



How EC3 Supports Buy Clean Policies

Building Transparency's free and open-access Embodied Carbon in Construction Calculator (EC3) service includes a large database of digitized, third-party verified Environmental Product Declarations (EPDs) which can be searched, filtered, and compared by geography, functional performance, and carbon emission intensity. EC3 enables Buy Clean policy by:

Helping users find compliant solutions

- Users can search relevant categories with filters for properties and carbon emissions from all publicly available EPDs in North America.
- Users can identify products or materials with the lowest carbon footprint that meet their specific application and requirements.
- EC3 can implement custom filters that apply policy-specific rules (e.g., "Buy Clean California 2021"), including which PCR(s) are used, how specific the data is, location(s) of manufacture, and the maximum carbon intensity.
- The tool interface facilitates overlaid limits on graphs and figures.
- Provides regional searches for locally available products.

Helping manufacturers document compliance

- Building Transparency provides a platform to share EPD information containing both carbon emissions and the relevant properties that determine which Buy Clean limit(s) or target(s) apply.
- Manufacturers can use custom Buy Clean Policy filters to see which of their products appear to comply and use results to improve documentation or develop new, compliant products.
- Manufacturers and stakeholders can challenge any designations they believe are inaccurate.
- Manufacturers can view unique search and specification statistics for their products within EC3.
- Building Transparency's openEPD standard allows EPDs to be exchanged between manufacturers, verifiers, public databases, and software tools.

Helping policymakers set targets and limits

- EC3 helps users understand the range of carbon intensity across each product category.
 - Provides policymakers with actual EPD data to develop 1) more inclusionary carbon emission limits and 2) more aggressive but realistic targets than would be possible using generic industry average data (see Figure 1)
 - Data can be filtered and sorted by performance characteristics
- EC3 custom filters help policymakers communicate sophisticated criteria that might be difficult to explain without the assistance of software.
- EC3 is free and open access, which ensures equitable treatment of all stakeholders.

Figure 1.

Sample results from EC3 showing product category statistics based on actual EPD data versus an industry average data point

