



Colorado Renewable Energy: Leading by Example

June 8th -10th, 2007
Steamboat Grand Resort Hotel
Steamboat Springs, Colorado

Hosted by the Colorado Renewable Energy Society

Friday, June 8th, 2007

Registration 7:30 am - 1:30 pm & 4:00 pm - 6:00 pm

Pre-Conference Workshops

Morning 8:30 am - 12:30 pm (Half Day)

Workshop 1 - Energy Analysis with eQuest, Aleka Pappas - Intro to building energy simulation consisting of an introduction to eQuest 3.6. Attendees will be taken through the schematic design wizard, required inputs, accurate modeling of the building envelope and HVAC systems, and general energy modeling theory. The workshop will also address required energy modeling methodology per ASHRAE 90.1-2004 Appendix G for LEED NC 2.2 EA Prerequisite 2: Minimum Energy Performance and EA Credit 1: Optimize Energy Performance. Attendees should bring a lap-top computer with a complete version of Quest 3.6 already installed. Free at: <http://www.doe2.com/equest/>

Morning 8:30 am - 12:30 pm (Half Day)

Workshop 2 - Passive Solar Design, Pamm McFadden - This workshop will give you the background of what passive solar design is, how to use it in Colorado to reduce your heating bills, where you can use it in your house, how to design your house around some simple techniques and the techniques available. Go home from the workshop with an idea of what you can use in your home for a remodel or addition, or what sort of things you can use to incorporate into your new home.

Lunch 12:30 pm - 1:30 pm

Afternoon 1:30 pm - 5:30 pm (Half Day)

Workshop 3 - Small Wind Systems, Victor Creazzi - Victor has been involved with wind energy for more than 27 years as a designer, builder, installer, and dealer. In 1979, he built his first wind turbine, later receiving two grants from the Department of Energy to develop a hybrid sailing airfoil for a wind turbine rotor. This workshop will cover design of small wind systems from the standpoint of the consumer. Also covered will be tower types: tilt up, guyed lattice, and free standing lattice types. There will be specifics on the design of turbine sizing and other topics such as grid tied and battery based systems. Handouts provided and *Wind Energy Basics* by Paul Gipe will be available.

Afternoon 1:30 pm - 5:30 pm (Half Day)

Workshop 4 - Solar Businesses & Jobs in Solar, Jeff Scott - Jeff traces his commitment to high-performance buildings back to his seven years living in Japan during the 1990s. While there, he began his research into green building practices and was impressed by the country's 'whole systems' construction methods. Upon returning to the U.S., Jeff began linking his belief in sustainable design to strong environmental values and business skills and founded SolSource in 2003. In this workshop, Jeff will describe his path to success to a solar business and provide insight to workshop attendees in how they can accomplish their goals for employment in the solar industry.

8:30 am - 5:30 pm (Full Day) (Lunch 12:30 pm - 1:30 pm)

Workshop 5 - Homeowner's Guide to Renewable Energy, Dan Chiras - Explore eight technologies: (1) energy efficiency, (2) solar electricity, (3) wind energy, (4) microhydro, (5) solar hot water systems for domestic hot water and space heating, (6) solar hot air systems, (7) passive solar heating, and (8) passive cooling; including cost-effectiveness and financial incentives. This presentation is geared towards homeowners, home builders, architects, students, and government officials and will show photos and drawings that demonstrate how the systems work, and where they're applicable. *The Homeowner's Guide to Renewable Energy* will be available for an additional charge.

Reception 6:30 pm - 8:00 pm (Cash Bar)



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Saturday, June 9th, 2007

Registration 7:30 am - 5:00 pm

Exhibitions

Exhibitor Set Up

Exhibits Open to the Public 8:00 am to 6:00 pm

Early Bird Sessions

Begin at 8:00 am

Room

Priest Creek III	Jim Logan - Future of Green Built Homes
Burgess Creek I	Jim Welch - The Future of Solar PV / Sarah Kraft & Steve Irvin - Solar Economics for Small/ Mid-sized businesses
Burgess Creek II	Paul Bony - The Value of Residential Energy Efficiency to Utilities and Customers
Saddle Creek	Tom Hootman - LEED Building Case Study

Break 9:15 am - 9:30 am

Morning Keynote

Welcome remarks by Doug Seiter, CRES Chairman, and the Honorable Ken Brenner, Councilman, City of Steamboat Springs

Dr. Chuck Kutscher - Climate Change and the Role of Renewable Energy and Energy Efficiency - Dr. Kutscher is a principal engineer at NREL and editor of the 2006 ASES report titled "Tackling Climate Change in the United States."

Break 11:00 am - 11:15 am

2nd Parallel Track

Room

Priest Creek III	CU Solar Decathlon Team - Solar Decathlon Experience Dr. Tom Konrad - Investing in Renewable Energy Stocks
Burgess Creek I	Kim and Sean Fendt - Personal Trials with getting a Solar House built Dan Bihn - Bihn Systems - Flexible Energy Communities: Designing Renewables into Public Buildings
Burgess Creek II	Mike Helwig - Optimizing Transportation Alternative Fuel use in the Federal Sector John Long - Blue Sun Biodiesel
Saddle Creek	Dave Bowden - Clean Energy News: Buying a Solar Electric System Roger Singer - Sierra Club - Clean Energy and Grassroots Campaigns at the Municipal Level

Lunch 12:30 pm - 1:45 pm

Plenary

1:45 pm - 2:45 pm

2:45 pm - 3:45 pm

Plenary 1
The Roles of Rural Electric Associations in Colorado's "New Energy Economy." REA leaders from around the state will discuss the opportunities and challenges of incorporating renewable energy and energy efficiency in their electricity portfolios.

Plenary 2
Ski areas, one of the largest industries in Colorado, have been embarking on environmental programs that include energy conservation and renewable energy. Representatives of major Colorado ski areas will share their success stories.



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Saturday, June 9th, 2007 (cont')

Break 3:45 pm - 4:00 pm

3rd Parallel Track

Room

Priest Creek III	Matt Baker & Carrie Doyle - Environment Colorado and League of Conservation Voters
Burgess Creek I	Joe McCabe - Instate Manufacturing Multipliers for Colorado Produced Renewable Energy Systems Micah Allen - ICAST - RE/EE projects as a means to rural economic development in CO
Burgess Creek II	Dr. Barbara Farhar - A New Market Paradigm for Zero-Energy Homes: The Comparative San Diego Case Study
Saddle Creek	Mike Deru & Paul Norton - Energy Efficiency Doug Seiter - New DOE and NREL LEED Platinum Building

Break 5:00 pm - 6:00 pm

Dinner and Keynote Address

Dr. Patricia Nelson Limerick - Dr. Limerick is the Faculty Director and Chair of the Board of the Center of the American West at the University of Colorado, where she is also a Professor of History. She has dedicated her career to bridging the gap between academics and the general public and to demonstrating the benefits of applying historical perspective to contemporary dilemmas and conflicts.

Colorful, Practical, and Counter-Intuitive Lessons from the Western Past: Historically-Based How-To Guides for Orchestrating Gigantic Social Transitions in Energy Use

For thousands of years, humans used muscle, the combustion of wood, or the flow of water to perform work. And then, in an astonishingly rapid transition, human beings replaced those sources of energy with coal, petroleum, and natural gas. This change so thoroughly transformed the everyday lives of human beings that we are justified in drawing a distinction between "Pre-Fossil-Fuel-Era Humanity" and "Fossil-Fuel-Era Humanity." As humanity moves toward the "Post-Fossil-Fuel Era," deeper knowledge of the origins of our current circumstances in energy production and use could provide guidance to the transition bearing down upon us.

Sunday, June 10th, 2007

Registration 9:00 am - 11:00 am

Exhibitions

Exhibits Open to the Public

Exhibits Open to the Public 9:00 am - 12:00 pm

Tours

A self guided tour of local homes and commercial buildings which highlight many different renewable energy or energy efficient technologies will be our last Conference event.

Mini-Workshop

Jeff Scott - SolSource - Mini-Workshops
1) How to Run A Successful Solar Energy Business
2) Solar Energy Technology to best meet your needs
3) Greening your Home or Business