

Energy Policy Update

Energy and Environmental News

January 25, 2010



ARIZONA DEPARTMENT
OF COMMERCE

The center for
economic advancement

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).

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

Governor Jan Brewer Continues Push for Jobs Creation

Announces State of Arizona Awarded \$5 million for Energy Sector Training Grant

[Arizona Governor's Office website, Jan. 22] Phoenix - Governor Jan Brewer today announced the State of Arizona has been awarded \$5 million through the American Recovery and Reinvestment Act (ARRA) of 2009 by the U.S. Department of Labor. The funds come from the State Energy Sector Partnership and Training Grants which are designed to teach workers the skills required in emerging industries, including energy efficiency and renewable energy. The grant will help train more than 1,500 Arizonans.

Group: Plug-In, Hybrid Cars Key to Clean Air

[Cronkite News Service, Jan. 22] Scottsdale, AZ - Electric and hybrid vehicles, along with renewable energy sources developed by utilities, can help clear Arizona's air, leaders of an environmental group said Thursday. "As we face higher pollution levels from transportation and electricity generation, electric cars can be a good solution to reducing air pollution and smog," said Bret Fanshaw, an associate with Environment Arizona Research & Policy Center. The group released a report touting the benefits of the vehicles, noting that they produce no tailpipe pollution when using electricity and can be recharged from the power grid. Meanwhile, gasoline-powered vehicles contribute 36 percent of the carbon-dioxide emissions in Arizona, the group said.

Solar-Driven Stirling Engines get to Work

[CNET News, Jan. 22] Business and government officials on Friday cut the ribbon on a solar array in Arizona that uses giant parabolic dishes to generate electricity from the sun. Solar plant developer Tessera Solar installed 60 solar collectors, called the SunCatcher from Stirling Energy Systems, in Peoria, Ariz. Each dish is rated at 25 kilowatts and the entire facility will have a capacity of 1.5-megawatts of generation. Utilities installing large-scale solar power generation are typically using arrays of flat photovoltaic panels or concentrating solar power systems, where mirrors or reflective troughs create heat to make electricity.

Solar Panels Prepare UA for Green Future

[Arizona Daily Wildcat, Jan. 21] The solar panels atop the Second Street Garage are the first and most visible component of an initiative to make the UA campus eco-friendly. The Second Street Garage panels, which are currently the biggest grouping of solar panels on campus, are being tested before they are used to produce energy and make the campus greener. The Sustainable Endowments Institute's annual college report card gave the UA's transportation department an "A" and the university as a whole a "B" for their sustainability efforts,

Solar Plant to be Built at UA's Tech Park

[Associated Press, Jan. 20] Tucson - A New York energy company is planning to build a \$32 million solar thermal plant at the University of Arizona's Tech Park. It's the first step in what university officials hope will be a 200-acre zone devoted to solar research, manufacturing and training. Rochester-based Bell Independent Power Corp. says its technology will produce power from the sun that is reliable and "cost-competitive with fossil fuel energy. Key to the 5-million watt system is a thermal storage component that will allow it to produce electricity for several hours after the sun sets, or is obscured by clouds. Construction of the facility is expected to be completed by May 2011.

Solar Plant Wants to Locate Near Havasu

[Mohave Daily News, Jan. 22] Kingman, AZ - Another solar generating plant is being planned near the once-proposed subdivision called Sterling north of Interstate 40 near the Lake Havasu City exit. Needle Mountain Power, LLC of Lake Havasu City is expected to file an application by the end of the month with the Western Area Power Administration. The project would be built on 10,000 acres once considered for the subdivision

SRP Rate Hike Gets Different Response

[Arizona Republic, Jan. 24] Salt River Project got a much different response to its rate-hike plans last week than it did last summer when it tried to pump up rates, and the feedback shows passion among clean-energy advocates. In August, SRP conducted five public meetings to explain an 8.8 percent rate hike being proposed at the time. Many customers were angered when they showed up and instead of a microphone for them to give officials an earful, they were met with service reps to help them analyze their bills and ways to save energy. SRP's elected leaders delayed that increase, and managers have come back asking for a 4.9 percent increase to add about \$6 a month to the average household bill.

ALTERNATIVE ENERGY AND EFFICIENCY

Homebuilders Sticking With Less-Is-More Approach

[Associated Press, Jan.21] Las Vegas, NV - Think of it as the shrinking American dream. What's out: Outdoor kitchens and fireplaces, two-story foyers and deluxe bathroom features like multiple showerheads in the master bathroom. What's in: Smaller homes with lots of natural light, storage and energy efficiency features that save money — and don't cost too much.

How Stimulus Saved Renewable Energy

[CNMoney.com web site, Jan. 24] New York - On a mountain top 80 miles northeast of Bangor, Maine, in country where houses and gravel pits are mere pinpricks on a map green with forest, Paul Gaynor is making stimulus work. Gaynor, chief executive of First Wind, is using \$40 million in federal funds to help build a wind farm that will produce enough power for 13,000 homes and has created 200 construction jobs. Without stimulus, First Wind's project -- and most renewable energy projects across the country -- may not have happened.

LEGISLATION AND REGULATION

California Objects to One Auto Emission Standard for the Nation

[Environmental News Network, Jan. 22] California has issues with federal attempts to weaken new vehicle pollution standards, but the state backed away on Wednesday from a report that it was threatening to pull out of a deal with U.S. President Barack Obama's administration. The California agency responsible for implementing the state's global-warming law and vehicle-pollution standards said in a November letter that federal agencies must address two issues "to ensure California's continued support for the national program."California can set its own vehicle-emissions standards with federal approval and it received the go-ahead from the Obama administration last year. But when the federal government proposed a national plan by the Environmental Protection Agency and the National Highway Traffic Safety Administration based on the state one, California agreed to harmonize its rules.

Natural Gas Legislation to Pass by May, Pickens Says (Update2)

[Bloomberg, Jan. 21] U.S. legislation with new incentives for natural-gas-powered vehicles will pass by late May because Democrats need to gain a bipartisan victory, T. Boone Pickens, founder and chairman of Dallas-based BP Capital LLC, said. "We've got a bill that's set to go," Pickens said in an interview today on Bloomberg Television. "It will pass by Memorial Day." Memorial Day is on May 31 this year. Pickens, who put his personal

worth at \$1.5 billion, down from \$3 billion when oil prices peaked in July 2008, said he started a \$62 million promotion that summer for a national energy plan that relies on domestically produced natural gas and wind energy to cut U.S. dependence on foreign oil. Now he's focused on replacing fleet cars and particularly trucks that run on gasoline and diesel fuel with those that use cleaner-burning natural gas.

Recovery Act Announcement: Secretary Chu Announces More Than \$20.5 Million for Community Renewable Energy Deployment Projects

[U.S. Dept of Energy – EERE website, Jan.21] U.S. Department of Energy (DOE) Secretary Steven Chu announced today the selection of five projects to receive more than \$20.5 million from the American Recovery and Reinvestment Act to support deployment of community-based renewable energy projects, such as biomass, wind, and solar installations. These projects will promote investment in clean energy infrastructure that will create jobs, help communities provide long-term renewable energy and save consumers money. They will also serve as models for other local governments, campuses, or small utilities to replicate, allowing other communities to design projects that fit their individual size and energy demands.

Senate Dems Build Case to Include Clean Energy, Solar in Jobs Bill

[New York Times, Jan. 25] A Senate Environment and Public Works subcommittee this week will highlight solar energy and clean energy job opportunities as President Obama and Democrats continue to work on economic recovery and job creation. Obama appeared at Lorain County Community College in Ohio on Friday to urge Congress to pass legislation that includes incentives for training in clean energy such as making solar panels and windmill blades. Obama watched formerly laid-off workers weld and shape components for wind turbines as they work toward a certificate or associate's degree.

State Regulators Still Strongly Distrust Federal Transmission Siting -- Study

[New York Times, Jan. 25] State regulators and environmental groups fear federal authority to site transmission lines would create a process that would emphasize infrastructure over costs and environmental benefits, according to a survey unveiled today by the University of Texas Center for Energy Economics and the Terra Group, a stakeholder relations consultant. The nine-month [survey \(pdf\)](#) of 11 state regulatory commissions and major national environmental organizations found that while both groups admit that the U.S. transmission system should be improved both for reliability and environmental purposes, they believe placing that power in the hands of the Federal Energy Regulatory Commission will lead to overly expensive lines that are not all necessarily needed.

ENERGY-GENERAL

Sector Snap: Coal Stocks Tumble

[Associated Press, Jan. 21] New York - Concerns about China taking measures to slow down its economy and a broader market slide sent shares of coal stocks tumbling Thursday. An analyst also downgraded many big names in the industry, warning that the sector is increasingly being threatened by the growing popularity of rival energy sources like inexpensive natural gas. China on Thursday reported 10.7 percent economic expansion in the fourth quarter and 8.7 percent for all of last year. The supercharged numbers reinforced concerns that China will take more steps to tighten monetary policy and rein in its economy — potentially hampering a global economic rebound. Coal currently provides two-thirds of China's power but if the nation tamps down expansion, coal demand would suffer.

Study: Asia Factors into West Coast Smog

Ozone found drifting over, and increasing, over time

Grants Pass, OR - Ozone blowing over from Asia is raising background levels of a major ingredient of smog in the skies over California, Oregon, Washington and other Western states, according to a new study appearing in Thursday's edition of the journal Nature. The amounts are small and, so far, only found in a region of the atmosphere known as the free troposphere, at an altitude of two to five miles, but the development could complicate U.S. efforts to control air pollution. Though the levels are small, they have been steadily rising since 1995, and probably longer, said lead author Owen Cooper, a research scientist at the University of Colorado attached to the National Oceanic and Atmospheric Administration's Earth System Research Laboratory in Boulder, Colo.

WESTERN POWER

California OKs \$350 Million in Rebates for Installing Solar Water Heaters

The program approved by the state Public Utilities Commission could reduce the cost of a solar-powered system by 15% to 25%, industry experts say.

[Los Angeles Times, Jan. 22] Utility regulators have approved \$350 million in rebates to encourage Californians to install water-heating systems powered by solar energy. The state Public Utilities Commission on Thursday established the California Solar Initiative Thermal Program, which will be funded using \$250 million to replace natural-gas-powered water heaters, with \$25 million set aside for low-income customers. An additional \$100.8 million will be used to swap out water heaters powered by electricity. The rebates could reduce the cost of a solar water heater by 15% to 25%, industry experts said. The federal government also offers a 30% tax credit.

First Solar Signs Deal with PNM for 22-Megawatt Plant

[Phoenix Business Journal, Jan. 20] First Solar Inc. will build a 22-megawatt photovoltaic power plant for PNM Resources Inc., New Mexico's largest public utility. The thin-film, utility-scale project will provide enough power for about 7,000 homes. The companies did not release a cost estimate. Locations for the panels have not been chosen, but officials say there will be five sites within PNM's territory selected based on the cost and availability of land. The move still has to be approved New Mexico's state regulators. It is the first contract under an agreement between PNM and the state to bring in more solar, about 45 megawatts, by the end of 2011.

PG&E SolarCity Partner on Solar

[San Francisco Business Times, Jan. 20] PG&E is officially financing solar. Under a partnership announced today, a financing arm of Northern California utility owner PG&E Corp. will provide \$60 million in tax equity financing for about 1,000 solar systems installed by Foster City-based SolarCity. This is the first partnership of its kind between a utility and a solar installer. Tax equity financing helped drive major growth in the solar industry in years past. The federal government offers a 30 percent tax credit for renewable energy projects but only companies that make a profit can use that tax credit..

INDUSTRIES AND TECHNOLOGIES

Ontario Says Samsung Deal to Make It Green Leader

[Reuters, Jan. 21] Toronto, Canada - A C\$7 billion (\$6.7 billion) green energy investment by a consortium led by South Korea's Samsung C&T Corp will make Ontario a leader in renewable energy technology, the Canadian province said on Thursday. The project to build four wind and solar power clusters in Ontario, Canada's most populous province, will have a combined power-generating capacity of 2.5 gigawatts by 2016. That's equivalent to 4 percent of Ontario's total electricity consumption. It will include wind turbines that will generate up to 2,000 megawatts, as well as solar power facilities that will generate up to 500 megawatts. Ontario has agreed buy electricity from the group.

Sea Change for Solar

The sugar daddy of the industry is finally making big subsidy cuts.

[Forbes, Jan. 21] London - Solar companies making bank in the world's biggest solar market may have to start looking elsewhere if they want to see real, long-term growth. The German government has just proposed a significant cut to the subsidies it pays business and individuals in Germany to use solar panels and "feed" the excess power they generate back into the national power grid, which is then bought by utilities for around six to eight times the market rate. Those "feed-in tariffs" on utilities, which have been shared out by consumers over the last decade, are why gray-skied Germany is currently the world's biggest market for harnessing the sun's power, accounting for half of global demand.

Wind Energy Could Be Big in Eastern US

[Environmental News Network, Jan. 21] Wind energy could generate 20 percent of the electricity needed by households and businesses in the eastern half of the United States by 2024, but it would require up to \$90 billion in investment, according to a government report released on Wednesday. For the 20 percent wind scenario to work, billions must be spent on installing wind towers on land and sea and about 22,000 miles of new high-tech power lines to carry the electricity to cities, according to the study from the Energy Department's National Renewable Energy Laboratory.

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.

NEW! 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)

NEW! Electrofuels - Recovery Act

The U.S. Department of Energy, Advanced Research Projects Agency-Energy (ARPA-E), requests proposals Recovery Act - Electrofuels. Through this RFP, ARPA-E seeks new ways to make liquid transportation fuels, without using petroleum or biomass, by using microorganisms to harness chemical or electrical energy to convert carbon dioxide into liquid fuels. \$30 million expected to be available, 10 awards anticipated. Concept Papers are required and are due 1/15/10, full proposals due early February 2010. For more info, contact ARPA-E@hq.doe.gov or go to: <https://www.fedconnect.net/FedConnect/?doc=DE-FOA-0000206&agency=DOE>.

Refer to Sol# DE-FOA-0000206. (FBO 12/9/09)

NEW! 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! Fuel Efficiency and Emission Testing

The U.S. Environmental Protection Agency requests quotes for Fuel Efficiency and Emissions Testing, Training and Technical Assistance for the Partnership for Clean Indoor Air. The estimated level of effort is 730 hours.

Responses due 1/28/10. For more info, contact Iris Redmon at (202) 564-2644 or go to:

https://www.fbo.gov/?s=opportunity&mode=form&id=c172392b28cf2a2a5523dd9e0c952f0c&tab=core&_cview=0.

Refer to Sol# RFQ-DC-10-00063. (FBO 12/31/09)

Reducing Methane from Landfills

The U.S. Environmental Protection Agency announces its intent to request proposals for Technical and Outreach Support Services for Reducing Emissions from Landfills. The contractor will support the mission of the Landfill Methane Outreach Program, a voluntary assistance program that helps to reduce methane from landfills by encouraging the recovery and use of landfill gas as a renewable, green energy source. The RFP will be issued on or about 2/2/10. For more info, contact Faye Sas at sas.faye@epa.gov or go to:

https://www.fbo.gov/?s=opportunity&mode=form&id=0e90c51835d6b1b73e011dbba75df433&tab=core&_cview=0

Refer to Sol# PR-HQ-10-10262. (FBO 11/7/09)

NEW! 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&opId=50806>.

Refer to Sol# M-OAA-GRO-EGAS-DGP-10-001. (Grants.gov 12/22/09)

NEW! Source Reduction Assistance

The U.S. Environmental Protection Agency requests proposals for the Source Reduction Assistance Grant Program, for environmental projects that reduce or eliminate pollution at the source. National areas of interest include projects that encourage greenhouse gas reduction, toxic and hazardous materials reduction, resource conservation, efficient business practices and P2 integration activities. \$1.3 million expected to be available, up to 300 awards anticipated. Responses due 2/4/10. For more info, including Regional contacts and Region-specific areas of interest, go to: <http://www.epa.gov/p2/pubs/grants/srap10.pdf>.

Refer to Sol# EPA-HQ-OPPT-2010-02. (Grants.gov 12/17/09)

Environmental Management Fellowship Program

The U.S. Environmental Protection Agency requests proposals for the National Network for Environmental Management Studies Fellowship Program. This program provides students an opportunity to participate in a fellowship project that is directly related to their field of study. Fellowship categories include: Environmental Policy, Regulation, and Law; Environmental Management and Administration; Environmental Science; and Public Relations and Communications. \$400K expected to be available, up to 40 awards anticipated. Responses due 2/5/10. For more info, go to: <http://www.epa.gov/education/students.html>.

Refer to Sol# EPA-EED-10-01. (Grants.gov 11/5/09)

Power, Controls and Adaptive Networks

The National Science Foundation requests proposals for Power, Controls and Adaptive Networks. This program supports distributed control of multi-agent systems with embedded computation for sensor and adaptive networks. This program emphasizes electric power networks and grids, including generation, transmission and integration of renewable, sustainable and distributed energy systems, such as fuel cells and micro-turbines in large power networks; high power electronics and drives; and understanding of associated regulatory and economic structures. The program also emphasizes energy scavenging and alternative energy technologies, including solar cells, ocean waves, wind, geothermal, low-head hydro, and the hydrogen economy. In addition, the program supports generation and integration in the National Grid (InterGrid), and interdependencies of critical infrastructure in power and communications. Responses due 2/7/10. For more info, contact Radhakishan Baheti at rbaheti@nsf.gov or go to: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13380.

Refer to Sol# PD-10-1518. (Grants.gov 11/16/09)

1890 Land Grant Capacity Building

The U.S. Department of Agriculture requests proposals from 1890 Land-Grant Institutions (http://www.csrees.usda.gov/qlinks/partners/state_partners.html), including Tuskegee University and West Virginia State University, for 1890 Institution Education, Research and Extension Capacity Building Grants. This program seeks to build institutional capacity through stimulating the development of high quality education, research and extension programs that will produce a professional work force in the food and agricultural sciences. High priority areas include, but are not limited to: Bio-energy/Biofuel; Sustainable Agriculture; and Global Climate Change. \$35 million expected to be available. Responses due 2/8/10. For more info, contact Ali Mohamed at amohamed@nifa.usda.gov or go to: http://www.nifa.usda.gov/funding/rfas/pdfs/10_1890_capacity.pdf.

Refer to Sol# USDA-NIFA-CBGP-002695. (Grants.gov 11/16/09)

NEW! Livability Bus Program

The U.S. Department of Transportation, Federal Transit Administration, requests proposals for the FTA Bus and Bus Facilities Livability Initiative. The Livability Bus Program makes funds available to public transit providers to finance capital projects to replace, rehabilitate, and purchase buses and related equipment and to construct bus-related facilities. Project evaluation criteria includes, but is not limited to, a determination of whether the project promotes a more environmentally sustainable transportation system, improves energy efficiency, or reduces greenhouse gases. Applicants are encouraged to provide information regarding the expected use of clean or alternative sources of energy. \$150 million expected to be available. Responses due 2/8/10. For more info, contact Kimberly Sledge at kimberly.sledge@dot.gov or go to: http://www.fta.dot.gov/funding/grants_financing_7829.html.

Refer to Sol# FTA-2010-002-TPM. (Grants.gov 12/22/09)

Organic Agriculture Initiative

The U.S. Department of Agriculture requests proposals for the Organic Agriculture Research and Extension Initiative. This program will support projects that enhance the ability of producers and processors who have

already adopted organic standards to grow and market high quality organic agricultural products. Projects that emphasize research and outreach that assist farmers and ranchers with whole farm planning and ecosystem integration are of particular interest. \$19 million expected to be available, individual awards NTE \$3 million. Responses due 2/9/10. For more info, contact Mary Peet at mpeet@nifa.usda.gov or go to: <http://www.nifa.usda.gov/funding/rfas/OREI.html>.

Refer to Sol# USDA-NIFA-ICGP-002696. (Grants.gov 11/18/09)

NEW! Urban Circulator

The U.S. Department of Transportation, Federal Transit Administration, requests proposals for the Urban Circulator Program. This program will support projects such as streetcars, buses, and bus facilities that connect urban destinations and fosters the redevelopment of urban spaces into walkable mixed use, high density environments. \$130 million expected to be available, up to 6 awards anticipated. Responses due 2/10/10. For more info, contact Elizabeth Day at Elizabeth.Day@dot.gov or go to: <http://edocket.access.gpo.gov/2009/pdf/E9-29245.pdf>. Refer to Sol# FTA-2010-001-TPE. (Grants.gov 12/23/09)

NEW! Methane Recovery

The U.S. Environmental Protection Agency requests proposals for Activities that Advance Methane Recovery and Use as a Clean Energy Source. This RFP will support investigation, survey, study, training, and demonstration projects that advance international near-term, cost-effective methane recovery and use as a clean energy source, and support the goals of the Methane to Markets Partnership. \$5 million expected to be available, up to 35 awards anticipated. A Notice of Intent to Apply is requested but not required and is due 2/11/10, final proposals due 4/15/10. For more info, contact Henry Ferland at ferland.henry@epa.gov or go to: http://www.epa.gov/air/grants_funding.html. Refer to Sol# EPA-OAR-CCD-10-02. (Grants.gov 12/22/09)

NEW! 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&opId=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)

NEW! 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 shihliu@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! 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! 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>

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)

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! 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)

NEW! 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&opId=50901>.
Refer to Sol# DTFH64-10-RA-00001. (Grants.gov 12/30/09)

NEW! 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! 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)

NEW! 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)

NEW! 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! 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)

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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