

Labs2Zero Pilot Operational Emissions Score

Labs2Zero is a voluntary program sponsored by the International Institute for Sustainable Laboratories (I2SL) that is dedicated to advancing the decarbonization of laboratories globally. I2SL is developing a variety of tools to score lab building energy and emissions performance, suggest measures to improve that performance, and certify high-performing

facilities. At the heart of Labs2Zero is the **I2SL Laboratory Benchmarking Tool** (LBT), a free tool through which users who input energy use and building data can now access an Operational Emissions Score. The score, which is currently in a pilot phase, accompanies a pilot Energy Score for lab buildings, also available in the LBT.



How the Pilot Operational Emissions Score Works



The score is a 1-100 percentile ranking of a lab building's location-based emissions, which means it is calculated using emissions factors for the building's electric grid and all other energy utilities used at the facility. For example, a score of 75 indicates that the location-based operational emissions performance of that building is better than 75 percent of similar facilities.

In the LBT, users have the option to enter specific emissions factors for central plants that provide buildings with district heating and cooling. The LBT uses default factors if plant-specific factors are unavailable. The Operational Emissions Score, like the Labs2Zero Energy Score, includes correction factors for the functional requirements of the building.

The pilot Operational Emissions Score includes a "clean grid" score, or the building's hypothetical score if it were located on an electricity grid powered with 100 percent renewable energy, to both recognize the importance of clean energy and encourage electrification of lab buildings.

The pilot Operational Emissions Score does not currently take into account market-based purchases of renewable energy certificates, green power, energy attribute certificates, or green tariffs. The LBT includes fields to collect data on other sources of emissions, such as lab processes, refrigerant use, and electric vehicle charging. I2SL encourages LBT users to enter any of this data, where applicable, to help us expand the location-based score and help I2SL add a

market-based emissions score to the Labs2Zero program in the future. Access a free Operational Emissions Score for your lab building today at **lbt.i2sl.org**.

- Operational Emissions Summary

All information is for the selected dataset (year or design phase). The Pilot Operational Emissions Score is a **location-based** score only. Please see the About the Scorecard page for more details. Note: any errors or warnings associated with the Operational Emissions score will appear in the Energy Summary box above.

Location-Based GHG Intensity: 13.5 kgCO2e/sf

Labs2Zero Pilot Operational Emissions Score **❸** : 65

Score If Your Electric Grid Were 100% Clean 6 : 72

Help Improve the Score

Please submit any feedback you have on the Operational Emissions Score to **lbt@i2sl.org**.