



CREATING GOOD JOBS, A CLEAN ENVIRONMENT, AND A FAIR AND THRIVING ECONOMY

**BlueGreen Alliance**  
**Harley Stokes, Policy Advisor**  
**1020 19th St., NW | Suite 750**  
**Washington, DC 20036**  
**[hstokes@bluegreenalliance.org](mailto:hstokes@bluegreenalliance.org)**

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### **BlueGreen Alliance Response to U.S. Environmental Protection Agency: Request for Information - Funding to Address Air Pollution in Schools**

The BlueGreen Alliance (BGA) unites labor unions and environmental organizations to solve today's environmental challenges in ways that create and maintain quality jobs and build a clean, thriving, and equitable economy. Our partnership is firm in its belief that Americans don't have to choose between a good job and a clean environment—we can and must have both. We are pleased to offer comments to the U.S. Environmental Protection Agency (EPA) on Funding to Address Air Pollution in Schools, which is an opportunity—especially for school buildings in disadvantaged communities—to protect and improve people's health while optimizing opportunities for quality job creation. This is aligned with the Justice40 initiative to ensure federal investments benefit disadvantaged communities as well as the Good Jobs Initiative that calls on all federal agencies to create good, quality jobs.

#### **Background**

The \$50 million that is available to address air pollution in schools can play a vital role for public schools in disadvantaged communities to address health and safety concerns while simultaneously improving energy efficiency. In the United States, 1 in 6 people in the United States—including K-12 students, faculty and staff—occupy 100,000 public schools. The American Society of Civil Engineers' (ASCE) 2021 Report Card gives U.S. schools a "D+" grade, unchanged from the last report card six years ago. These school buildings are estimated to have an annual spending gap of \$85 billion in deferred maintenance costs. The condition of inadequate school facilities can result in exposure to mold and legacy toxics such as lead, asbestos, and polychlorinated biphenyls (PCBs); poor air quality and temperature control; inadequate lighting; and excessive noise.

Modernizing school facilities also provides opportunities to significantly reduce energy costs and greenhouse gas emissions, and improve the quality of indoor learning environments. All told, school facilities emit 72 million metric tons of carbon dioxide annually which is the equivalent of the emissions of fourteen million homes' electricity use for one year.<sup>i</sup> Meanwhile, according to the EPA, around a quarter of energy used in U.S. schools is wasted and facilities in low income areas are often the least efficient.<sup>ii</sup> Moreover, the second-highest operating expenditure for schools is energy, with schools spending more than \$8 billion on energy every year.<sup>iii</sup> Green schools, which achieve the maximum level of water and energy efficiency and are built with the health of occupants in mind, utilize an average of 33% less energy and 32% less water, lowering utility costs of a typical green school by around \$100,000 annually.<sup>iv</sup>

Research shows that as the percentage of students who qualify for reduced-cost lunch increases, the quality of the school building decreases.<sup>v</sup> School districts with higher enrollments of students from low-income families are more likely to report their buildings in "fair" or "poor" condition.<sup>vi</sup> Furthermore, school districts with higher enrollments of students from low-income and minority families invest thousands of dollars less per student in facilities capital improvements than districts in high-wealth communities.<sup>vii</sup> Many studies show that after controlling for income, students in poor quality school buildings score between 5 to 11 percentile points lower on standardized tests than students in modernized buildings.<sup>viii</sup>

At the same time, energy efficiency investments can support existing, and create new, high-quality, family-sustaining jobs. There are currently over 2.3 million jobs in the energy efficiency sector. The BlueGreen Alliance estimates that for every \$250 million invested in energy efficient public buildings including schools—more than 16,700 jobs are created over 10 years.<sup>ix</sup> This breaks down to 6,562 direct, 4,225 indirect, and 5,937 induced job years. Done right, these will be good, family-sustaining jobs created in domestic manufacturing, construction, and professional trades.<sup>x</sup>

Below we have responded directly to the section of the Request for Information (RFI) pertaining to the Funding to Address Air Pollution in Schools:

*Funding to Address Air Pollution at Schools [60106] Funding includes \$37.5 million for grants and other activities to monitor and reduce air pollution and greenhouse gas emissions at schools in low-income and disadvantaged communities, and \$12.5 million for technical assistance to address environmental issues, develop school environmental quality plans, identify, and mitigate ongoing air pollution hazards.*

## QUESTIONS:

**2. What specific approaches do you recommend to promote the successful award of these grants to low income and disadvantaged communities most in need of such support? What energy efficiency/greenhouse gas emission reduction technologies or approaches do you think would be the most successful in school buildings?**

### ***Promote Healthy Building Materials***

When a building is undergoing an energy efficiency retrofit, it is important to ensure that federal funding goes to procuring building materials that protect human health.

BuildingClean.org is a database to help identify healthier building materials and minimize exposure of harmful chemicals to both installers and occupants.<sup>xi</sup> Below are Building Clean criteria that can be used to guide the procurement of healthy building materials. We recommend that EPA promote the use of healthier building materials for all school retrofit projects used with federal funding by incentivizing projects that utilize such materials. We recommend that program guidance include:

- Best practices for minimizing exposure to harmful chemicals should use the following Building Clean criteria:<sup>xii</sup>
  - Good: Interior building products with the potential to emit volatile organic compounds (VOCs) should have a low-VOC emissions certification.
  - Better: Utilize third-party product certifications and labels to select products that limit some of the most hazardous content.
  - Best: Utilize third-party product certifications and labels to select products that are free of the most hazardous content.
- Best practices for procurement:
  - Discourage the use of insulation materials containing respiratory sensitizers, specifically two-part spray polyurethane foam insulation which is linked to debilitating respiratory diseases.<sup>xiii</sup>
  - Discourage the use of funds for recycled vinyl flooring or wall-coverings which may contain a number of legacy toxics, including lead.<sup>xiv</sup>

### **Remediate Legacy Toxics**

Legacy toxics such as lead, asbestos, and PCBs are a significant issue in older school buildings that are most often located in low-income and disadvantaged communities. Buildings constructed between 1950 and 1979 often contain legacy toxics such as the known human carcinogens asbestos and PCBs; both are known airborne pollutants that threaten the health of building occupants.<sup>xv</sup>

EPA funding for the reduction of indoor air pollution at schools could be used to remediate airborne legacy toxics and in doing so increase the opportunity for schools in disadvantaged communities to leverage other funding (i.e. from the Bipartisan Infrastructure Law (BIL)/Renew America's Schools grants) for energy upgrades. For example, the average PCB remediation for public schools costs \$2 million.<sup>xvi</sup> Schools could utilize the indoor air pollution program to help fund remediation costs while utilizing Renew America's Schools or Elementary and Secondary School Emergency Relief (ESSER) III grant money to install new heating, ventilation and air conditioning (HVAC) systems and other energy efficiency upgrades.

### **Ensure a Qualified Workforce**

For effective and sustainable indoor air quality and energy efficiency, the importance of having a qualified workforce to properly install upgrades cannot be overstated. Studies have shown that poor installation of HVAC and energy efficiency measures often results in energy savings losses of up to 50% compared to projected savings goals.<sup>xvii</sup> Investing in a qualified workforce not only ensures the full potential of EPA's investment but also that building occupants receive the full expected health benefits. Whether it is HVAC installation and energy retrofits or legacy toxics remediation, it is important to ensure that a qualified workforce does the work properly the first time.

Funds to address air pollution could also be used to train school facilities staff to properly manage and maintain HVAC, improved air monitoring, or other energy efficiency upgrades. Grantees that choose to use funding for this purpose should prioritize training up of current staff and/or recruitment of new staff for operations and maintenance positions. Grant applications should include a section describing how the proposed program will provide quality job opportunities or career advancement for school operations and maintenance staff. This may include:

- School districts partnering with unions in public-facing campaigns to recruit new workers. For example, Service Employees International Union (SEIU) Local 99 in Los Angeles and Local 1948 in Washington State have run advertising campaigns and provided technical assistance to help recruit workers to fill vacant K-12 positions.
- Grow-Your-Own programs that help to provide school staff in underpaid, part-time positions with opportunities to train for positions in building operations and maintenance.
- Establishing district-level labor-management committees focused on finding local solutions on environmental, climate, and sustainability issues.

- Ensuring adequate operations and maintenance staff through adoption of a school cleanliness standard that includes cleaning products that are certified to be safest, such as Safer Choice, to protect the health of staff and building occupants.

We recommend that EPA establish a Memorandum of Understanding with the U.S. Department of Labor (DOL) under the Good Jobs Initiative to develop job quality metrics and help connect school districts with a qualified workforce. In addition, to ensure a qualified workforce, EPA should incorporate the following high-road labor standards into its program design:

#### *Davis Bacon Prevailing Wage*

Construction projects—including retrofits—that are federally funded are required to adhere to Davis Bacon prevailing wage provisions. Prevailing wage rates—which reflect local area standards—help attract skilled workers and benefit local communities through quality job creation. EPA can ensure prevailing wage requirements are met through program guidance, grant application, and reporting requirements.

Higher wages on a given project can attract highroad contractors employing skilled professionals who perform high quality work, helping projects meet construction milestones on-time and safely, without increasing total construction costs. Higher wages can have long-term economic benefits to a community and create a long-standing professional workforce for future projects. At the same time, Davis Bacon should be considered the floor of what agencies can do to ensure job quality through this program. Additionally, BGA urges EPA to recommend, or even incentivize living wages for all contractors and subcontractors.

#### *Registered Apprenticeship, Pre-Apprenticeship, and Labor Management Partnerships:*

One of the best methods for ensuring a high standard of training resulting in proper installation and fully realized energy savings and health benefits is through registered apprenticeship, pre-apprenticeship, and other union-affiliated training programs. Apprenticeships are registered through a state apprenticeship agency or through DOL. Because registered apprenticeships are paid positions that combine on-the-job training with classroom instruction in a trade, they also improve access to job opportunities for disadvantaged workers. Construction unions operate robust registered apprenticeship programs while industrial unions work with employers on joint labor management training programs that also provide a combination of classroom and on-the job skills training.

Pre-apprentice programs aim to ensure that workers can qualify for entry into an apprenticeship program and have the skills and support they need to succeed. These programs are generally designed to target certain populations or demographics such as low-income workers, workers of color, women, and other underrepresented and marginalized communities. Additionally, many unions offer training throughout a member’s career to enable them to stay up to date with changes in technology. The most successful pre-apprenticeship programs are those affiliated with registered apprenticeships. Wraparound services such as transportation vouchers and child care also help with recruitment and retention of underrepresented and disadvantaged workers.

*Project Labor Agreements (PLAs), Community Workforce Agreements (CWAs) and Community Benefit Agreements (CBAs)*

High-road labor standards for larger projects should include Project Labor Agreements (PLAs), Community Workforce Agreements (CWAs), or Community Benefit Agreements (CBAs).

PLAs promote safe, quality, cost-effective project delivery by providing project owners with unique access to the safest, most productive, best-trained skilled craft labor available in any given market. A CWA or CBA consists of a PLA that additionally reflects community input and outlines benefits for the community where the project is happening. In addition to the collective bargaining aspects of a PLA, CWAs frequently include local hire provisions, targeted hire of low-income or disadvantaged workers, and the creation of pre-apprenticeship pathways for careers on the project.

**Ensure Domestic Content**

The Build America Buy America Act (BABA), passed as part of BIL on November 15, 2021, was enacted to improve our domestic supply chains and establish robust, comprehensive domestic content preferences across all federal aid infrastructure spending. BABA requires federal agencies to prioritize improving job opportunities by focusing on high-road labor standards in the implementation of infrastructure projects including school retrofits. Implementing policies, such as BABA, to increase domestic manufacturing can help to support and create quality manufacturing jobs.

As required by law, EPA should ensure use of domestic content and Buy America standards in projects funded by this program. These provisions also apply to the EPA funding from the Inflation Reduction Act that will go towards school infrastructure projects. All of iron, steel, and available manufactured products and construction materials for the “construction, alteration, maintenance, or repair of infrastructure in the United States”—including school retrofits—should be produced in the United States.

There are several other resources available to EPA and contractors to help navigate the BABA requirement, including The Made in America Office at the Office of Management and Budget (OMB), which has developed robust resources and technical expertise to help federal contractors with BABA compliance. Additionally, the BuildingClean.org website includes a database that identifies domestic manufacturers of products for energy efficiency retrofits in addition to healthier building materials. The database includes roughly 4,500 domestic manufacturing facilities in nearly every state across the country and also identifies facilities with union workers.

The BlueGreen Alliance Foundation (BGAF) also recently commissioned a report that found that many of the building materials needed for energy efficient retrofits are made in the United States. For example, more than 90% of air sealing, wall insulation, and windows and doors are made domestically, while the majority of HVAC equipment is also made in the United States. Appendix A of this document provides a summary table of the findings, which show the percent of energy efficiency products made domestically.

As BABA provisions come into effect and strengthen the Buy America requirements associated with federal investments, the positive market and employment effects generated by addressing air pollution in schools will be further magnified. Supply chain reporting and disclosure should also be encouraged while incentivizing assembler/supplier commitments and accountability. Further, a waiver process for unavailability should be limited as the vast majority of component parts can be sourced domestically (e.g., steel and aluminum for the manufacturing of clean technologies). It is in the public interest to avoid waivers for these domestic content requirements, given the environmental and economic benefits of sourcing from domestic manufacturers.

### **Implement Justice40**

The whole-of-government Justice40 Initiative calls for a minimum of 40% of all benefits of climate and clean energy federal investments to go to disadvantaged communities that are marginalized, underserved and overburdened by pollution. The \$50 million provided in BIL for addressing air pollution in schools should prioritize high-poverty schools given that school districts with higher enrollments of students from low-income families are more likely to have older school buildings in need of health and energy efficiency upgrades.<sup>xviii</sup> The Justice40 lens should also be applied to the workforce development aspect of this grant program. Below are equity levers that can be applied to EPA programs to implement Justice40.

We recommend that EPA:

- Ensure awareness and implementation of the Justice40 initiative—and the accompanying mapping tools including EPA’s Environmental Justice (EJ) Screen and the U.S. Council on Environmental Quality (CEQ) Climate and Economic Justice Screening Tool—through program guidance, technical assistance, and reporting requirements.
- Require Justice40 information through the grant application process:
  - Grant applications should include a section describing how the proposed program will provide disadvantaged workers with improved access to career opportunities. This may include:
    - Requiring or incentivizing local or targeted hire or other hiring and procurement policies that benefit low-income communities, people of color, and women in disadvantaged communities;
    - Requiring or incentivizing CBAs and CWAs that increase economic opportunities for communities and local workers—especially for people of color and low-income communities;
    - Requiring or incentivizing pre-apprenticeship opportunities that are linked to registered apprenticeship programs targeting disadvantaged communities;
    - Integrating pre-apprenticeships with community-based wraparound services to maximize retention of disadvantaged and underrepresented workers as they enter careers;
    - Omitting or limiting drug testing or background checks, except for employees with access to customer premises;
    - Identifying existing community networks for recruitment of disadvantaged workers; and
    - Creating a community task force for monitoring and enforcement of a local hire provision or CWA/CBA. Such use of an oversight committee is an emerging strategy for ensuring equity on public works projects, with clearly defined roles for members, and composition drawing from relevant stakeholder organizations.<sup>xix</sup>
  - Reporting: Track anonymized disadvantaged worker participation (recruitment, retention, and advancement) in coordination with DOL.
  - Grant applications that include a section describing how the proposed program benefits disadvantaged communities. This may include:
    - Projected energy efficiency savings in disadvantaged communities;
    - Projected health benefits of the project to disadvantaged communities; and
    - Results from community assessments.



## **Conduct Community Assessments**

The U.S. Department of Energy's Regional Clean Hydrogen Hubs Funding Opportunity Announcement (FOA) requires significant assessments of the communities that will be affected by the project, and engagement with relevant stakeholders. Applicants must develop a Community Benefit Plan (CBP) to describe their proposed actions for 1) community and labor engagement; 2) investing in the United States' workforce; 3) advancing diversity, equity, inclusion, and accessibility; and 4) contributing to the Justice40 Initiative.

Components of the CBP include:

- A Social Characterization Assessment, where applicants include a brief write-up of the community dynamics, decision making processes, etc.;
- An Initial Stakeholder Analysis Summary, where applicants identify the stakeholders, sectors, labor unions, communities, organizations, etc., involved with and affected by the upcoming project; and
- A Two-Way Engagement Statement where the applicant should include a statement discussing how program implementation incorporates community input for the project and the extent to which the host communities have indicated support.

Federal agencies should require all three tools for any funding opportunities. These tools work in tandem towards the goal of prioritizing the needs of affected communities while creating a platform for participation in the decision making process of project implementation.

**Appendix A**  
**% of Energy Efficiency Products Made in America**

		% Domestic	
Remodel Category	Subcategory	2010 Report	2022 Report
Air Sealing	Caulk/Adhesives	95.7%	94.39%
	Spray Foam	90.4%	97.21%
Attic Insulation	Fiberglass and Mineral Wool	93.7%	91.37%
Duct Sealing and Replacement	Caulk/Adhesives	95.7%	94.39%
	Duct Sheet Metal	99.4%	99.63%
Wall Insulation	Fiberglass and Mineral Wool	93.4%	91.37%
	Spray Foam	90.4%	97.21%
	Rigid Foam (Polystyrene)	95.9%	88.91%
Crawl Space Insulation	Fiberglass and Mineral Wool	93.4%	91.37%
	Spray Foam	90.4%	97.21%
	Rigid Foam (Polystyrene)	95.9%	88.91%
Fenestration	Vinyl Window & Door Frames	98.4%	93.49%
	Wood Windows & Doors	N/A	94.47%
Heating, Ventilation, and Air Conditioning	Fossil Fuel Furnace	94.2%	74.03%*
	Air/Ground Source AC and Heat Pump	82.3%	74.03%*
	Compressors	N/A	59.42%
	Water Heaters, Non-Air Heating	77.9%	77.73%
	Thermostats	N/A	64.79%
Household Appliances	Household refrigerators and parts	62.3%	53.46%*
	Household clothes washers and parts	76.8%	53.46%*
Lighting	Light Fixtures	N/A	44.69%



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- <sup>ii</sup> Center for Green Schools, *Green school buildings are better for budgets*. Available online: <https://www.centerforgreenschools.org/green-schools-are-better-budgets>
- <sup>iii</sup> U.S. Department of Energy (DOE), School Operations and Maintenance: *Best Practices for Controlling Energy Costs*, August 2004. Available online: <https://www.energy.gov/sites/prod/files/2015/04/f21/ED486496.pdf>
- <sup>iv</sup> Ibid
- <sup>v</sup> Schools for Health, *Foundations for Student Success, How School Buildings Influence Student Health, Thinking And Performance*. Available online: [https://forhealth.org/Harvard.Schools\\_For\\_Health.Foundations\\_for\\_Student\\_Success.pdf](https://forhealth.org/Harvard.Schools_For_Health.Foundations_for_Student_Success.pdf)
- <sup>vi</sup> Rebuild America's School Infrastructure Coalition, *Education Equity Requires Modern School Facilities*, September 2018. Available online: <https://static1.squarespace.com/static/5a6ca11af9a61e2c7be7423e/t/5ba23b3688251b659c2f9eff/1537358671343/Education+Equity+Requires+Modern+School+Facilities.pdf>
- <sup>vii</sup> Ibid
- <sup>viii</sup> BlueGreen Alliance, *Making the Grade 2.0*, Sept. 7, 2017. Available online: <https://www.bluegreenalliance.org/wp-content/uploads/2017/09/MakingTheGrade-2.pdf>
- <sup>ix</sup> BlueGreen Alliance, "Build Back Better Investments Will Create Jobs Across the Country." Available online: <https://www.bluegreenalliance.org/site/build-back-better-investments-will-create-jobs-across-the-country/methodology/>
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- <sup>xi</sup> BlueGreen Alliance Foundation, *Building Clean Database*, 2022. Available online: <http://www.buildingclean.org>
- <sup>xii</sup> BlueGreen Alliance Foundation, *Product Certifications*, 2022. Available online: <https://buildingclean.org/harmful-chemicals/certifications>
- <sup>xiii</sup> NRDC, *Federal Relief Should Support Healthier Energy Efficiency*, 2022. Available online: <https://www.nrdc.org/experts/veena-singla/federal-relief-should-support-healthier-energy-efficiency>
- <sup>xiv</sup> BlueGreen Alliance Foundation, "Beware Recycled, Older Flooring," 2022. Available online: <https://buildingclean.org/harmful-chemicals/flooring/beware-recycled-older-flooring>
- <sup>xv</sup> Environmental Science and Pollution Research International, *Review of PCBs in US Schools: A Brief History, Estimate of the Number of Impacted Schools, and an Approach for Evaluating Indoor Air Samples*, 2015. Available online: <https://pubmed.ncbi.nlm.nih.gov/25940477/>
- <sup>xvi</sup> The Office of Senator Ed Markey, "The ABCs of PCBs: A Toxic Threat to America's Schools," 2016. Available online: <https://www.markey.senate.gov/download/2016-10-05-markey-pcb-report-abcsofpcbs>
- <sup>xvii</sup> Berkeley Labor Center, *EE Program Workforce Guidance Plan*, 2014. Available online: <http://laborcenter.berkeley.edu/workforce-issues-and-energy-efficiency-programs-a-plan-for-californias-utilities/>
- <sup>xviii</sup> Rebuild America's School Infrastructure Coalition, *Education Equity Requires Modern School Facilities*, September 2018. Available online: <https://static1.squarespace.com/static/5a6ca11af9a61e2c7be7423e/t/5ba23b3688251b659c2f9eff/1537358671343/Education+Equity+Requires+Modern+School+Facilities.pdf>
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