generally, American schools are funded through property taxes which leads to significant inequities in school resources, which could often account for capacity deficiencies.[3] In fact, lack of capacity could be indicia of need, particularly where high poverty also exists. When deficiencies exist in high poverty areas, LEAs should be connected to resources and tools to build and maintain capacity, including use of IIJA and other funding opportunities.

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[1] See https://www.energy.gov/diversity/justice40-initiative.
[2] https://nationalequityatlas.org/indicators/School_poverty#/.
[3] See The Adequacy and Fairness of State School Finance Systems (Baker, DiCarlo, & Weber, 2019); 23 Billion (EdBuild, February, 2019).



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***(4) How can eligible entities best assess, demonstrate, and articulate the degree to which they can leverage other funding, including energy savings performance contracting?***

LEAs and schools in high poverty areas that demonstrate an inability to meet initial capacity, experience, and personnel thresholds should be incentivized if not required to include use of energy savings performance contracts (ESPCs). Use of Energy Service Companies (ESCOs) and ESPCs can provide LEAs the expertise, planning, project management, and possible financing options to better ensure project and program success.

***(5) What metrics, criteria, required performance levels, and standardized reporting formats or tools should be used to demonstrate and report project and program metrics, including costs, energy savings, health, and safety benefits?***

ESCOs have extensive experience and are best positioned to have predictable and standardized metrics consistent with overall project success. The Alliance recommends that DOE collaborate with organizations such as the National Association of Energy Service Companies (NAESCO) in determining what tools should be used to demonstrate and report on savings and benefits.

Due to the effectiveness of ESCOs and their ability to shepherd the full range of a project's implementation, including energy audits, project design, evaluation, and reconciliation, ESCOs are likely the most efficient strategy for LEAs and schools in high poverty areas. That said, the Alliance would also propose that at a minimum, recipient LEAs and schools should be required to participate in Energy Star benchmarking and scoring, in addition to participating in the Department's Efficient and Healthy Schools campaign.

***Category 4: Questions – Workforce***

***(2) What pathways exist to improve operations and maintenance capacity of school staff (e.g., Joint Apprenticeship Training Centers (JATCs) and/or other continuing education)?***

The Alliance to Save Energy proposes collaboration with key energy stakeholder organizations in designing pathways to improve operations and maintenance capacity of school staff. Importantly, part of the work of ESCOs necessarily includes facility staff training.

Other key stakeholders for collaboration include but are not limited to the American Association of Blacks in Energy and the Center for Energy and Workforce Development (CEWD). That said, consistent with Justice 40 objectives and prioritization of equity, DOE should develop relevant pathways with ESCOs to ensure that training and contracting opportunities are representative of the communities where the work is performed.



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***(6) What educational programs/models exist to integrate school facility energy performance with STEM K-12 curriculum and/or encourage student engagement in project execution (e.g., monitoring and verification)?***

The Alliance to Save Energy has a long history of partnering with state and local partners, utilities and other leading energy companies, to deliver K-12 energy education that prioritizes STEM learning, student leadership, and community engagement. Since 1996, the Alliance has designed and implemented education programs in 18 states and over 3,500 schools, teaching students about energy efficiency, empowering them to lead behavior change in their schools, homes and communities, and preparing them for careers in energy and sustainability.

The Alliance has implemented programs with Los Angeles Department of Water & Power, Southern California Edison, Pacific Gas & Electric, San Diego Gas & Electric, the Sacramento Municipal Utility District, the Tennessee Valley Authority, Siemens, Johnson Controls, and others. The Alliance currently operates education programs in 10 states, serving 335 schools, with partners including Energy Upgrade California, Xcel, 3M, South Jersey Gas, New Jersey Natural Gas, Elizabethtown Gas, and Alabama Power.

The Alliance's programs seek to serve low-income and disadvantaged communities, consistently exceeding 50% low-and-moderate income (LMI) participation targets as measured by students qualified for free and reduced-price lunch participation. In recent years, the Alliance developed the online EmPowered Schools platform, which shares the program's content with students and teachers in an intuitive, user-friendly interface. The EmPowered platform enables the program to reach broader geographies at lower costs, and can support teachers and students in remote, in-school, or hybrid learning models.

***Other***

In addition to the responses above, the Alliance to Save Energy proposes the following recommendations to help ensure equitable implementation of energy efficiency improvements in public school facilities.

**(1) <u>Energy Savings Performance Contracts</u>**

To the greatest extent possible, use of energy savings performance contracts (ESPCs) and Energy Service Companies (ESCOs) should be prioritized, incentivized, and when appropriate required. This is particularly recommended as a strategy to ensure success of energy efficiency investments in high poverty LEAs and schools. As DOE stated in <u>Reported Energy Cost Savings from the DOE ESPC Program: FY 2016</u>, "[a]lthough the primary objective of an ESPC project is to reduce energy use, the most important issue contractually is cost savings, which the ESCO guarantees on an annual basis." For the studied projects in 2016, DOE reported cost savings 107.9% of ESCO guarantees. Because ESCOs develop comprehensive measures to match the needs of facilities, including project design, the energy audit, and long-term evaluation, ESCOs are best positioned to ensure that investments



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in high poverty LSAs are cost effective and maintained, particularly in those LSAs and schools where project capacity would be an issue.

As a supplemental recommendation, DOE should also consider whether opportunities exist to incentivize bundling of projects in regions or states, allowing ESCOs to act as intermediaries to facilitate grant application and project readiness capacity.

That said, as another viable construct for consideration to facilitate leveraging, the Energy as a Service (EaaS) model is also an attractive way for schools to fund and implement comprehensive energy efficiency upgrades. EaaS is a third-party financing solution whereby an EaaS provider finances and owns energy efficiency upgrades and then a school would pay for realized energy savings based on an agreed upon cost per unit of energy saved. In this manner, EaaS is similar to a traditional solar power purchase agreement (PPA).

**(2) <u>Whole Systems Efficiency</u>**

To the greatest extent possible, the Alliance urges DOE to prioritize projects in high poverty schools that are more comprehensive and includes full-system efficiency solutions (including envelope improvements) versus single equipment replacements. Understanding the limited funds available as compared to the national need, the Alliance would again underscore the essential use of energy savings performance contracts (ESPCs) to achieve maximized facility system efficiency.

**(3) <u>Active Efficiency</u>**

In addition to traditional retrofits commonly used to achieve building envelope and system energy efficiency, the Alliance to Save Energy recommends that DOE also incentivize deployment of Active Efficiency technologies as part of school energy efficiency investments. Active Efficiency technologies include solutions such as grid-interactive enabled buildings, smart buildings optimization and analytics, and use of distributed energy technologies that allow building systems to shift, share, and shed load, including direct links to school bus transportation investments.

As a strategy to leverage existing limited funding resources, the Alliance encourages collaboration with technology enablers and utilities, in addition to consideration of how funding opportunities connected to IIJA's grid flexibility provisions (section 40107) could be incorporated. IIJA provides $3 billion for grid flexibility.

**(4) <u>Student Education and Training Pilot</u>**

The Alliance to Save Energy proposes that DOE set aside $8 million to fund energy efficiency education and workforce training development, targeting students, teachers, LEA and school administrators, and facility operations staff. Education opportunities would provide curriculum-based training for relevant participants and would include pairing participants with Energy Service Companies (ESCOs) allowing them to learn about the building retrofit process, including but not



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limited to the initial energy audit, project design and management, hands-on installation and maintenance, and project and facilities energy savings monitoring and evaluation.

**(5) <u>Net Zero Pilot</u>**

The Alliance to Save Energy proposes that DOE create a pilot to encourage development of zero-energy schools. Recent NREL analysis demonstrates that the cost of zero-energy retrofitting and construction can be less or comparable to conventional approaches.[4] That said, to leverage funds and to achieve targeted objectives, the Alliance proposes that zero-energy projects that are also part of the IIJA energy improvements require use of Energy Service Companies and energy savings performance contracts.

[4] https://www.nrel.gov/docs/fy22osti/80766.pdf.



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