

Colorado
State
University



REcharge ⚡ Labs®



**RECHARGE
ACADEMY**

**FORT COLLINS, CO
JULY 17-21, 2017**

About this REcharge Academy

This Academy will cover both wind and solar concepts. We will focus a little more heavily on wind energy, as a great deal of our sponsors, and Colorado energy producers, are in the wind energy industry. We will be partnering with the Colorado Wind for Schools program and the Powerhouse Energy Institute at CSU. The institute is a nucleus of research, education, and outreach about energy for the faculty, staff, and students of Colorado State University. The Powerhouse is an incredible resource for research and knowledge exchange, and we are excited to share this unique environment by hosting guest lectures from local experts, going on a tour, and more!

This program will appeal to elementary, middle, and high school teachers, as well as Maker/Tinkerer/Fablab educators interested in exploring and learning more about renewable energy (wind and solar power), basic circuits (Circuit Blocks), and modelling (stop motion animation).

About renewable energy

Renewable energy is gaining traction as a viable option in the United States. Yet many holes still remain in the public understanding of energy in general and how these emerging energy sources will impact our future and mitigate climate change. We need to build informed public understanding of energy and the impact it has on the planet and society. REcharge Labs works directly with educators because we know that when educators have the tools and knowledge to affect student understanding, the impact extends into the larger community.

Our REcharge Academy is a unique opportunity for educators to develop a robust understanding of wind and solar power. Attendees learn how to integrate engaging educational materials to teach about renewable energy into their classrooms.

About the Maker Movement

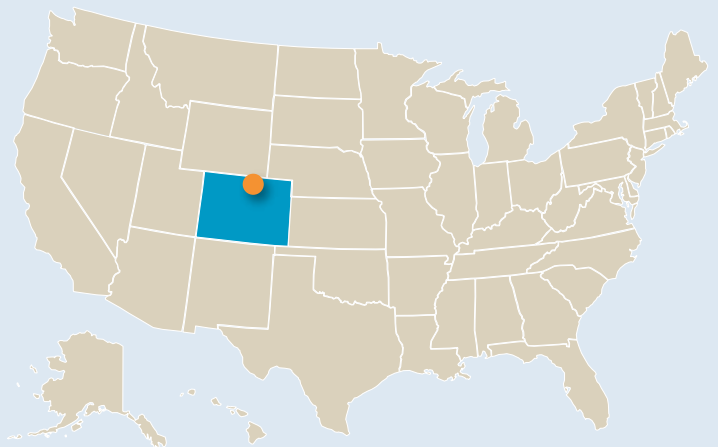
Maybe you've seen the term "Make" before, but what does it mean? Within the Maker Movement, Making, also sometimes called tinkering and hacking, is the open-ended exploration of materials and tools in order to design physical or digital things. Making is driven by inquiry-based learning, design thinking, and the constructivist approach. The Maker Movement has its roots in Maker Magazine, which launched in 2005, and the first Maker Faire in 2006. Today, the Maker Movement has become incredibly influential in educational spaces and beyond. MakerSpaces have been designated in schools, libraries, and museums worldwide, while DIY communities, startup companies, and formal and informal educators have also incorporated Maker approaches in their own environments.

2017 REcharge Academy location

Fort Collins, CO: July 17-21, 2017

Powerhouse Energy Institute
Colorado State University
430 N College Ave
Fort Collins, CO 80524

REcharge Labs will host this REcharge Academy in partnership with the Powerhouse Energy Institute at Colorado State University.



Why combine Making with renewable energy?

There are no easy answers to our most pressing social, political, and environmental issues about climate change. In order to teach, learn, and make a difference in our energy usage and carbon footprint, multiple learning approaches are required to comprehend as well as investigate possible solutions. Here at REcharge Labs, we believe that making and tinkering are essential skills for understanding, improving, and reshaping the designed world we live in. By engaging the curiosity, interests, and needs of students and teachers, we encourage thoughtful learning experiences and prompt more informed decision makers, active doers, and creative problem solvers.

What to expect

This REcharge Academy offers the most comprehensive professional development for K-12 educators to explore renewable energy with creative problem solving. Attendees will do the same hands-on activities that their students will use, and will following critical thinking processes to understand challenges that students may face. The two main goals of the annual REcharge Academy are to help teachers integrate renewable energy subjects in their classrooms and to increase local understanding of the social, technical, and scientific issues facing the modern energy industry.

We do this at a REcharge Academy by:

- Helping educators understand the sources and forms of energy, how the world generates and consumes it, and complex issues surrounding renewable energy sources.
- Offering a variety of activities that make it interesting and engaging for students to explore these issues.
- Preparing educators to act as local hubs of information for their individual communities.

During the week-long Academy, participants delve into concepts of electricity, generators, energy usage, efficiency, wind and solar power development, and the real-world applications of these clean energies. They will engage in this through:

- Hands-on instruction
- Experiments and evaluations
- Lectures
- Field trips and tours
- Meetings with industry experts and speakers



Application details

Tuition

The cost for teachers to attend the 2017 REcharge Academy are broken down according to accomodation type:

- Single Room: \$1600
- Shared double room: \$1450
- Communter (you don't need a place to stay or meals): \$1100

Tuition fees include the following:

- Lodging in dorms from Sunday July 16 - Saturday July 22
- Food from Sunday Dinner 16 to Saturday Breakfast July 22
- \$200 in gear
- Tuition for the course

Scholarships are are available (see below). Tuition does not cover travel to and from the training location. Please check the event webpage for updates and more details on what else will be included with the tuition.

Apply

You may apply to attend a REcharge Academy once registration has opened. Please check the event page for these details.

Credit

We are currently able to offer a certificate verifying 40 hours of contact time. We are also working on options for teachers to get credit hours.

Scholarships

Scholarships will be posted on the event page as they are announced. We are constantly seeking funding opportunities in order to provide scholarships. Scholarship decisions are made on a rolling basis and we get new scholarships all the time. You may apply to receive a scholarship even if none are available at the time you apply. We cannot promise that we will be able to fund you, but we will try our best!

