

Energy Policy Update

Energy and Environmental News

February 8, 2010



ARIZONA DEPARTMENT
OF COMMERCE

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This newsletter is published by the Arizona Department of Commerce Energy Office and is provided free of charge to the public. It contains verbatim excerpts from international and domestic energy and environment-related publications reviewed by the Education and Community Outreach personnel. For inquiries, call **(602) 771-1143** or toll free **(800) 352-5499**. Compiled and edited by Gloria Castro, Special Projects Coordinator. To register to receive this newsletter electronically, email [Gloria Castro](mailto:Gloria.Castro@azcommerce.com).

For additional program information, access: <http://www.azcommerce.com/Energy/Energy+Policy+Update+%28Monthly+Publication%29.htm>.

Click here to view Grant Opportunities from the American Recovery and Reinvestment Act (ARRA).

FOR YOUR CONVENIENCE, ARIZONA-RELATED TITLES ARE HIGHLIGHTED IN BLUE

ARIZONA

Arizona SolarBullet High Speed Rail Energized by Meeting with Agency Representatives

[PRZOOM Newswire, Feb. 4] Tucson, AZ - Four months ago, the chief proponent of a very high-speed solar-powered bullet train between Tucson and Phoenix passed away suddenly. Last week, the new leaders of the SolarBullet initiative resumed the campaign by holding the roundtable meeting with route representatives that their founder, William S. Gaither, had planned. Hosted by the cities of Eloy and Casa Grande last Thursday, Jan. 28, more than a dozen city, county and state agency participants met for a SolarBullet update, beginning with a preview of a public awareness campaign to be themed "Tucson to Phoenix in 33 Minutes: Imagine the Possibilities." The group then discussed the steps it will take to move the entire project from imagination to action.

Cost an Obstacle to Building Nuclear Reactors

Experts discuss drawbacks to recent calls from Obama, Brewer to boost nuclear power

[Arizona Republic, Feb. 2] Nuclear reactors' hefty price tag is the biggest obstacle to building more, the nation's top nuclear regulator said Monday. Nuclear Regulatory Commission Chairman Gregory Jaczko said that permitting new reactors could take four years or more, and that storing the waste is not a pressing concern, but that paying for the new reactors remains a significant concern for most utilities. The best estimate for a new reactor's price tag is about \$10 billion, he said.

Firm to Hold off Filing for Solar Plant

[Today's News-Herald, Feb. 1] A Lake Havasu City-based company that is working to develop a 1,200MW solar plant north of Pilot has decided to hold off on filing with Western Area Power Administration so the firm can consider its options, according to the project's consulting engineer. "Once you file an application with Western (Area Power Administration), it is difficult to make any changes," said Project Consulting Engineer Michael Clinton on Monday during an interview. Clinton is also a member of Havasu-based Needle Mountain Power LLC. The company is looking into different types of solar power generating technology that would be a vehicle to create renewable energy at the proposed Sterling Solar Generating Facility.

Grant Helps NAU Spread Word Of Wind Power Across Arizona

[Northern Arizona University website, Feb. 3] Northern Arizona University has been selected to host a new program that will develop educational programs to improve the understanding of wind technology through the installation of small wind turbines at K-12 schools in rural areas across the state. NAU will receive about \$60,000 a year for three years from the U.S. Department of Energy's Wind Powering America program. The university will work with a network of community, state and industry partners to implement the program, including Flagstaff Unified School District, Southwest Windpower, the Flagstaff Chamber of Commerce and Coconino County's Sustainable Economic Development Initiative.

NAU entities involved include the Landsward Institute, the Sustainable Energy Solutions Group and the Institute for Tribal Environmental Professionals.

Raymond S. Kellis High School Students in Glendale are Solar Pioneers

[Arizona Republic, Feb. 4] Kevin English, a building trades teacher at Raymond S. Kellis High School, was upfront with his students about the state of the construction industry. "He told us the first day we got into his classroom that the construction industry is way down and not going up anytime soon," said Eric Villezcas, 17, a senior. But there was hope for Villezcas and the other students in the class at the Peoria Unified school, 8990 W. Orange-wood Ave., Glendale. English is integrating alternative energy projects to help his students prepare for an emerging renewable energy industry.

SRP Device Measures Home Energy Usage

[Arizona Republic, Feb. 3] Salt River Project officials think they can help people use less energy, or at least satisfy their curiosity, by showing how much their appliances cost to run. SRP customers can borrow a small device that will tell them how much electricity appliances use, from coffeemakers and refrigerators to computers and flat-screen televisions. With some basic math, users can calculate what those devices

Sunshine Acres Launching Solar Project

[Arizona Business Gazette, Feb. 4] Its name seems to be a perfect fit for solar energy. But hooking Sunshine Acres Children's Home up to the renewable-power source is more than a business decision. The home's executives say they take pride in reducing costs and trimming dependency on fossil fuels to generate electricity. An underlying motivation, however, reflects a more compelling concern. "We want the children here to have a wonderful planet to live on," said Sean Sloan, the home's executive director. With incentives, rebates and tax credits, Sunshine Acres is embarking on the first phase of a solar-energy system that ultimately will power electrical needs on the 116-acre campus and its 40-plus buildings.

Worker Retraining Key to Solar Industry Push

[Phoenix Business Journal, Feb. 5] Arizona is pushing for a bevy of solar companies to produce a new industry base in the state. The only drag may be where to find the workers. Despite Chinese manufacturer Suntech Power Holdings Co. Ltd. announcing it will build a facility in Goodyear and numerous commercial and utility projects coming online in the area, the Valley has just one nationally certified school training solar installers. It has nothing yet in terms of manufacturing the panels. Arizona is pushing for a bevy of solar companies to produce a new industry base in the state. The only drag may be where to find the workers. Despite Chinese manufacturer Suntech Power Holdings Co. Ltd. announcing it will build a facility in Goodyear and numerous commercial and utility projects coming online in the area, the Valley has just one nationally certified school training solar installers. It has nothing yet in terms of manufacturing the panels.

ALTERNATIVE ENERGY AND EFFICIENCY

Ethanol's 'Biggest Battle' is Keeping Tariff, Grassley Says

[Bloomberg, Feb. 2] U.S. Senator Charles Grassley said the ethanol industry faces a challenge this year in maintaining a tax credit and the tariff on Brazilian imports of the biofuel. Demand for ethanol in the nation is supported by a 45-cent tax credit provided to refiners for every gallon of the fuel blended into gasoline and by a 54-cent tariff on Brazilian-made forms of the additive. They both expire on Dec. 31.

Ruling is Big Plus for Biodiesel

[DesMoinesRegister.com website, Feb. 4] Washington, D.C. - Iowa's moribund biodiesel industry got a jolt of life Wednesday as the Obama administration reversed itself and found that the fuel meets federal carbon emission rules. That finding clears the way for biodiesel made from soybean oil, to qualify toward meeting a new national usage mandate. That requirement guarantees a market for the fuel and will require the industry to ramp up production this year. All but one or two of Iowa's 15 biodiesel plants have been shut down in recent weeks because of the industry's poor economics and the unexpected expiration on Dec. 31 of the industry's federal subsidy, a \$1-a-gallon tax credit, according to industry officials. Members of Congress have promised to revive the subsidy early this year.

US Government Expected to Increase Geothermal Funding by 25%

[RenewableEnergyWorld.com, Feb. 3] Washington, D.C. - The Obama administration 2011 federal budget proposal includes a 25% increase in geothermal technology funding through the Department of Energy, the Geothermal Energy Association (GEA) said this week. In addition to the US \$55 million requested specifically for geothermal technology development, the President's budget also allocated energy funding that the geothermal industry will have a chance to compete for. This funding includes \$300 million for the Advanced Research Projects Agency–Energy to assist in developing technologies such as the Enhanced Geothermal Systems (EGS) that an MIT report says could prove upwards of 800,000 MW of geothermal power across the United States.

U.S. Government Plans to Reduce Its Energy Use

[New York Times, Jan. 29] Washington, D.C. - The federal government will take steps to cut its energy use and reduce its heat-trapping emissions by 28 percent by 2020, compared with 2008 levels, the White House announced on Friday. The government is the largest user of electricity and fuel in the country, accounting for roughly 1.5 percent of the nation's annual energy consumption and emissions of the gases that contribute to global warming. The White House said the emissions reduction goal, if met, would save \$8 billion to \$11 billion in energy costs over the next decade. The actions would provide only a fraction of the emissions reductions that President Obama has pledged the United States will achieve across all sectors of the economy by 2020: 17 percent below 2005 levels. But he said the federal government must lead by example.

LEGISLATION AND REGULATION

Cap and Trade? Maybe Not Now...

[Environmental News Network, Feb. 3] President Barack Obama acknowledged on Tuesday that a controversial "cap-and-trade" mechanism to fight climate change could be separated from other aspects of an energy bill before the U.S. Senate. A cap-and-trade system would set limits on greenhouse gas emissions and allow companies to trade permits to pollute. The system, a version of which was approved by the House of Representatives, is controversial, especially among lawmakers who represent states with big coal reserves.

DOE and EPA Join States to Speed Progress on U.S. Energy Efficiency

[U.S. Dept. of Energy – EERE News, Feb. 2] DOE and the U.S. Environmental Protection Agency (EPA) announced on February 2 the creation of the State Energy Efficiency (SEE) Action Network. This network will help states achieve maximum cost-effective energy efficiency improvements in homes, offices, commercial buildings, and industrial facilities by 2020. Through the network, member organizations will assist states with their energy efficiency initiatives, including residential efficiency programs, financing solutions, and improved availability of energy usage information. Led by DOE and the EPA, the SEE Action Network will provide targeted technical assistance to states in order to reach national energy goals. The network will drive energy efficiency by using a broad set of goals from the National Action Plan for Energy Efficiency, a public-private initiative that began in 2005 to create a sustainable commitment through the collaborative efforts of gas and electric utilities, utility regulators, and other partner

DOE Requests \$2.4 Billion for Renewable Energy, Efficiency in FY 2011

[U.S. Dept. of Energy – EERE News, Feb. 3] President Barack Obama unveiled on February 1 a \$28.4 billion budget request for DOE for fiscal year (FY) 2011, including \$2.36 billion for the DOE Office of Energy Efficiency and Renewable Energy (EERE). The proposed budget aims to reduce unnecessary energy use, boost renewable energy sources, and strengthen clean energy research as the United States moves toward a clean energy economy. The budget request for EERE represents a 5% increase over FY 2010, not counting funds provided through the American Recovery and Reinvestment Act.

Massachusetts Sets Ambitious Energy Standards

[New York Times, Jan. 29] Massachusetts state officials on Friday announced new energy efficiency standards for utilities that aim to be the most ambitious in the nation. The plan calls for a statewide reduction of 2.4 percent in electricity use and 1.15 percent in natural gas use annually for three years. The savings are to be achieved largely through \$1.6 billion in incentives for utility customers who take certain steps to conserve energy, like insulating their houses or replacing conventional light bulbs with compact fluorescent ones. The reductions were mandated by the Green Communities Act, passed by the state legislature in 2008. But the bill did not specify the

reduction goals or how they were to be reached. The State Department of Public Utilities approved the specifics late Thursday.

ENERGY-GENERAL

Countries Submit Emission Goals

[New York Times, Feb. 1] Washington, D.C. - The climate change accord reached at Copenhagen in December passed its first test on Monday after countries responsible for the bulk of climate-altering pollution formally submitted their emission reduction plans, meeting the agreement's Jan. 31 deadline.

Most major nations — including the United States, the 27 nations of the European Union, China, India, Japan and Brazil — restated earlier pledges to curb emissions by 2020, some by promising absolute cuts, others by reducing the rate of increase from a business-as-usual curve. In all, 55 developed and developing countries submitted emission reduction plans to the United Nations Framework Convention on Climate Change, the body overseeing global negotiations. Two major nations — Mexico and Russia — had not submitted plans as of Monday evening.

Michigan Pushes Workers into Green Jobs as Automotive Engine Sputters

[Detroit News, Feb. 2] Even as Michigan makes great strides in transitioning to a green economy, some question whether the state leading the nation in unemployment can deliver enough renewable energy jobs to employ the workers it's retraining. State leaders and educators are expanding training programs and doling out free tuition to displaced Rust Belt workers looking to make a new start in the state's fledgling renewable energy industry. At the same time, the state is offering tax incentives to green businesses willing to relocate to Michigan. With the recession ravaging the state's automotive industry, the green energy sector -- an umbrella term that includes everything from solar and wind energy to battery technology -- is being held up as one way to stanch manufacturing job loss.

Shell Strikes Huge Ethanol Deal with Brazil's Cosan

[Financial Post, Feb. 1] Sao Paulo, Brazil - Royal Dutch Shell PLC plans to make the biggest-ever foray into biofuels by an oil major, striking a deal with Brazil's Cosan to create a US\$21-billion a year ethanol joint venture. The venture, which will be the No. 3 fuel distributor in Latin America's largest country, marks Shell's entry into ethanol production and underscores the biofuel's lure as an alternative to gasoline. It also follows moves by British oil company BP PLC, which in 2008 took a stake in a Brazilian biofuel project and unveiled US\$1-billion in investments.

WESTERN POWER

California Sets Up Statewide Network to Monitor Global-Warming Gases

[New York Times, Feb. 2] San Francisco, CA - California is preparing to introduce the first statewide system of monitoring devices to detect global-warming emissions, installing them on towers throughout the state. The monitoring network, which is expected to grow, will initially focus on pinpointing the sources and concentrations of methane, a potent contributor to climate change. The California plan is an early example of the kind of system that may be needed in many places as countries develop plans to limit their emissions of greenhouse gases.

Cement Plant Looks to Sun

[The Pueblo Chieftain, Jan. 30] Penrose, CO - Holcim's Portland cement plant is the first in the United States to use solar panels to help provide power to the plant, company officials say. Project Manager Ryan Trujillo said after a year and a half of planning and three months of installation, the solar panels are providing power to a substation at the plant and the plant consumes all the energy the panels can produce. A total of 528 solar panels produce an estimated 156,201 kilowatts of power each hour — enough to power the administrative offices or the equivalent of the power consumed by 14 homes. The benefit to the environment is that the solar power prevents an estimated 301,000 pounds of carbon dioxide emissions per year, said John Todd, Holcim general manager.

In Texas, Resistance over Stricter U.S. Smog Limits

[New York Times, Feb. 3] Houston, TX - Environmentalists squared off against business groups and Texas state officials on Thursday at a hearing on the Obama administration's proposal to tighten standards for smog-producing pollutants, a change that could improve the health of millions but would impose burdensome costs on industry and local governments. The hearing, before a panel of federal environmental officials, was one of three

being held around the country on the proposed new standards, which would replace those set by the Bush administration in March 2008. Those standards, which set the limit for ozone at 75 parts per billion, ignored the advice of a panel of scientists advising the Environmental Protection Agency and have been challenged in court as too weak.

L.A. Takes a Shine to another Owens Valley Product: Sun

The Department of Water and Power wants to transform the area into one of the largest producers of solar energy in America.

[Los Angeles Times, Jan. 2] First it was silver ore that streamed to Los Angeles from the rim of the Owens Valley, then the water from the valley floor. Now, L.A. has come back for the sunshine. The Los Angeles Department of Water and Power, the agency responsible for turning Owens Lake into a dusty salt flat and snatching up nearly every acre from Lone Pine to Bishop, has its sights on transforming the Owens Valley into one of largest sources of solar power in America.

Proposal to Link the Nation's Grid Sparks a Debate

[New York Times, Feb. 3] The Tres Amigas transmission project in New Mexico, which seeks to link the nation's three power grids to share wind power across the United States, has attracted both eager allies and some determined foes. Scandia Wind Southwest LLC, a venture led by Norwegian wind power developers, has proposed to build an initial 2,250 megawatts of wind power in the Texas Panhandle, with a potential capacity of 10,000 MW. That amount of power, the equivalent of 10 large nuclear power plants, could move into the Eastern and Western grid interconnections, and to Texas' independent grid, over the Tres Amigas transmission linkage.

INDUSTRIES AND TECHNOLOGIES

China's Labor Edge Overpowers Obama's 'Green' Jobs Initiatives

[Bloomberg, Feb. 4] President Barack Obama is spending \$2.1 million to help Suntech Power Holdings Co. build a solar-panel plant in Arizona. It will hire 70 Americans to assemble components made by Suntech's 11,000 Chinese workers. That gap shows the challenge Obama faces as he works to create "green" jobs. Asia makes more than half the world's wind and solar energy equipment, and is gaining ground as U.S. factories lose out to cheaper labor and higher demand for clean energy. China for the first time topped the U.S. in wind-turbine manufacturing and installations last year, the Brussels-based Global Wind Energy Council said yesterday in a report. Obama is giving billions of dollars in tax breaks to the wind and solar industries to create jobs in the U.S. even as production expands faster overseas. First Solar Inc., the world's largest maker of thin-film solar-power modules, won \$16.3 million to add 200 manufacturing jobs at its Ohio plant, yet 71 percent of its planned factory growth will go to Malaysia. The company employs 4,500 globally.

Investment Dollars Flow to Green Energy Start-Ups

[Forbes, Feb. 3] Start-ups developing products aimed at wringing every last drop of efficiency from green technologies have become the standouts in the increasingly crowded field of renewable energy. These companies are gaining favor, in part because they don't require a lot of cash to bootstrap, a big draw at a time when there's not much financing available. Other winners in the investor sweepstakes are companies seeking to replace existing power grids to allow utilities to interact with home appliances, turning them on when power demand is low and electricity is cheaper. Makers of more efficient electric cars are also getting cash, with the U.S. government providing large loan guarantees. Meanwhile, investor interest in turning inedible plants into liquid fuels has cooled. Building biorefineries can cost well over \$100 million and venture capitalists aren't ready to underwrite these experiments after some high profile crashes triggered in part by falling oil and natural gas prices.

GASOLINE AND DIESEL FUEL

To view Arizona and U.S. Gasoline and Diesel fuel data plus other pertinent oil information click [here](http://www.azcommerce.com/Energy/MotorFuel/).
<http://www.azcommerce.com/Energy/MotorFuel/>

GRANTS

The RFPs created or supplemented as a result of the American Recovery and Reinvestment Act (Recovery Act) are identified in the RFP titles.

NIST Research Grants

The National Institute of Standards and Technology (NIST) announces that programs including, but not limited to, are soliciting applications for FY 2010 financial assistance: 1) The Electronics and Electrical Engineering

Laboratory Grants Program, 2) The Manufacturing Engineering Laboratory Grants Program, 3) The Chemical Science and Technology Laboratory Grants Program; 4) The Physics Laboratory Grants Program; 5) The Materials Science and Engineering Laboratory Grants Program, and 6) The Building Research Grants and Cooperative Agreements Program. Applications considered on a continuing basis. For more info, contact Christopher Hunton at christopher.hunton@nist.gov or go to: <http://www.grants.gov/search/search.do?mode=VIEW&oppld=50883>. Refer to Sol# 2010-MSE-01. (Grants.gov 12/28/09)

Climate Adaptation and Disaster Resilience - Indonesia

The U.S. Agency for International Development, Mission in Indonesia, requests proposals for Climate Adaptation and Disaster Resilience (CADRE). Indonesia is particularly vulnerable to climate change and disasters. CADRE supports projects that address climate change and disasters by efficiently, effectively and sustainably addressing the needs for disaster risk reduction and climate change adaptation together, among vulnerable populations in Indonesia. Multiple awards ranging from \$500K to \$1.5 million anticipated. Concept Papers are due 1/25/10 and 7/26/10. For more info, contact Johanna Gardjito at aps10-005@usaid.gov or go to: <http://www.grants.gov/search/search.do?mode=VIEW&oppld=50515>. Refer to Sol# APS10-005. (Grants.gov 12/7/09)

NEW! Solar – Delivery to Multiple Locations – Recovery Act

The U.S. Department of the Interior, U.S. Geological Survey, announces its intent to request quotes for for 261 (ea) 40-watt solar panels, 75 (ea) 50-watt solar panels, and 50 (ea) 65-75-watt solar panels for multiple deliveries to Alaska, Hawaii, Washington (state), and the Northern Marianas Islands, Saipan. The RFP will open on or about 2/5/10, anticipated response date not provided. For more info, contact EC_helpdesk@NBC.GOV or go to: <https://www.fbo.gov/?s=opportunity&mode=form&id=0773de26b89937ce74ecedee8591f9c3&tab=core&cvview=0>. Refer to Sol# 10WRQQ0062. (FBO 1/27/10)

International Development Grants

The U.S. Agency for International Development requests proposals for the Development Grants Program, which supports development activities in the following areas: Climate change adaptation, microenterprise, water and sanitation, and dairy. DGP recipients will be responsible for ensuring achievement of the program objectives in specified countries. Applications should consider Agency priorities in Food Security, Global Climate Change, and Global Engagement with new partners. \$40 million expected to be available, individual awards NTE \$2 million. Responses due 2/12/10. For more info, contact Roderick Watson at rwatson@usaid.gov or go to: <http://www.grants.gov/search/search.do?mode=VIEW&oppld=50806>. Refer to Sol# M-OAA-GRO-EGAS-DGP-10-001. (Grants.gov 12/22/09)

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The U.S. Agency for International Development requests proposals for the Development Grants Program, which supports development activities in the following areas: Climate change adaptation, microenterprise, water and sanitation, and dairy. DGP recipients will be responsible for ensuring achievement of the program objectives in specified countries. Applications should consider Agency priorities in Food Security, Global Climate Change, and Global Engagement with new partners. \$40 million expected to be available, individual awards NTE \$2 million. Responses due 2/12/10. For more info, contact Roderick Watson at rwatson@usaid.gov or go to: <http://www.grants.gov/search/search.do?mode=VIEW&oppld=50806>. Refer to Sol# M-OAA-GRO-EGAS-DGP-10-001. (Grants.gov 12/22/09)

Engineering Design and Innovation

The National Science Foundation requests proposals for Engineering Design and Innovation. The program focus is on gaining an understanding of the basic processes and phenomena underlying a holistic, life-cycle view of design where the total system life-cycle context recognizes the need for advanced understanding of the identification and definition of preferences, analysis of alternatives, effective accommodation of uncertainty in decision-making, and the relationship between data and knowledge in a digitally-supported process. Responses due 2/15/10. For more info, contact Christina Bloebaum at cbloebau@nsf.gov or go to: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13340. Refer to Sol# PD 08-1464. (Grants.gov 11/16/09)

Residential Weatherization Grants

The U.S. Department of Energy requests proposals for Weatherization Formula Grants. Prime applicant restricted to agencies responsible for administering the annual Weatherization Assistance Program (WAP) formula allocation. WAP funds are used to increase the energy efficiency of dwellings owned or occupied by low-income persons, reduce their total residential expenditures, and improve their health and safety. WAP assists persons who are particularly vulnerable such as the elderly, persons with disabilities, families with children, high

residential energy users, and households with high-energy burden. \$210 million expected to be available, 59 awards anticipated. Response due date dependant on fiscal year end of prime applicant, with range of 2/15/10 – 8/1/10. For more info, including contacts, go to:

<https://www.fedconnect.net/FedConnect/?doc=DE-FOA-0000216&agency=DOE>. Refer to Sol# DE-FOA-0000216. (Grants.gov 12/29/09)

Sensors and Sensing Systems

The National Science Foundation requests proposals for Sensors and Sensing Systems. This program supports fundamental research on advanced actuators, sensors, wireless sensor networks, new materials and concepts for sensing applications, power generation and energy supply for sensors and sensing systems. Responses due 2/15/10. For more info, contact Shih Liu at sliu@nsf.gov or go to:

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13349. Refer to Sol# PD-08-1639. (Grants.gov 11/16/09)

Structural Materials and Mechanics

The National Science Foundation requests proposals for Structural Materials and Mechanics. This program supports fundamental research on the behavior of civil infrastructure materials and the mechanics of structural components in the built environment. Of particular interest is research on structural components consisting of natural and synthetic materials, their response to mechanical, hydrothermal and time-dependent loads, and their impact on life-cycle performance and sustainable development of the civil infrastructure. Responses due 2/15/10. For more info, contact Lawrence Bank at lbank@nsf.gov or go to:

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13357. Refer to Sol# PD-08-1635. (Grants.gov 11/16/09)

Materials and Surface Engineering

The National Science Foundation requests proposals for Materials and Surface Engineering. This program supports fundamental research leading to a better understanding of the effect of microstructure, surfaces and coatings on the properties and performance of engineering materials, and the ultimate control of these properties through material design. Responses due 2/15/10. For more info, contact Clark Cooper at ccooper@nsf.gov or go to: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13356.

Refer to Sol# PD-08-1633. (Grants.gov 11/16/09)

Materials Processing and Manufacturing

The National Science Foundation requests proposals for Materials Processing and Manufacturing. This program supports fundamental research on the interrelationship of materials processing, structure, performance and process control. Responses due 2/15/10. For more info, contact Mary Toney at mtoney@nsf.gov or go to:

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13344. Refer to Sol# PD-08-1467. (Grants.gov 11/16/09)

Mechanics of Materials

The National Science Foundation requests proposals for Mechanics of Materials. This program supports fundamental research on solid mechanics including theoretical, analytical, and computational approaches, model-based simulation, and the development of constitutive models. Responses due 2/15/10. For more info, contact Glaucio Paulino at gpaulino@nsf.gov or go to: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13355.

Refer to Sol# PD-08-1630. (Grants.gov 11/16/09)

Manufacturing and Construction Machines and Equipment

The National Science Foundation requests proposals for Manufacturing and Construction Machines and Equipment. This program supports fundamental research leading to improved machines and applications for both manufacturing and construction. Key goals are to advance the transition of these industries from skill-based to knowledge-based activities and to develop them as activities with minimal environmental and societal impact. Responses due 2/15/10. For more info, contact George Hazelrigg at ghazelri@nsf.gov or go to:

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13346. Refer to Sol# PD-08-1468. (Grants.gov 11/16/09)

NEW! Transportation Planning

The U.S. Department of Transportation, Federal Highway Administration (FHWA) requests proposals for the 2010 Transportation Planning Broad Agency Announcement. FHWA seeks projects in the following areas: Tools and Techniques that Support State and Local Planning Capacity Building; Tools and Techniques that Support Tribal Planning Capacity Building; Global Climate Change and Air Quality Research; Congestion Management; Safety Planning; Public Involvement, Environmental Justice, Visualization in Planning; and Freight Planning. \$1.5 million expected to be available, number of awards anticipated not specified. Pre-proposals are required and are due 2/15/10, final proposals due 4/5/10. For more info, contact Joseph Fusari at Joseph.fusari@dot.gov or go to:

https://www.fbo.gov/?s=opportunity&mode=form&id=ac164c8ae3c75df21e8786c2b9383d90&tab=core&_cvview=0. Refer to Sol# DTFH61-10-R-00013. (FBO 1/25/10)

NEW! Tribal Energy Projects – BPA Service Territory

The Bonneville Power Administration requests proposals for Tribal Activities or Events. This initiative will support project areas including, but not limited to: Energy, tribal capacity building/training projects, R&D, and Fish Accord implementation. Lead applicants must be from federally recognized tribes or tribal organizations located within the BPA service territory. Award range \$1K to \$30K. Responses due 2/15/10. For more info, contact Nathan Dexter at ndexter@bpa.gov or go to: http://www.bpa.gov/corporate/About_BPA/Tribes/rfp.cfm. Refer to Sol# DKT-7.

Environmental Video Contest

The U.S. Environmental Protection Agency is sponsoring a video contest titled "Our Planet, Our Stuff, Our Choice," that challenges filmmakers to produce short, creative videos that highlight the "Three Rs" of individual consumption: Reduce, Reuse, and Recycle. Entries should be 30 to 60 seconds in length. Award range \$500 to \$2.5K. Videos accepted through 2/16/10. For more info, go to: <http://www.epa.gov/osw/wycd/video.htm>.

NEW! Green Heroes

Clorox requests proposals for the 2010 Green Heroes Grant Program. This initiative, sponsored by the makers of Green Works® natural cleaners, and Jane Goodall's Roots & Shoots, will provide support to individuals, organizations and schools that are making their communities a greener place. \$60K expected to be available, 6 awards anticipated. Responses due 2/18/10. For more info, go to: http://greenworkspresskit.com/Green_Heroes_Grant_Program.html. (Foundation Center RFP Bulletin 1/29/10)

Plant Feedstock Genomics for Bioenergy

The U.S. Department of Energy's Office of Science, Office of Biological and Environmental Research (OBER), and the U.S. Department of Agriculture (USDA), National Institute of Food and Agriculture (NIFA), hereby announce their interest in receiving applications for genomics-based research that will lead to the improved use of biomass and plant feedstocks for the production of fuels such as ethanol or renewable chemical feedstocks. Specifically, applications are sought for fundamental research on plants that will improve biomass characteristics, biomass yield, or sustainability. Systems biology approaches to identify genetic indicators enabling plants to be efficiently bred or manipulated, or research that yields fundamental knowledge of the structure, function and organization of plant genomes leading to improved feedstock characterization and sustainability are also encouraged. Reference Number: DE-FOA-0000223 Response Due Date: 2/18/2010 8:00:00 PM ES. Use the following link to view this opportunity: <https://www.fedconnect.net/fedconnect?doc=DE-FOA-0000223&agency=DOE>

NEW! Renewable Energy Credits

The Defense Logistic Agency, Defense Energy Support Center, seeks up to 101,062,000 kWh of renewable energy certificates for ultimate transfer to various Federal civilian customers. Responses due 2/22/10. For more info, contact Ashleigh Johnson at Ashleigh.Johnson@dla.mil or go to: https://www.fbo.gov/?s=opportunity&mode=form&id=187f0eb8c0084f759ce482ef4877affa&tab=core&_cview=0. Refer to Sol# SP0600-10-R-0412. (FBO 1/22/10)

Energy for Sustainability

The National Science Foundation requests proposals for Energy for Sustainability. This program supports fundamental research and education in energy production, conversion, and storage and is focused on energy sources that are environmentally friendly and renewable. Sources of sustainable energy include: Sunlight, Wind/Wave, Biomass, and Geothermal. Responses due 3/3/10. For more info, contact Gregory Rorrer at grorrer@nsf.gov or go to: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=501026. Refer to Sol# PD-10-7644. (Grants.gov 11/16/09)

Environmental Engineering

The National Science Foundation requests proposals for Environmental Engineering. The goal of this program is to encourage transformative research which applies scientific principles to minimize solid, liquid, and gaseous discharges into land, inland and coastal waters, and air that result from human activity, and to evaluate adverse impacts of these discharges on human health and environmental quality. Responses due 3/3/10. For more info, contact Paul Bishop at pbishop@nsf.gov or go to: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=501029. Refer to Sol# PD-10-1440. (Grants.gov 11/16/09)

Environmental Sustainability

The National Science Foundation requests proposals for Environmental Sustainability. This program supports engineering research with the goal of promoting sustainable engineered systems that support human well-being and that are also compatible with sustaining natural systems. Research in Environmental Sustainability typically

considers long time horizons and may incorporate contributions from the social sciences and ethics. Responses due 3/3/10. For more info, contact Bruce Hamilton at bhamilto@nsf.gov or go to: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=501027. Refer to Sol# PD 10-7643. (Grants.gov 11/16/09)

Environmental Implications of Emerging Technologies

The National Science Foundation requests proposals for Environmental Implications of Emerging Technologies. This program provides support to develop and test the environmental effects of new technologies. The program also supports research on the development and refinement of sensors and sensor network technologies. Responses due 3/3/10. For more info, contact Cynthia Ekstein at acekstein@nsf.gov or go to: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=501030. Refer to Sol# PD-10-1179. (Grants.gov 11/16/09)

Biotechnology, Biochemical, and Biomass Engineering

The National Science Foundation requests proposals for Biotechnology, Biochemical, and Biomass Engineering. This program addresses fundamental problems involved in the processing and manufacturing of products of economic importance by effectively utilizing renewable resources of biological origin and bioinformatics originating from genomic and proteomic information. Responses due 3/3/10. For more info, contact Leon Esterowitz at lesterow@nsf.gov or go to: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=501024. Refer to Sol# PD-10-1491. (Grants.gov 11/16/09)

Biosensing

The National Science Foundation requests proposals for Biosensing. This program supports innovative, transformative, and insightful investigations of fundamental problems with broad long term impact and applications that require novel use of bio-inspired engineering principles and sophisticated devices to meet the engineering and technology needs of the nation. Responses due 3/3/10. For more info, contact Alex Simonian at asimonia@nsf.gov or go to: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503353. Refer to Sol# PD-10-7909. (Grants.gov 11/12/09)

NEW! HOPE VI Main Street Program

The U.S. Department of Housing and Urban Development requests proposals for the HOPE VI Main Street Program. This program will assist small communities in the rejuvenation of an historic or traditional central business district or "Main Street" area by replacing unused commercial space in buildings with affordable housing units. HOPE VI strategic goals include, but are not limited to, Promoting Energy Star and Green Development. \$4 million expected to be available, up to 4 awards anticipated. Responses due 3/3/10. For more info, contact Lawrence Gnessin at lawrence.gnessin@hud.gov or go to: <http://www.grants.gov/search/search.do?mode=VIEW&oppld=50180>. Refer to Sol# FR-5300-N-24. (Grants.gov 11/11/09)

Thermal Transport

The National Science Foundation requests proposals for Thermal Transport Processes. This program supports engineering research aimed at gaining a basic understanding of the microscopic and macroscopic levels of thermal transport phenomena (heat and mass transfer) in energy conversion and conservation, the synthesis and processing of materials, cooling and heating of infrastructure and equipment, the interaction of industrial processes with the environment, the propulsion of air and land-based vehicles, and thermal phenomena in biological and environmental systems. Responses due 3/3/10. For more info, contact Theodore Bergman at tbergman@nsf.gov or go to: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13367. Refer to Sol# PD-10-1406. (Grants.gov 11/16/09)

NEW! Engine R&D to Improve Efficiency and Reduce Emissions

The U.S. Environmental Protection Agency requests proposals for Engine R&D for Future Advanced Vehicle Technologies that Will Improve Fuel Efficiency and Reduce Emissions. Through this RPF, EPA seeks research that includes investigation into the effect of the piston bowl design on fuel-air mixing and combustion in direct injection engines and provide comprehensive details on the influence of in-cylinder fuel spray injection pressure, spray patterns, liquid and vapor fuel penetration, injection timing and duration, nozzle geometry, ignition timing for best performance, as well as the effect of exhaust gas re-circulation on combustion process and emissions. \$800K expected to be available, 1 award anticipated. Responses due 3/5/10. For more info, contact Fakhri Hamady at hamady.fakhri@epa.gov or go to: http://www.epa.gov/air/grants_funding.html. Refer to Sol# EPA-OAR-OTAQ-10-03. (Grants.gov 1/20/10)

NEW! Greenest School Contest

IC Bus, a school bus manufacturer, requests proposals for the 2010 America's Greenest School contest. Students across the U.S. are invited to submit an entry that illustrates their ideas for making their school a

greener place. The winning entry will receive a hybrid school bus from IC Bus, a green audit of their school from a LEED Accredited Professional, and approximately \$20K for their school to use toward a "green" makeover. Responses due 3/8/10. For more info, go to: <http://www.americasgreenestschool.com/>. (Foundation Center RFP Bulletin 1/29/10)

Community Action and the Environment

The U.S. Environmental Protection Agency requests proposals for the Community Action for a Renewed Environment (CARE) Program. CARE is a unique community-based, community-driven, multimedia demonstration program designed to help communities understand and reduce risks due to toxic pollutants and environmental concerns from all sources. \$2 million expected to be available, up to 9 awards anticipated. Responses due 3/9/10. For more info, contact Dennis O'Connor at oconnor.dennis@epa.gov or go to: http://www.epa.gov/air/grants_funding.html. Refer to Sol# EPA-OAR-IO-10-04. (Grants.gov 12/15/09)

Eisenhower Transportation Fellowships

The U.S. Department of Transportation requests proposals for the Eisenhower Graduate Fellowship Program, which provides funding for the pursuit of Masters or Doctorate Degrees in transportation related disciplines. \$900K expected to be available, 76 awards anticipated. Responses due 3/12/10. For more info, contact Henry Murdaugh at Henry.Murdaugh@dot.gov or go to: <http://www.grants.gov/search/search.do?mode=VIEW&oppld=50901>. Refer to Sol# DTFH64-10-RA-00001. (Grants.gov 12/30/09)

NEW! Strategic Agricultural Initiative - Region 2, Region 7 and Region 9

The U.S. Environmental Protection Agency, Regions 2, 7, and 9, request proposals for the Strategic Agricultural Initiative, for projects that will promote the transition to reduced-risk pest management practices in agriculture to protect human health and the environment.

Region 2: \$200K expected to be available, up to 2 awards anticipated. Responses due 3/12/10. Projects must take place in NJ, NY, Puerto Rico, or the Virgin Islands. For more info, including Region-specific priorities, contact Adrian Enache at enache.adrian@epa.gov or go to: <http://www.epa.gov/region02/grants/>. Refer to Sol# EPA-R2-DECA-PTSB-10-01. (Grants.gov 1/26/10)

Region 7: \$93K expected to be available, up to 2 awards anticipated. Responses due 3/12/10. Projects must take place in IA, KS, MO, or NB. For more info, including Region-specific priorities, contact Heather Duncan at duncan.heather@epa.gov or go to: <http://www.epa.gov/region07/economics/pdf/epa-r7wwpd-10-001.pdf>. Refer to Sol# EPA-R7WWPD-10-001. (Grants.gov 1/13/10)

Region 9: \$250K expected to be available, up to 3 awards anticipated. Responses due 3/15/10. Projects must take place in AZ, CA, HI, NV, or the Pacific Islands. For more info, including Region-specific priorities, contact Cindy Wire at wire.cindy@epa.gov or go to: <http://www.epa.gov/region09/funding/food-quality.html>. Refer to Sol# EPA-R9-CED1-10-002. (Grants.gov 1/19/10)

Photon Research

The U.S. Department of Defense, Defense Advanced Research Projects Agency, requests proposals for Information in a Photon, for projects that address the basic science and the associated unifying physical and mathematical principles that govern the information capacity of optical photons. Project abstracts due 1/28/10, final proposals due 3/15/10. For more info, contact Mark Neifeld at mark.neifeld@darpa.mil or go to: <http://www.darpa.mil/dso/solicitations/solicit.htm>. Refer to Sol# DARPA-BAA-10-19. (Grants.gov 12/16/09)

NEW! Water Sustainability and Climate

The National Science Foundation requests proposals for Water Sustainability and Climate. This initiative will support research to understand and predict the interactions between the water system and climate change, land use, the built environment, and ecosystem function and services. \$16 million expected to be available, up to 14 awards anticipated. Letters of intent are due 3/15/10, final proposals due 4/15/10. For more info, contact Enriqueta Barrera at ebarrera@nsf.gov or go to: http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf10524. Refer to Sol# 10-524.

NEW! EcoStar Grants

Constellation Energy requests proposals for the EcoStar Grant Program. This program will support community-based projects in the following areas: Pollution prevention, education and outreach, energy efficiency, conservation, and community activism. Projects must take place where Constellation Energy does business (the continental U.S. with the exception of AZ, GA, ID, MT, NM, NV, OR, and WY). Individual awards NTE \$5K. Responses due 3/16/10. For more info, go to: <http://www.constellation.com/portal/site/constellation/menuitem.999b6fed85785a2399084010016176a0>. (Foundation Center RFP Bulletin 1/22/10)

Science, Mathematics and Engineering Mentoring

The National Science Foundation requests proposals for Presidential Awards for Excellence in Science, Mathematics and Engineering Mentoring. This program, administered on behalf of the White House, seeks to identify outstanding individual mentoring efforts or organizational programs designed to enhance the participation of groups underrepresented in science, technology, engineering, and mathematics. It is expected that each award will be used to continue the recognized activities. The nominees must have served in a described mentoring role for at least five years prior to nomination. \$400K expected to be available, up to 16 awards anticipated. Responses due 3/23/10. For more info, contact Daphne Rainey at drainey@nsf.gov or go to: http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf10520. Refer to Sol# 10-520. (Grants.gov 12/23/09)

Environmental Synthesis Center

The National Science Foundation requests proposals for the Environmental Synthesis Center. The purpose of the Center will be to stimulate research, education and outreach at the interface of the biological, geological, and social sciences. Few challenges require synthesis as urgently as global environmental change, which is proceeding at an unprecedented scope, scale and speed. The Center will be international in scope and foster collaborative, cross-disciplinary efforts to understand and predict the complex interactions among ecological populations, communities and ecosystems, the geophysical environment, and human actions and decisions that underlie global environmental change. \$30 million expected to be available, 1 award anticipated. Pre-proposals are required and are due 3/23/10, final proposals due 7/14/10. For more info, contact Saran Twombly at stwombly@nsf.gov or go to: http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf10521. Refer to Sol# 10-521. (Grants.gov 12/23/09)

Fuels from Sunlight Hub

The U.S. Department of Energy requests proposals for the Energy for Innovation Hub - Fuels from Sunlight. The purpose of the Hub will be to assemble the most talented scientists and technologists to focus intense research and development efforts on the development of an effective solar energy to chemical fuel conversion system. The system should operate at an overall efficiency and produce fuel of sufficient energy content to enable transition from bench-top discovery to proof-of-concept prototyping. \$122 million expected to be available, 1 award anticipated. A Letter of Intent is strongly encouraged but not required and is due 1/29/10, final proposals due 3/29/10. For more info, contact Marlene Martinez at marlene.martinez@ch.doe.gov or go to: <https://www.fedconnect.net/FedConnect/?doc=DE-FOA-0000214&agency=DOE>. Refer to Sol# DE-FOA-0000214. (Grants.gov 12/22/09)

NEW! Renewables, Efficiency and Water Conservation - Worldwide

The U.S. Navy announces its intent to request proposals for Renewable Energy Technologies - Energy and Water Conservation Services for Navy Facilities. This work is intended to promote the use of renewable energy technologies, acquire energy and water conservation services, reduce energy and water consumption and/or associated utility costs, and reduce energy and water-related operations and maintenance costs, as specified in each task order issued against the contract. The work will be performed at DOD facilities globally. DOD anticipates release of the RFP on 4/5/10. For more info, contact Dyanne Van Der Kamp at dyanne.vanderkamp@navy.mil or go to: https://www.fbo.gov/?s=opportunity&mode=form&id=5366f2e24697c02cbe9b7eae834546a2&tab=core&_cview=0. Refer to Sol# N6258310R0333. (FBO 1/22/10)

NEW! Solar - Arizona

The U.S. Department of the Air Force requests proposals from a qualified utility provider to furnish all labor, materials, etc. to supply and deliver solar powered utility service to Davis-Monthan Air Force Base, AZ from a contractor-owned PV array. Responses due 4/7/10. For more info, contact Arthur Perry at arthur.perry@dm.af.mil or go to: https://www.fbo.gov/?s=opportunity&mode=form&id=f24b230c924db03598baa7fbd2c75be0&tab=core&_cview=0. Refer to Sol# FA4877-10-R0001. (FBO 1/24/10)

NEW! Modeling Regional and Global Climate

The U.S. Department of Energy requests proposals for the Regional and Global Climate Modeling Program: Modes of Low Frequency Variability in a Changing Climate. Of particular interest is research on how natural climate variability interacts and modulates future climate change. High risk, high pay-off research ideas that explore innovative new directions that further the understanding of the modes of low frequency variability are encouraged. \$3 million expected to be available, up to 10 awards anticipated. Pre-applications are required and are due 2/18/10, final proposals due 4/12/10. For more info, contact Renu Joseph at

Renu.Joseph@science.doe.gov or go to: <https://www.fedconnect.net/FedConnect/?doc=DE-FOA-0000242&agency=DOE>. Refer to Sol# DE-FOA-0000242. (Grants.gov 1/21/10)

NEW! Youth & Environmental Advocacy

Earth Island Institute requests applications for the Brower Youth Awards, to recognize young people for outstanding activism and achievements in the fields of environmental and environmental justice advocacy. Individual awards \$3K, six awards anticipated. Responses due 5/15/10. For more info, go to: <http://www.broweryouthawards.org/article.php?list=type&type=54>. (Foundation Center RFP Bulletin 1/8/10)

U.S. DOE Office of Science

The U.S. Department of Energy, Office of Science, announces its continuing interest in receiving grant proposals in areas including, but not limited to: Basic Energy Sciences, Biological and Environmental Research, and Advanced Scientific Computing. Proposals accepted through 9/30/10. For more info, including program-specific contacts, go to: <https://www.fedconnect.net/FedConnect/?doc=DE-FOA-0000179&agency=DOE>. Refer to Sol# DE-FOA-0000179. (Grants.gov 12/4/09)

NEW! Climate and Weather

The National Oceanic and Atmospheric Administration (NOAA) requests proposals for the FY10-FY11 Broad Agency Announcement for special projects and programs associated with the Agency's strategic plan. NOAA's Strategic Plan includes, but is not limited to: 1) Understanding Climate Variability and Change to Enhance Society's Ability to Plan and Respond; and 2) Serving Society's Needs for Weather and Water Information. Funding amount and number of awards not specified. Responses due 9/30/11. For more info, contact Steve Drescher at steve.j.drescher@noaa.gov or go to: <http://www.grants.gov/search/search.do?mode=VIEW&oppld=51101>. Refer to Sol# NOAA-NFA-NFAPO-2010-2002272. (Grants.gov 1/14/10)

NEW! Mechanics of Materials

The National Science Foundation requests proposals for Mechanics of Materials. This program supports fundamental research on solid mechanics including theoretical, analytical, and computational approaches, model-based simulation, and the development of constitutive models. Funding amount and number of awards not specified. Responses due 10/1/10. For more info, contact Glaucio Paulino at gpaolino@nsf.gov or go to: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13355. Refer to Sol# PD-10-1630. (Grants.gov 1/18/10)

Solid State and Materials Chemistry

The National Science Foundation requests proposals for Solid State and Materials Chemistry. This program supports basic research in solid state and materials chemistry comprising the elucidation of the atomic and molecular basis for material development and properties in the solid state from the nanoscale to the bulk. Areas of interest include, but are not limited to: Innovative approaches to design, synthesis, bulk crystal and/or film growth, and characterization of novel organic, inorganic, and hybrid materials, as well as liquid crystal materials and multi-component material systems exhibiting new phenomena and/or providing new scientific insights into structure/composition/property relationships in the solid state. Responses due 10/31/10. For more info, contact Linda Sapochak at lsapocha@nsf.gov or go to: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5356. Refer to Sol# PD-09-1762. (Grants.gov 11/18/09)

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