
EXECUTIVE SUMMARY

A growing number of government agencies are pursuing procurement policies to reduce the greenhouse gas emissions from the production of construction materials. Many of these policies are referred to as ‘Buy Clean’ policies, a nickname derived from the Buy Clean California Act passed in 2017.

‘Buy Clean’ is a type of procurement policy that establishes construction material purchasing requirements for government agencies. Buy-clean policies focus on reducing cradle-to-gate embodied carbon, or the greenhouse gas emissions arising from the raw material extraction, transportation, and manufacturing of construction materials. Embodied carbon is measured using life cycle assessment (LCA) with a metric called global warming potential (GWP).

Buy-clean policies vary in their scope (e.g., which material types are included), structure, and mechanisms for implementation. They typically include two primary components:

- **Disclosure:** Requirement to disclose the carbon footprint of covered products using an environmental product declaration (EPD). An EPD is a third-party-verified document that reports the environmental impacts of a product, including GWP, based on a product LCA.
- **Limits:** Requirements that a product’s carbon footprint be below a maximum allowable GWP value (e.g. limit) established by a government agency or third party. Limits vary depending on the policy design and may be set at industry-average or a different threshold specified by the policy language. Policies may also use a two-tiered approach requiring an additional GWP value setting a high performance standard to incentivize innovation.

Policy design choices have a significant impact on implementation but are not the focus of this report. This report provides recommendations on how Agencies can increase success once a policy has been established, not on how legislators or other policymakers should design new buy-clean policies.

The guidance in this report was developed through research and interviews with agencies responsible for implementing procurement policies. Referenced policies include:

Federal policies and programs

- Clean Futures Act
- Executive Order 14057 (Federal Sustainability)
- FHWA Sustainable Pavements Program
- GSA Green Building Advisory Committee Advice Letter

State policies and programs

- Buy Clean California (BCCA)
- CalTrans EPD Program
- Buy Clean Colorado (BCCO)
- Buy Clean Buy Fair Washington (BCBF WA) Project
- New York State Low Embodied Concrete Act (LECCLA)
- Oregon Concrete EPD Program

Local policies and programs

- Marin County Low Carbon Concrete Building Code
- Port Authority of New York and New Jersey (PANYNJ)
- Portland Low Carbon Concrete Program, and
- Sound Transit.

Table 1 provides a summary of the recommendations included in this report.

Table 1. Summary of implementation recommendations, organized into loosely chronological steps. The research team expects that guidance will continue to evolve over time as more policies are implemented, given the nascent stage of this type of policy.

Disclosure-Only Phase	
Step 1: Establish Agency Buy-In	<ul style="list-style-type: none"> • Dedicate staff time to establish the program • Identify agency policy champions
Step 2: Develop Initial Limits	<ul style="list-style-type: none"> • Reference third-party benchmarks • Evaluate past public procurement practices to establish an agency baseline • Leverage regional and private sector data to inform public limits • Allow for a project average compliance pathway • Use a two-tiered limits approach
Step 3: Engage Stakeholders and the Public	<ul style="list-style-type: none"> • Provide a public notice and comment period • Establish an advisory committee • Address equity in committee design • Involve stakeholders early in GWP limit development
Step 4: Test Limits	<ul style="list-style-type: none"> • Compare against standard Agency specifications • Conduct pilot projects
Step 5: Incentivize EPD Development	<ul style="list-style-type: none"> • Incentivize local EPDs through financial, technical, or educational support and driving increased awareness of upcoming policy requirements
Step 6: Publish methodology	<ul style="list-style-type: none"> • Publish the methodology used to establish the adopted GWP limits
Mandatory Limits Phase	
Step 7: Track Compliance	<ul style="list-style-type: none"> • Establish a central resource for project team requirements • Create a centralized system for Tracking EPDs and Compliance • Utilize Policy Exceptions
Step 8: Incentivize High Performance	<ul style="list-style-type: none"> • Provide high performance incentives for contractors and/or provide purchasing preferences during the bid evaluation process • Use a two-tiered limits approach (see Step 2)
Step 9: Provide Education and Training	<ul style="list-style-type: none"> • Provide both internal and external education and training opportunities • Keep implementing agencies informed • Provide contractor training
Step 10: Re-evaluate Initial Limits	<ul style="list-style-type: none"> • Lower limits at a regular interval over time to continue to drive emissions reductions