



BETTER BUILDINGS APPROACH

The BlueGreen Alliance (BGA) unites the nation's labor unions and environmental organizations to solve today's environmental challenges in ways that create and maintain quality jobs and build a stronger, fairer economy. Our partnership is firm in its belief that we don't have to choose between good jobs and a clean environment—we can and must have both. BGA's

Better Buildings Approach is a framework built from these values to optimize the climate, health, equity, and job creation potential that the buildings sector represents. Outlined below are three guiding principles to ensure better buildings reach that potential:

A Better Building...

1. is energy efficient, healthy, and climate resilient.
2. is designed with equity and high-road labor standards.
3. utilizes construction materials that are healthy, made in the United States, and low-carbon.

1. A BETTER BUILDING IS ENERGY EFFICIENT, HEALTHY, AND CLIMATE RESILIENT

- **Energy Efficient:** The buildings sector—residential and commercial—represents one of the highest emitting sectors in the United States, accounting for 30% of greenhouse gas emissions.¹ Energy efficiency is essential for reducing electricity demand on the grid and meeting climate goals. Investing in a building’s improved energy efficiency lowers energy bills, increases a building’s durability, and reduces emissions.
- **Healthy:** A healthy building protects human health and has air and water free from toxic chemicals and pollutants. This includes replacement of lead service lines and the remediation of legacy toxics such as lead, asbestos, and polychlorinated biphenyls (PCBs) that are found in older buildings. Buildings constructed between 1950 and 1979 often contain these legacy toxics. Asbestos, lead, and PCBs are human carcinogens. Lead is also a potent neurotoxin and both lead and PCBs can damage the ability to have a healthy child.²
- **Climate Resilient:** Buildings are considered climate-resilient if they can withstand extreme weather or man-made events, including prolonged loss of electricity, heating, and/or cooling. The purpose of a climate resilient building is to protect the health and safety of building occupants and to assure the ability of critical facilities to provide services during extreme weather events or other emergencies. This can take the form of “passive survivability” where buildings can maintain healthy temperatures during a power outage that lasts several days, a heat wave, or a winter storm. Climate resilient retrofits can often overlap with energy efficiency upgrades like improved insulation or window and door sealing.

2. A BETTER BUILDING IS DESIGNED WITH EQUITY AND HIGH-ROAD LABOR STANDARDS

- **Equity:** There is significant potential in the buildings sector to address racial and economic inequality, advance environmental justice, and tackle climate change—all while creating good, union jobs. This can be done by a) prioritizing investments in communities that are disproportionately burdened with older, inefficient, and unhealthy buildings and b) creating targeted job and career opportunities across the energy efficiency sector for disadvantaged workers.³ The Justice40 (J40) Initiative calls for a minimum of 40% of all benefits of climate and clean energy federal investments—including workforce development—to go to communities that are marginalized, underserved, and overburdened by pollution. In addition to implementing J40 for training and workforce development programs, additional high-road labor standards can be used specifically to support disadvantaged communities. This includes targeted and local hire provisions, often included in Community Workforce Agreements (CWA) or Community Benefits Agreements (CBA), as well as pre-apprenticeships with comprehensive wrap-around services.
- **Labor Standards:** High-road labor standards are key to maximizing energy efficiency investments to support and create good, union jobs. Studies have shown that poor installation of energy efficiency measures often results in energy savings losses of up to 50%.⁴ Investing in a qualified workforce that will install these technologies properly ensures that stakeholders realize the full potential of their investments and building occupants receive the full expected economic and health benefits. Applicable high-road labor standards include Davis-Bacon prevailing wage, registered apprenticeship programs and/or other labor management partnerships, Project Labor Agreements (PLAs), CWAs, CBAs, and prevention of worker misclassification.⁵

3. A BETTER BUILDING UTILIZES CONSTRUCTION MATERIALS THAT ARE HEALTHY, MADE IN THE UNITED STATES, AND LOW-CARBON

- **Healthy Building Materials:** Many chemicals used in building products that make up our indoor spaces are known or suspected to cause long-term harm to human health. Certifications and material ingredient lists are one of the best ways to ensure building product selections are healthier by identifying products that reduce or eliminate the most hazardous content and that ensure low volatile organic compound emissions. This is also an equity consideration given that communities of color face disproportionate exposure to toxic chemicals.⁶
- **Made in America:** Build America Buy America Act (BABA)—which was included in the BIL—was enacted to improve domestic supply chains and establish robust, comprehensive domestic content preferences across all federal infrastructure spending.⁷ BABA provisions therefore also apply to the federal funding from the Inflation Reduction Act including for retrofits or new construction of buildings open to the public or that serve a public function. BABA requires that 100% of iron, steel, and most construction materials must be produced in the United States and 55% of manufactured products for federal infrastructure projects.
- **Low-Carbon Building Materials:** While energy efficiency can reduce operational emissions of a building, it is also important to reduce embodied emissions. Embodied emissions include those that are produced in the production and manufacturing of raw materials—such as steel and cement—and the transport of those goods to the building site. A lifecycle analysis of a product's total embodied emissions can be useful information to ensure procurement of low-emission, climate-friendly building materials. Whereas operational emissions can continuously be reduced, there is only one opportunity to lower the embodied emissions of a building. Utilization of low-carbon and carbon-storing materials can help to reduce a building's embodied emissions.



ENDNOTES

1 U.S. Environmental Protection Agency, Total U.S. Greenhouse Gas Emissions by Sector with Electricity Distributed, 2021. Available online: <https://www.epa.gov/sites/production/files/2021-04/total-2021-caption.png>

2 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/>

3 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>

4 Berkeley Labor Center, *Workforce Issues and energy efficiency programs: A Plan for California Utilities*, May 2014. Available online: <http://laborcenter.berkeley.edu/workforceissues-and-energy-efficiency-programs-a-plan-for-californias-utilities/>

5 Contractors and subcontractors must pay all employees the local prevailing wages for construction, alteration, or repair of a qualified facility.

6 Building Clean, *Choosing Healthier Products*. Available online: <https://buildingclean.org/products-and-health/choosing-healthier-products>

7 Federal Register, "Request for Information Relating to the Implementation of the Build America Buy America Act," 2022. Available online: <https://www.federalregister.gov/documents/2022/06/01/2022-11729/request-for-information-relating-to-the-implementation-of-the-build-america-buy-america-act>