

BUILD A HOME FOR ENERGY INNOVATION

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The answer to the climate crisis is simple: society must dramatically reduce



EFFICIENCY
WORLD'S
FOR BEATING
CHANGE.

re its greenhouse gas emissions. The more complicated question is how.




The Institute for Energy Efficiency at UCSB is the world's premier center for applied energy-efficiency research.


It starts with being smarter about how we use energy.


Energy efficiency—using less energy and doing more with it—is the most practical, achievable, and affordable solution for addressing climate change. Renewable energy sources hold much promise, but their wide adoption, and their ability to provide the amount of energy the world needs, are still many years from realization. Energy efficiency is an approach we can use today for cutting emissions, reducing our consumption of fossil fuels, and getting the most from alternative forms of energy as they emerge—all without compromising economic growth or quality of life.

Home to world leaders in LED development.

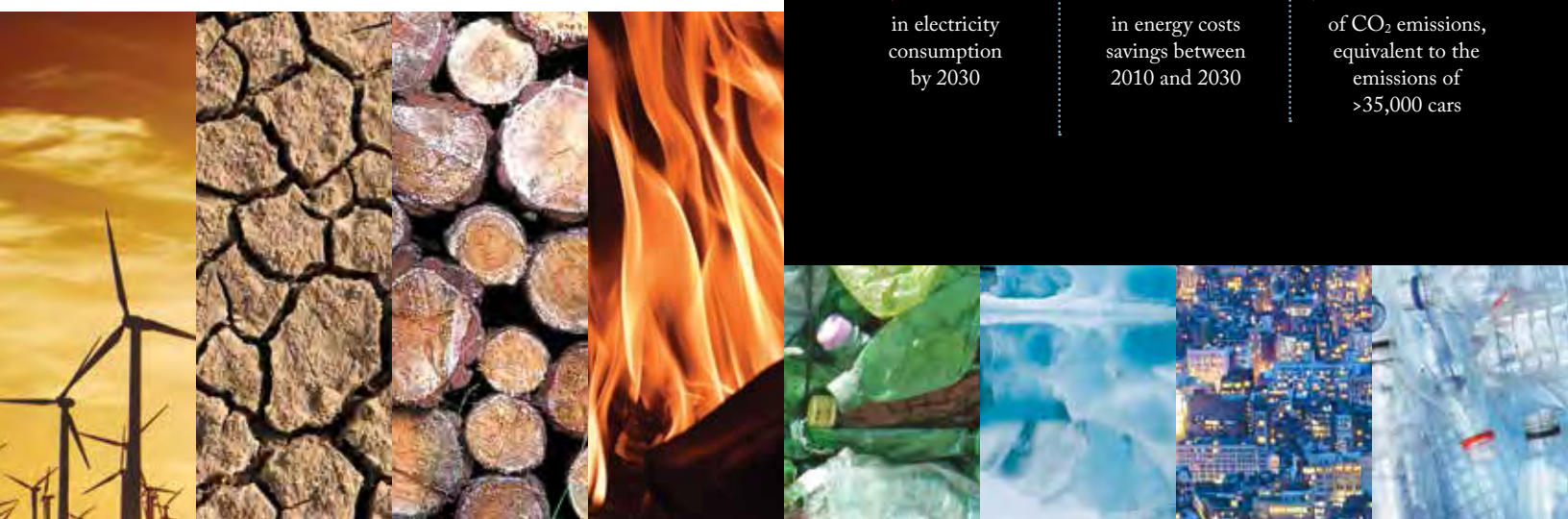
Lighting consumes 22 percent of electricity annually in the U.S. Breakthroughs by Institute researchers have enabled the commercialization of LEDs, a dramatically more efficient light source. Growing adoption of LEDs is expected to result in:

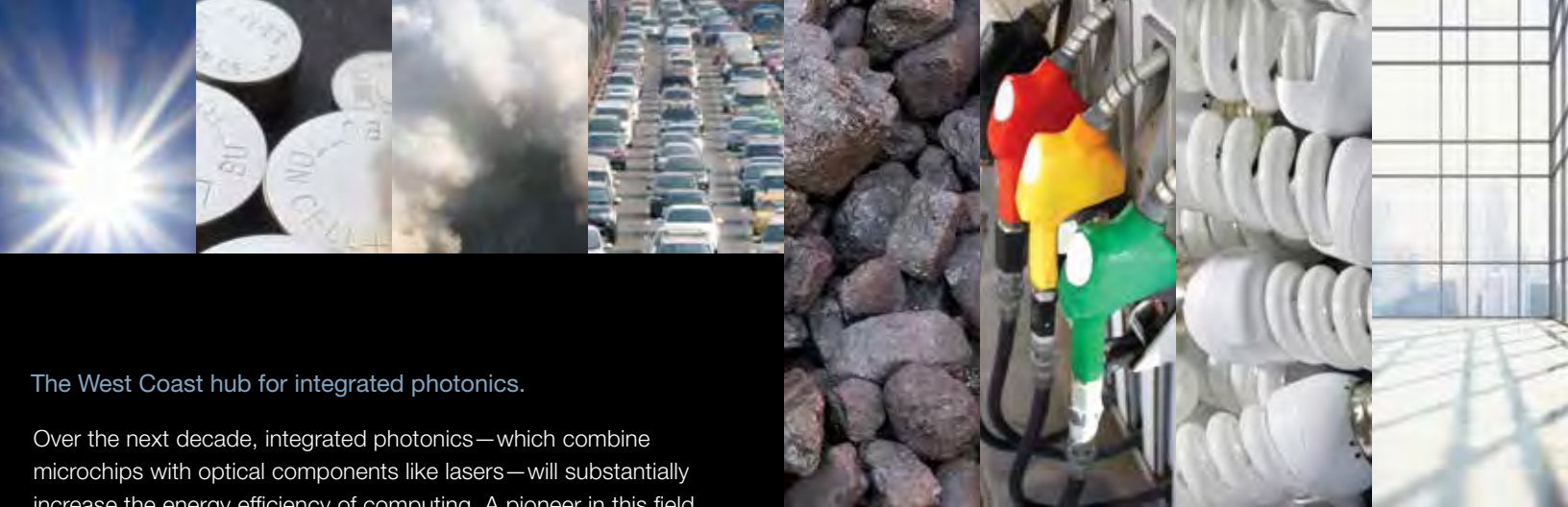
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↓ 46%
in electricity
consumption
by 2030
- 

+ \$250B
in energy costs
savings between
2010 and 2030
- 

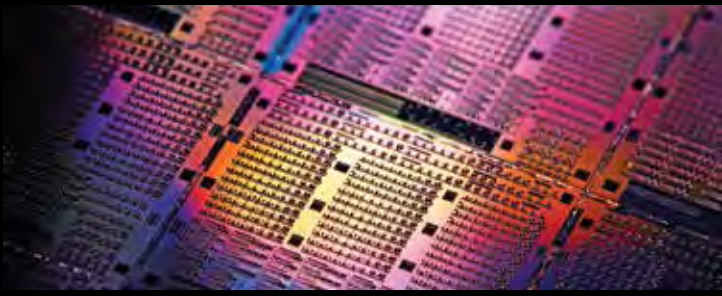
↓ 185M tons
of CO₂ emissions,
equivalent to the
emissions of
>35,000 cars





The West Coast hub for integrated photonics.

Over the next decade, integrated photonics—which combine microchips with optical components like lasers—will substantially increase the energy efficiency of computing. A pioneer in this field, the Institute is leading the invention of new technology as the official lead institution on the West Coast for the American Institute for Manufacturing Integrated Photonics, a major federal consortium of industry, government and universities created to increase both research and domestic manufacturing in this promising field.



Not just groundbreaking, Nobel Prize groundbreaking.

UCSB is second in the nation in the number of science and engineering researchers who have earned the Nobel Prize. We are proud that three of these leading thinkers are members of the Institute.



ALAN HEEGER
Conducting Polymers



SHUJI NAKAMURA
LED Lighting



HERBERT KROEMER
Semiconductors

A bold goal, within reach.

The Institute is committed to increasing energy efficiency in all of its research areas by 50 percent by 2025. That means a world where lighting is 50 percent more efficient. Where data centers use 50 percent less power. Where solar panels are more affordable. And more. This is essential work that will contribute significantly toward reducing global carbon emissions.

Our trailblazing faculty are inventing real solutions for the race against climate change by transforming how the world generates, stores, and uses energy. They are dramatically increasing the efficiency of lighting, computing, solar panels, batteries, building design, and much more. Their breakthroughs regularly become widely available products and technology used to reduce energy consumption among consumers and companies worldwide. The Institute's vision? To be a world-renowned leader in developing breakthrough technologies that substantially save energy while advancing the standard of living worldwide.

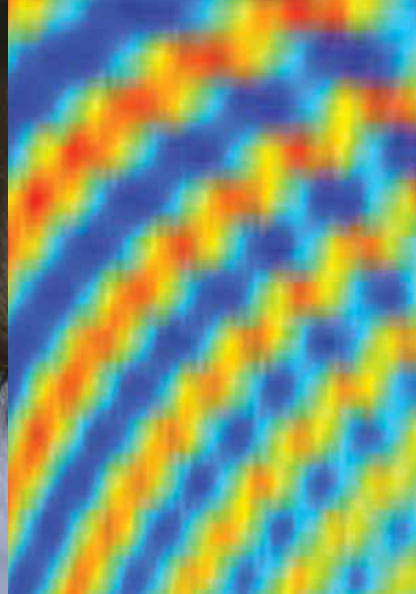
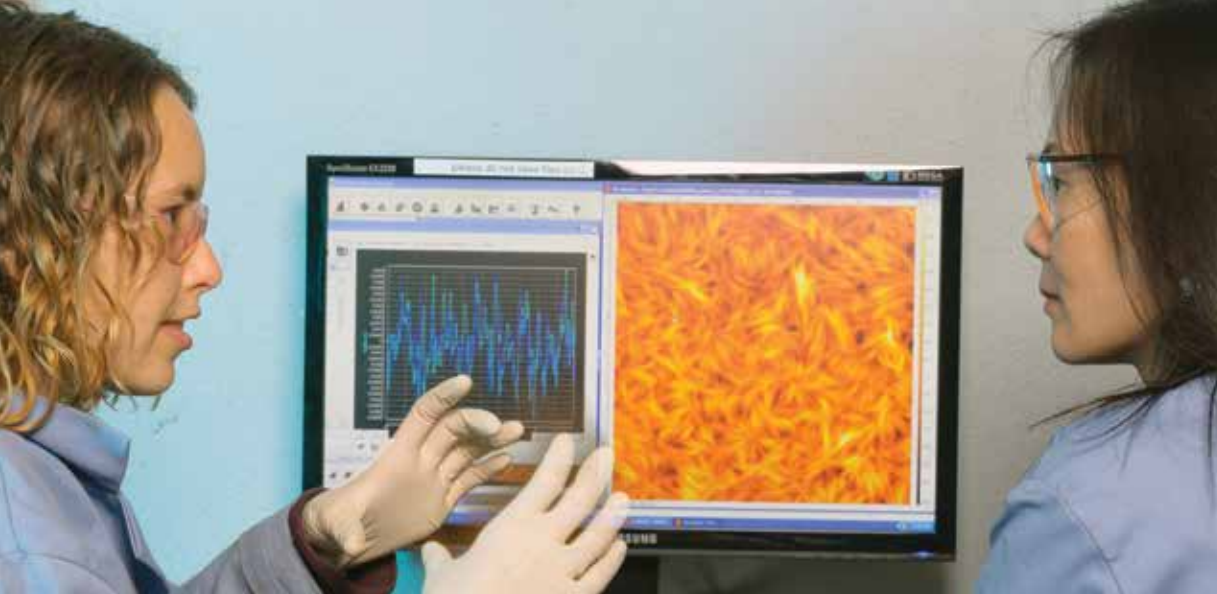


Today, Institutions
and students
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Imagine putting
innovation under

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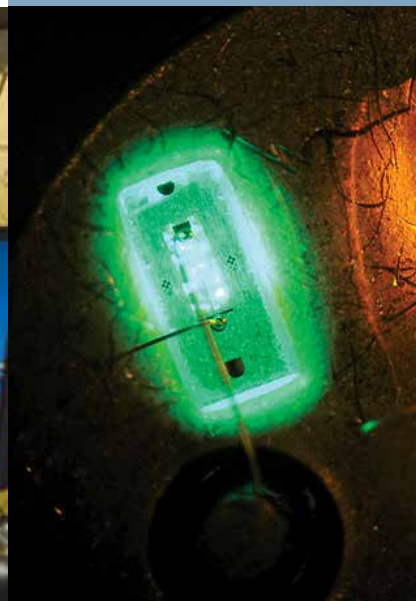
A catalyst for the UCSB community.

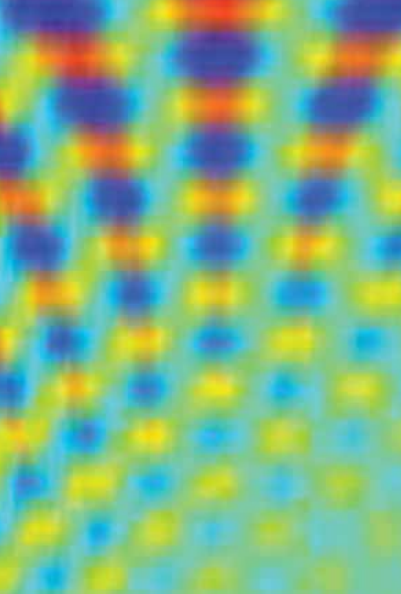
On a campus known for leadership in sustainability, the Institute draws strength from the rest of UCSB—and vice versa. Institute faculty and students collaborate with resident thought leaders in energy-related sciences, engineering, environmental science, sustainability, economics, and policy. The Bren School of Environmental Science and Management, a partner of the Institute, offers one of the leading environmental science graduate programs in the U.S., and the Princeton Review named UCSB as the number one public university in its annual ranking of green colleges. By drawing together faculty and students of diverse disciplines and interests, the Institute is bridging people and departments in a new way that makes our whole campus stronger, more productive, and more widely known for excellence.

Help build a home for the Institute. Help build solutions against climate change. By investing in the Institute for Energy Efficiency, you can accelerate critical innovation and make a real, measurable difference in the global fight against climate change. We have made substantial progress in our effort to fund Henley Hall. Your contribution will help us complete this important work. Naming opportunities for laboratory spaces and lecture halls are available. There are also opportunities to support research, graduate student recruitment, the Institute's operation, and more.

The Institute and business.

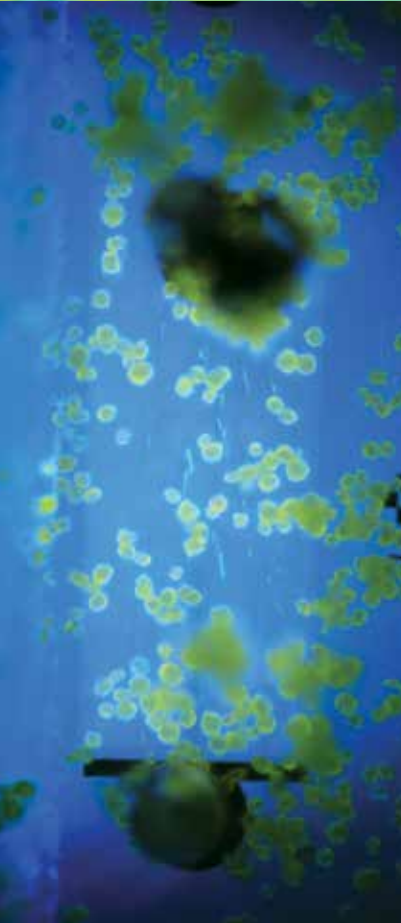
Corporate donors are important investors in the Institute for Energy Efficiency. Your company's support of Henley Hall will promote innovation in leading-edge materials and technologies that your business may be able to leverage in the future. Institute faculty have a record of success in bringing research to industry and turning those breakthroughs into widely adopted solutions. Overall, UCSB's substantial U.S. patent portfolio includes more than 100+ energy-related technologies available for licensing. We welcome an opportunity to discuss your company's sponsorship or other collaboration.





Leading the UC system.

In November 2013, University of California President Janet Napolitano announced the **Carbon Neutrality Initiative**, which aims to achieve zero net emissions at all 10 campuses in the UC system by 2025. Energy efficiency is a key component of the initiative, and the Institute is centrally positioned to help accomplish this ambitious goal. Institute Executive Director David Auston is a key figure in coordinating the work of the UC campuses and helping to advance UCSB's role in this initiative. He was recently recognized for this work as the recipient of the first UC Sustainability Champion Award.



A young man with dark hair, wearing a light blue lab coat, is shown in profile, focused on adjusting a complex piece of scientific equipment. The equipment is filled with numerous blue, black, and red wires, metal pipes, and various mechanical components. A small label on one of the metal parts reads "coil 1 Yb". The background is slightly blurred, showing more of the laboratory environment.

**A LOW-CARBON
FUTURE STARTS
HERE.**

**HELP FUND
HENLEY HALL.**



To learn more about the Institute for Energy Efficiency, please contact:

John Bowers

**DIRECTOR OF
THE INSTITUTE FOR ENERGY EFFICIENCY**

bowers@ece.ucsb.edu

805.893.8447

To talk more about your philanthropic investment, please contact:

Nicole Klanfer

**SENIOR DIRECTOR OF
PRINCIPAL AND LEADERSHIP GIFTS**

nicole.klanfer@ucsb.edu

805.893.7680

[www.
iee.ucsb.edu](http://www.iee.ucsb.edu)



The Institute for Energy Efficiency
2314 Phelps Hall
University of California
Santa Barbara, CA 93106-5160

805.893.4191

iee.ucsb.edu