

## Energy Research Symposium

### i<sup>4</sup>Energy and Berkeley Energy and Climate Institute

**When:** Tuesday, September 17, 2013, 8:00am-4:00pm

**Where:** Sutardja Dai Hall Auditorium, UC Berkeley campus

**Registration is FREE –**

<https://www.eventbrite.com/event/8019507563>

The **i<sup>4</sup>Energy** is a nexus, bringing multi-disciplinary minds together to create information technology advances for our multi-layered energy challenges. **i<sup>4</sup>Energy** is a collaboration among **CITRIS** (U.C. Berkeley, Davis, Merced, and Santa Cruz); the California Institute for Energy and Environment (**CIEE**); and the Lawrence Berkeley National Laboratory (**LBNL**). The research collaboration is focused on creating an integrated information infrastructure that will transform our energy grid into a cooperative, “aware” energy network that is both efficient and able to use sustainable energy resources.

The **Berkeley Energy and Climate Institute (BECI)** provides a coordinating hub for all of Berkeley's energy and climate efforts to ensure the integration of science, engineering, social science, market, and policy research. Specific programs launched in 2011 include the **Cal Energy Corps**, a program created to engage UC Berkeley students in the design, development and delivery of sustainable energy and climate solutions around the world, the **Innovation Seed Fund**, a fund that supports multi-disciplinary research by UC Berkeley faculty as well as the **Berkeley Energy and Climate Lectures**.

The Symposium will present on-going energy research at the **i<sup>4</sup>Energy**

and the **Berkeley Climate Change Institute**. Sponsors of the research include the CEC, DOE, NSF, and private industry.

**Preliminary Agenda:**

- 8:00 am            **Registration and continental breakfast**
- 8:30 am            **Introduction of the Symposium** (Therese Peffer, CIEE)
- 8:40 am            Morning presentations:  
**Berkeley Energy and Climate Institute** (Paul Wright, BECI)  
**Center for Research in Energy Systems Transformation – CREST** (Patrick Scaglia, CREST)  
**Korean Micro Energy Grid (K-MEG)**  
**Collaboration for Energy Efficiency** (Therese Peffer, CIEE)  
**Natural Gas Pipeline Sensors** (Igor Paprotny, UI Chicago/UC Berkeley)  
**Sensor-Based Cables for Underground Reliability of Electricity Infrastructures** (Igor Paprotny, UI Chicago/UC Berkeley)
- 10:30 am          **Enabling Technologies Development for Demand Response** (Paul Wright and UC Berkeley Graduate Student Researchers)  
**Integrated low power radios and microcontrollers**  
                         **MEMS sensors**  
                         **MEMS energy scavenging**  
                         **Printable energy storage devices**
- 12:00 pm          **Lunch** (not provided)  
**Poster session**
- 1:30 pm            Afternoon presentations  
**Impact of PV and Storage in Distribution Systems** (Michael Cohen, UC Berkeley)  
**Distribution Monitoring for Renewables Integration** (Lloyd Cibulka, CIEE)  
**Micro-Synchrophasors for Distribution Systems** (Sascha Von Meier, CIEE)

**Demand-to-Grid Lab and Smart Appliances** (Chuck McParland, LBNL)

**Vehicle-to-Grid Project at Los Angeles AFB** (Jason MacDonald, LBNL)

**Changing the Rules of Personal Comfort** (Ed Arens, CBE/UC Berkeley)

**Building Operating Systems Services – BOSS** (Andrew Krioukov, UC Berkeley)

4:00 pm

**Adjourn**

**Symposium Registration**

**(FREE):** <https://www.eventbrite.com/event/8019507563>

**Directions and Parking Information:** <http://citris-uc.org/contact/visitors>

**For symposium logistics questions, please contact:** Lorie Mariano: [lorie@citris-uc.org](mailto:lorie@citris-uc.org)

**For symposium content questions, please contact:** Therese Peffer: [therese.peffer@uc-ciee.org](mailto:therese.peffer@uc-ciee.org)