



CRES NEWS

Newsletter of the Colorado Renewable Energy Society

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A Chapter of the American Solar Energy Society

OCTOBER 2008

Peak Oil: Genuine Problem or Just Another Liberal Scare - Featured Topic for Next Meeting

Two Megawatt Solar Array Installed at Denver International Airport



In mid-August, a two megawatt solar energy system was completed and dedicated at the Denver International Airport (DIA). The solar photovoltaic system, spanning seven and a half acres at the airport's entrance, will generate over three million kilowatt hours (kWh) of clean electricity annually, demonstrating Denver's commitment to environmental sustainability by reducing carbon emissions into the atmosphere by more than 6.3 million pounds each year.

MMA Renewable Ventures, which financed, owns and operates the system, joined WorldWater and Denver International Airport to develop an innovative public-private partnership to finance this landmark solar power system. Using more than 9,200 solar panels, the new ground-mounted PV solar arrays employ a single-axis tracking system that follows the sun during the day for greater efficiency and energy production. The city was able to construct the PV array without investing taxpayer's dollars by using third-party financing and a power purchase agreement. Under this plan, MMA owns the system and sells electricity to DIA under a multi-year agreement. DIA's only involvement is to host the array on its land and buy the electricity from MMA. DIA's net cost for electricity does not change inasmuch as the cost of the solar electricity is offset by savings in the electricity purchased from Xcel Energy.

The array is one of the largest solar installations at any public airport in the U.S. The airport is operated by the City and County of Denver and is the fifth busiest airport in the United States serving nearly 50 million passengers annually. The project is part of the Xcel Energy* Solar rewards program and the City of Denver will receive a rebate to offset upfront construction costs.

The next meeting of the Colorado Renewable Energy Society will take place at **5:30pm on Thursday, October 23**. The location is the **Jefferson Unitarian Church** at 14350 W. 32nd Ave. In Golden. (You can take I-70 to exit 264, and then go west on 32nd Ave. for about 1 mile... or you can go north or south on any intersecting street and go west on 32nd Ave. about 1 mile past the I-70 interchange).

World production of oil is currently at its peak, or soon will be, as world demand continues to grow. Accordingly, we have assembled a panel of experts to discuss ***Peak Oil: Genuine Problem or Just Another Liberal Scare?***

The panelists will be: **Morey Wolfson**, Board member of the Association for the Study of Peak Oil - USA (ASPO-USA); **John L. Langhus**, Corporate and transitional lawyer for Forest Oil Corp. in Denver and Adjunct Professor at DU's Sturm College of Law; and **Steve Andrews**, independent energy consultant and Board member of ASPO-USA. The panel will be moderated by **Steve Sargent**, CRES Vice President.

The meeting is co-sponsored by the Green Task Force of the JUC, the Sierra Club, and Environmental Colorado. It will be followed by a free networking reception.

CRES Monthly Meeting Now Accessible via WEBCAST

To attend a meeting via webcast go to www.instantlyglobal.com/cresmeeting1. Please log on in this order:

1. CRES Chapters - **5:00pm** or earlier
2. 3+ CRES Membs - **5:10pm** or later
3. All others - **5:20pm** or later (until all connections are exhausted-15 max)

Colorado Calendar

This column features dates for meetings and other events relevant to Coloradans interested in renewable energy.

October 14... Colorado's New Energy Economy Conference. - See announcement on page 3..

October 15-17... 2nd Annual Utility Efficiency Exchange. Case studies and panel discussions on renewable energy topics. *Location:* Aspen Meadows Resort, Aspen. For details visit www.utilityexchange.org.

October 16... Annual Sustainability Gala. Fun, casual evening featuring food, auctions, and a tribute to "Heroes of Sustainability." *Time:* 6:00-9:00pm. *Location:* Sherman Events Center, 1770 Sherman St., Denver. For details visit www.sustainablecolorado.org.

October 17-18... Alternate Energy Expo. Presented by the Western Slope Environmental Resource Council. Features exhibits and workshops on solar, wind, geothermal, micro-hydro, green buildings, and biodiesel. *Location:* Bill Heddles Recreation Center, Delta. For details visit www.wsec.org.

October 21... Clean Energy Conference. Sponsored by West Mountain Alternative Energy, Inc. and supported by the City of Fort Collins. Learn how to bring clean energy into your community. *Location:* Hilton Hotel, Fort Collins. For details visit www.CleanEnergyConference.com.

October 24... Rocky Mountain Consumer Energy Conference. Aimed at purchasing agents, facilities managers, and owners. Learn to better budget rising energy costs. *Time:* 9:00am. *Location:* Invesco Field, Denver. For details visit www.rmced.org.

October 26-29... National Renewable Energy Marketing Conference. Featuring *A New Climate for Change*. *Location:* Marriott City Center, Denver. For details visit www.renewableenergymarketing.net.

October 28-30...21st NREL Industry Growth Forum. America's largest venture event focused on companies developing clean energy products. *Location:* Denver. For details visit www.nrel.gov.

Where the Candidates Stand on Energy

A new WorldPublicOpinion.org poll finds the majority of supporters of John McCain and Barack Obama largely agree on how to deal with both the country's energy needs and the problem of climate change.

Asked whether the government should require utilities to use more alternative energy sources, such as wind and solar, even if this increases costs in the short-run, 75% of Obama voters and 60% of McCain voters say that it should. Presented two competing arguments, both Obama and McCain supporters reject the argument that making a major shift to alternative energy sources "would cost so much money that it would hurt the economy." Very large majorities in both the Obama (83%) and McCain (73%) camps instead support the argument that "with the rising cost of energy, it would save money in the long run."

Supporters in both camps strongly favor a greater emphasis on increasing energy efficiency: 71 percent of Obama and 55 percent of McCain supporters endorse requiring businesses to use energy more efficiently, even if it might make some products more expensive. Only small minorities in both camps favor greater emphasis on "building coal or oil-fired power plants," although more McCain supporters favor this approach (34%) than those for Obama (19%).

Both Obama and McCain supporters favor the United States departing from its current position on the Kyoto Treaty. Told that, "the U.S. and other countries from around the world will be meeting next year to develop a new treaty to address climate change by reducing greenhouse gas emissions such as those caused by using oil and coal," 94 percent of Obama supporters and 63 percent of McCain supporters said that the United States should "be willing to commit to reduce its greenhouse gas emissions."

These findings are part of a larger international poll conducted by WorldPublicOpinion.org, an international research project managed by the Program on International Policy Attitudes at the University of Maryland. The poll of 1,174 Americans was fielded from August 9 - 20, 2008 by Knowledge Networks. The margin of error ranges from +/2.9 to 3.4 percent, depending on the sample size. Because this was an international poll questions about offshore drilling were not included.

For more information, visit: www.WorldPublicOpinion.org

DOE to Invest Heavily in CSP

DOE announced on September 19 that it will invest up to \$35 million over the next 4 years in 15 concentrating solar power (CSP) projects which, combined with the project cost-sharing from the project participants, will result in up to \$67.6 million being invested in these projects.

CSP technologies concentrate the sun's heat for conversion into electricity, and the ability to store that thermal energy and draw on it after sunset will greatly increase the economic feasibility of CSP power plants. Of the 15 projects, 11 will involve the research and development of thermal energy storage technologies, 1 involves R&D for advanced heat transfer fluids, and 3 will be geared toward near-term demonstrations of thermal storage technologies.

The projects are expected to further DOE's goal of reducing the cost of CSP electricity from today's 13-16 cents per kilowatt-hour (kWh) with no thermal storage to 8-11 cents per kWh with 6 hours of thermal storage by 2015, and to less than 7 cents per kWh with 12-17 hours of thermal storage by 2020.

CSP has long been DOE's unheralded solar power technology. Despite many years of trough collector and power tower system successes in Southern California, the technology has remained on the back burner. Perhaps its time has come.

CRES CORNER

NEWS BRIEFS...

H. M. (Hub) Hubbard Memorial Fund - Members and friends of Hub have donated a total of \$1,975 to CRES in his honor as of this date. We are most grateful for their generous contributions in his name.

New Business Member - We welcome **Alpine Geothermal Drilling** as our latest Business Member. Alpine Geothermal Drilling is a subsidiary of Rocky Mountain GeoExploration, Inc. It is a full service drilling company started by Eric Pattemore and Joel Poppert in February 2007. They are located 15 miles west of Denver in Kittredge, Colorado.

Condolences - CRES and the national renewable energy industry have lost a friend, colleague, and advocate in **Steve Palomo** who succumbed to a long-term illness in early September. Steve last coordinated the Wind Powering Program for the Department of Energy Office in Golden. Everyone who knew Steve, and the list is very long, knew him to be passionate about living life to its fullest, and a friend to everyone he met. We shall miss him.

CRES Protests Natural Gas Rate Change - On September 8, CRES Policy Committee Chair, Tom Konrad, presented CRES' opposing position on a proposed change to Xcel Energy's natural gas tariff being considered by the Colorado Public Utilities Commission (PUC Docket 08S-146G). Xcel's proposal would shift natural gas charges from a volumetric (per therm) billing to a fixed monthly charge. The Energy Efficiency Coalition joined forces with CRES to oppose the change because it would eliminate the market signal that provides a price incentive for consumers to conserve or invest in energy efficiency measures or renewable energy improvements. As of publication, a decision has not yet been issued in this case.

CRES Endorses Amendment 58 - CRES has endorsed the "Smarter Colorado Initiative" that will appear on the November 4 ballot as Amendment 58. If approved by voters, the initiative will end the property tax exemption for oil and gas drillers in Colorado. The exemption was established 30 years ago to spur oil and gas industry growth and no longer serves its purpose. Ending the exemption will bring Colorado as much as \$300 million which is committed to lower/middle income student scholarships, as well as environmental, energy efficiency and renewable energy projects. Members are urged to get involved...go to www.asmartercolorado.com.

REGISTER NOW!

Colorado's New Energy Economy Conference

The Path Forward - A Local Focus

Tuesday, October 14

Colorado Convention Center

Governor Ritter invites you to join citizens eager to share their local sustainable initiatives across Colorado. Best practice models that power communities into an efficient and renewable future will be showcased. The conference has been designed to ensure maximum networking opportunities.

Registration Fee : \$125.00

Register at www.energyoutreach.org/conf/index.htm

Sponsored by the Governor's Energy Office (GEO) and other state agencies

CRES NEWS

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COMING CRES MEETING

Unless otherwise noted, CRES monthly meetings will be held at the Jefferson Unitarian Church, 14350 W. 32nd Ave., Golden. The meetings customarily take place on Thursdays and begin at 5:30pm.

November 20... CRES Monthly Meeting. The guest speaker will be **Kirk Johnson**, Vice President and Chief Curator of the Denver Museum of Nature and Science. His subject will be *Deep Time Climate Change and its Relevance to our Understanding of Global Warming.*

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303-806-5317

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BOOK REVIEW - *The Tyranny of Oil* by Antonia Juhasz

The book explores the world's most powerful industry, "Big Oil," and outlines what we must do to curtail it before it is too late. It pulls back the curtain on Big Oil—uncovering virtually unparalleled global power, influence over elected officials, lax regulatory oversight, the truth behind \$150-a-barrel oil, \$4.50-a-gallon gasoline, and the highest profit in corporate history.

Exposing an industry that thrives on secrecy, Juhasz shows how Big Oil manages to hide its business dealings from policy makers, legislators, and most of all, consumers. She reveals exactly how Big Oil gets what it wants—through money, influence, and deception. Juhasz then provides a clear set of meaningful and achievable solutions, including the break-up of Big Oil.

The Tyranny of Oil prepares readers for election 2008—allowing them to interpret the constant stream of competing proposals and perplexing news stories about the economy and the impact of oil. It arms the reader with the facts while guiding them through the industry's rapacious history—demonstrating how the worst abuses of the robber-baron era are being revisited today.

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