Welcome to the inaugural issue of the California Institute for Energy and Environment's monthly newsletter, the CIEE Sentinel! In this month's issue, we look back on the Cal 150th Anniversary celebration, explore how data technology can alleviate climate impact for low-income communities, and review the BERC Energy Summit.

**upcoming EVENTS**

- **April 23**
  - CGI U Application Deadline

- **April 25**
  - BERCShop: The Future of Transportation

**in the NEWS**

- Biofuels Can Help Solve Climate Change, Especially With a Carbon Tax

- Augmented-Reality Mural in Miami Warns of Climate-Change Danger
A Message from Berkeley's Vice Chancellor of Research

I have directed the Berkeley Energy and Climate Institute (BECI) and the California Institute for Energy and Environment (CIEE) to consolidate their operations. This will increase efficiency and may open some new opportunities. The BECI staff and externally funded research projects will move to CIEE. CIEE has had a long and distinguished history of research leadership and coordination, both on the campus and throughout the University of California. Founded by Art Rosenfeld in 1989, the California Institute for Energy and Environment has received 470 research awards and managed nearly 1,000 subawards at more than 160 universities, national labs, and research centers over its near-30 years of operation. CIEE has an incredibly capable team of researchers and administrators, and have my confidence and my full support in continuing their important work.

Randy Howard Katz
Vice Chancellor for Research

Susanna Berkouwer Receives Art Rosenfeld Award

Congratulations to Susanna Berkouwer for winning this year's Art Rosenfeld Award for Energy Efficiency!

The Rosenfeld Award aims to promote innovative research in technologies and policies that will enable a more resource efficient society, and is awarded annually to one graduate student who is committed to pursuing both educational and career paths in that field.

Susanna Berkouwer, currently a PhD candidate at the Agricultural and Resource Economics department, brings a background of International and Development Economics to bear on developing strategies on how to encourage the widespread adoption of energy efficient technologies worldwide, with an understanding for how energy issues manifest in settings with, for example, poor government capacity, poorly functioning credit markets for both households and firms, and for households making adoption decisions while facing the cognitive pressure of living in constant poverty.

With the resources from the award, Susanna plans to travel to Nairobi, Kenya and Kampala, Uganda to engage with local partners and implement research projects seeking to understand and improve the development and deployment of energy efficient technologies in East Africa.

We wish Susanna the best of luck on her research project, and are glad to support efforts in keeping Art Rosenfeld's pioneering spirit alive in the field of energy efficiency.
On March 23rd, UC Berkeley celebrated its Charter Day; commemorating the birth of the University of California when two colleges merged: the private College of California in Oakland, and a new state land-grant institution, the Agricultural, Mining and Mechanical Arts College. 150 years later, UC Berkeley celebrated this milestone with a ceremony dedicated to 150 years of Berkeley life. The event, hosted at Haas Pavilion, featured an address by Chancellor Carol T. Christ, as well as a procession of alumni carrying class banners, dating all the way back to the founding of the university.

From all of us at CIEE, congratulations on a strong 150 years, Berkeley. Go Bears!
Climate Video Series:
How Data Technology can Alleviate Climate Impact for Low-Income Communities

The term “big data” is often tossed around to describe the mechanics of user behavior analytics that guide advertisements, websites, and the like. People use data technology to analyze financial markets, improve medical practices, and enhance scientific research. But how are people harnessing such data technology to better the environment?

Soloman Hsiang, an Associate Professor of Public Policy at UC Berkeley, studies just this. His work is interdisciplinary in nature: it compares economic development with global climate, focusing on how policies can improve both. Using mathematical models, Professor Hsiang collects historical data on global temperatures, economic productivity, and wages to better predict future implications of global warming.

Professor Hsiang recently gave a talk on his work and the optimism he holds for a sustainable, climate-healthy future. In his uplifting view, he believes that “for the first time in human history, we are able to exploit data, analytics and computing to see forward and what lies ahead with clear eyes.” Be sure to watch his talk below!
BERCShop: The Future of Transportation

BERC in partnership with the Energy Institute at Haas will be hosting a panel on the future of transportation on April 25th, at Chou Hall, Room N500.

The transportation industry is vastly changing, but there is still an uncertainty of what the future will hold. Will autonomous vehicles eventually be legalized? Will EVs take over the auto industry? And importantly, how will these changes affect our planet's climate and resources? To that end, three panelists—Justin Erlich, Head of Policy, Autonomous Vehicles & Urban Aviation at Uber; David Schlosberg, Vice President, Energy Market Operations of eMotorWerks Inc.; and Sahar Shirazi, Senior Planning Advisor of the Governor's Office of Planning and Research—will be discussing what the future of transportation might look like.

The event is free and open to the public, and you can register here.

Clinton Global Initiative University Applications Closing Soon

Annually, Bill and Chelsea Clinton host the annual Clinton Global Initiative University conference to challenge young leaders and entrepreneurs to become agents of positive social change. The CGI U meeting is a three-day event which gathers over 1,000 Commitment-makers from around the world, as well as policy makers, topic experts, philanthropists, and leaders from the public, private, and NGO sectors.

This year, CGI U 2018 will take place at the University of Chicago from October 19-21st. The Blum Center for Developing Economies will be serving as the hub for student participation at CGI U 2018 and we would like to encourage students to apply to participate!

Applications close on the 23rd, and for more information, including on how to apply, you can visit their website.
Looking Back at the BERC Energy Summit

This month, we would like to take some time to reflect on the collaboration and connections fostered at the Berkeley Energy and Resource Collaborative’s (BERC) 12th annual Energy Summit. Over the course of two days—Thursday February 22 through Friday February 23—the event gathered around 600 students, professionals, academics, and policy makers together to discuss current and future energy prospects.

Thursday night’s research exhibition brought together undergraduate and graduate researchers to share their projects and enter into an innovation exposition prize contest. Hors d'oeuvres were served as people looked at various project posters, analyzing anything from utility solar sites in Puerto Rico to creating valuable chemicals from carbon dioxide. Researchers had the opportunity to present their research to peers, faculty, alumni, and other Berkeley affiliates, creating an interactive and engaging discussion.

Friday’s events included a keynote address by Christine Harada (former Federal Chief Sustainability Officer), various speaker panels, and networking sessions. Speaker panels explored everything from the impact of green energy grid systems on low income communities, to lucrative funding avenues for future energy innovations.

At one panel on the U.S. national security, professionals from an array of disciplines discussed the implications of current energy trends on the future of national security. Particularly, they assessed the national-level push toward energy independence. With global markets creating an intricate network of nations trading oil, gas, and renewables, the geopolitics of energy resources greatly impacts foreign policies on a whole. In a thoughtful discussion, experts explored how a shift towards renewable energy influences security, along with other scenarios.

The BERC Energy Summit is the largest student-run energy conference on the west coast, and continues to prove its importance in developing an interactive dialogue for tomorrow’s
leaders in the energy industry. We congratulate BERC on their successful conference and look forward to more in future years.