ReNews week of 09 14 09 Sustainable News

Concentrator PV: Harvesting More, Spending Less

September 8, 2009 **by Nancy Hartsoch, CPV Consortium** **New Hampshire, United States** **Photovoltaics World magazine** Today we are faced with dramatically increasing electricity demand globally presenting a critical need for clean, renewable energy. While the sun is the world's most abundant renewable resource, today it is barely tapped as an energy source. The challenge has been in cost effective conversion of that sunlight to electricity. Historically, harvesting photons has been hindered by high costs compared with traditional energy. http://www.renewableenergyworld.com/rea/news/article/2009/09/concentrator-pv-harvesting-more-spending-less?cmpid=WNL-Wednesday-September9-2009

Wind Technology Center Installing a Dynamic Duo

September 4, 2009 by Joseph B. Verrengia, NREL Colorado, United States [RenewableEnergyWorld.com] The clean wind energy industry must expand significantly in the next two decades to fulfill a strategy of generating 20 percent of the nation's electricity. To provide the technological foundation for that dramatic growth, the National Renewable Energy Laboratory (NREL) is embarking on significant improvements at its National Wind Technology Center (NWTC). http://www.nrel.gov/features/20090821_turbines.html

Video: GE turbine installation

http://link.brightcove.com/services/player/bcpid6801356001?bctid=36672585001

"Fishing for Energy" Big Ideas for a Small Planet

Episode 6: Energy. Early alternative energy ideas have their limitations. Can we imagine reinventing alternative energy? Ideas include energy from trash, urban wind farms and brewing bio fuels. Featuring Meghan Forbes from the Marine Debris Program, Paul Gilman from Covanta, Josh Dorfman, Simran Sethi, Joel Makower of greenbiz.com <http://greenbiz.com/> , Rob Barrosa on urban wind farms, and Russ Eisner from Vereneium Corp. http://www.sundancechannel.com/big-ideas Thanks: Ray McGovern

Overcoming hurdles with perseverance in tidal power

Published 08 Sep 2009 Start-ups, hoping to carve a niche for themselves in a sector like tidal power, need to show resilience. And New York-based Verdant Power exemplifies this with its approach. Marine renewable energy solutions company Verdant Power is currently in the process of optimising its technology for commercial distribution. In May this year, the Federal Energy Regulatory Commission (FERC) issued a public notice stating that it concluded the pre-filing process related to Verdant Power's application for a commercial license. The next step in the application process for Verdant Power was to submit its final license application. The company has been seeking license to commercially develop the Roosevelt Island Tidal Energy (RITE) Project.

http://social.tidaltoday.com/feature/overcoming-hurdles-perseverance-tidal-power

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View the full agenda outline and impressive speaker line below...
http://www.tidaltoday.com/ITES/agenda.shtml

center for sustainable energy

As the nation's largest urban university, CUNY has committed itself to environmentally sustainable practices in every aspect of its operations, from renewable energy use, to construction and retrofitting of current facilities, to procurement of equipment and supplies. Developing and offering education and training programs for individuals, unions, employers and other organizations is an important component of that commitment. No single institution offers the depth and range of knowledge in so many sustainability-related fields, and the capacity to offer programs related to each of those fields to as broad range of audiences. With 23 colleges throughout the five boroughs, serving 242,000 degree program students and over 230,000 continuing education students, CUNY has unmatched capacity to offer sustainability training programs to individuals, unions, employers and other organizations.
http://www.bcc.cuny.edu/InstitutionalDevelopment/CSE/Courses_Seminars.cfm

USGBC Upstate New York *Scholarship:*

USGBC is pleased to announce an opportunity for USGBC chapters to help identify candidates for four Greenbuild scholarships to **low-income individuals in your communities who would otherwise not be able to attend the conference.** In support of the guiding principal of social equity in USGBC's strategic plan, **four scholarships** will be awarded from a pool of candidates referred to USGBC from the chapters network. Scholarship recipients will receive **one full-conference registration package**, including a **travel and lodging stipend**, to the 2009 Greenbuild International Conference and Expo in Phoenix, Arizona, to be held **November 11 – 13, 2009**. The scholarship is ideally intended for people who are interested in a career as a green building professional and have not yet pursued a LEED credential. Once the recipients are chosen by USGBC, we will reach out to the winner's local USGBC chapter to seek a chapter leader to mentor the recipient in their pursuit of green building knowledge during Greenbuild and beyond. **Note that the applications are due to USGBC by September 30.**
Details and application package are attached. If you have any questions, please contact Tracie Hall of the NY Upstate Chapter - tracie@greenupstateny.org - or visit the Chapter website: www.greenupstateny.org

California condors and wind farms on a collision course

August 31, 2009 http://www.wind-watch.org/news/2009/08/31/california-condors-wind-farms-on-collision-course/

Euro wind producers want billions for sea turbines

September 14, 2009 • Europe European wind power producers are calling for billions of euros (dollars) in investments to generate energy from wind turbines planted in the sea. The European Union is aiming to generate a fifth of all its energy from renewable sources by 2020 to lessen reliance on imported oil and gas and meet climate change goals to reduce greenhouse gas emissions. http://www.wind-watch.org/news/?p=30258

OPT sees interest for its Underwater Substation Pod

Ocean Power Technologies (OPT) has highlighted the utility of an underwater substation device. The Pennington, New Jersey-based company says such device is often "overlooked". The company has developed an innovative Underwater Substation Pod (USP) as an environmentally responsible means of networking and transmitting offshore power and data to onshore electric utility grids. It can aggregate up to 10 offshore power generation devices into one common interconnection point (e.g. wave, tidal and offshore wind) for economic, undersea power transformation and data communication.

http://social.tidaltoday.com/news/opt-sees-interest-its-underwater-substation-pod

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Wisconsin's U.S. Senators being pressured to support climate change proposal

Sun, 09/13/2009 - 4:11pm By Chuck Quirmbach, Wisconsin Public Radio WASHINGTON (WPR) More groups are trying to convince Wisconsin Senators Herb Kohl and Russ Feingold to get behind a bill aimed at curbing emissions that contribute to climate change. http://www.fox21online.com/news/wisconsin%E2%80%99s-us-senators-being-pressured-support-climate-change-proposal

Oregon: California's wind Farm?

August 19, 2008 National Wind Watch

T. Boone Pickens and Texas may be the kings of Big Wind but California is catching up, buying gigawatts of green electricity from turbines planted on the windswept flatlands of … Oregon. On Monday, Southern California Edison became the latest Golden State utility to look north, announcing a 20-year contract to buy a whopping 909 megawatts from Caithness Energy's Shepherd's Flat project. The 303-turbine wind farm will span two Oregon counties and 30 square miles when it goes online between 2011 and 2012. PG&E (PCG), meanwhile, signed a deal in July for 240 megawatts of wind power from Horizon Wind Energy's turbine ranch in the same area. That's on top of 85 megawatts it agreed to buy last year from PPM Energy (now called Iberdrola Renewables) in a neighboring county that's part of a turbine tier of counties on Oregon's northern border. http://www.wind-watch.org/news/2008/08/19/oregon-california%e2%80%99s-wind-farm/

Support for laboratory-led projects in the US

The US Department of Energy (DOE) has chosen national laboratory-led projects for up to $11 million to support development of advanced water power technologies. read more

MMS and FERC release guidance document

The US Department of the Interior's Minerals Management Service (MMS) and the Federal Energy Regulatory Commission (FERC) have released a report as part of an ongoing effort to clarify jurisdiction. read more thanks to Jim Michaels from the USFWS

Southampton University moves ahead with its project

Tidal Today Southampton University has shared that discussions are on with the South East England Development Agency and the Isle of Wight Council over the construction of a proposed tidal energy marine platform for extended sea trials of tidal energy devices. The University, according to a report filed by Isle of Wight County Press, has also received initial funding of £20,000 from sources, including its own budgets, to fund site characterization surveys. The project is a collaboration between Southampton University and the Isle of Wight Council as part of Eco-Island.
http://social.tidaltoday.com/news/southampton-university-moves-ahead-its-project

Growth Industries Advanced Energy Storage Systems

Michigan's Domestic Battery Plan VIDEO

Three years ago the State of Michigan launched an economic development strategy to identify and capitalize on key industry sectors where the state had unique and certain competitive advantages. One of the sectors identified was Advanced Energy Storage, with an initial focus on transportation. It was clear that Michigan—as home to more than 330 transportation R&D companies, 65,000+ engineers, and world-class engineering schools—was exceptionally positioned to address the critical national need of developing a domestic advanced battery manufacturing industry. To address this need, the State developed two aggressive, first-of-their-kind incentive programs to seed the industry and complement federal funding opportunities:

http://www.michiganadvantage.org/Targeted-Initiatives/Advanced-Energy-Storage/Default.aspx?banner=centro09_TechRev_300x250

Video / Michigan: The Advanced Battery Capital of the World

Nanophosphate Technology (Batteries) for HEV applications

A 123 Technologies 2008 DOE Merit Review Power Points on PDF
http://www1.eere.energy.gov/vehiclesandfuels/pdfs/merit_review_2008/energy_storage/merit08_chu.pdf

Welcome to National Wind Watch

Since 2005, your source for research material and news about industrial wind energy **This web site provides the information that promoters of industrial wind do not.** Armed with knowledge beyond their sales pitches, you can decide for yourself whether the elusive benefits of large-scale wind energy development are enough to justify the further destruction of communities, the environment, and individual lives. www.wind-watch.org

Energy Efficiency in the American Clean Energy and Security Act of 2009: Impacts of Current Provisions and Opportunities to Enhance the Legislation is available for free download or a hard copy can be purchased for $25 plus $5 postage and handling from ACEEE Publications, 529 14th St, N.W., Suite 600, Washington, D.C. 20045, phone: 202-507-4000, fax: 202-429-2248, e-mail: aceee_publications@aceee.org.

Strong Energy Efficiency Policies Under Consideration by Congress

Washington, D.C. (September 9, 2009): Energy efficiency provisions in the American Clean Energy Security Act (ACES — H.R. 2454) with improvements could create more than 569,000 new jobs nationwide in the next ten years and provide $283 in annual savings for every household in America, according to a new study released today by the American Council for an Energy-Efficient Economy (ACEEE). By 2030, these benefits could increase to more than one million jobs and $832 in annual savings per household — all while reducing government-projected levels of nationwide carbon emissions by 15 percent, or 959 million metric tons.

In June 2009, the House of Representatives passed the American Clean Energy and Security Act of 2009 *(ACESA). This climate and energy legislation included a number of provisions intended to help the U.S. reduce energy use through various energy efficiency measures, which have largely been overlooked in recent discussions and analyses of ACESA. When analyses ignore the readily available benefits from energy efficiency they distort how energy and climate legislation, such as ACESA, could affect American consumers and the U.S. economy*. http://www.aceee.org/press/e096pr.htm

State-by-State Impacts

Click on a state to see how it is affected by energy efficiency policies under consideration in Congress *http://www.aceee.org/energy/national/50states.htm*

Big Dreams For Small Wind Turbines NPR

by Melissa Block NPR Sept 14, 2009 When most people think about wind power, a vast field of gigantic turbines spinning on a ridgeline might come to mind. Well, that's *big* wind. But another part of the wind power industry is thinking small — as in turbines that are the right size to power a single home or business. And one of the hottest ideas blowing around is the concept of roof-top turbines that generate energy right at the point of use. http://www.npr.org/templates/story/story.php?storyId=112298310

Wind Power Law Blog email and feeds

http://feedproxy.google.com/~r/WindPowerLawBlog/~3/RaNNcPyFLJ4/

Thank you Robert E. Knoer,

New York Testing Small Wind on Albany Skyscraper

http://mendocoastcurrent.wordpress.com/2009/02/03/new-york-testing-small-wind-on-albany-skyscraper/

Baryonyx to build largest offshore wind farms in the US, power massive data…

http://www.engadget.com/2009/07/23/baryonyx-to-build-largest-offshore-wind-farm-in-the-us-power-ma?icid=sphere_wpcom_inline

National Grid told to reveal details

PSC says utility cannot withhold financial info regarding "smart grid" plan

Tuesday, August 18, 2009 **LARRY RULISON**, Business writer times union ALBANY --

National Grid can no longer keep portions of its $290 million "smart grid" plan out of public view barring a court order. In a ruling made last Thursday, the state Public Service Commission determined that the London-based utility cannot withhold financial details of the project from the public. The project involves testing what's known as "smart grid" technologies in Saratoga County and the Syracuse area that are expected to help consumers and businesses better manage their electricity usage.
http://www.timesunion.com/AspStories/storyprint.asp?StoryID=832175

SMART GRID PROJECTS SEEK FEDERAL STIMULUS FUNDING

— Cutting-Edge Initiatives to Pave Way for the Electric Grid of the Future —

Albany, NY—07/24/09—The New York State Public Service Commission
The Commission today voted to approve a wide-range of advanced smart grid initiatives as proposed by six major electric utilities in New York. The Commission's approval of the cutting edge projects is contingent upon the U.S. Department of Energy (DOE) awarding a 50 percent matching federal grant.
http://www3.dps.state.ny.us/pscweb/WebFileRoom.nsf/0/AB915D76A2A14A02852575FD0060FE00/$File/pr09072.pdf?OpenElement

U.S. Department of Energy Issues New Lamp Efficiency Rules

Lighting Controls Association by Craig DiLouie Posted September 2009 In July 2009, the Department of Energy issued new energy efficiency standards for commercial general-service fluorescent lamps and incandescent (and halogen) reflector lamps. The new rules take effect July 14, 2012 and will basically eliminate products with the lowest efficiency and lowest cost. In the case of fluorescent lamps, equivalent-performance products are readily available, such as T8 lamps, and the market is expected to shift to that and other technologies. In the case of incandescent reflector lamps, only a few equivalent-performance products are readily available that comply, such as infrared-coated halogen lamps, and manufacturers are expected to develop new substitutes.
http://www.aboutlightingcontrols.org/education/papers/2009/2009_doe-lamp-rules.shtml

More Efficient, and Cheaper, Solar Cells

Technology review New manufacturing techniques could cut solar power costs by 20 percent. By Kevin Bullis Improvements to conventional solar cell manufacturing that could significantly increase the efficiency of multicrystalline silicon cells and bring down the cost of solar power by about 20 percent have been announced by startup 1366 Technologies of Lexington, MA.
http://www.technologyreview.com/energy/23459/?nlid=2344&a=f

U.S. Wants G20 to Axe Fuel Subsidies:

Reuters, September 4, 2009 The United States plans to call on the Group of 20 to eliminate fossil fuel subsidies in five years and increase oil market transparency when the group meets at the end of the month, according to a source familiar with the proposal. The world's biggest energy user intends to argue fuel subsidies distort oil and product markets and artificially raise fuel demand, leading to higher greenhouse gas emissions. The plan for the September 24-25 summit in Pittsburgh, Pennsylvania, also says members should provide more timely and accurate information on the notoriously murky oil market, including on inventory levels and positions held in the futures markets. http://www.reuters.com/article/newsOne/idUSTRE58326U20090904

U.S. House Passes Wind Energy Bill:

SustainableBusiness.com, September 11, 2009
http://www.sustainablebusiness.com/index.cfm/go/news.display/id/18858

The New Ideas Workforce Education Conference will take place on November 18-20, 2009 at the Marriott Hotel in Albany, New York. Conference sessions are planned for November 19 and 20. On Wednesday, November 18, 2009
http://www.meetmax.com/sched/mie1109/~public/conference_register.html?event_id=3120

Sprawling Los Angeles Shrinks Energy Use:

GreenBiz.com, September 1, 2009 Energy consumption in America's second largest city fell by 318 gigawatt hours during the 2008-2009 fiscal year -- more than half of which was driven by Los Angeles businesses using a slew of successful incentive programs. Five core programs are credited with achieving the vast amount of energy savings, such as compact fluorescent lamp distribution and lighting retrofit programs. For example, the Los Angeles Department of Water and Power (LADWP) handed out more than 500 rebates to commercial, industrial and government sites for high-efficiency lighting projects, accounting for $3.9 million in utility bill savings for participating customers. The program reduced energy use by 36 GHw. Another incentive, the Custom Performance Program, reduced business energy use by 26.5 GWh through 77 energy efficiency projects. LADWP paid out $2.7 million in incentives, which will save customers roughly $2.9 million. The incentive program that spurred the greatest amount of energy savings involved more than 34,000 small businesses. LADWP targeted small operations using less than 30 kWh for free energy efficient lighting, saving individual customers up to $500 annually, which equates to a 25 percent bill reduction.
http://www.greenbiz.com/news/2009/09/01/sprawling-la-shrinks-water-and-energy-use

The Personal Computer Goes on an Energy Diet:

Wall Street Journal, by Jim Carlton, September 8, 2009 Personal computers suck up enormous amounts of electricity—often when they aren't even being used. The Alliance to Save Energy estimates upwards of $1.7 billion is being wasted in the U.S. with about 15 million tons of carbon emitted by desktops left on overnight. Accordingly, manufacturers are tackling the problem. For example, Dell Inc. says the displays on its laptop computers use 43% less energy after older cathode screens have been swapped out with more efficient LED ones. And Hewlett-Packard Co. says it has saved 41% energy consumption on its lineup of PCs, compared with 2005 models, because of fewer components and other factors. At Apple, the MacBook is equipped with features such as more efficient power supplies and enhanced sleep mode. The new 13-inch MacBook Pro released earlier this year draws just 15 watts when idle with display on—a quarter of the power needed to run a single household lightbulb—versus about double that for some other new laptops.
http://online.wsj.com/article/SB10001424052970204908604574336280116296164.html

Coalition Launches Campaign to Pass Climate Bill:

Washington Post, by Juliet Eilperin, September 8, 2009 A coalition of environmental, labor, veterans and religious groups formally launched a national lobbying campaign Tuesday aimed at mobilizing grass-roots support for passage of a Senate climate bill this fall. The group -- dubbed Clean Energy Works -- marks perhaps the most ambitious effort yet to enact legislation that would cap greenhouse gas emissions linked to global warming. The coalition has enlisted organizers in 28 key states to help build support for a cap-and-trade bill, and is scheduled to launch paid television ads this week. It also plans to bring 100 veterans to Washington this week to lobby, and has held town halls and rallies in several states. A July poll conducted by The Washington Post, ABC News and Stanford University indicated that Americans favor the idea of a cap-and-trade bill by a margin of 52 to 43 percent. But many senators remain wary of supporting legislation that will raise energy prices in the short term.
http://www.washingtonpost.com/wp-dyn/content/article/2009/09/08/AR2009090802295.html

Bechtel to Build 440-MW Solar Plant in California:

New York Times, by Todd Woody, September 8, 2009 Bechtel has jumped into the solar power plant business in a deal with a developer to build a 440-megawatt energy complex in California, known as the Ivanpah Solar Electricity Generating System. The collection of three solar power stations will deliver electricity to Pacific Gas & Electric and Southern California Edison. It's a landmark solar power transaction, the largest in the world when completed, and it expands the capability of solar power tower technology. Construction of the solar power plants, which use a technology that has not been deployed on a commercial scale, is expected to begin in 2010. http://greeninc.blogs.nytimes.com/2009/09/08/bechtel-to-build-solar-energy-plant-in-california

Consumer Interest for Plug-In Hybrid Vehicles Soars:

New Energy World Network, September 8, 2009 In a new study 'Electric Vehicle Consumer Survey', released by Pike Research, the promise of an improved fuel economy over standard internal combustion engines and the reduction of carbon emissions has led to a rise in consumer interest. Showings find that 48 per cent of those surveyed would be extremely or very interested in purchasing a plug-in hybrid electric vehicle with a 40-mile range on a single charge. Other key findings showed 85 per cent of consumers felt that improved fuel efficiency would play an important role when choosing their next vehicle. In turn, 65 per cent of respondents said they would be willing to pay a premium price above that of a standard gasoline vehicle if they were guaranteed a more environmentally-friendly vehicle. http://www.newenergyworldnetwork.com/alternative-energy-knowledge-bank/consumer-interest-for-plug-in-hybrid-vehicles-soars.html?utm_source=NewNet+Clean+Energy+Investor+Newsletter%28cap%29&utm_campaign=0fbc70a01a-newnet_newsletter1_test&utm_medium=email

Failing to Curb Global Warming Could Cost the Nation Hundreds of Billions by the End of the Century:

Union of Concerned Scientists, September 10, 2009
http://www.ucsusa.org/news/press_release/failing-to-curb-global-0275.html

September 2009 issue of Power Engineering.
Simply click the links below to access the Digital Edition of PE in your choice of format. To View in your browser, please click on the link below: http://www.qmags.com/2FE1161B16A107D91115D5856131436A92FF140544.htm

Some Bad Climate News and Some Good

Though a bill limiting greenhouse gas emissions has been put on the back burner, all is not lost. The E.P.A. is rolling out emissions rules for the automotive industry. http://www.nytimes.com/2009/09/16/opinion/16wed2.html?th&emc=th