Labs2Zero

A Roadmap to Decarbonizing Laboratories





Support this significant new program with the International Institute for Sustainable Laboratories.

Get in on the Ground Floor of Transformational Lab Sustainability Program

Whether for developing the COVID-19 vaccine or testing vehicle emissions, laboratories are critical contributors to public health and environmental improvements. With their unique air quality and safety requirements, however, energy-intensive laboratories have an outsized impact on carbon emissions compared to other buildings. Recognizing how vital decarbonization is to reducing climate change and other environmental impacts of the built community, the International Institute for Sustainable Laboratories (I²SL) is launching a major new initiative, the Labs2Zero program.

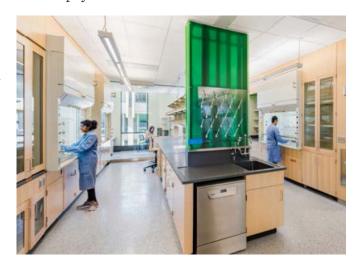
The mission of Labs2Zero is to address the complex nature of safely reducing laboratory energy use and emissions while accelerating the transition of the research community to net zero carbon buildings. As I²SL's most significant initiative to date, Labs2Zero will require significant industry investment and support. A variety of program elements will be developed over the next three to four years, and eventually will collect fees to make this program self-supporting; however, to make this ambitious program a reality, I²SL seeks immediate funding as well as technical input to ensure a balanced and sustainable program suitable for the laboratory community.

2022-2023 Labs2Zero Founding Sponsorship Program

Founding sponsors who choose to support the program at the outset will receive a variety of benefits, which will increase as the program is

Laboratories have higher energy consumption due to their need for tighter environmental controls and increased ventilation, as well as the inability to recirculate laboratory air to other zones due to safety concerns.

developed. Higher-level sponsors will be granted "right of first refusal" to exclusively sponsor program elements and have their organization associated with that aspect of the program, along with related benefits. Furthermore, Gold level sponsors and higher will secure seats on the various councils organized to develop Labs2Zero programmatic aspects. And for sponsors that wish to commit funds at the outset to three or more years of support, I²SL will provide a 20 percent discount, as described below. Payments received in 2022 will automatically apply to 2023 as an annual payment.



Labs2Zero Sponsorship Levels and Benefits

Annual Sponsorship Level Costs	Diamond	Platinum	Gold	Silver
Minimum annual sponsorship level cost	\$50,000	\$30,000	\$15,000	\$7,500
Upfront payment for three-year sponsorship Note this represents a 20 percent annual discount.	\$120,000	\$72,000	\$36,000	\$18,000
Benefits for Sponsoring in 2023				
One voting member on the Governing Council	Χ			
Right to exclusively sponsor one program element	Х			
Logo on all pages of the I ² SL website	Х	X		
Inclusion in program media announcements	X	X		
Right to limited sponsorship of program element(s)	Х	X		
Voting member(s) on Technical Advisory Council(s)	3	2	1	
I ² SL-hosted webinar on the topic of your choice	Х	X	Χ	
Logo on the I ² SL website/Lab Benchmarking Tool	Х	X	X	Χ
Opportunity to add case studies to Labs2Zero tool	Х	X	Χ	X
Mentions in I ² SL communications and social media	Х	X	X	Х
Recognition at the I ² SL Annual Conference	Χ	X	Χ	Χ

For Founding Sponsors who sign up the first year and commit to future years' contributions, they can enjoy the same level and benefits but can contribute 20 percent less in future years.

Future Program Element Sponsorship Benefits and Opportunities

With the help of founding sponsors, I²SL anticipates developing a variety of specific program elements, to which these sponsors can choose to direct their support in future years. Following are the tools slated for development in the next few years and how sponsors can get involved in their development and promotion.

• Energy and Emissions Scorecard for Labs: This tool will provide quantitative, normalized scores based on energy use intensity (EUI), as well as the greenhouse gas emissions associated with EUI, in a

scorecard format featuring sponsor logo(s) comparing a lab to other facilities in the I²SL Laboratory Benchmarking Tool. The scorecard will include limited embodied carbon emissions; over time, more extensive embodied carbon and water use intensity will be added.

• Actionable Insights and Measures
(AIM) Report: Based on user-entered lab
characteristics and performance data, this
tool will automatically generate an extensive
screening report for existing buildings.
This standardized, independent report will
recommend appropriate energy and carbon



reduction measures to achieve approximate energy savings and emissions reductions, plus estimated implementation costs and calculated return on investment, where appropriate. The report will also include case studies from sponsors and information on their technologies and services that are relevant to the recommended energy conservation measures. Funders of this program aspect will be listed as co-sponsors of the AIM report.

• **Design2Zero Tool:** For new lab construction and major renovations, this suite of tools will allow building designers to select a desired energy and emissions score and receive the estimated EUI and greenhouse gas emission targets based on planned design characteristics. The tool will provide suggestions on the best approaches to reduce energy and emissions to help achieve that desired score or rating, factoring in both estimated performance and costs. Sponsors will provide technical inputs to the tool and have their logos on the outputs.

- Decarbonization Certification: To publicly recognize and celebrate those facilities leading the way in energy and emissions reduction, I²SL will develop a certification scheme to verify the labs' performance on the scorecards and validate that baseline lab safety requirements are met. Sponsoring partners will be associated with all aspects of certification.
- Labs2Zero Training and Accreditation
 Program: Individuals will be trained to benchmark lab buildings, act on AIM report recommendations, use the Design2Zero tool, and earn accreditation to verify lab building results as part of the lab decarbonization certification program. Training sponsors will inform the curriculum and be associated with course promotion.
- Laboratory Benchmarking Tool (LBT):

 This existing tool developed by the
 Lawrence Berkeley National Laboratory
 and I²SL is free to use, and with data from
 approximately 1,000 lab buildings, it is
 the world's largest lab building energy
 and emissions benchmarking database.
 I2SL is planning to improve the LBT
 with enhancements such as weather
 normalization. As the foundation for many
 of the other Labs2Zero components, LBT
 sponsorship allows for broad exposure to
 everyone who uses the tool and contact lists
 of users where appropriate.

For organizations wishing to sponsor some the Labs2Zero program in some other more specific way, I²SL would be happy to customize financial and recognition aspects of the contribution. For more information, please contact Gordon Sharp at president@i2sl.org.