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Read on for more on our Cal Energy Corps students' summer internships, a deeper dive into this fall's BECC Conference, and more.

upcoming EVENTS

November 17th-20th BECC Conference

in the **NEWS**

The Animals That Will Survive Climate Change

The Cows That Could Help Fight Climate Change

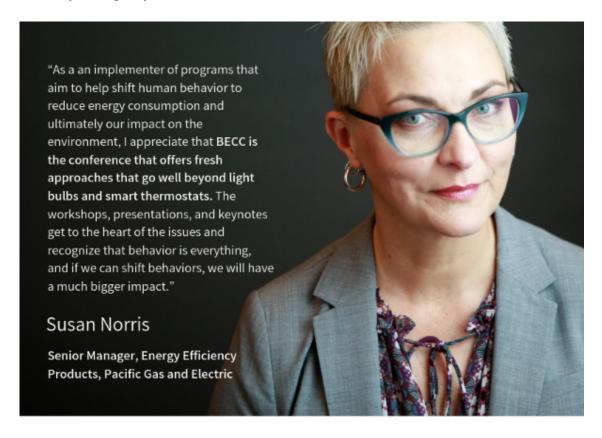




2019 BECC Conference: Scaling Up

In just four more months, the BECC conference will kick off at the Hyatt Regency in Sacramento. Come join CIEE, the American Council for an Energy-Efficient Economy (ACEEE), and the Stanford Environmental and Energy Policy Analysis Center for an unforgettable three days of education, networking, and coming together to help push back against the climate problems facing the globe.

For those who aren't familiar, the Behavior, Energy & Climate Change (BECC) Conference is the premier conference that brings together researchers, policymakers, utilities, and businesses focused on energy and behavior to advance knowledge and actionable climate solutions. This year's conference will be held from November 17th-20th, at the Hyatt Regency in Sacramento, California.



The theme of this year's conference is "Scaling Up". With many ecosystems at the brink of collapse, the need to mitigate climate change is more urgent than ever. BECC has been at the forefront of supporting behavioral research to address climate and energy issues for more than a decade. Now is the time to take these established principles and practices and scale them up. Scaling up means looking at the big picture, adapting small

interventions for broad application, working with others, addressing policy, and generally taking climate action to the next level. In 2019, through regular and special sessions, we plan to showcase research, programs, organizations and people that help move toward a sustainable energy and climate future.

This year's keynote speaker is Phil Sharp, a fellow with the Center on Global Energy Policy at Columbia University's School of International and Public Affairs. Dr. Sharp, who served as President of Resources for the Future from 2005 until 2016, has a distinguished record across energy and environmental research and policy. During a 20-year congressional tenure as a member of the U.S. House of Representatives from Indiana, Dr. Sharp took key leadership roles in the development of landmark energy legislation including the Energy Policy Act of 1992 and the Clean Air Act Amendments of 1990. After leaving Congress, Dr. Sharp was a member of the National Research Council's Committee on Effectiveness and Impact of Corporate Average Fuel Economy (CAFE) Standards and he chaired the Secretary of Energy's Electric Systems Reliability Task Force.

If you'd like to join us this October, it's still not too late to register!



around CAMPUS

CITRIS Foundry Alum Receives \$1.7 Million

WattTime, a company formed in our very own CITRIS Foundry, has received \$1.7 million dollars from Google's philanthropic arm to support their mission to harness the powers of space technology and machine learning to track emissions from large power plants across the globe.

Based out of Oakland, WattTime and its partners are using satellite images to capture visible plumes emitted by power plants. From there, the images, combined with other data inputs, will rely on artificial intelligence to create an accurate read of the amount of carbon emissions being made by power plants. That information will then be consolidated, and made publicly available. "The main thing we're trying to focus on for the project is what is currently leading to a rise in emissions and how can we get that data into the right hands of stakeholders and citizens," said Chiel Borenstein, director of operations of WattTime.

You can read a full article on WattTime and their award, published in the San Francisco Chronicle, <u>here</u>.

monthly SPOTLIGHT



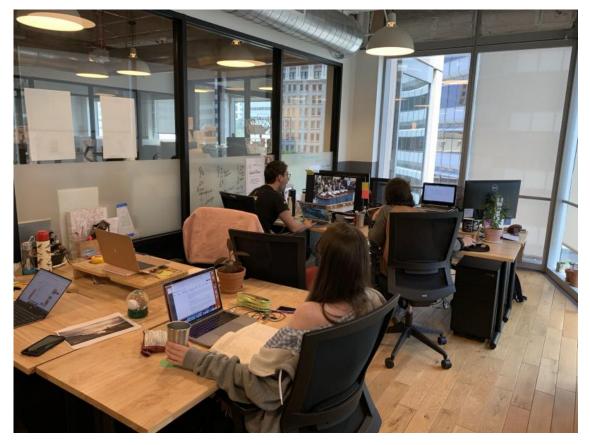
Just as soon as it's began, we are at the end of another great year of the Cal Energy Corps summer internship program. It's been an incredible experience following this group of students throughout their respective summers. The Cal Energy Corps program, cosponsored by CIEE and CITRIS, places a cohort of high achieving UC Berkeley undergraduate students in summer internships, to perform research and work focusing on sustainable development and climate solutions. For this month's spotlight, let's take a look at some of the work done over the summer by two of this year's interns, and learn a bit

from their findings.

Emily Turkel, a junior majoring in Conservation and Resource Studies and minoring in Public Policy, spent her summer working with Carbon180, a carbon sequestration NGO in Oakland. She's spent her internship performing analysis on agricultural soil (and tree) carbon sequestration in the marketplace-- specifically, on the kinds of actions agricultural groups undertook as part of the now-defunct Chicago Climate Exchange. As explained by Emily in her Cal Energy Corps blog entry:

"The Chicago Climate Exchange (CCX) was an incredible (now defunct) scheme developed by the economist Richard Sandor. The main idea was to have companies take part in a voluntary carbon market -- firms would agree to take part in a cap and trade system with CFI (carbon financial instrument) contracts. In essence, firms were agreeing to only emit as much carbon as the CCX allowed them to based on how much carbon the firm typically emitted annually. Each year the system was in place, the CCX would allot 1% fewer CFIs to each firm, forcing them to cut down on emissions and move toward a carbon-neutral economy. Some firms, however, were unable to cut down their emissions; This is where offsets come into play. In addition to the firms that directly generate and emit greenhouse gases (members), the CCX also included offset providers and aggregators (participant members). Participant members ran projects that removed carbon dioxide from the air and stored the carbon. These projects were given CFIs to sell to firms looking to continue emitting more carbon than they were permitted."

Through focusing on the activities of these participants in the CCX, Emily hopes to show what they can teach us about agricultural offsets in current and future carbon markets. Eight weeks later into the internship, there were some fascinating takeaways regarding how difficult it can be to quantify costs farmers incur in order to participate in offset programs, as well as how to balance those against potential revenues.



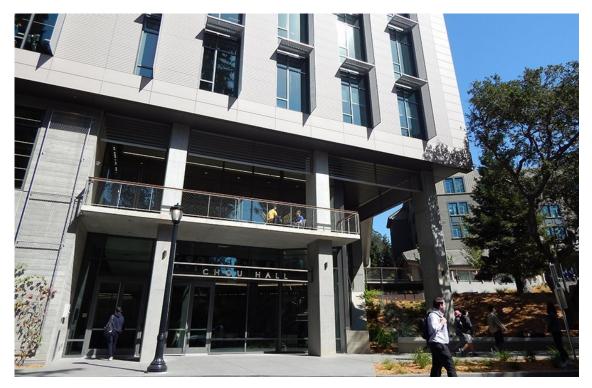
At Carbon180, Emily, Rory (Senior Policy Advisor), and Dvorit (Director of the Carbontech Labs accelerator program) watch Erin's (Director of Policy) testimony to the House Science Committee on implementing the first-ever dedicated carbon removal program and updates to the Department of Energy's carbon capture R&D work.

Meanwhile, across town at Integral Group's Oakland office, Johnathan Santoso, a major in Chemical Engineering who focuses his research on energy and sustainability, spent his summer returning right back where he came from: UC Berkeley's campus. Integral Group is an engineering and design firm that's internationally renown for its cutting edge work in sustainability and energy efficiency in architecture. On the job, his first project had Johnathan submitting a proposal to nominate Chou Hall, a building created by Integral Group up to the highest sustainability standards, for the Building Health Leadership award, awarded by the U.S. Green Building Council in partnership with the University of Washington. But, what makes Chou Hall special? Summarized neatly by Johnathan:

"Chou Hall is the newest building for the Haas School of Business at Cal and has been dubbed as the country's greenest academic building after earning their <u>TRUE Zero Waste certification</u> as well as <u>LEED Platinum certification</u>. Recently, Chou Hall has also obtained WELL Silver certification and thus has earned the <u>trifecta of green building credentials</u>.

The commitment of the community to divert landfills, particularly presented by Chou Hall Zero Waste Initiative led by <u>Danner Doud-Martin</u>, results in obtaining the only <u>TRUE</u> <u>Zero Waste certification ever given to an academic building</u>. On the other hand, LEED is an abbreviation for Leadership in Energy and Environmental Design and is the most widely

used green building credentials that focuses on areas such as indoor air quality, land use, energy and atmosphere. Unlike TRUE Zero Waste or LEED, WELL standard provides performance requirements for buildings that focuses on the well being of the building occupants by focusing in areas such as air, water, and comfort proven through performance verification during site visits. These certifications also prove as a testament to one of Haas' core values: student-focused."



Chou Hall, on the Haas School of Business campus, is the first academic building to receive TRUE Zero Waste certification.

Johnathan's proposal ended up being right-on, as Integral Group was indeed awarded the Building Health Leadership award, with Johnathan himself accepting the award at the GreenerBuilder convention in San Francisco.

This is just a brief look into the depth of experiences our Cal Energy Corps students have had over the summer. Next month, they'll reconvene for a final poster reception, where they'll get the chance to share their work with each other, each other's mentors, and loved ones to share in their success.

As this year's Cal Energy Corps program starts to wind down, we're looking onward to next year: the tenth anniversary of the Cal Energy Corps program. For such a huge anniversary, we want to go all-out in making it one of the best programs we've had yet, and to do so we could use your support. If you're able to, please consider donating, so that we can keep supporting incredible undergraduate research in our tenth year.







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