

HB21-1303: Buy Clean Colorado Act - Early Agency/IHE Presentation

Office of the State Architect
Energy & Environment Program

Early Agency Meeting – Fall 2022

Presented By: *Office of the State Architect* - Bailey Vigil, EIT II



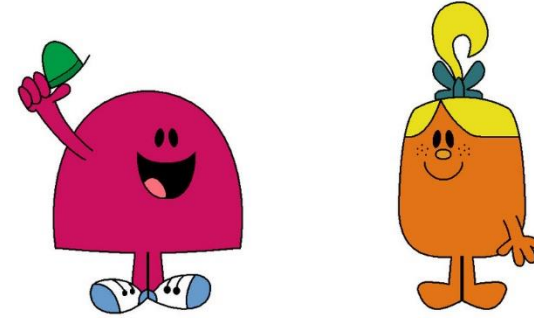
COLORADO

Office of the State Architect

Department of Personnel & Administration

Introductions

Cheri Gerou – State Architect



Rod Vanderwall – Manager of Energy Programs

Bailey Vigil – Buildings GHG Emissions Analyst



Meeting Agenda

Overview
of HB21-
1303

Important
Definitions

Responsibilities

Processes

Feedback
Request

Questions



Overview of HB21-1303



Colorado Revised Statutes (C.R.S.):

HOUSE BILL 21-1303

24-92-117

OSA

Maximum global warming potentials for materials used in eligible projects – buildings – projects that are not roads, highways, or bridges...

24-92-118

CDOT

Maximum global warming potential for materials used in public projects – road – highway – bridge projects...

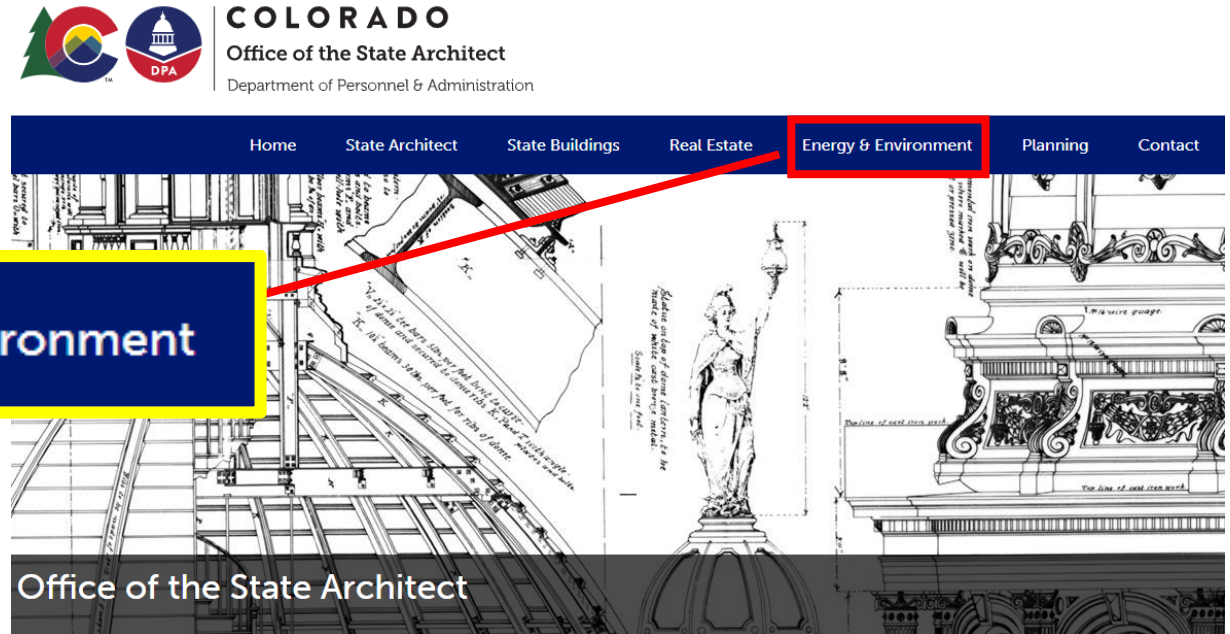
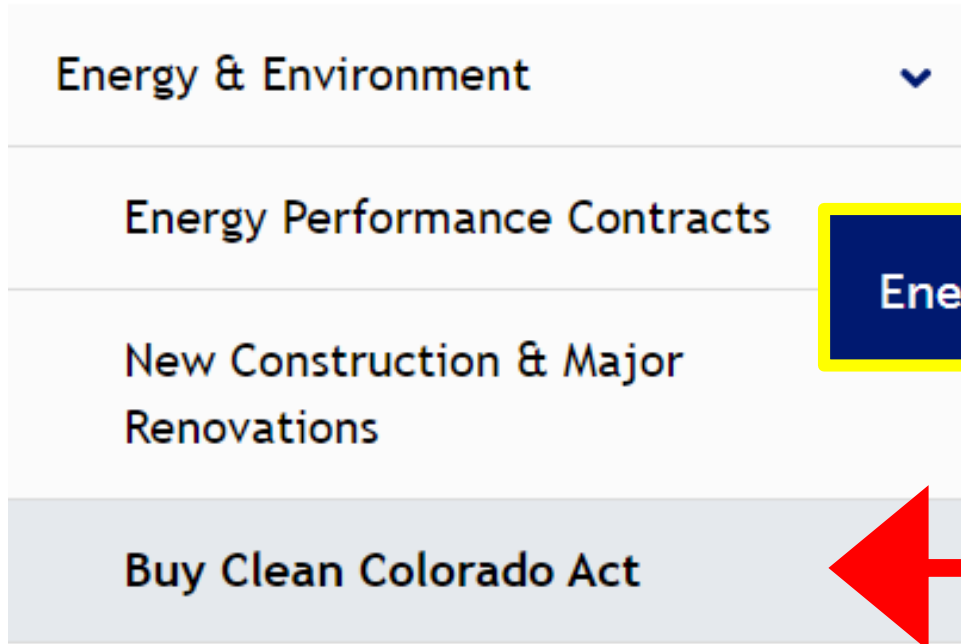


Overview of HB21-1303 - OSA Policy

POLICY



- Policy posted to OSA website on July 1, 2022



Office of the State Architect

<https://osa.colorado.gov/>



Overview of HB21-1303 - Benefits of Complying

- Meet sustainability goals and achieve national rankings that require EPD submission (LEED, BREEAM, Green Globes, etc.)
- Build with lower embodied carbon emissions (i.e. green buildings)
- Tax Exemption: Contractors working on State projects already receive State Tax Exemptions assuming that you share our tax exempt number with your consultants and contractors
 - Tax exemptions for purchasing eligible materials begins in 2024 (SB22-051)



Overview of HB21-1303 - Communications

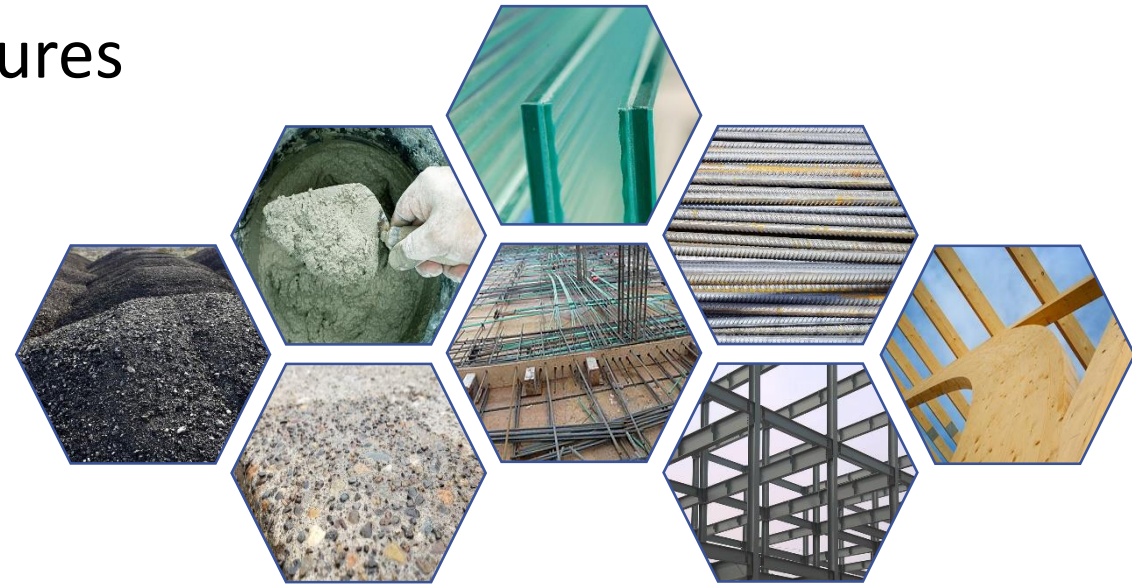
Due to the statutory authority of HB21-1303 and the emergence and development of this requirement, OSA will be involved with the OSA designated delegate via communications on all matters through the design and construction of projects.

It is the delegate's responsibility to work with OSA to ensure compliance with the program through all phases of a construction project. This is to ensure that all waivers and modifications are handled within the same parameters.



Important Definitions

- **“Eligible materials”** means materials used in the construction of a public project, including:
 - Asphalt and asphalt mixtures
 - Cement and concrete mixtures
 - Glass
 - Post-tension steel
 - Reinforcing steel
 - Structural steel
 - Wood structural elements



- **“Eligible project”** means a public project as defined in C.R.S. 24-92-102, for which an agency of government issues a solicitation on or after January 1, 2024; except that “eligible project” does not include any maintenance program for the upkeep of a public project or any road, highway, or bridge project.
- **“Embodied Carbon”** is reported as global warming potential (GWP) and includes greenhouse gas emissions arising from the production, construction, use, and end-of-life of products or systems used in the construction of buildings, roads, and other infrastructure.



- **“Global warming potential”** or **“GWP”** is a metric describing the potential climate change impact of a product or process as measured by an LCA, reported in an EPD.
- **“Product category rule”** or **“PCR”** means a set of specific rules, requirements, and guidelines necessary for developing Type III environmental declarations for one or more product categories.



- **“Stages A1-A3”** refers to the life cycle stages which define an EPD from cradle-to-gate and considers emissions from the raw materials extraction and processing (A1), transport to the manufacturer (A2), and manufacturing of building materials (A3).
- **“Industry-Wide Environmental Product Declaration”** or **“IW-EPD”** means an EPD that meets the representativeness criteria and is released by multiple manufacturers to publish the production-weighted average footprint of the entire industry.



“Environmental Product Declaration” or “EPD” or “Type III EPD” means a third-party verified document that summarizes the life cycle assessment of a single product and publicly discloses its environmental impacts. EPDs enable comparisons between products serving the same function. For an EPD to be deemed approved:

- A. The EPD must be a current product-specific, Type III EPD.
- B. The EPD must reference all ISO Standards - ISO 14025:2006, ISO 14040:2006, ISO 14044:2006, and ISO 21930:2017.
- C. The EPD must align with the applicable product category rule requirements.



Responsibilities – Agencies and IHE

Agencies and Institutions of Higher Education (IHE) shall:

- Update their design standards with materials with EPDs
- Build project budgets that include the cost of all eligible materials

EPD Process

For any solicitation beginning on or after January 1, 2024, agencies/IHE shall:

- Require consultants to specify EPDs for all eligible materials considered in the design
- Require contractors to submit EPDs for all eligible materials prior to site installation
- Submit EPDs to the OSA as part of the L-1 Code Compliance Documentation



Responsibilities - Delegates

Put projects together

- Specify materials (as necessary)
- Build ALL eligible materials with EPDs into cost estimate

Work with consultants and contractors

- Work with consultants on the project specifications (as necessary)
- Determine if a waiver is needed and initiate the process

Ensure that consultants and contractors can meet your needs for compliance

- Evaluate each RFQ and select firms that can meet requirements
- Evaluate each bid and select contractors that can meet requirements



Responsibilities – Consultants (internal and external)

Consultants are engineers, architects, or sustainable design consultants which make up the design team (internal or external).

For solicitations beginning on or after January 1, 2024, consultants shall:

- Prioritize products with EPDs for the design
- Specify an EPD for each eligible material considered in the design
- Verify that the GWP value included in each EPD is less than or equal to the maximum acceptable GWP limits established by OSA



Responsibilities - Contractors

For solicitations beginning on or after January 1, 2024, contractors shall:

- Obtain EPDs for all eligible materials procured for a public project
- Submit compliant EPDs to the agency/IHE delegate prior to installation on site
- Report information related to the transportation of eligible materials for products sourced over 100 miles from the project site



Responsibilities - Transportation-Related Emissions

- Beginning January 1, 2024, for **products sourced** (extracted, manufactured, purchased) **over 100 miles** (160 km) outside of the project site contractors shall record and report information relating to the transportation of eligible materials
- For each transport of eligible materials record and report
 - The **weight** of the cargo (lbs. or kg)
 - The **method used for transporting eligible materials**
 - The **total distance traveled** (miles or km) OSA will perform conversions to determine the resulting GWP
- OSA will collect this information, but will not consider it as criteria for the materials yet



Processes – Consultant Evaluation

To evaluate a consultant for qualifications, ensure that

- Individuals understand how to specify components that meet GWP thresholds
- Individuals can understand, locate, and specify compliant EPDs
- Individuals have knowledge and experience of LEED for buildings and the requirements and guidelines behind those buildings



Processes – Bid Evaluation

To evaluate a bid for compliance, ensure that

- Contractors can identify which materials included in the bid require EPDs
- Contractors can follow project specifications and procure specified materials
- Contractors can obtain product EPDs for all specified eligible materials
- Contractors can record and report all required information
 - EPDs, transportation-related emissions, waiver information, etc.



Processes - Managing Submittals

For each project,

- Establish a system (or folders) to store project information and EPDs
- Maintain organization of EPDs
 - OSA recommends organizing EPDs by establishing eligible material category folders
- Download and utilize OSA developed forms and instructions
 - Released 07/2023
- Record the weight, distance, and mode of transportation for transporting eligible materials
- Submit EPDs and transportation information to the OSA as received and as part of the closeout submittal documentation as listed on the Pre-Acceptance Checklist (SBP-05)



Feedback Request - Identify Gaps in Training

GOAL: Support compliance and gain an understanding of what agencies/IHE needs to know to comply with the BCCO Act

PROBLEM: OSA does not develop projects as agencies/IHE do

SOLUTION: Determine gaps in training

- Create training syllabus
- Train delegates on what they need to know



Questions to help OSA help Agencies/IHE

- What is not clear about the HB21-1303 requirements?
- How does your agency/IHE currently evaluate a bid for compliance?
- What questions do we need to answer for projects developing next spring?
- What do agencies/IHE need to learn NOW to comply?
- What do agencies/IHE need to learn in a years time to comply?
- Do you have the resources now to comply with HB21-1303?
- What kinds of training events/materials would be beneficial?
 - How to find and review EPDs
 - How to specify materials
 - Updating design standards
 - Designer/Contractor checklists
 - How to work with designers
 - Etc.



Feedback

We want your feedback!

A survey will be sent out following the meeting

Share information with OSA until 01/06/2023 when training syllabus becomes final





Any Questions?

