

ENTERPRISE RESEARCH CAMPUS

East of the SEC, the Enterprise Research Campus will house lab and office space for technology and life science-focused startups and mature companies, residential buildings, a hotel, a conference center, and an extensive Greenway that will connect the neighborhood towards the Charles River.

The SEAS campus in Allston is part of the regional innovation ecosystem that also includes MIT, Boston University, Tufts, nearby teaching hospitals, and a vibrant cluster of life science and emerging tech companies.

(Bottom) The red dotted line indicates Phases A and B of the ERC development. The future Greenway spans along the orange line/multi-use path. (Top left) Proposed lab building. (Top right) Proposed central plaza. (Illustrations courtesy of Tishman Speyer and Harvard)



SUSTAINABILITY ACHIEVEMENTS

One of the healthiest and most energy-efficient laboratory buildings in the world, Harvard's Science and Engineering Complex was certified by two international sustainable building programs—the International Living Future Institute (Materials, Beauty, and Equity Petals) and the U.S. Green Building Council (LEED Platinum)—and marks a major step toward Harvard's goal to be fossil fuel-free by 2050 and to reduce damage to human and ecosystem health.

Experts in architecture, design, engineering, sustainability, and construction contributed insights into energy, wellness, water management, equity, and beauty. Harvard leveraged the SEC as an opportunity to evaluate more than 6,000 products, and to educate and partner with manufacturers and designers to create a safer global supply chain. More than 1,200 companies disclosed the ingredients in their building products and made this information publicly available. Many manufacturers reformulated their products to remove harmful chemicals.

The façade is engineered to boost energy performance and maximize natural light. A screen of metal shading panels—the first façade element in the world to be fabricated using hydroforming techniques from the aerospace industry—sheaths the upper research spaces. The patterned enclosure shields the interior from solar heat gain during warmer months, while letting sun enter during the winter, reducing cooling and heating loads on the mechanical plant. Rooftop solar panels help further reduce the building's energy impact.

The SEC was built to withstand storm surge flooding and other major climate events. Its water management system was engineered to manage runoff during severe rainfalls and alleviate the impact of stormwater events up to, and including, a 100-year storm. Bioretention basins and swales capture rainwater and direct it into a 78,000-gallon rainwater reuse tank. The building's electrical and mechanical equipment is positioned above expected flood levels to reduce the risks of power outages and other damage caused by high winds or catastrophic events.

Before construction, the land on which the SEC was built was a brownfield, with a 100-plus year history of industrial and manufacturing operations. Harvard removed and properly disposed of over 150,000 tons of soil containing lead, cadmium, petroleum hydrocarbons, and volatile organic compounds.

SCIENCE AND ENGINEERING COMPLEX

SELF-GUIDED TOUR

Home to the Harvard John A. Paulson School of Engineering and Applied Sciences (SEAS), the 544,000 square foot building was designed by Behnisch Architekten to foster world-class, interdisciplinary research, learning, and innovation.

SEAS has campuses in Allston and Cambridge. The Allston campus houses faculty in Bioengineering, Computer Science, Robotics, Data Science, and Computational Science and Engineering, along with most SEAS administrative offices. Faculty from Electrical Engineering and Materials Science/Mechanical Engineering are split between locations in Cambridge and Allston. Applied Physics and Applied Mathematics are based in Cambridge.

