



International Institute for
Sustainable Laboratories

Dedicated to
advancing sustainable
laboratories globally.

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Dear Lab Community Member:

The [Labs2Zero](#) Technical Advisory Council (TAC) responsible for developing the benchmarking and scoring of the embodied carbon of laboratory buildings is asking for your help. We are looking to collect an initial set of life cycle assessment (LCA) data to help us launch a project benchmarking database that reflects the status of embodied carbon in laboratory buildings.

To create this project database, we are asking for you to please fill out the attached data spreadsheet for projects you can share with us. We are requesting this initial information by **October 15, 2023**, if possible, so we can provide some initial results at our Annual Conference starting October 22nd. Otherwise, we will of course gladly accept the data after that date. Follow the instructions provided on the spreadsheet and return one or multiple Excel files to us.

We hope that you should have the data readily available, as our methodology is based on standard LCA tools required by the LEED certification systems such as Tally, OneClick, and the Athena Impact Estimator.

Our data request is also similar, although less intense, than an ongoing project data request by the Carbon Leadership Forum for their current WBLCA Benchmark Study V2 with some of the same data fields but also with more lab specific information requested. If you are not aware of their current call for project data and would like to participate in their study as well you can find more information [here](#).

Your information will remain confidential and be anonymized, and we are not asking for confidential owner or project information that you cannot share. We have attached a simple data collection agreement for you to sign that spells this out.

Due to the time and efforts put forth by contributing organizations we will be recognizing those participants by inviting them into a new “Labs2Zero Partner” program that is being developed to recognize “Owner Partners” and “Consulting Partners” who contribute to the Lab Benchmarking Tool (LBT) and Labs2Zero peer databases. We will also be providing special recognition for the firm that contributes the most projects, potentially within some different categories such as size and type of organization.

Another benefit of answering this data call and being a Labs2Zero Partner organization will be access to a deeper dive into the anonymized analysis results of the data call such as pilot access to benchmarking of this data against their entered projects and special access meetings to discuss the results. Once a scoring methodology for lab building embodied carbon is developed, we will provide pilot scoring of contributor’s projects and gather any feedback on these results.

If you have any questions about this data call or need more time, please contact Dirk von Below (Chair of the Embodied Carbon Scoring TAC), me, or any of the I2SL/ERG personnel copied in the CC section of this email.

The following is some general information about our approach and goals:

1. The goal of the larger Labs2Zero initiative is to develop performance scores and certifications as well as tools for reducing the carbon footprint of laboratory buildings. Most existing benchmarking and certification systems developed by the Carbon Leadership Forum (CLF), USGBC, ILFI, or ENERGY STAR either do not include laboratories due to their unique environmental footprints or do not account for the breadth of different lab types.
2. This study will provide benchmarking data that will inform the industry on the current status of embodied carbon in different types of lab buildings as well as provide some of the baseline data that will be used to develop a performance score on a lab building's embodied carbon content.
3. Embodied carbon in construction is now increasingly a concern for lab owners and designers. However, there is no embodied carbon benchmarking or scoring systems available for laboratories. I2SL intends to fill the gap with your help and develop actionable comparison data for embodied carbon as well as enhance the usefulness of the [Lab Benchmarking Tool](#) (LBT) for both operational and embodied carbon.
4. We intend to use existing methodologies and measurements for assessing the carbon footprint of laboratories. The data we are asking for should be the same as required by certification systems or owner ESG reporting. The hope is that providing this data should not require much additional effort when certifying for LEED or submitting data to the new CLF V2 benchmarking study. We also hope to gain a small number of additional design criteria to deliver some more detailed, lab related, comparisons so lab owners and designers can target lower carbon emissions.
5. For this data call we are asking for optional data covering a broad scope. Hopefully you can provide some or all of the optional field data, however we have limited the required field data to a minimal design scope to assess what data is readily available in the industry. Limiting the required input for life cycle stages to cradle-to-gate (A1-A3) and the scope to structure and enclosure/shell building components allows us to develop comparable data sets and target those building components with the largest environmental impact. Concrete, steel, and enclosure systems also provide a broad set of Environmental Product Declarations and robust data as a foundation for the embodied carbon calculations. Specifically for renovations and fit-out projects we have also asked for a limited set of interior product data as that data is most relevant for these fit out or renovation types of projects.
6. We know that these data collection efforts take some time and effort, but we encourage you to provide the most complete dataset with as many projects that you are able to share as your efforts will become an important step forward in our collective goal of decarbonizing laboratories and reducing embodied carbon in lab buildings!

We hope to discuss this effort at the upcoming I2SL conference in October, where we also invite you to provide feedback on our path forward. You can register for the conference [here](#).

Your support for this initial study is very much appreciated. Thank you for being a supporter of the Labs2Zero initiative. Please feel free to send us any comments, questions or feedback on our development of an embodied carbon benchmarking and scoring system for labs.

Kind regards.



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