

SFI weekly newsletter for the week of January 18, 2010
A weekly service of SFI



SUSTAINABILITY NEWS

1. **Wisconsin Campuses Can't Meet Governor's Energy Goal**
Wisconsin Gov. Jim Doyle has acknowledged that his campaign promise that four University of Wisconsin campuses would be "off the grid" in energy use by 2012 was too ambitious and can't be met, the Associated Press reported. While some university officials say that the goal was never realistic, they credit the governor's pledge with inspiring more creative approaches to reducing energy use.
2. **Mercury in the Great Lakes is the topic of the week in Environment in Focus** by Satyaprakash Mohapatra of the [Canadian Institute for Environmental Law and Policy \(CIELAP\)](http://www.canadianinstitute.org/) .See <http://www.earthportal.org/?p=1747>
3. **First Contract for Beaming Solar Energy From Space** has been approved by the California Public Utilities Commission. PG&E will receive solar energy generated by Solaren Corp's orbiting satellites through a long term power purchase agreement. Solaren says it can provide 1700 GW-hours of energy a year for the 15-year contract, which starts in 2016. Once the 200 MW solar plant is hoisted into space it has the advantage of 24-hour sunlight. Solar cells in space would capture about five times more energy as that on earth. A mylar mirror, about a kilometer in diameter, would be inflated and float freely once it reach its orbit. Sunlight would be concentrated onto smaller mirrors, which would focus the light on PV modules. The resulting electricity will be converted into radio frequency energy that's transmitted to a receiver station on the ground.

SEMINARS



1. **Great Lakes Restoration Initiative request for proposals public webinar archive is available for viewing.**
<http://greatlakesrestoration.us/action/?p=178>
This public webinar occurred December 16, 2009 with 584 participants.
View the captioned video or download video here:
<http://epa.gov/glnpo/live/rfp01webinar/index.html>
Find out more about the Great Lakes Restoration Initiative request for proposals here: <http://epa.gov/glnpo/fund/2010rfp01/index.html>
2. **AASHE Launches STARS 1.0 -- Webinar**
The full, formal launch of [STARS 1.0 \(Sustainability Tracking, Assessment & Rating System\)](http://www.aashe.org/stars) will take place on Tuesday, January 19th. Already over 100 institutions have registered as [STARS Charter Participants](http://www.aashe.org/stars).

In honor of the launch, AASHE is presenting an educational webinar titled "Measuring Campus

Sustainability: Reaching for the STARS," which addresses how STARS will meet the needs of the campus sustainability community. This free webinar, broadcast from American University, starts at noon Eastern on Jan. 19th. Please [RSVP for the webinar](#) to receive login details.

The webinar features the following leaders in higher education (and includes a Q & A session):

- Nan Jenks-Jay - Dean of Environmental Affairs, Middlebury College
- Dave Newport - Director of the Environmental Center, University of Colorado at Boulder
- Chris O'Brien - Director of Sustainability, American University
- Paul Rowland - Executive Director, AASHE

For questions about the launch, contact the STARS Team (stars@ashe.org)

FUNDING & AWARD OPPORTUNITIES

To submit research proposals through the Sustainable Futures Institute, add "SFI" to the DEPT/CENTER/INSTITUTE(S) column for identifying the PI's and co-PI's. SFI Director, David Shonnard, will sign the transmittal sheet on page 3. (If David Shonnard is unavailable for signing transmittal sheets, Rick Donovan can also sign for SFI). Submitting proposals under SFI provides wider publicity and recognition for your research as well as a 10% return on your incentive account. Please feel free to contact SFI in regards to proposal development – SFI can serve as a hub for bringing together different faculty, merging concepts related to sustainability, providing literature review assistance, etc.

1. **Great Lakes Restoration Initiative Request for Proposals**

Note: SFI will be coordinating several responses to this RFP. Please feel free to contact Richard Donovan, SFI's operations manager regarding how you can participate.

<http://epa.gov/greatlakes/fund/2010rfp01/index.html>

HUFY2010 Great Lakes Restoration Initiative Interagency Funding GuideU

U.S. EPA, August 24, 2009

Bob Shuchman's write-up of the summer EPA presentations on the GLRI is here:

<http://www.mtri.org/GreatLakesRestorationInitiative.html>

2. **NSF Environmental Implications of Emerging Technologies**

Deadline Mar 03, 2010

Upper Amount \$100,000 for one to three years. Equipment proposals for less will be considered

This program provides support to develop and test the environmental effects of new technologies.

Fundamental and basic research is sought to establish and understand outcomes as a result of the implementation of new technologies such as nanotechnology and biotechnology. The program also supports research on the development and refinement of sensors and sensor network technologies that can be used to measure a wide variety of physical, chemical, and biological properties of interest in characterizing, monitoring, and understanding environmental impacts. The program emphasizes engineering principles underlying technology impacts. Innovative production processes, waste reduction, recycling, and industrial ecology technologies are of interest. All of these have implications that would be relevant to this program.

Current areas of support include

- understanding and mitigating how new developments in nanotechnology and biotechnology will interact with the environment;
- nanotechnology environmental, health, and safety implications and applications;
- predictive methodology for the interaction of nanoparticles with the environment and with the human body, including predictive approaches for toxicity;
- fate and transport of natural, engineered, and incidental (by-product) nanoparticles;
- risk assessment and management of the effect of nanomaterials in the environment;
- evaluation of the effect of increased usage of renewable resources on water supply and land use; and
- sensor and sensor network technologies as they relate to the measurement of these environmental implications.

All proposed research should be driven by engineering principles, and presented in an environmental health and safety or environmental sensor context. Proposals should include involvement of at least one engineering student. URL for more info http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=501030

3. Broadening Participation Research Initiation Grants in Engineering (BRIGE) - NSF 10-509

Sponsor: NSF

Amount: \$175,000

Deadline: Feb 25, 2010

The Directorate for Engineering (ENG) at the NSF offers a research initiation grant funding opportunity with the goal of broadening participation to all engineers including members from underrepresented groups and persons with disabilities in the engineering disciplines. These grants are intended to increase the diversity of researchers in engineering disciplines to initiate research programs early in their careers, including those from underrepresented groups, engineers at minority serving institutions, and persons with disabilities. By providing these funding opportunities, ENG intends to further broaden participation of engineering researchers who share NSF's commitment to diversity in the following ways:

1. Expand the population of role models who will interact with an increasingly diverse student population, the workforce of the future.
2. Increase the number of engineering researchers at minority serving institutions actively and competitively engaged in research as independent investigators, thereby creating new research opportunities for students from underrepresented groups and persons with disabilities.
3. Fund engineering research projects that use innovative ways to attract and retain members of underrepresented groups and persons with disabilities to careers in engineering.

The participating ENG organizations are

- Electrical, Communications and Cyber Systems;
- Division of Chemical, Bioengineering, Environmental, and Transport Systems;
- Civil, Mechanical and Manufacturing Innovation;
- Engineering Education and Centers; and
- Industrial Innovation and Partnerships.

[http://fundingopps.cos.com/cgi-](http://fundingopps.cos.com/cgi-bin/getRec?id=110373&_ksTicket=1adbf95f580b280eeacefdbabc0f3c&_ksExpires=2010010100:00:00)

[bin/getRec?id=110373&_ksTicket=1adbf95f580b280eeacefdbabc0f3c&_ksExpires=2010010100:00:00](http://fundingopps.cos.com/cgi-bin/getRec?id=110373&_ksTicket=1adbf95f580b280eeacefdbabc0f3c&_ksExpires=2010010100:00:00)

4. Fundamental Research Program for Industry/University Cooperative Research Centers (FRP) - NSF 10-507

Amount \$50,000 to \$200,000 for ~10 awards No cost sharing required.

Deadline Feb 17, 2010 to Feb 02, 2011

Industry participation extends the scope and horizon of center research projects so as to drive innovation with industrially relevant fundamental research projects. Industry-defined fundamental research projects must demonstrate measurable industry collaboration and involvement that accelerates fundamental research.

The I/UCRCs contribute to the knowledge base of a large number of industrial manufacturing processes that involve a wide range of technological pursuits and are found in areas such as aerospace, electronics, chemicals, recovery of natural resources, the environment, petroleum, biochemicals, materials, food, power generation, and allied activities. To better enable these processes, the I/UCRC fundamental research program supports research that involves the development of fundamental engineering and science principles, process control and optimization strategies, mathematical models, and experimental techniques, with an emphasis on projects that have the potential for innovation and broad application in areas in industry. This fundamental research is leading to applications that include sensors, materials, pharmaceuticals, imaging, visualization, embedded systems, next generation computers, medical devices and instrumentation, alternative energy, ecological engineering, water and waste treatment, and robotics. Should the fundamental research proposals be awarded, there may be opportunities for additional funding for opportunities such as those listed below:

1. GOALI (NSF-09-516) - Graduate and Undergraduate Student Industrial Fellowship
2. Research Experienced for Undergraduates (NSF 09-598) - REU

Bookmark Url <http://fundingopps.cos.com/cgi-bin/fo2/getRec?id=115693>

URL for more info <http://www.nsf.gov/pubs/2010/nsf10507/nsf10507.htm>

5. ERDC BAA - Construction Materials Made From Recycled Wastes (CERL-11)

Sponsor: DOD

Amount not listed

Deadline Continuous

The Construction Engineering Research Laboratory announces research opportunities involving construction materials made from recycled wastes. Research is currently being conducted on construction materials made from recycled, post-consumer wastes with a primary focus on products made from recycled plastics. Required research on these polymeric materials includes, but is not limited to, studies concerning the relationship of fabrication techniques to end-product properties, degradation mechanisms in various environmental exposures, long-term mechanical properties and durability in severe and varying environments, creep behavior at varied temperatures and loads, behavior and design of bolted connections, quality assurance techniques, design criteria for structural applications, and modeling techniques to predict material behavior in different loading situations over the life-cycle of the product.

Bookmark Url <http://fundingopps.cos.com/cgi-bin/fo2/getRec?id=41644>

6. ONR's Young Investigator Program (YIP)

Deadline: Jan 29, 2010

The Office of Naval Research (ONR) is interested in receiving proposals for its Young Investigator Program (YIP). ONR's Young Investigator Program (YIP) seeks to identify and support academic scientists and engineers who have received Ph.D. or equivalent degrees within the last five years (on or after 01 November 2004 for this FY10 competition) and who show exceptional promise for doing creative research. The objectives of this program are to attract outstanding faculty members of Institutions of Higher Education (hereafter also called "universities") to the Department of the Navy's research program, to support their research, and to encourage their teaching and research careers. Proposals addressing research areas as described in the ONR Science and Technology (S&T) Department section of ONR's website at www.onr.navy.mil which are of interest to ONR Program Officers and Division Directors will be considered. Contact information for each Division (a subgroup of an S&T Department) is also listed within the S&T section of the website. Potential applicants may contact the appropriate Division Director, or the Program Officer who is the point-of-contact for a specific technical area, to discuss their research ideas. Brief informal pre-proposals may be submitted to facilitate these discussions. Such discussions can clarify the content and breadth of the priority research areas and enhance the match between a subsequent proposal and Department of the Navy research needs.

<http://www07.grants.gov/search/search.do?&mode=VIEW&flag2006=false&oppld=50529>

7. Research Excellence Fund Calls for Proposals

Deadline: 4 p.m. Thursday, Feb. 25.

Proposals are being solicited for the FY2010 Research Excellence Fund (REF), an internal award of the Office of the Vice President for Research.

The announcement, which includes a program description, proposal format, review criteria and process, award procedure and reporting requirements, is available online. A new REF category, Scholarship and Creativity Grants, has been added this year. [More information](#). Incomplete proposals or those received after the deadline will not be accepted for consideration by the review committee for this year and will be returned. Newly funded REF awards will begin on Thursday, July 1.

Submit your proposal to Laurie Stark, office assistant in Research Integrity and Compliance, located on the third floor of the Lakeshore Center.

JOB, POST DOCS, INTERNSHIPS, FELLOWSHIPS, SCHOLARSHIPS



1. CA-CP Announces Climate Fellowship Opportunities for Summer 2010

The highly competitive Clean Air-Cool Planet Climate Fellowship program pairs outstanding students with challenging real-world opportunities to propel society toward a low-carbon future. Highly qualified graduate and undergraduate students in fields ranging from the humanities to environmental policy or economics to statistics, engineering, physical or biological sciences complete important, challenging, and in-depth projects.

Applications will be accepted from December 18th until midnight on January 31st, 2010. Placements run for ten weeks, between May and August, 2010, and include a \$5000 stipend.

Opportunities for 2010 are as follows:

Communicating Carbon Management Strategies Across Sectors

Vanasse Hangen Brustlin, Inc. (Boston, MA)

Vanasse Hangen Brustlin, Inc. is an emerging leader in the campus sustainability movement—a movement that has much to lend to organizations in other sectors that are not as far along the carbon management path. A Climate Fellow will work with the VHB higher education team to evaluate what kinds of projects and solutions are most immediately applicable with their work in other sectors, including healthcare, airports, municipal governments and others. From there, the fellow will work with Clean Air-Cool Planet and VHB to implement internal strategies at both organizations and produce a white paper for the sharing of best practices across sectors.

[Read the full description \(pdf\).](#)

Seacoast Science Center's Carbon Challenge

The Seacoast Science Center (Rye, NH)

A climate fellow will evaluate and assist in the successful cultivation of Northeast Science Center Collaborative (NESCC) members as implementing partners in the New England Carbon Challenge (NECC) program from the Seacoast Science Center. This fellow will evaluate the progress of science centers implementing the Carbon Challenge. The result of this query will be a short, written report identifying the places where our partners have succeeded and the places where our partners have fallen short, and why. The cumulative result of this work will be a "Guide for Science Centers as an Implementing Partner in a Residential Carbon Challenge.

[Read the full description \(pdf\).](#)

Strategic Communications and Development

Clean Air-Cool Planet (Portsmouth, NH)

This fellowship will allow for exploration and development of effective communication mechanisms, aimed at supporting the work outcomes of all of the 2010 fellows, as well as supporting the fellowship program's overall branding, development, and alumni retention efforts. Two key areas of focus will be effective representation of data and information in graphically appealing ways, and the leverage of existing networks and systems (such as social networking tools) to disseminate these accessible data visualizations. The fellow may work with local graphic and web design studios in Portsmouth, NH, to explore these needs and to develop effective tools. [Read the full description \(pdf\).](#)

Climate Policy: Natural Resources

The Climate Policy Center (Washington, DC)

This fellow will be involved in Clean Air - Cool Planet's work in the nation's capital, meeting key players in climate policy development and producing products of immediate value. He or she will compile background information, assess the latest research and explore policy implications on scientific topic(s) of importance to climate change, in particular issues of climate adaptation on natural resources and natural resource policy. At the end of the summer term, this Climate Policy Fellow will have written one or more papers and/or presentations on the state of scientific/technical knowledge on climate change adaptation and implications for policy development. [Read the full description \(pdf\).](#)

Climate Policy: The Economics of Adaptation, Readiness, and Risk

The Climate Policy Center (Washington, DC)

This is the second fellowship assisting Clean Air-Cool Planet in its work in Washington. The fellow will compile background information, assess the latest research and explore policy implications of the economic impact of climate adaptation, readiness, and risk. At the end of the summer term, this fellow will have written one or more papers and/or presentations on the state of scientific/technical knowledge on Adaptation and implications for policy development.

[Read the full description \(pdf\).](#)

Charting Emissions from Food Services (CHEFS)

Tulsa, Oklahoma, Chamber of Commerce (Tulsa, OK)

Clean Air - Cool Planet is creating an innovative tool: CHEFS—Charting Emissions from Food Services. Not only will CHEFS allow our partners to estimate their broader footprint, but we are also 1) creating momentum within corporate foodservice providers to green their own operations, and 2) contributing to the body of life cycle data for food production in North America. This fellow will be responsible for coordinating the communications with pilot sites, recruiting new pilot partners, and synthesizing the outcomes into best practices and outstanding questions. This fellowship will be based in Tulsa, Oklahoma. The fellow will work in the office of the Tulsa Chamber of Commerce. Approximately one day per week will be spent supporting the Chamber's "Tulsa Young Professionals" group with several environmental projects.

[Read the full description \(pdf\).](#)

Greening the Greater Portsmouth Chamber of Commerce

Greater Portsmouth Chamber of Commerce (Portsmouth, NH)

Clean Air-Cool Planet is an active member of the Greater Portsmouth Chamber of Commerce, with a staff member who serves on its Legislative Affairs Committee. The purposes of this fellowship will be production of a guide to engage small businesses on climate change and sustainability bringing together components of the action plan launched by the City of Portsmouth. The fellow will work to identify key obstacles to

success by surveying membership and developing a template for measuring outcomes. He or she will also help develop programs to engage and encourage GPCC members, partners and the greater community in general to demonstrate innovative technologies or programs on the path toward achieving its goal of reducing the carbon footprint. [Read the full description \(pdf\).](#)

New Hampshire Climate Action Campaign

The Carbon Coalition (Concord or Portsmouth, NH)

Working closely with other state environmentalists and under the direction of CA-CP, this Fellow will influence the response to and point of view of Republican candidates and activists throughout New Hampshire on the issue of climate change in advance of the state primary on September 14th. This work is especially important as prospective candidates for the Republican nomination for President will be in the state during this period of time, setting the groundwork for retail-level campaigning in advance of the 2012 presidential primary. The fellow will have the opportunity to extend his or her placement for a second six-week term through the primary. [Read the full description \(pdf\).](#)

Maine Energy Efficiency and Climate Change Handbook

Greater Portland Council of Governments (GPCOG) Portland, Maine

A Maine-based CA-CP Fellow will work throughout the summer in the Portland-based GPCOG office area to ensure regional and municipal project implementation. This will result in a *Maine Energy Efficiency and Climate Change Handbook* that is modeled upon existing NH and CT handbooks developed by CA-CP over the past two years. In addition, the Fellow will support the Maine Local Energy Committee Working Group that has been formed to advance the goals of the project and that will meet monthly. Maine resident preferred; some travel throughout the GPCOG region likely will be required. [Read the full description \(pdf\).](#)

Carbon Reductions for Historic Buildings

Portsmouth, NH

Historic buildings represent a significant portion of the building stock in New England and indeed of the US as a whole. As a result, improving the energy performance of these structures is an important piece of the global warming solutions puzzle. Clean Air-Cool Planet is working on ways to begin addressing this problem. Our newly released *Energy Efficiency, Renewable Energy, and Historic Preservation: A Guide for Historic District Commissions*—a product of two 2009 CA-CP Climate Fellowships—has facilitated the beginnings of a dialogue between the preservationist and green building communities; the 2010 Historic Building Fellow will have the opportunity to carry this work forward in new and important ways. [Read the full description \(pdf\).](#)

2. Michigan Sea Grant is recruiting applicants for three fellowship programs.



Graduate students with a wide range of backgrounds (science, policy, law etc.) and a strong interest in Great Lakes, coastal or marine issues are encouraged to apply. Please forward this email to potential candidates. The fellowships offer terrific career-building and networking opportunities, real world training, salary & benefits, and a chance to explore careers at the science/policy interface. Visit the program websites or contact Lynn Vaccaro (Lvaccaro@umich.edu) for more information.

www.miseagrant.umich.edu/research/fellowships

3. Kathryn Fuller Fellowships

Advancing Conservation through Science

World Wildlife Fund – US (WWF-US) is pleased to announce the availability of Kathryn Fuller Fellowships for 2010. For nearly 50 years WWF has committed to delivering science-based conservation results while incorporating the latest research and innovations into our work. As part of its commitment to advancing conservation through science, WWF established Kathryn Fuller Fellowships to support PhD students and postdoctoral researchers working on issues of exceptional importance and relevance to conservation in WWF-US priority places. This year, the Kathryn Fuller Science for Nature Fund will support doctoral and postdoctoral research in the following three areas: (1) ecosystem services; (2) measuring and monitoring carbon stocks in forests; (3) climate change impacts on and adaptation of freshwater resources.

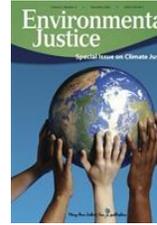
<http://www.worldwildlife.org/science/fellowships/fuller/item1296.html>

4. STARS Technical Development Coordinator, AASHE

AASHE seeks a Technical Development Coordinator to contribute to the ongoing development and refinement of the Sustainability Tracking, Assessment & Rating System (STARS). The STARS Technical Development Coordinator's primary responsibility will be to coordinate a team of Technical Advisors across many disciplines to improve the STARS credits and corresponding support materials. Review of applications will begin on January 25, 2010, and will continue until the position is filled.

<http://www.aashe.org/highlights/jobs/stars-technical-coordinator>

EVENTS, CONFERENCES, & CFPs



1. **ENVIRONMENTAL JUSTICE Earth Day Commemoration Issue Submissions**

from Dr. Sylvia Hood Washington, Editor in Chief, *Environmental Justice*

As many of you know, April 22, 2010 is the 40th anniversary of the first Earth Day celebration in the United States. I am planning a special issue of the *Environmental Justice* journal to commemorate this historic moment. Included in the issue will be a compendium of personal and professional reflections from our diverse community that will focus on how you remember your first Earth Day experience; how you feel that environmental justice was implicitly, explicitly, or simply missing from the first celebration, or from subsequent celebrations; your opinions as to whether environmental justice became, or did not become, part of the mainstream environmental movement over the years; and how environmental justice is or should be part of the climate change, green, and or sustainable movements today.

When I was a doctoral student in environmental history in the latter half of the 1990s, there was a pervasive, if not universal belief, that minority communities were not interested in the environmental movement and did not participate in the first Earth Day. My dissertation and subsequent books and publications over the last decade help to dispel this myth among environmental historians. This issue for Earth Day hopefully will provide a forum for individuals from every spectrum of the EJ field to tell their history of Earth Day and the environmental justice movement over the last 40 years to a much larger audience and shed more light on an important topic that we all care about.

We anticipate a wide array of views and reflections on this provocative topic and look forward to your active participation. We invite you to submit your contribution to be considered for inclusion in this issue, which may be from 250 – 1,000 words, **no later than February 20** to jchapman@liebertpub.com. Please be sure to include your complete contact information.

In an effort to increase recognition and enhance SFI's image, we want to include more publicity about SFI member achievements. Please send announcements of your publications, presentations, awards, and names of awarded proposals to SFI at sfi-admin@mtu.edu.