NYC Executive Order 23 EC3 Reporting Instructions

Background:

On September 22, 2022, New York City issued Executive Order 23: Clean Construction (EO 23) to streamline the administration of the city's lead-by-example sustainability and climate directives, and set new goals for the environmental performance of NYC agencies and authorities. For more information, refer to the **NYC EO 23 Embodied Carbon Environmental Product Declaration (EPD) Guidance.**

Building Transparency is a 501 c-3 nonprofit dedicated to addressing embodied carbon's role in the built environment. The Embodied Carbon in Construction Calculator (EC3) is a free database of construction EPDs and matching building impact calculator for use in design and material procurement. Building Transparency has created this guidance document to support Affected Entities with the EO 23 reporting process using the EC3 tool.

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1. **Create an Account**

   To register for an EC3 account, go to https://buildingtransparency.org/auth/register and enter the requested information, making sure to accept the Beta User Agreement and Privacy Notice. EC3 is primarily for professional business use; users who specify their employer and profession will be granted a Professional (regular) account. Those who do not, or who register with a Personal (e.g., Gmail or Hotmail) Account will be given a Private Account with some features (including sharing features) disabled to protect privacy. Once a user has registered for an account, an activation email will be sent to the registered email address. Once activated, users may log in to the tool at https://buildingtransparency.org/auth/login.
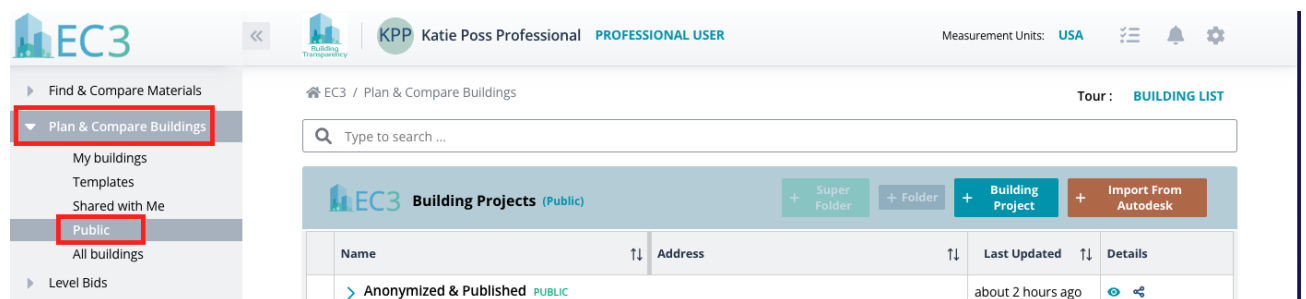
2. **Understand what materials must be reported.**

   Executive Order 23 directs Capital project agency construction managers to submit environmental product declarations (EPDs) for all batch plant ready-mixed and precast concrete and structural steel to the Building Transparency database. Reference the **NYC EO 23 Embodied Carbon Environmental Product Declaration (EPD) Guidance** for more detail on materials and EPD requirements.

   Note: The contracting agency may have stricter or more detailed requirements. Confirm requirements for your project with your agency representative.

3. **Copy NYC EO 23 reporting template.**

   Once you are logged in to EC3, click "Plan & Compare Buildings" located in the top left corner of the screen, just below the EC3 logo. Then click "Public"
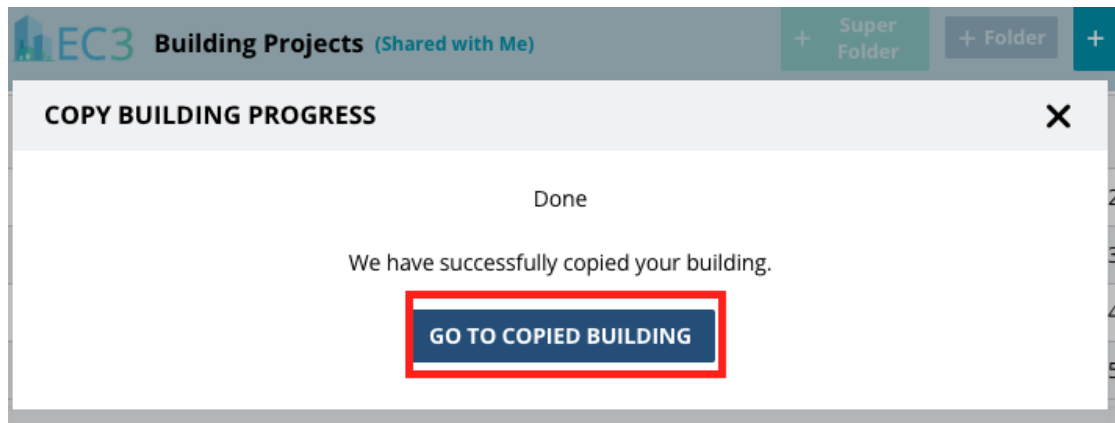

   Navigate to the project titled "NYC E..O#23 [Reporting Agency], [Project Name], [Contract

Name/Number]". Create a copy of this project by clicking on the button highlighted in red below.

Once the project has completed copying, click on the "Go to Copied Building" button.

4. Modify template with your project specific details.

a. Delete "Copy of" in the Project Name field. Replace text in brackets with your project specific information including [Reporting Agency], [Project Name], and [Contract Name/Number]. Once completed, the project name should look like this: **"NYC E.O.#23 [MTA], [Project 123], [123456]"**

b. Enter the project address.

c. A pop-up will appear once you enter a new address. Click "Yes, Recalculate"

d. Click on the arrow to the left of "Notes & Links" and enter the requested information about your project.

Note: For client agency or contracting agency, use the acronym of the affected entity i.e.

i.e DDC, PARKS, DEP, DOT. Client agency is the owner of the project whereas the contracting agency is the one managing the construction work directly. Both the client agency and contracting agency will be New York City entities, not consultant or contracting firms.

NOTE: The "Building Classification" and "Embodied vs Operating" sections are not required for reporting purposes but may be optionally completed.

5. Input project specific quantities and map collections.

Scroll down to the bottom of the page to the tab titled "A1-A3 Uniformat 2". This is the section where you will enter project specific materials, quantities, and Environmental Product Declarations (EPDs).
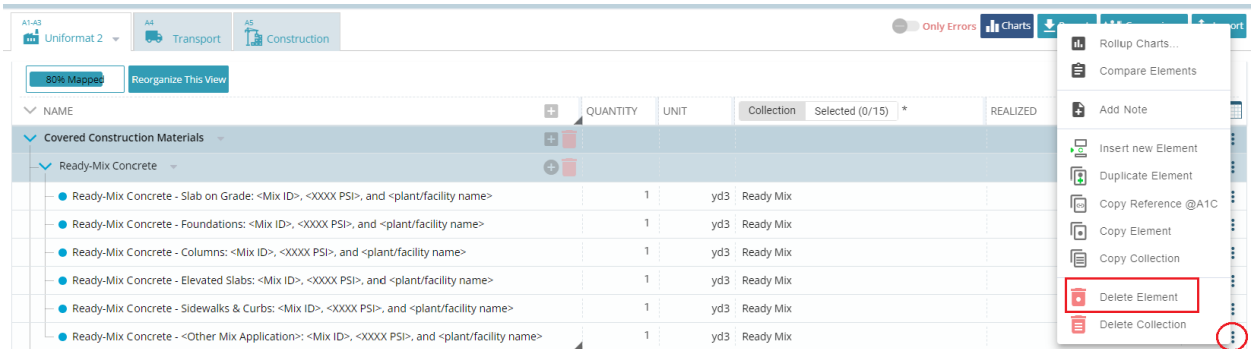
You will see concrete, precast concrete, and steel line items pre-populated. You will also see an "Other Materials - Encouraged Reporting" section. You may add any material quantities and EPDs here which you have data for, as NYC is encouraging reporting for all materials where possible. Any information within <brackets> should be revised with your project specific information.
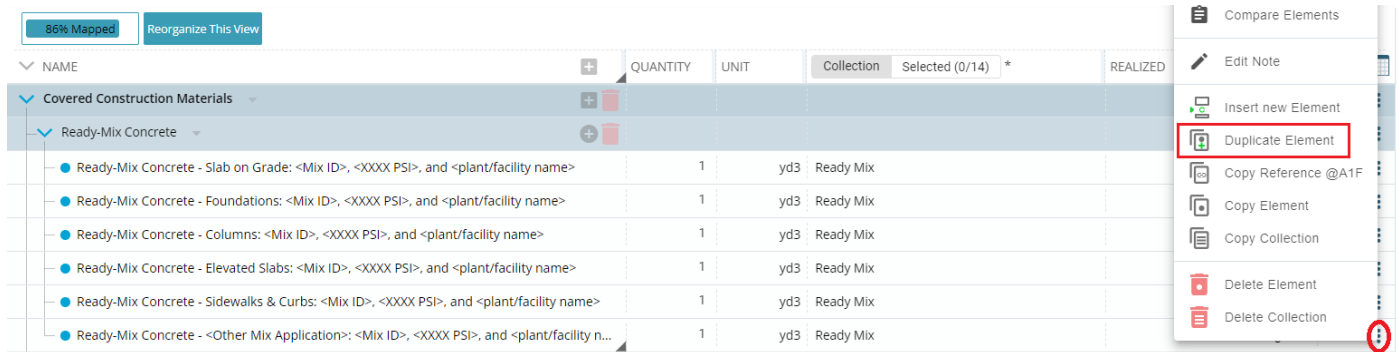
6. Material Specific Instructions - Ready-Mix Concrete

a. Each ready-mix concrete mix used on your project should be added to EC3. Five commonly used mix applications are provided in the template: Slab on Grade, Foundations, Columns, Elevated Slabs, and Sidewalls & Curbs. A line item for <Other Mix Application> is provided. If there is a mix application in the template that is not used on your project, simply delete the item by clicking the three circles on the far right of the row. Then click "delete element" from the menu.

b. For each line item/unique mix, replace the text in <brackets> with information specific to that mix including the Mix ID, compressive strength i.e. 4000 psi, and plant/facility name.

c. If you need to add additional mixes, you can duplicate elements by clicking on the three circles at the far right of the line item you wish to duplicate as shown below, then click "duplicate element".

d. Enter the volume of each mix in the quantity column. Note that the unit of measure is pre-populated to cubic yards (yd3). If possible, you should enter the amount actually poured (as-built quantity), not an estimated quantity.

e. Next, you will need to "map the collection" of the material, or tell EC3 more information about the material. Hover over the text "ReadyMix" and a magnifying glass in a teal box will appear. Click the magnifying glass.

f. A pop-up will appear for the ready-mix concrete category. Enter the compressive strength of your mix in the field highlighted below. Type the number (i.e. 4000), then the letters "psi".

g. Note the geography is pre-populated with "New York". If your concrete plant is located in a different state, click within the geography box and select the appropriate state.

h. Once your compressive strength and geography are entered, click "Search".

i. Scroll down to the Product EPDs section to view the results. Find the EPD for the specific concrete mix used on your project. You can narrow the search results by manufacturer, plant name, or product name by entering the details of your mix in the corresponding field.

j. Once you've identified the correct EPD, click on it. You will know it has been selected when the row turns teal and the star to the far left is filled yellow. Note that when you select an EPD, it will move to the top of the list.

k. Click "Use this Collection" at the far right bottom corner of your screen. If there is no EPD available for your product, click "use this collection" without selecting an EPD.


l. Repeat steps 6a-6k for each ready-mix concrete mix used on your project.
m. If there are unused concrete elements, delete them by clicking on the three stacked circles at the far right of the element, then click "delete element."

7. Material Specific Instructions - Precast Concrete

a. Each precast concrete product used on your project should be added to EC3. One precast line item is included in the reporting template, but you can duplicate this element for each unique precast product on your project.

b. For each line item/unique mix, replace the text in <brackets> with information specific to that mix including a product description, compressive strength i.e. 4000 psi, and plant/facility name.
c. Enter the mass of each precast product in the quantity column. Note that the unit of measure is pre-populated to pounds (lbs), but you may enter in tons if you wish. If possible, you should enter the as-built quantity, not an estimated quantity.
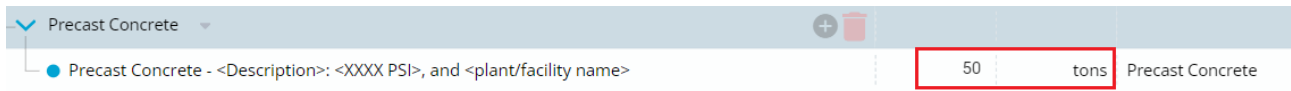
d. Next, you will need to "map the collection" of the material, or tell EC3 more information about the material. Hover over the text "Precast" and a magnifying glass in a teal box will appear. Click the magnifying glass.
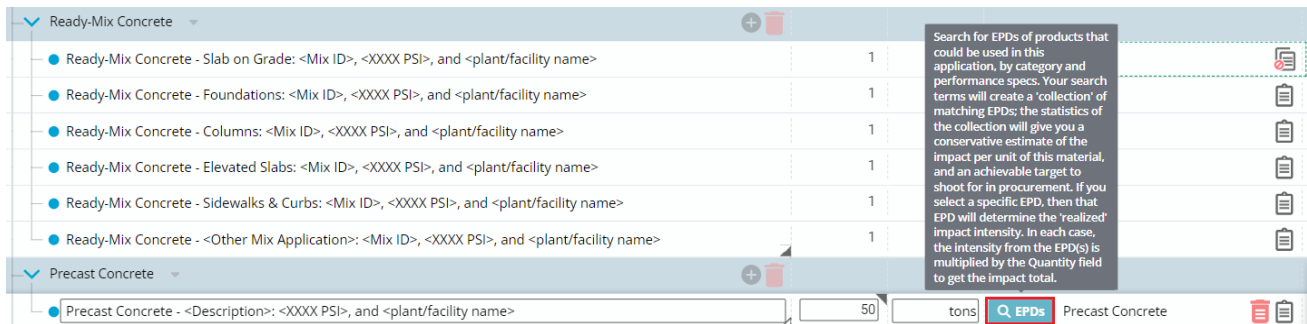
e. A pop-up will appear for the precast concrete category. Note the geography is pre-populated with "USA". If your precast concrete plant is located outside of the U.S., click within the geography box and select the appropriate location.
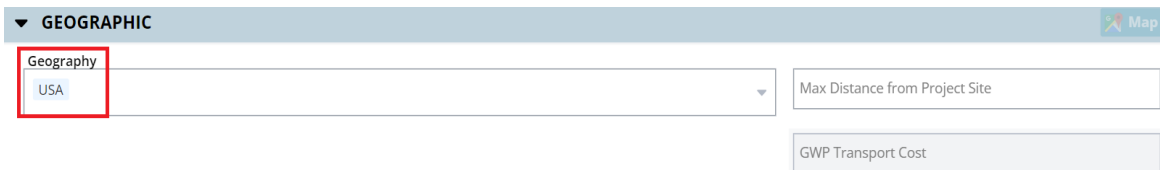
f. Once the appropriate geography is selected, click "Search".
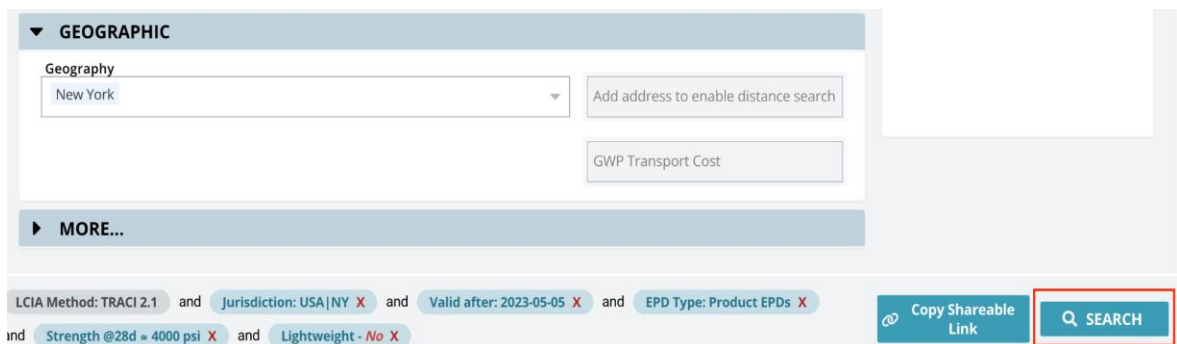
g. Scroll down to the Product EPDs section to view the results. Find the EPD for the specific precast concrete product used on your project. You can narrow the search results by

manufacturer, plant name, or product name by entering the details of your mix in the corresponding field.

h. Once you've identified the correct EPD, click on it. You will know it has been selected when the row turns teal and the star to the far left is filled yellow. Note that when you select an EPD, it will move to the top of the list.

i. Click "Use this Collection" at the far right bottom corner of your screen. If there is no EPD available for your product, click "use this collection" without selecting an EPD.


j. Repeat steps 7a-7i for each precast concrete product used on your project.
k. If there are unused precast line items or elements, delete them by clicking on the three stacked circles at the far right of the element, then click "delete element."

8. Material Specific Instructions - Steel

a. Click on the arrow next to "Steel" to expand this section. Each steel product used on your project in the following categories should be added to EC3; Hot Rolled, Fabricated; Hollow Sections, Fabricated; Plate Steel, Fabricated; Reinforcing Steel/Rebar, Fabricated; Cold-Formed Steel. Duplicate rows to create as many line items as you need according to the number of unique products on your project. You can duplicate elements by clicking on the three circles at the far right of the line item you wish to duplicate as shown below, then click "duplicate element".
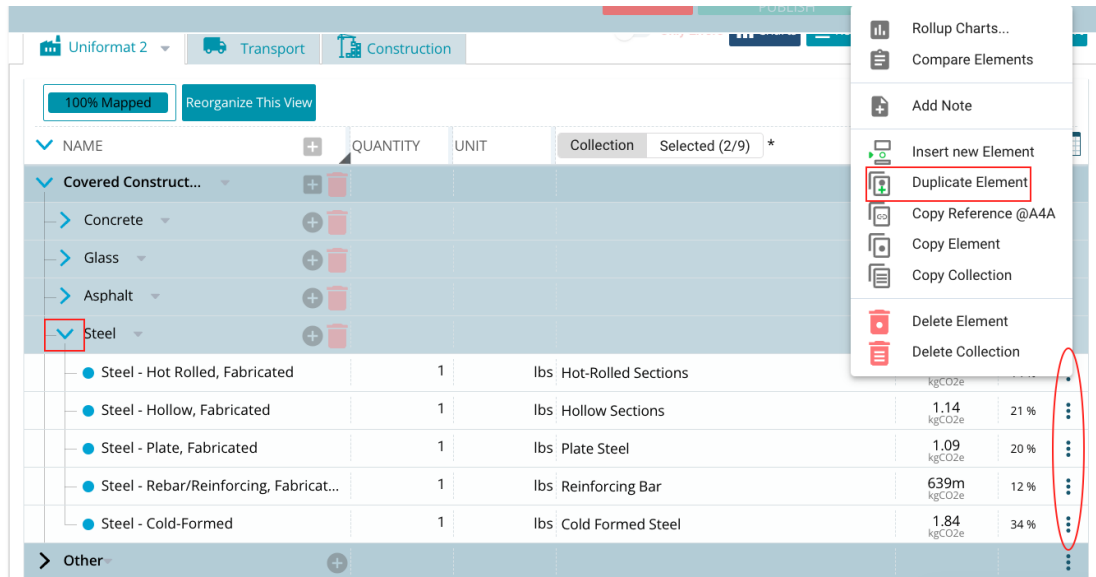
b. For each product, enter the quantity of the product delivered to your project in pounds or tons. Include the amount of steel actually delivered to your project including any waste/overages.

c. Next, you will need to "map the collection" of the material, or tell EC3 more information about this particular material. Hover over the text "Hot-Rolled Sections" and a magnifying glass in a teal box will appear. Click the magnifying glass.

d. A pop-up will appear for the steel category. Click "Search". Note the geography is pre-populated to "Global". If you would like to narrow your search to a specific manufacturing location, click within the "Geography" box and select the appropriate country or state. Note the "Fabricated" filter is pre-populated to "Yes". Leave this filter as-is. Click "Search".

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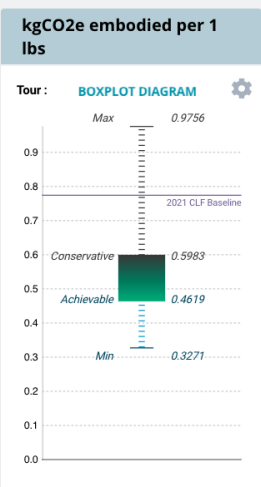
e. Scroll down to the Product EPDs section to view the results. Find the EPD for the specific steel product used on your project. Click anywhere on the row of your product. Once it is selected, the row will turn teal, move to the top of the results, and the star will be filled yellow.
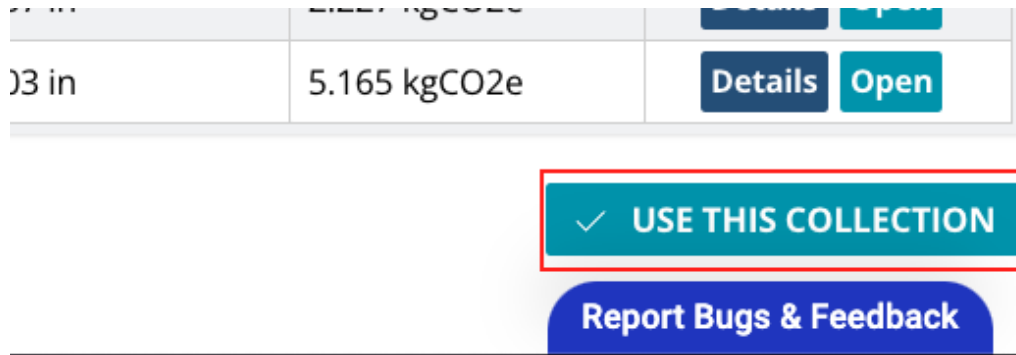

f. Click "Use This Collection" at the bottom right of your screen beneath the search results.

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✓ USE THIS COLLECTION

Report Bugs & Feedback

g. Repeat steps 8a-8f for each steel product on your project.

h. If there are unused steel elements, delete them by clicking on the three stacked circles at the far right of the element, then click "delete element."
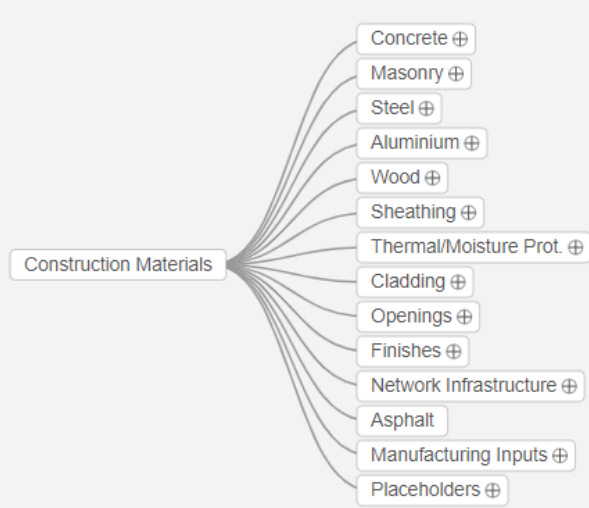
9. Other Materials - Encouraged Reporting

a. New York City is encouraging projects to report any EPDs in any material category if they are available. These materials should be added to the "Other" category.

b. Replace the text in brackets with a description of the material.

∨ Other

⦿ <Enter description of material here>

⦿ <Enter description of material here>
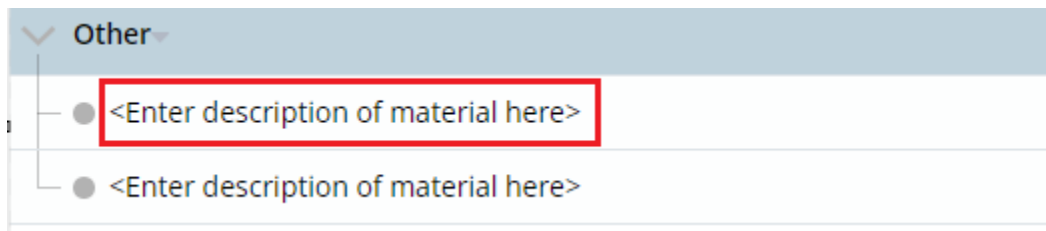
c. Click on the teal magnifying glass "EPDs" button. A tree map will appear with several material categories. Navigate to the appropriate material category using the tree map or by typing directly in the "Search Category" box.

d. When you've identified the appropriate EPD, select it by clicking on it. The EPD will highlight teal and the star will fill yellow once it is selected. Click "Use This Collection".

e. Enter the quantity of the material in the material column. Note, the unit of measure will automatically populate after you've selected the EPD.
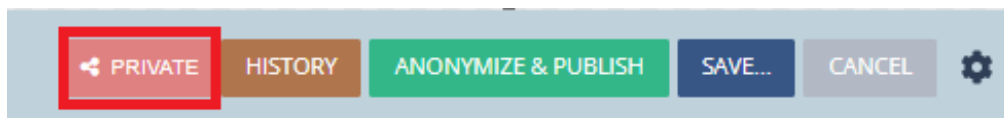
10. Final Reporting Instructions

a. When you have completed entering your materials, quantities and EPDs, scroll to the top of the project and click the blue "Save" button, then click the first option in the dropdown that appears, "Save".
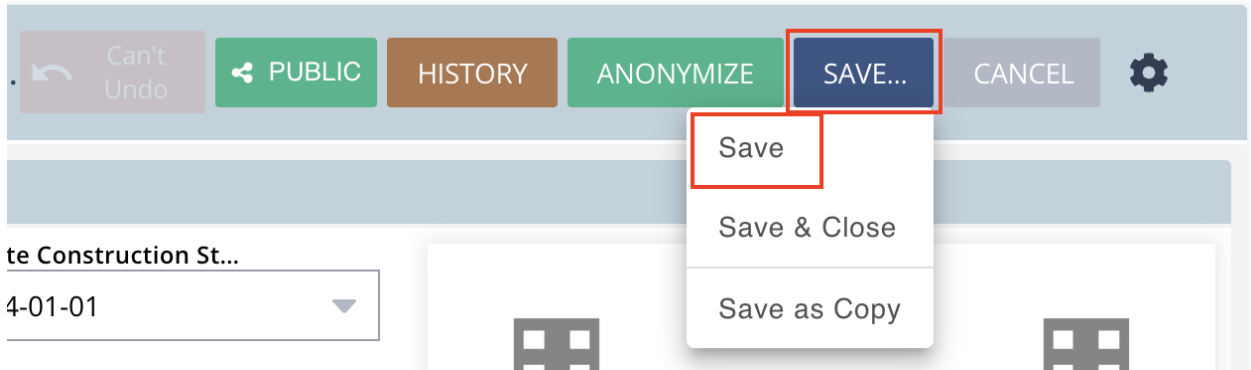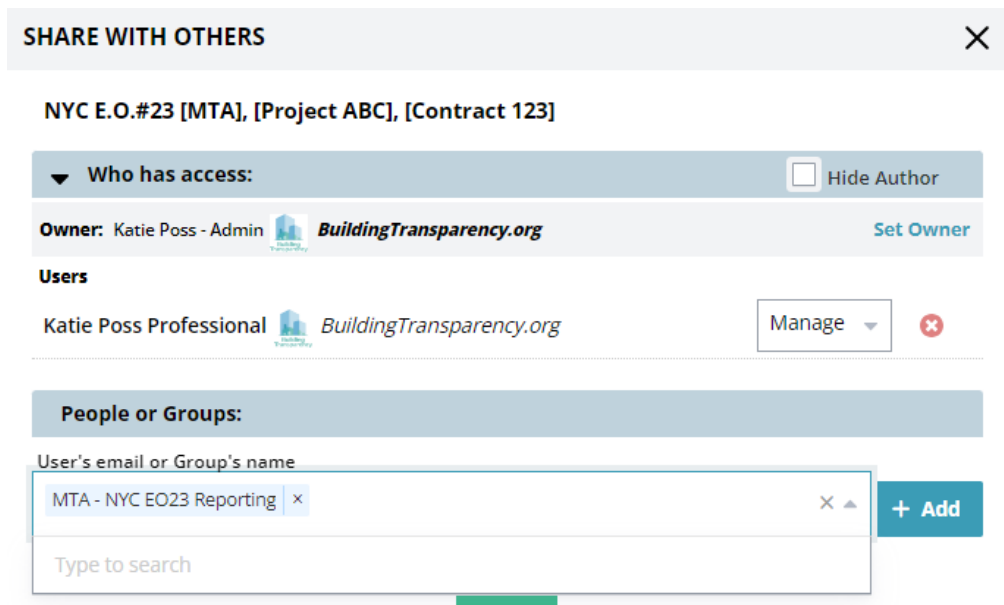
b. To share the project for agency review, Click "Private".

c. Click inside of the box that says "User's email or group's name". Start typing the name of the agency you are reporting to. For example, if you are reporting to MTA, type "MTA - NYC" and the MTA - NYC E.O.#23 Reporting group will appear as an option below. Click this option, then click "Add".

d. Change the permissions of the user group (i.e. MTA-NYC E.O.#23) from "Read" to "Write", then click "Done".
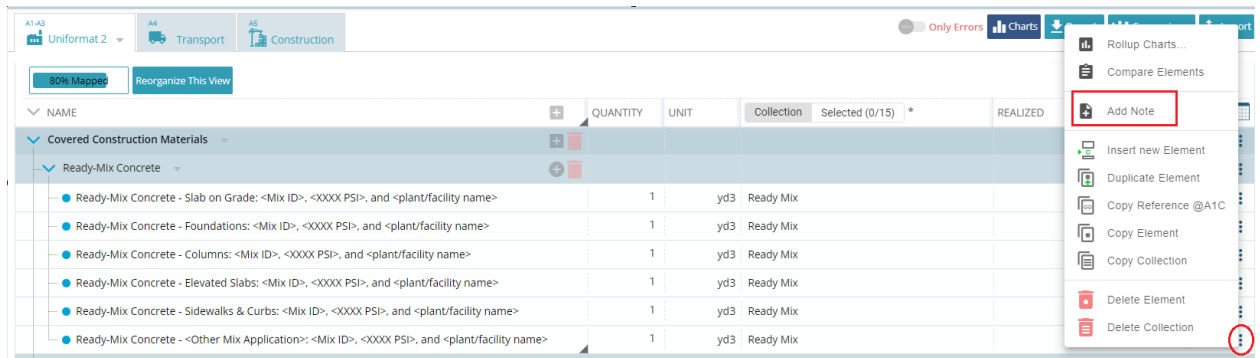
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e. Click "Save" then click "Save & Close"

11. FAQ's

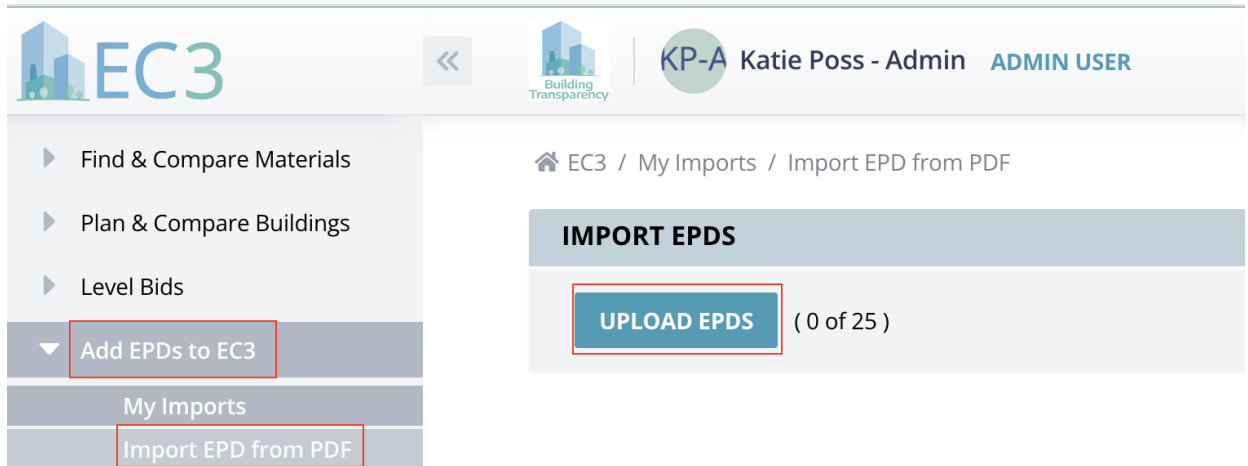**Q: What should I do if there is not an EPD for a product I am using on my project?**
A: Ask the manufacturer of the product to pursue an EPD. Check out our resources here to learn more about how to get an EPD. If the manufacturer is not able to provide an EPD by the end of the project, include a reason in the notes field in EC3 underneath the corresponding material line item. You can add a note by clicking on the 3 stacked circles at the far right of the line item, then click "Add Note"

Q: Can I add an EPD to EC3's database?

A: Yes, anyone can add an EPD to EC3 if it is not already in the database. Click "Add EPDs to EC3" in the left toolbar then click "Import EPD from PDF". Click "Upload EPDs" then navigate to the file on your computer.

Q: What should I do if I have a question about EC3?

A: You can reference EC3's User Guide if you have a question, or Click the "Report Bugs & Feedback" button at the bottom right of your screen in EC3. Here you can report a bug, ask a question, or report a problem related to an EPD.