



MANUFACTURING DEEP DIVES

Buy Clean

Overview

Buy Clean is a set of public procurement policy instruments aimed at infrastructure and building materials to rapidly reduce greenhouse gas (GHG) emissions from government entities. It is also a powerful tool to incentivize the purchase of low-carbon materials from manufacturing suppliers. The proposed policy framework below sets a performance standard based on carbon intensity (CI), which includes direct emissions from a product's production, transportation, and use.

Procurement policies help support the transition to zero- and low-carbon products and create a competitive advantage for clean manufacturing in the U.S. The federal government is a major purchaser of cement and steel, but the costs of those materials are a relatively small share of the roughly \$300 billion spent annually on public construction projects. As a result, a Buy Clean policy can meaningfully contribute to decarbonization of these industries at a fairly small cost to taxpayers. Under Buy Clean, the federal government could direct federal agencies to purchase low-carbon materials and products (e.g., concrete, steel, timber). The policy could set CI performance thresholds for covered products that decrease over time.

Buy Clean would help incentivize disclosure of environmental impact data across a range of industrial products, create a market for low-GHG infrastructure and building materials, and significantly reduce emissions associated with publicly financed projects.

Principles

Ambition: Federal Buy Clean policies should incorporate emissions information into federal purchasing decisions based on CI and should aim to decarbonize federally funded infrastructure and building projects by 2050. To provide certainty, Buy Clean policies should establish annual procurement targets across a range of covered products.

Eligibility: Eligible materials should include concrete, steel, aluminum, wood, glass, insulation, ceiling tile, gypsum board, flooring materials, and asphalt. Federal transportation projects, construction projects, and building renovation projects above a certain size should adhere to Buy Clean requirements.



Targets: The policy should set the maximum CI for each eligible material based on available data (e.g., environmental product declarations, (EPDs)). These CI targets should decrease over time, in line with targets for net-zero emissions by 2050.

Incentives for Performance: Buy Clean should incentivize use of the lowest emissions products. This could be done through financial incentives (e.g., rebates based on CI), explicit evaluation preference (e.g., additional 'points' awarded during competitive bidding), or through carbon shadow pricing to incorporate climate externalities directly into procurement decisions.

Qualifying Technologies: Procurement should be technology neutral and promote the lowest-carbon technologies in appropriate applications.

Flexibility: Periodic technology assessments should be scheduled to ensure that technologies are continuing to advance and will be available when required across the U.S., and that they are providing direct benefits to low-income and historically disadvantaged communities where appropriate.

Disclosure: Buy Clean policy relies on tracking and disclosure of embodied carbon by government agencies and suppliers. Buy Clean should require the disclosure of facility-specific EPDs to determine the CI of products eligible for procurement. EPDs usually capture the embodied impact of materials and products by reporting "cradle-to-gate" emissions: those generated during life cycle stages A1 (raw material extraction), A2 (transportation of materials to manufacturing facilities), and A3 (processing and manufacturing). Alternatively, for building construction, governments can consider whole building footprint disclosure using life cycle assessment (LCA) methods. The federal government could provide technical assistance and/or fiscal incentives to help facilities develop and defray the cost of these disclosures.

Permitting: When applicable, the government should fast-track permitting for projects using lower-carbon technologies, designs, or materials.