



# Labs2Zero Pilot Energy 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 access an Energy Score. The score, which is currently in a pilot phase, accompanies a pilot Operational Emissions Score for lab buildings, also available in the LBT.



## How the Pilot Energy Score Works



Each lab building's energy performance is rated from 1 to 100, where 100 represents the highest performance. The rating is a percentile score, meaning that a building with a Pilot Energy Score of 85 has better energy performance than 85 percent of similar facilities. The score takes into account the functional requirements driving the energy consumption of each lab building to calculate an energy "allowance." The allowance factors are based on an analysis of the LBT's database, and include the amount of net lab space, lab type, hours of occupancy, and weather. The Pilot Energy Score is generated by comparing this allowance with the actual annual energy consumption of the building. The score is calculated separately for each year of data you provide, and it is updated automatically any time you update your data.

## Set Energy Performance Targets for a Lab Building

A new LBT feature allows users to select a target Energy Score value and determine what their corresponding energy use intensity (EUI) levels would need to be to achieve it; by simply entering data into several fields along with a target score, users will receive a target EUI by fuel type in an easy-to-interpret chart for use in procurement or design documents. In this Target Setter tool, users can adjust the expected fuel mix of a planned lab building to reflect decarbonization strategies or other factors.

## Help Improve the Energy Score!

During the pilot phase, I2SL is seeking feedback from LBT users with data on vivaria, manufacturing laboratories, and lab buildings in colder climates (ASHRAE Climate Zone 6 and above) to help I2SL improve the accuracy of the Energy Score. I2SL plans to release the next version of the Labs2Zero Energy Score later in 2024. Access a free Energy Score for your lab building today at [lbt.i2sl.org](https://lbt.i2sl.org). If this is your first time using the LBT, you can access a **Quick-Start Guide** showing what data you need to gather on the LBT website.

**LEARN MORE**  
Labs2Zero's pilot energy scoring system was developed by Lawrence Berkeley National Laboratory in 2023; more details are available on the **LBT FAQ page**.

Please submit any feedback on the Labs2Zero Pilot Energy Score or the LBT to [lbt@i2sl.org](mailto:lbt@i2sl.org).