U.S. DEPARTMENT OF ENERGY | Energy Efficiency & Renewable Energy

EERE Program News

The business, programs and policies of moving new energy products into the marketplace

EERE Program News , web version

Subscribe to EERE Program News

October 2009

Editor: Jack Jenkins
Associate Editor: John Horst
Contributing Writer: Julie Behrens

The just completed 2009 Solar Decathlon dominates both **News** and **Features** this month. This year's event was blessed with good weather and interested crowds. Visitors were able to view a broad range of the latest off-the-shelf solar energy and building technologies.

Take virtual video tour of each 2009 Solar Decathlon home

In other news, read how the nation's entrepreneurs are thinking about "the next big thing." Many of them are betting that it's going to come in the form of clean energy and energy efficiency.

Also, see how automotive, hybrid-drive technology is moving into international racing, and how this may ultimately impact the cars we drive.

Hybrid drive technology is beginning to show up at the racetrack, as racers reach for the fuel-saving and power advantages that everyday drivers seek on the highway. (Read article)

Photo courtesy of: Corsa Motorsports

For information you can use right now, explore NREL's new alternative fuels/advanced vehicles Web page. It's loaded with tools to help guide your own vehicle and driving choices.

Features explores the human side of the Solar Decathlon. We look at how the event has positively impacted and permanently changed students' thinking and career choices. Read, in their own words, the post-Decathlon choices of five recent Solar Decathlon alumni.

Index

News

- **Team Germany walks away with 2009 Solar Decathlon honors**
- **Louisiana moves toward sugar cane-based ethanol**

Clean energy — the *Next Big Thing*?

- Big time auto racing explores hybrid power technologies
- One-stop shop for alt fuels and advanced vehicle info

Features

- Solar-powered careers
- Solar Decathletes speak out
- Bringing it all together

EERE Program News Archive

- September 2009 — Raising the roof on weatherization
- August 2009 — Indian Country powers up with renewables
- July 2009 — Just say no to rush hour
- June 2009 — Out of disaster — opportunity
- May 2009 — How to grow a wind farm
- April 2009 — Driving Miss Daisy into a green future
- Listing of earlier issues

News Releases

Reader Comments

Speeches, Op-eds and Testimony

Events

News

Team Germany walks away with 2009 Solar Decathlon honors

The 2009 Solar Decathlon challenged 20 university-led teams from the United States and as far away as Spain, Germany and Canada to compete in 10 different contests, as well as for overall honors.

Photo courtesy of: Stefano Paltera / U.S. DOE Solar Decathlon

Team Ontario/BC's Solar Decathlon home lights the night on the National Mall.

Photo courtesy: Stefano Paltera / U.S. DOE Solar Decathlon

The Puerto Rico team designed a practical home suitable to Caribbean living, including the ability withstand hurricane force winds.

Photo courtesy: Stefano Paltera / U.S. DOE Solar Decathlon

Overall Winners

In a tight competition Team Germany, the student team from Darmstadt, Germany, won top honors in the 2009 Solar Decathlon by designing, building and operating the most attractive and efficient solar-powered home. Altogether, they garnered 908 points out of a possible 1000.

Photo courtesy: Stefano Paltera / U.S. DOE Solar Decathlon

Photo courtesy: Stefano Paltera / U.S. DOE Solar Decathlon

The University of Illinois at Urbana-Champaign took second place with 897 points. The team set out to prove that there is "no schism" between new technologies and traditional ways of building houses.

Team California captured third place with 863 points. The team's home bent design takes maximum advantage of south-facing vistas from the inside, making it seem larger. The patio area is

incorporated visually into the house space.

Photo courtesy: Stefano Paltera / U.S. DOE Solar Decathlon

Individual contest winners

Comfort Zone

Team Germany won, scoring 92 out of 100 points for maintaining indoor temperatures between 72 and 76 degrees Fahrenheit and relative humidity between 40 percent and 55 percent.

Team Germany celebrates winning the 2009 Solar Decathlon competition.

Photo courtesy: Stefano Paltera / U.S. DOE Solar Decathlon

Architecture

Team California took first place, earning 98 points out of a possible 100. A jury of architects judged homes on the aesthetic and functional elements of the home's design, including ease of circulation among the public and private areas, integration of various spaces into a holistic design, generosity and sufficiency of space in the house and the house's design surprises.

Appliances

The University of Illinois at Urbana-Champaign earned the most points based on keeping a refrigerator and freezer cold, washing and drying 10 loads of laundry during the contest week, and washing dishes in a dishwasher five times during the competition—all on electricity generated only from sunlight. The team scored 93.5 out of 100 possible points.

Communications

Team California's communications efforts, including communications plans, student-led tours and team Web site, were judged best by the jury of Web site and public relations experts with a score of 69.7 points out of a possible 75 points.

Engineering

The University of Minnesota, scoring 96 out of a possible 100 points, won the contest to determine which solar home best exemplified excellence in energy systems design, energy-efficiency savings, creative innovations in design and reliability of energy systems.

Home Entertainment

In this contest, the University of Illinois at Urbana-Champaign earned 92.6 out of a possible 100 points. Students were required to use solar-generated electricity to run interior and exterior lights, a TV, computer and a kitchen appliance to boil water. Teams

were also required to hold two dinner parties and a movie night for neighbors.

Hot Water

The University of Illinois at Urbana-Champaign earned the maximum 100 points in the Hot Water Contest's "shower tests," aimed at delivering 15 gallons of solar-heated, hot water in ten minutes or less.

Market Viability

The University of Louisiana at Lafayette designed its **BeauSoleil** home to reflect Cajun culture, solar innovation and environmental practicality.

Photo courtesy of: Stefano Paltera / U.S. DOE Solar Decathlon

The University of Louisiana at Lafayette earned 97 out of a possible 100 points to win. The contest evaluated whether the cost-effective construction and solar technology in a team's design would create a viable product on the open market. Judges gauged market appeal based on three criteria: livability, feasibility of construction and marketability.

The **BeauSoleil** home also won the "People's Choice" award, voted on by event attendees.

Lighting Design

The University of Minnesota earned 72 points out of a possible 75 to win this contest. A jury of lighting design experts toured each house to evaluate the aesthetics, innovations, energy efficiency, user-friendliness, flexibility and performance of the teams' lighting designs.

Net Metering

Team Germany took the top spot in the crucial, 150-point Net Metering Contest. Of that 150, teams were awarded 100 points if the energy supplied to their home's two-way electrical meter registered zero or less after all of the energy demands of the contest week. Team Germany scored a perfect 150 points.

Comments:

return to index

Net metering was used this year to help judge Solar Decathlon home performance.

Photo courtesy: Stefano Paltera / U.S. DOE Solar Decathlon

See photos of all 2009 Solar Decathlon homes

Louisiana moves toward sugar cane-based ethanol

For more than 200 years, sugar cane has been an integral part of the Louisiana's agriculture, contributing more than $2 billion annually to the state's economy. Now, Louisiana State University (LSU), farmers and commercial companies want to make sugar

cane-based ethanol a reality.

Fifth generation cane grower Rodney Foret says cane growers need new markets. "Production costs are going through the roof," he told local TV station, WWL (video). "The profit margin is going to the bottom. We're playing on the red line so close, you have a lot of sleepless nights."

Researchers are striving to increase the growing range of sugar cane by selecting more cold-tolerant varieties.

Photo courtesy of: www.los-dos.com

Sugar cane can be an efficient ethanol producer, but it requires a great deal of water, heat and a long growing season; it's basically a tropical crop. The U.S. Department of Agriculture (USDA) is searching for new varieties to broaden the climatic range in which the crop can be grown.

"We actually go around the world, looking for wild types of sugar cane that we can use," said Dr. Ed Richard, director of the USDA Research Center at Houma, La. "We're collecting sugar cane varieties in Asia, in the foothills of the Himalayas where the temperatures are actually colder than in Louisiana. We are looking for those cold tolerance genes we can incorporate into our commercial sugar cane varieties."

Dr. Richard says the new sugar cane varieties being investigated could be grown in north Louisiana and parts of Arkansas. Some of the early generation hybrids are also being tested in Alabama, Arkansas, California, Mississippi and Oklahoma.

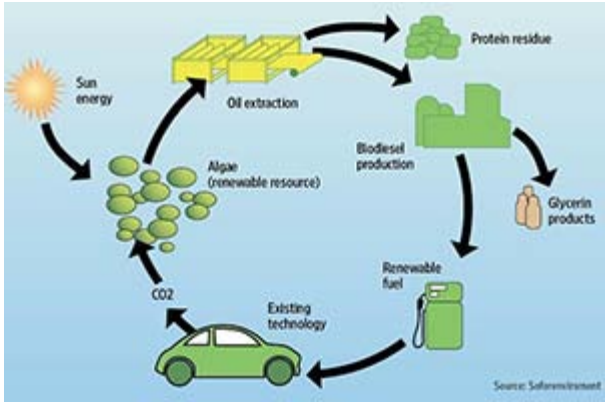
"We're also looking at other tall growing grasses that produce sugar and biomass," he continued. "Sweet sorghum is one example; it's an old crop that was once widely grown in the South." Now, researchers in Louisiana, Texas and other states are exploring it as a potential biofuel feedstock.

Louisiana hopes, eventually, to become one of the country's largest producers of efficiently produced ethanol. Other southern states share similar goals. High humidity, reliable rainfall and a long growing season are all pluses for the region.

Comments:

return to index

Clean energy — the *Next Big Thing*?



Entrepreneurs, whether in California's Silicon Valley, Boston, Seattle or Atlanta, are always searching for the "Next Big Thing." Many believe they have found it in clean energy, or what they call "cleantech." Within this definition they include such things as wind, solar and bio power, energy storage devices, smart grid electricity, plug-in electric cars and energy efficient buildings.

They may be right. Clean, efficient energy

lies at the heart of our industrial and everyday strength, and some of America's most important new products have been developed during hard economic times.

Algae may become the ultimate feedstock for bio-based fuels, producing a much higher yield per acre than traditional crops.

Illustration courtesy of: Wall Street Journal

The depression of the 1870s saw development of early telephones and phonographs. In the recession of 1958, the integrated circuit hit the marketplace, changing everything. In slump years of the late 1970s and early 1980s, personal computers burst onto the scene, starting a new era of globalization and major changes in how we work and play.

Among the "big idea" new energy technologies currently being explored are:

- Space-based solar power (beaming microwave energy down to earth);
- Advanced car batteries (lithium air);
- Utility-scale energy storage (distributed, lithium-ion batteries);
- Carbon capture and storage (underground storage, clean coal technologies);
- Advanced biofuels (algae-based liquid fuel production).

At the same time, many more down-to-earth products are already moving out of the laboratory and into the marketplace. One example is a new roofing shingle from Dow Chemical Company that incorporates thin-film solar photovoltaic (PV) technology into the roofing material itself, rather than having to be added on as an afterthought. DOE's National Renewable Energy Laboratory has, for years, led the way in developing these technologies.

"These shingles are rugged and easy to install. You can walk on them, just like an ordinary shingle," Dow spokesperson Dave Parrillo said. "They can be installed by a roofer having no special training and using an ordinary nail gun. No electrician is required on the roof, because there is no complicated roof-side wiring."

The shingles look like traditional roofing and cost far less than current, high-end solar shingles made to fit in with conventional slate or clay tile roofing materials.

Comments:

return to index

Big time auto racing explores hybrid power technologies

The Ginetta Zytek 09-SH, the first Le Mans prototype car capable of being powered by three different motive systems, has hit the race circuit this year. It can run on:

- a conventional 4.0 liter V8 internal combustion engine;
- a gasoline/electric hybrid power train that uses the V8 in combination with a 35kw electric motor, and;
- an all-electric drive system powered by a lithium-ion battery recharged through regenerative braking.

Steve Pruitt, a Utah businessman, and Corsa Motorsports have been testing the car on the American Le Mans Series this past racing season, getting good results. The power under the hood is an ethanol-burning V8 that generates 625 horsepower. The power train was developed by Zytek Motorsport, a British engineering company.

Pruitt believes the car's improved gas mileage may allow it to skip at least one stop during the next season's important opening race, the 12 hours of Le Mans at the Sebring International Raceway, and even more after his team has worked out more of the kinks.

Kinetic energy recovery systems and hybrid electric drives may give auto racing its next big boost.

Photo courtesy: Corsa Motorsports

This could save anywhere from 14 seconds to more than a minute per race — a staggering amount in racing. According to Pruitt, the car is nearly 10 percent more fuel efficient than its competitors.

In parallel development, Kinetic Energy Recovery Systems (regenerative braking systems) are being introduced into Formula One Racing, the all-out, unlimited auto racing class that dominates in world competition.

Engineers testing these technologies under the extreme conditions of highly competitive auto racing will ultimately help improve the cars we drive on the streets. History has shown this to be the case.

Comments:

return to index

One-stop shop for alt fuels and advanced vehicle info

Want to find access to a great selection of tools to help make choices about advanced vehicles and alternative fuels?

The National Renewable Energy Laboratory (NREL) has gathered its complete collection of tools, database searches, cost calculators and interactive maps from the Alternative Fuels and Advanced Vehicles Data Center onto one convenient, easy-to-use Web page.

The new Web page helps users quickly find the 23 tools, maps, and searches developed by the Alternative Fuels and Advanced Vehicles Data Center. You can easily find tool such as:

- Alternative fueling station finder;
- Light duty vehicle research tool;
- Flexible fuel cost calculator;
- Truck stop electrification locator;
- Vehicle fuel economy rating chart;
- Fuel properties identifier;
- State incentives and law listings.

For those addicted to iPhones and smart phones, use your device and go to "mobile" tools" (www.eere.energy.gov/am/cc).

Comments:

return to index

Features

Solar-powered careers

Since its inception in 2002, DOE's Solar Decathlon has touched the lives of more than 5,000 undergraduate and graduate students from around the world. Many of these students consider their involvement a life-changing experience, one that has heavily influenced their global outlook and career ambitions.

EERE Program News captures the thoughts of five former “Decathletes” as they talk about the opportunities provided by the Solar Decathlon and how the competition has influenced their lives and careers.

Comments:

return to index

Solar Decathletes speak out

James Bickford

"Looking back, what the Decathlon equipped us with wasn’t really a deeper appreciation for renewable energy but a real world application to solve a problem. We already cared about our country’s energy issues.

''What the Solar Decathlon really provided me with was 'Start-Up 101.' It gave me a sense of not only do I have to make the engineering work, but also all of the other elements including aesthetics, cost, marketing, functionality, design and market viability.

"The competition equipped us with a responsibility that couldn’t be found anywhere else in school. There was also an amazing element of pressure and prestige as we were representing our school to the world through a major, international competition.”

James Bickford was project manager for the third place Santa Clara University team in 2007. Following his Solar Decathlon experience, Bickford and eight of his fellow team members went on to found Valence Energy, a provider of Web-based energy management solutions with offices in California and India. He currently serves as marketing manager for California-based Tigo Energy Inc., a provider of solar efficiency and analysis technology.

Cristina Zancani

"In this current economic and political climate, defined by increasing energy consumption and environmental impact, the building industry must respond to accommodate the current and future needs of our society. For this to happen, it may require pressure from an educated public and that's why an educational forum of this magnitude is so important.

"The Solar Decathlon not only shapes students into our country's future industry leaders but it also has a major impact on educating the public and policy makers regarding the benefits and realities of sustainable energy.

"Once you participate in a Decathlon, the related social and environmental philosophies seem to become part of your DNA and for me, I now cannot support architecture that is not environmentally conscious in every way."

Cristina Zancani was the team leader for the 2005 team from the Rhode Island School of Design. She currently serves as a junior architect for Perkins+Will (a 2009 Solar Decathlon sponsor) in their New York office. She is a LEED-accredited professional with an active role in numerous "green" projects.

Emile Chin-Dickey

"Through the Solar Decathlon experience, my current business partners and I knew we'd found a very compatible and productive group of diverse talents.

"We also recognized a need to change the approach to sustainable home design since there had not been significant changes in 30, 40, 50 years.

"With my perspective as an economics major, the Solar Decathlon really got me thinking about energy efficiency through a cost-benefit lens which enables me to help clients make the most informed, effective decisions."

Emile Chin-Dickey was the business ,manager for the Cornell team that won 2nd place in the 2005 competition. He and four teammates went on to start Zero Energy Design, a Boston-based integrated architecture and energy consulting firm focused on green modern home design, HVAC design, and high performance home analytics.

Chip Clark

"Architecture has always been a strong interest of mine, but the implications of energy efficiency never fully resonated with me until my involvement in the Solar Decathlon. The competition has driven me to focus on the integration of

architecture and engineering to ultimately enrich design.

"I also learned that architecture is really a managerial role where you have to understand so many different disciplines - not only design, but engineering, economic and viability aspects as well. The competition exposed me to cutting edge work that I could not necessarily explore through traditional experience.

"As a young designer, I believe that this event is one of the best educational experiences I could have had, and that's why I returned to do it again this year."

Chip Clark has been involved in three Solar Decathlon competitions. As a freshman architecture student at Virginia Tech he had brief exposure to the event through help with lighting systems for the 2002 fifth place entry. In 2005, he served as the student team leader for the fourth place home. And, in his current role as adjunct architecture faculty for Virginia Tech, he was an advisor for the 2009 team.

David Schieren

"The Solar Decathlon was transformative for me. It provided the opportunity to learn in depth about solar energy, energy efficiency, sustainable design, team work and the economics of it all. I learned about how effective solar power could be and how important it needs to be for our society - for our buildings AND transportation.

"It also showed me the potential for how viable solar could be as a business. The experience provided the spark I needed to found my current, growing business and also introduced me to my future business partner.

"Back home, the competition also provided our campus and community with such a great educational opportunity. It inspired our community members, including our political leaders, to evaluate their ways and seek alternative solutions."

David Schieren has represented the New York Institute of Technology at two Solar Decathlon competitions. He served as team leader for the 2005 5th place entry and as an advisor for the 12th place 2007 home. With support from fellow teammate Greg Sachs, Schieren drew from his Solar Decathlon experience and his economics and energy management degrees to start his current 25-person company, New York-based EmPower Clean Energy Solutions.

Bringing it All Together

Fueled by what they considered to be “the life changing experience of the Solar Decathlon,” Bickford, Chin-Dickey, Schieren and Zancani (all past competitors from different universities) decided to form the Solar Decathlon Alumni Association.

The mission of the Association, which now has more than 200 members, is to provide a platform for networking and for supporting future Solar Decathlons and decathletes

The organization provides a community for alumni to stay connected as advocates who promote renewable energy, green building and sustainability.

Solar Decathlon Alumni. Org

Comments:

return to index

News Releases

Oct. 19, 2009
Vice President Biden unveils report focused on expanding green jobs and energy savings for middle class families

Oct. 16, 2009
2009 Solar Decathlon winners announced

Oct. 15, 2009
2010 annual fuel economy guide now available

Oct. 15, 2009
Secretary Chu announces new investments in cutting-edge wind energy research facilities

Oct. 13, 2009
DOE announces steps to strengthen enforcement of energy efficiency standards

Oct. 13, 2009
Team California wins the communications contest at DOE Solar Decathlon

Oct. 12, 2009
DOE Secretary Chu issues call to action on carbon capture and storage

Oct. 8, 2009
DOE announces $87 million in funding to support solar energy technologies

Oct. 7, 2009
DOE announces new private sector partnership to accelerate renewable energy projects

Oct. 1, 2009
DOE Solar Decathlon coming to National Mall

Oct. 1, 2009
Obama Administration delivers nearly $72 million for energy efficiency and conservation projects in 7 states and territories

Sept. 30, 2009
DOE announces testing for AeroSys, Inc. products to ensure compliance with appliance standards

Sept. 24, 2009
Obama Administration delivers more than $106 million for energy efficiency and conservation projects in 9 states

Sept. 22, 2009
Treasury, Energy surpass $1 billion milestone in Recovery Act awards for clean energy projects

Sept. 15, 2009
DOE awards up to $14.6 million to support development of advanced water power technologies

Sept. 14, 2009
DOE to fund up to $454 million for retrofit ramp-ups in energy efficiency

Sept. 14, 2009
DOE delivers more than $354 million for energy efficiency and conservation projects in 22 states

Sept. 14, 2009
Obama Administration delivers more than $60 million for weatherization programs in six states and territories

Sept. 14, 2009
Obama Administration awards more than $18.6 million for Oklahoma's state energy program

Sept. 14, 2009
DOE recognizes green power network leaders

Sept. 10, 2009
DOE recognizes midwest industrial efficiency leaders

Sept. 4, 2009
Vice President Biden announces finalized $535 million loan guarantee for Solyndra

Sept. 2, 2009
"Cash for Clunkers" replaces 700,000 vehicles with more efficient models

Sept. 1, 2009
Treasury, Energy announce $500 million in awards for clean energy projects

Sept. 1, 2009
Secretary Chu announces completion of critical energy conservation appliance standards

Aug. 31, 2009
DOE selects biofuels projects to receive up to $21 million in funding

Aug. 27, 2009
DOE announces more than $8.4 million for regional sequestration technology training projects

Aug. 25, 2009
Obama Administration awards more than $51 million for state energy programs in Alaska,

Guam and New Jersey

Aug. 14, 2009
Obama Administration awards more than $119 million for state energy programs in seven states and territories

Aug. 13, 2009
Treasury, Energy announce more than $2 billion in Recovery Act tax credits for energy manufacturers

Aug. 13, 2009
Obama administration delivers more than $66 million for weatherization programs in Alaska, Colorado, Connecticut and Hawaii

Aug. 13, 2009
Secretary Chu announces funding for clean energy projects on tribal lands and Alaska villages

Aug. 12, 2009
Good Morning America promotes the Living Zero Home tour

Aug. 10, 2009
DOE announces funding for energy efficiency in federal buildings

Aug. 5, 2009
DOE announces $2.4 billion for U.S. batteries and electric vehicles

return to index

Reader Comments

September — Raising the roof on weatherization
"We need some help for small minority business contractors who want to be used for weatherization projects. Although these funds are being dropped into energy efficiency, all the larger businesses are able to suck up all the funds and contracts. The little business trying to grow is left out."
— **J. P.**

Editor's note: The following answer is from Oct. 6 testimony given by Brenda DeGraffenreid, DOE's Office of Small and Disadvantaged Business Utilization to the U.S. Senate Committee on Small Business & Entrepreneurship:

"[In the] Weatherization Assistance Program, $5 billion of Recovery Act funding is dedicated to low-income families for use in weatherization ($6,500 per home). Additionally, 900 community action agencies are receiving weatherization money. The agencies utilize a pool of approximately 2,500-3,000 private contractors, the vast majority of which are small businesses with 5-25 employees each.

"Of the community action agencies, half use private contractors for every line of work (HVAC, insulation installation, caulking etc.), and the remaining half use private contractors only for HVAC installation.

"In addition, the State Energy Program and Energy Efficiency Conservation Block Grants are also funding thousands of small businesses throughout the country as contractors and subcontractors."

return to index

Speeches, Op-Eds and Testimony

Sept. 30, 2009
Richard Kidd, program manager, FEMP Office of Energy Efficiency and Renewable Energy, before the House Veterans Affairs Committee
Subject: Energy Efficiency at the Department of Veterans Affairs

Aug. 6, 2009
David Sandalow, assistant secretary, Office of Policy and International Affairs, before the Senate Environment and Public Works Committee
Subject: Climate Change and Ensuring that America Leads the Clean Energy Transformation

July 23, 2009
Patricia Hoffman, acting assistant secretary, Office of Electricity Delivery and Energy Reliability, before the House Science and Technology Subcommittee on Energy and Environment
Subject: Smart Grid: Cyber-Security and American Recovery and Reinvestment Act Funding

Comments:

return to index

Events

If you have an event scheduled of regional or national interest to the energy efficiency and renewable energy communities, please contact us with pertinent information and a Web link and we will include it in EERE Program News. — Jack Jenkins or Julie Behrens

Federal Energy Management Program (FEMP) — holds technical workshops around the nation throughout the year, plus webinars; check this link for continuously updated information on these events.

Industrial Technologies Program — holds specialized workshops and on-line webinars year-around. Check this link for a continuously updated schedule.

Solar Power International — Oct. 27-29, Anaheim, Calif.
The largest solar power conference in the U.S. about the solar industry and market opportunities, sponsored by the Solar Energy Industries Association (SEIA) and the Solar Electric Power Association (SEPA).

2009 Remodeling Show — Oct. 27-30, Indianapolis, Ind.
A national event that places serious buyers and serious sellers face to face for three days of serious business.

Sunbelt Builders Show — Oct. 29-31, Grapevine, Texas
A trade show and education conference for residential and light construction industries; offers an opportunity to exhibit the latest building products and services and learn from the nation's construction industry experts, while networking with thousands of building professionals.

Healthcare Design 09 — Oct. 31-Nov. 3, Orlando, Fla.
Topics include confronting financial realities and the building science, management and engineering technologies of healthcare facilities.

Edison Electric Institute National Key Accounts Workshop — Nov. 1-4, Palm Desert, Calif.
A one-stop avenue for buyers to network with sellers and distributors of energy and related products and services, and the place to learn about new building technologies and

energy practices to improve your bottom line and the environment.

2009 Combined CIF & NCAF Energy Conference — Nov. 1-6, St. Petersburg, Fla.
This combined conference put on by Community Investment Futures and the National Community Action Foundation will focus on how community action can leverage Recovery Act resources to build sustainable communities

Geothermal Energy Utilization: with Oil & Gas Development — Nov. 3-4, Dallas, Texas
An international energy conference specializing in the enhancement of existing oil and gas wells for electrical production from the Earth's heat.

U.S. Mid-Size Wind Turbine Development Workshop — Nov. 6, Detroit, Mich.
Workshop will facilitate collaboration between wind turbine designers and U.S. manufacturers and build awareness of the DOE-NREL Mid-Size Wind Turbine Development Project.

AIChE Annual Meeting — Nov. 8-13, Nashville, Tenn.
Premier educational forum for chemical engineers. A wide range of subjects relevant to the latest research and newest technologies in emerging growth areas will be covered.

2009 Greenbuild International Conference and Expo — Nov. 10-14, Phoenix, Ariz.
U.S. Green Building Council conference will offer workshops, tours and informational sessions on all phases of green building.

2009 Behavior, Energy, and Climate Change Conference — Nov. 15-18, Washington, D.C.
A conference to catalyze collaboration across government, utility, business and research sectors, and to share recent research and program information on meeting long-term energy and greenhouse gas emissions reduction targets.

Tribal Energy Program Review — Nov. 16-18, Denver, Colo.
A forum for tribes to meet and learn from other tribes pursuing energy sufficiency through conservation or renewable energy, and to share in their successes. A unique forum offering an excellent overview of the wide range of renewable energy and energy efficiency projects under way in Indian Country. The meeting is open to all.

2009 Fuel Cell Seminar & Exposition — Nov. 16-19, Palm Springs, Calif.
Event will feature close to 1,700 participants and over 130 exhibition spaces, one of the largest conferences of its kind.

Renewable Energy & Energy Efficiency Workforce Education — Nov. 18-20, Albany, N.Y.
Conference will offer the most current information on instructional strategies, curricula development and best practices for training in the renewable energy and energy efficiency fields.

Ecobuild America — Dec. 8-10, Washington, D.C.
Ecobuild America educates design and construction professionals on how to improve our built environment. Emphasis on creating high performance, sustainable structures, and doing it faster and more profitably.

International Builders Show — Jan. 19-22, 2010, Las Vegas, Nev.
This show will center on how builders can retool their businesses and educate themselves to be ready when the housing market turns around.

ASHRAE Winter Conference — Jan. 23-27, 2010, Orlando, Fla.
Conference will seek to advance the state of the art in indoor environmental control by focusing the technical program on the theme "Humidity and Sustainable Indoor Environment"; will include tracks on energy conservation and alternative energy sources, sustainability, humidity and load calculations.

Better Buildings: Better Business Conference — March 3-5, 2010, Wisconsin Dells, Wis.
Learn how to build homes that deliver the energy savings customers want, about

renewable energy technologies that reduce energy costs and how energy efficiency and green building practices keep your business competitive.

NESEA's BuildingEnergy 2010 — March 9-11, 2010, Boston, Mass.
The Northeast Sustainable Energy Association's annual conference will bring together professionals who help shape the practice of sustainability. Nearly 200 presenters will define the leading edge of smart building, energy efficiency and renewable energy.

2010 IEEE PES Transmission and Distribution Conference — April 19-22, 2010, New Orleans, La.
The conference and exposition will bring together the world's leading power system equipment manufacturers and technical professionals to display their products, explore new technology and enhance existing technologies.

National Hydrogen Association Conference & Expo — May 3-6, 2010, Long Beach, Calif.
The NHA Hydrogen Conference and Expo is the largest hydrogen conference in the United States and the longest running annual hydrogen conference in the world.

return to index

Subscribe to EERE Program News