

**From:** Gil Masters (gmasters@stanford.edu)  
**To:** energyfolks@lists.stanford.edu  
**Date:** Saturday, April 12, 2008 7:06:51 PM  
**Subject:** Wind, nukes, Candidates on energy, EAT PZEVs, RPS, CSPs

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22. Tenure-track Assistant/Associate Prof. Sustainability Engineering, UColo, Denver
23. Project Intern, International Business Development, SunEdison
24. Transportation & Energy Systems: TIAXX LLC, Irvine & Cupertino
25. Senior Mechanical Engr - Tracker Technology, Energy Innovations, Pasadena

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**STANFORD AREA NEWS:**

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**1. Energy Seminar April 16: Cristina Archer, Importance of Wind Power**

Woods Energy Seminar  
Spring Quarter, Wednesdays 4:15 to 5:15 p.m.  
Building 420 Room 40

April 16, Cristina Archer, Department of Global Ecology, Carnegie Institution of Washington  
The Importance of Wind Power in a Clean and Renewable Future

April 23, Scott Elrod, Palo Alto Research Center  
III-V Solar Concentrators: Driving Down the Cost to Below \$1.00/Watt

April 30, Martin Roscheisen, CEO, Nanosolar (followed by a MAP Energy Social)

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**2. GCEP: Carbon Management in Manufacturing, April 15-16**

The Global Climate and Energy Project (GCEP) at Stanford University is organizing a two-day workshop on "Carbon Management in Manufacturing Industries" that will be held at the Frances C. Arrillaga Alumni Center on the Stanford campus on April 15 - 16, 2008. This event is part of GCEP's assessment of energy technologies that might significantly reduce CO2 emissions.

According to predictions from Lawrence Livermore National Lab, the manufacturing industries will account for approximately 1/3 of total energy demand in 2025. It is anticipated that much of that demand will be met by the direct use of fossil fuels. The cement, metals and refining industries are the largest industrial contributors to energy consumption and greenhouse gas emissions. Chemicals, mining, food processing and forest products are significant as well.

At this workshop, technical experts in these industries will share their recent research. Talks will address technology advancements required to meet emissions reduction targets in areas such as Carbon Capture, Advanced Combustion, Advanced Materials and Renewable Energy. The objective of the workshop is to identify innovative, high-risk research opportunities in technologies specific to the manufacturing sector that could significantly limit the amount of CO2 released to the atmosphere.

The workshop is free and open to the Stanford community and other researchers and energy professionals, but registration is required by Monday, April 7, 2008. Seating is

limited to approximately 100 participants, so register soon at:

<http://gcep.stanford.edu/carbon>

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### **3. Bio-based Composites for the Construction Industry, May 8**

Sustainable Built Environment Seminar Series  
Y2E2, Conference Room 299

May 8, 2008; 12 noon to 1 pm; Lunch will be provided

Cost-effective biotechnologies coupled with composite materials design methods are being developed to produce high-performance, low embodied energy, natural fiber-reinforced polyhydroxyalkanoate (PHA) bio-based composites for use in the construction industry.

Proessors Sarah Billington and Craig Criddle (CEE Department) will present their current research on bio-based plastic production and composite design that develops the foundation for a closed-loop life-cycle for polymeric construction materials.

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### **4. Prof. Mark Jacobson tells Congress EPA CO2 waiver decision contradicts latest science**

Lauren Morello, E&E Daily reporter (4/10/08)

Democrats pressed a top official from the Centers for Disease Control and Prevention to give an opinion on EPA's refusal to complete a Supreme Court-mandated endangerment finding on greenhouse gas emissions from motor vehicles. If EPA determines that the emissions endanger public health, that would clear the way for a new federal rule to limit greenhouse gases from motor vehicles, in response to the Supreme Court's decision in Massachusetts v. EPA.

U.S. EPA Administrator Stephen Johnson's stated reasons for denying California's request to regulate greenhouse gas emissions from motor vehicles are not supported by the latest scientific research, experts told a House committee yesterday.

Mark Jacobson, a Stanford University professor of civil and environmental engineering, said that a study he published in February demonstrates that greenhouse gas emissions are more harmful to residents of California than to the United States as a whole -- contradicting Johnson's rationale for refusing California's request.

Jacobson's study -- published in Geophysical Research Letters -- is the first to examine

how carbon dioxide emissions magnify the health effects of other types of air pollution, including ozone and particulate matter.

It concluded that, for every degree Celsius rise in the temperature of the atmosphere, carbon dioxide causes 1,000 more deaths per year in the United States. More than 30 percent of those deaths occur in California, which is home to just 12 percent of the total U.S. population.

That means [for this impact] that CO2 causes 2.5 times more deaths in California relative to the country as a whole, Jacobson said, taking aim at EPA Administrator Johnson's claim that climate change in California is "not sufficiently different from conditions in the nation as a whole."

Jacobson's study also found that CO2 emissions do not immediately mix into the global atmosphere, so ozone and particulate matter pollution is magnified in cities with high CO2 emissions.

That directly contradicts a written statement Johnson released last month, which states that "GHG emissions from California cars are not a causal factor for local ozone levels, any more than GHG emissions from other sources of GHG emissions in the world."

"There is no basis in science we know of right now for the two main reasons cited by Administrator Johnson," Jacobson told members of the House Select Committee on Energy Independence and Global Warming. "Those are assumptions that he made."

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## **5. GRID Alternatives: April Energy Efficiency Team Workdays**

It is that time of year again for Energy Efficiency Team workdays and we'd love to see as many of you as are interested out there again. This year we'll need Volunteers to work on teams in Oakland, San Francisco, and in Silicon Valley.

GRID Alternatives volunteers will be installing basic energy and water conservation measures in the homes of low-income, elderly and disabled residents in Oakland, San Francisco and Silicon Valley. The measures we'll install make a big difference in the lives of these seniors, not only saving them on average \$150 in utility costs per year, but making their homes a little less drafty. We will hold OPTIONAL trainings the week of April 14th and The workdays in each region follow.

Email [info@gridalternatives.org](mailto:info@gridalternatives.org) to RSVP.

Rebuilding Together Websites:

Oakland -

<http://cts.vresp.com/c/?GRIDAlternatives/652a1b307f/7f495f123d/ab9d40cf3d>

San Francisco -

<http://cts.vresp.com/c/?GRIDAlternatives/652a1b307f/7f495f123d/54912d3063>

Silicon Valley - [www.rebuildingtogether-sv.org](http://www.rebuildingtogether-sv.org)

[info@gridalternatives.org](mailto:info@gridalternatives.org)

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### IN THE NEWS...

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## 6. A Textbook Case of Downplaying Global Warming?

By ANDREW C. REVKIN, April 10, 2008, 10:54 am NYTimes

Matthew LaClair, a high school senior in Kearny, N.J., ...has persuaded Houghton Mifflin, one of the powerhouses in textbook publishing, to review a popular college and AP high school text, "American Government," written by conservatives James Wilson and John Dilulio, over its characterizations of human-caused global warming and other controversial issues.

Here are some lines from the book:

"The earth has become warmer, but is this mostly the result of natural climate changes, or is it heavily influenced by humans putting greenhouse gases into the air?" (p.559)

"On the one hand, a warmer globe will cause sea levels to rise, threatening coastal communities; on the other hand, greater warmth will make it easier and cheaper to grow crops and avoid high heating bills." (p. 559)

"...But many other problems are much less clear-cut. Science doesn't know how bad the greenhouse effect is." (p. 566)

Needless to say, these lines are taken out of context... but...

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## 7. Mar 27 -\$8 billion for 2.7 GW Nuclear Power Project

NRG Energy Inc.'s estimate of the cost to build two nuclear reactors in South Texas keeps climbing. Last summer, officials with the power plant developer said the reactors at the South Texas Project would cost between \$6 billion and \$7 billion.

On Wednesday, executives said the reactors will probably cost \$8 billion.

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## **8. Obama, Clinton and McCain on Energy**

Excerpts from March 31, 2008 EnergyBiz Insider, Darrell Delamaide

On climate change, both Democratic candidates Barack Obama and Hillary Clinton espouse a cap-and-trade emissions program with an auction of 100 percent of emission credits to force emitters to quantify their pollution levels. The objective in both senators' plans is to get emissions 80 percent below 1990 levels by 2050.

Sen. John McCain, the likely Republican candidate, pledged a "market-based energy reform" that would rely far less on government subsidies. As far as climate change goes, a utility or industrial plant could generate tradable credits if it cuts pollution thereby offering incentives to deploy new and better energy sources and technologies.

While Obama is strangely silent on the issue of nuclear energy, Clinton is not. She believes that energy efficiency and renewables are better options. As she sees it, there are significant unresolved issues about the cost of producing nuclear power, the safety of operating plants, waste disposal, and nuclear proliferation. So Clinton opposes new subsidies for nuclear power.

McCain is less shy about using nuclear energy. He says that the obstacles that have kept a new nuclear power plant from being constructed for more than 25 years are political, not technological. He asks, rhetorically, whether the United States is less innovative or secure than France, which produces 80 percent of its electricity from nuclear power. He suggests providing for the safe storage of spent nuclear fuel by giving host states or localities a proprietary interest so when advanced recycling technologies turn used fuel into a valuable commodity, the public will share in its economic benefits.

McCain cites many of the same solutions as his Democratic rivals - improved light bulbs, smart grid technology, energy savings - concluding that "government must set achievable goals, but the markets should be free to produce the means." Regardless of which Democratic hopeful ends up with the nomination, candidate McCain will differentiate his energy policy from theirs through the level of government intervention.

Obama's detailed plan, by contrast, ticks off numerous areas in which government will get involved. He plans, for starters, to invest \$150 billion over 10 years in energy reform. Part of this money will go to transportation - the next generation of bio-fuels and fuel

infrastructure and the commercialization of plug-in hybrids. But the focus is also on development of commercial-scale renewable energy, investments in low-emission coal plants, and transition to a new digital electricity grid.

The Democratic hopeful would also establish a federal renewable portfolio standard to require that 25 percent of electricity consumed in the United States be derived from clean, sustainable energy sources by the year 2025. At the same time, he would significantly increase the resources devoted to the commercialization and deployment of low-carbon coal technologies. If that would mean establishing standards that ban new traditional coal facilities, then he would consider that possibility.

With regard to energy efficiency, new buildings should be carbon neutral, or produce zero emissions, by 2030, according to the Obama plan. As president, Obama said he would establish a national goal of improving new building efficiency by 50 percent and existing building efficiency by 25 percent over the next decade to help meet the 2030 goal. And he would create a competitive grant program to reward states and localities that implement new building codes prioritizing energy efficiency.

Clinton approaches the issue from an environmental standpoint, emphasizing green objectives, but her goals are remarkably similar to Obama's, right down to some of the details, such as the \$150-billion investment over 10 years and the 25 percent renewable portfolio standard by 2025. A federal strategic energy fund of \$50 billion would fund one-third of that 10-year investment.

Some of the other novelties in her plan include doubling of federal investment in basic energy research. That would involve implementing measures to spur the green building industry by investing in green collar jobs and helping to modernize and retrofit 20 million low-income homes to make them more energy efficient. It also would mean launching a new "Connie Mae" program to make it easier for low- and middle-income Americans to buy green homes and invest in green home improvements.

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## **9. CPUC launches California Institute for Climate Solutions (CICS)**

April 10, 2008 - The California Public Utilities Commission (CPUC) today created the California Institute for Climate Solutions (CICS). The mission of the CICS includes:

- To facilitate mission-oriented, applied and directed research that results in practical technological solutions and supports development of policies to reduce greenhouse gas emissions in the electric and natural gas sectors, or otherwise mitigates the impacts of climate change in California.
- To speed the transfer, deployment, and commercialization of technologies that have the highest potential to reduce greenhouse gas emissions in the electric and natural gas

sectors.

The work of the CICS will be directed by a Strategic Plan that will identify potential areas of research, maximize consumer benefit, and minimize unnecessary redundancy. The Strategic Plan will identify those areas of research and technological innovation that are most likely to achieve the greatest greenhouse gas reductions in the energy sector at the lowest cost.

The funding for the CICS, \$60 million per year for 10 years, is an investment in California's future and will directly benefit ratepayers, the CPUC determined. The CPUC has charged the CICS Executive Director with obtaining 100 percent matching funds over 10 years in order to maximize ratepayer benefits.

The proposal voted on by the CPUC is available at [http://docs.cpuc.ca.gov/PUBLISHED/AGENDA\\_DECISION/81119.htm](http://docs.cpuc.ca.gov/PUBLISHED/AGENDA_DECISION/81119.htm).

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## 10. Texas Dominates in New Wind Installations (but Iowa has highest % of wind)

From the 2007 AWEA Annual Wind Rankings Report:

Texas installed 1708 MW in 2007 giving it a total of 4446 MW. CA only installed 63 MW, but holds onto 2nd place with 2438 MW installed. Colorado has 2nd largest new capacity 776 MW.

[http://www.awea.org/AWEA\\_Annual\\_Rankings\\_Report.pdf](http://www.awea.org/AWEA_Annual_Rankings_Report.pdf)

State	MW installed end 2006	MW added in 2007	MW installed end 2007
Texas	2739	1708	4446
California	2376	63	2439
Minnesota	895	405	1299
Iowa	931	341	1271
Washington	818	345	1163
Colorado	291	776	1067
Oregon	438	447	885
Illinois	107	592	699
Oklahoma	535	155	689
New Mexico	496	0	496
New York	370	55	425
Kansas	364	0	364
North Dakota	178	167	345
Pennsylvania	179	115	294
Wyoming	288	0	288

..but wind power provides 5.5% of the electricity generated in Iowa, making it the leading state for wind power generation on a percentage basis,

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## **11. A new interactive 80m hub-height wind map on the web**

<http://firstlook.3tiergroup.com/>

A company called 3TIER has launched a global wind map that is available for free viewing on the Internet. The map provides global wind data at an 80-meter height for a single year, but the free version is at a relatively low resolution. For the higher resolution generally needed for wind power developers, the company is currently selling maps for locations within the continental United States and plans to gradually expand its service to other countries over the next 20 months.

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## **12. Enhanced, Advanced-Technology, Partial-Zero-Emission Vehicles..whoa!**

California Agency Reduces Zero-Emission Vehicle Requirements

EERE Network News - 4/2/08

The California Air Resources Board (CARB) decided last week to scale back its requirements for the sale of zero-emissions vehicles (ZEVs) throughout the state by allowing new credits for the sale of plug-in hybrid electric vehicles and vehicles with hydrogen-fueled engines.

The approach approved last week added a new option for plug-in hybrids or internal combustion hydrogen vehicles, which CARB is calling Enhanced, Advanced-Technology, Partial ZEVs, or "Enhanced AT PZEVs" for short. The new regulations would result in 58,500 Enhanced AT PZEVs for 2012-2014, and if automakers follow that path, only 7,500 ZEVs would be required.

A similar option for model years 2015 to 2017 would cut the number of ZEVs to 25,000. Different automakers may choose different paths, so the ultimate result may fall between the two approaches.

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## **13. New LBNL Report: "Renewable Portfolio Standards in the U.S.: A Status Report"**

Lawrence Berkeley National Laboratory today released a new report: "Renewables Portfolio Standards in the United States: A Status Report with Data through 2007." This report provides a comprehensive overview of early experience with renewables portfolio standards (RPS) in the United States.

State-level RPS programs are among the most important drivers for renewable energy deployment in the United States. As their popularity and importance have grown, so too has the need to keep up with the design, early experience, and projected impacts of these RPS programs. This report seeks to fulfill this need by providing basic, factual information on RPS policies.

Drawing from a variety of sources, this report - the first in what is envisioned to be an ongoing series - provides comprehensive information on a broad range of RPS-related topics, including:

- What states have RPS policies, and when were they developed?
- What percent of sales by U.S. retail electricity suppliers is subject to RPS obligations?
- What are the key design features of, and differences among, state RPS programs?
- To what extent have RPS policies driven renewable energy investments?
- What kinds of renewable resources are benefiting from these policies?
- How much new renewable energy will ultimately be required to fully meet these mandates?
- How have RPS policies been designed to specifically support solar power?
- Have suppliers fully complied with RPS purchase requirements so far?
- How are renewable energy certificate markets developing?
- To what degree have RPS policies impacted retail electricity rates?

The report concentrates on key recent developments, while also providing information on historical RPS experience and design. It should serve as a valuable reference on the current status of RPS policies in the U.S.

The Ryan Wiser report can be downloaded from:  
<http://eetd.lbl.gov/ea/ems/reports/lbnl-154e.pdf>

A PowerPoint presentation that summarizes the key findings can be found at:  
<http://eetd.lbl.gov/ea/ems/reports/lbnl-154e-ppt.pdf>

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## **14. Multiple Large-Scale Concentrating Solar Power Projects Planned for California**

EERE Network News - 4/9/08

FPL Energy has filed an application to build a 250-megawatt CSP plant in the Mojave Desert and the Pacific Gas and Electric Company (PG&E) agreed to buy the power from up to 900 megawatts of CSP projects proposed by BrightSource Energy, Inc.

The FPL Energy project, called the Beacon Solar Energy Project, will employ trough-shaped

parabolic mirrors to concentrate the sun's heat, capture the heat in a fluid such as oil, and then transfer that heat to a boiler. The boiler generates steam that drives a turbine to produce electricity. FPL Energy plans to build, own, and operate the facility, which will be located on 2,000 acres of land in eastern Kern County. Construction is slated to begin late next year, and it will take about two years to build the project, which will consist of more than 500,000 parabolic mirrors.

Meanwhile, PG&E has signed contracts with BrightSource Energy to buy at least 500 megawatts of power from three CSP facilities. BrightSource submitted an application to the California Energy Commission (CEC) last year to build Ivanpah 1, 2, and 3 in the Mojave Desert, with the first two units each producing 100 megawatts of power and the third unit producing 200 megawatts of power. Ivanpah 1 is slated to begin operating in 2011 and will use a field of flat mirrors, or "heliostats," to focus the sun's heat on a receiver mounted on a tower. A fluid pumped through the tower carries the heat to a boiler. If BrightSource is successful with its initial power tower installations, PG&E has an option of buying another 400 megawatts of power from additional CSP facilities.

The CEC is currently reviewing a number of CSP proposals and is expecting more in the near future. In addition to the Ivanpah and Beacon Solar Energy projects, the CEC is reviewing the Victorville 2 Hybrid Power Project, which combines a 513-megawatt natural gas power plant with 50 megawatts of CSP, and the Carrizo Energy Solar Farm, which will generate 177 megawatts. The CEC is also expecting an application from the City of Palmdale for another hybrid plant combining a natural gas power plant with 50 megawatts of CSP, as well as applications for two CSP plants using arrays of dish-shaped mirrors to concentrate the sun's heat onto thermal engines. These "dish/engine systems" convert the heat directly into power, and the CEC is expecting proposals for a 900-megawatt project and an 850-megawatt project. In the long run, the CEC anticipates another six CSP plants with a combined capacity of 1,370 megawatts.

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**JOBS                      JOBS                      JOBS**

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**15. Energy Management Engineers & Carbon Consultants--NEXANT**

Nexant, Inc. is a leading provider of energy and carbon management consulting services to electric utilities, energy producers, and energy end-users worldwide. We are currently seeking junior and senior level engineers experienced in energy efficiency, energy management, green buildings applications, and carbon markets for our offices in San Francisco, Los Angeles, Salt Lake City, Boulder, Madison, New York, and Houston.

Interested applicants should send their resume and salary requirements to [jobs@nexant.com](mailto:jobs@nexant.com).

Reference "Energy Engineer" and indicate location preference.

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## **16. China Demand-Side Management / Energy Efficiency Analyst/Advocate, Beijing**

The Natural Resources Defense Council, Inc. (NRDC) is an international environmental non-profit corporation with more than 1.2 million members and online activists. We are headquartered in New York, and have offices in Beijing, Washington, D.C., San Francisco, and Los Angeles.

The NRDC China Program focuses on curbing global warming by promoting a sustainable energy system in China with clean, efficient and cost-effective energy solutions. The Demand-Side Management (DSM) / Energy Efficiency analyst/advocate would be an integral part of the China team promoting effective energy policies, strategies and technologies to reduce the emissions of greenhouse gas and health-related air pollutants that are emitted as a result of the building and industrial sectors, in a manner that provides other economic and environmental benefits in China and in the world. The analyst/advocate will work with our partners in China to identify opportunities for greater energy efficiency, develop policies and strategies enabling energy efficiency to reach its full potential, and build a strong capacity for China to support effective energy efficiency implementation and verification.

The analyst/advocate will mobilize the China-US Energy Efficiency Alliance to help China recreate on a much larger scale the California model for using demand-side management (DSM) financial incentives and analytical support to catalyze more stringent building and equipment standards.

This position requires a thorough understanding of China's energy industry; a strong engineering background, particularly with respect to energy consumption and efficiency; and the ability to learn about the technical basis of a range of energy-consuming industrial products, as well as policy expertise.

This person must be self-motivated, require limited supervision, be an independent thinker, work well with others, have excellent communication skills, and be able to work on multiple projects simultaneously. Fast and clear writing skills are a must, as the analyst is often called upon to produce written documents with short notice.

The deadline to apply is May 1, 2008. Please reference where you saw this posting. NRDC is an Equal Opportunity Employer.

### **AND China Residential Energy Efficiency Analyst/Advocate Beijing Office**

The NRDC China Program focuses on curbing global warming by promoting a sustainable energy system in China with clean, efficient and cost-effective energy solutions. The China residential energy efficiency analyst/advocate would be an integral part of the China

team promoting effective energy policies, strategies and technologies to reduce the emissions of greenhouse gas and health-related air pollutants resulting from China's residential sector, in a manner that provides other economic and environmental benefits in China and in the world.

NRDC is working both in the US and internationally to develop harmonized test methods and performance specifications for voluntary and mandatory standards for key consumer electronics categories. The goal of this work is to reduce the overall energy use of these products by: a) increasing the energy efficiency of the product when in use; and b) ensuring the product enters a low power mode when not in use and has low standby mode power use. This work is critical as consumer electronics is the fastest growing source of energy use in the home and now represents 15% or more of US household electricity use.

The analyst/advocate will work with our partners in China and Chinese policy makers to help develop and strengthen China's electronic equipment standards in order to move towards full harmonization of test methods and performance specifications for voluntary and mandatory standards. While this position will focus primarily on mandatory electronic equipment standards, these must be developed in a policy context that includes other mechanisms such as financial incentives, labels, recognition programs, etc. The deadline to apply is May 1, 2008. Please reference where you saw this posting. NRDC is an Equal Opportunity Employer.

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## **17. Product Designer AND Energy Modeler: Project FROG**

Project FROG is currently seeking dynamic individuals to be part of our growing team. In particular, we are in search of a Product Designer with strong SolidWorks skills as a contract-to-hire employee.

### **REQUIREMENTS:**

Ideal applicants must have a minimum of 2 years experience and demonstrated ability working on complex projects in SolidWorks. In addition, applicants must have a degree from an accredited architecture or design school.

Applicants should be highly motivated and talented designers, who are self-driven, detail oriented, and interested in modular design.

Candidates should be proficient in a variety of design visualization tools, including freehand and digital techniques (AutoCAD, Photoshop, Illustrator, PowerPoint) and have experience with modeling software such as 3-D Studio, SketchUp, and FormZ. This position incorporates a variety of design responsibilities including conceptual & design development, presentation graphics, and communication skills directed toward diverse audiences.

COMPANY PROFILE:

Project FROG Inc. designs, manufactures and sells high-performance, sustainable, and quick-to-deploy buildings that utilize modular construction technology. FROG units fill the product gap between underperforming temporary trailers and expensive permanent structures. The product line is architecturally stylish, highly functional, energy efficient, and adaptable for different applications including education, government, healthcare, and retail. Project FROG is based in San Francisco, California. Our clients include premier educational and corporate institutions.

TO APPLY:

Email your cover letter, resume, and examples demonstrating your skills in PDF format to Clint Cope at cope@projectfrog.com You must indicate "Product Designer Position" in the subject line of your email. Your cover letter should explicate your interests in Project FROG (if e-mails are not sent in this format, they will not be reviewed). NO PHONE CALLS PLEASE. Local applicants only. Must be eligible to work in the U.S.

Project FROG, Inc. is proud to be an equal opportunity employer.

Compensation: DOE.

no -- Principals only. Recruiters please don't contact this job poster.

no -- Please, no phone calls about this job!

no -- Please do not contact job poster about other services, products or commercial interests.

no -- Reposting this message elsewhere is NOT OK.

#2: ENERGY MODELER, TEMP/CONTRACT

Project FROG and MK Think are seeking a contractor to do building energy modeling on an occasional per-project basis.

REQUIREMENTS:

2+ years architectural energy modeling, including daylighting as well as heat and cooling loads. Prefer 5+ years experience. Skills in Ecotect, Energy Plus / DOE-2, Radiance, Green Building Studio, ArchiCAD, or similar software. Must present results of previous modeling to us in quantitative but easily understandable form.

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**18. Atellier Ten: Energy Analyst, New York**

Atelier Ten is looking for an experienced and ambitious energy analyst to join our interdisciplinary environmental design team in our New York City office. The candidate will work closely with Atelier Ten's

energy analysis practice manager to develop and maintain analysis methods and standards; assist other staff with energy analysis-related work; and train staff in aspects of energy analysis. The candidate also will work closely with Atelier Ten's integrated design groups to provide architects, engineers, and project teams the full range of our services, which include environmental design consulting, building energy optimization, daylight and shading design, and LEED program management. Atelier Ten expects that the candidate will also manage projects that range widely in types and scales.

Candidates are required to be experienced in sustainable and energy-efficient building design, have at least five years' professional experience in building physics and in energy modeling with eQuest or another DOE2-based analysis tools, have a Bachelor's or higher degree in a field related to building design, and be fluent in written and spoken English. Preference will be given to candidates who have knowledge of EnergyPlus, TRNSYS, IES, or other similar software; experience managing a consulting group; are LEED AP; have other professional certifications or licenses as appropriate; and, who have speaking, publishing, and/or teaching experience.

Atelier Ten are environmental designers, lighting designers and building services engineers committed to the application of low-energy and sustainable design principles. Our core objective is to meet the needs of our clients by developing well-integrated buildings with simple systems that work with natural laws of physics to increase comfort, reduce energy consumption and contribute back to the greater environment. In the US and around the world we have been able to develop award-winning designs that integrate architectural, landscape, and programmatic requirements into environmentally effective projects.

Atelier Ten was founded in London in 1990 as a team of MEP Engineers working in close collaboration with like-minded clients and architects. We opened an office in New York in 2001 to provide specialty consulting on environmental design and building performance analysis to architects, engineers and

clients in the United States. Our lighting design practice, which opened in New Haven, CT in 2006, collaborates with architects and facility planners to develop resourceful, responsive, and sustainable lighting systems.

As an employer, Atelier Ten provides an exciting, engaging, professional, and fun workplace where individuals are respected and supported through all stages of their professional development. The company aims to foster a high quality of life for its employees both professionally and personally. In addition to competitive salaries, all staff are awarded annual profit shares; all staff are receive additional company contributions to an individual retirement plan; all staff are given four weeks of personal holiday in addition to bank holidays; all staff are provided full health insurance including vision and dental plans; a strong family leave program is offered; and additional insurances are available through the company if desired.

Interested candidates should submit a CV and cover letter to [usa.recruitment@atelierten.com](mailto:usa.recruitment@atelierten.com). Please reference "Atelier Ten New York" in your subject line.

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**19. blue moon fund, inc. Charlottesville: Program Associate, Asia energy & enviro**

blue moon fund is a private foundation that supports initiatives to restore the connections within and among communities and ecosystems. The fund seeks a full-time Program Associate in its Charlottesville-based office.

The Program Associate will assist the Vice President for the Asia energy and environment initiative with program development, research, strategy, convening, communications, travel, and general office support; identify and interact closely with grantees; and work with other staff on the integration of programs throughout the fund. Asia experience and/or language abilities a must.

Specific duties and responsibilities include:

... Work with Program Vice President on program development through a combination of field work, research, and networking.

- ... Stay current on relevant issues (science, policy, economic and political trends, institutional capacity, etc.) influencing proposed and ongoing grants
- ... Work with program vice president to identify and evaluate candidates for funding
- ... Maintain primary communications and information flow with Grants and Technology Coordinator and grantees
- ... Support communications with the board regarding prospective grants and grantmaking strategy, including preparing funding recommendations and extensive editing and formatting
- ... Produce web site content and assist in transferring pertinent information to site and managing format
- ... Provide travel and other logistical support for program vice presidents
- ... Travel as needed for meeting preparation, training/conferences, and program-related issues
- ... Work with other Program Associates and financial staff to ensure cross-program pollination and integration
- ... Provide general office support, including answering phones, organizing meetings, and greeting visitors

The successful candidate will have the following qualifications:

- ... Minimum bachelors degree in a related field
- ... Excellent writing, communications, and computer skills
- ... International travel experience
- ... Cross-cultural competency
- ... Exceptional organizational skills
- ... At least two years experience in an area related to Asian energy and environment issues
- ... Knowledge of current events and trends related to program areas
- ... Flexibility and an ability to work with grace under pressure
- ... Asian language skills a plus

Competitive salary and benefits. To apply, send resume and writing sample to [resumes@bluemoonfund.org](mailto:resumes@bluemoonfund.org). No phone calls, please.

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## **20. Sustainability advisor - LEED China consultant, Brightwork, Portland**

Brightwork, a Portland, Oregon-based sustainability advisory service with offices in San Francisco and Los Angeles, is looking for candidates to be part of a new office in Beijing, China. The office will be initially located in the offices of a leading global architecture, design, planning, and consulting firm to support their green building work in China as well as the work of other world-class and local architects and developers.

Sustainability advisor - LEED consultant will guide the sustainability and LEED programs for new

construction, existing buildings, tenant improvements, and master plan developments. Additional work requirements include research, writing and analysis of sustainability strategies and systems for buildings and communities, facilitation of eco-charrettes and sustainability strategy discussions, and potentially teaching workshops. The job also includes the opportunity to write proposals and engage in business development activities.

Skill and experience requirements include: knowledge and familiarity with LEED and sustainability frameworks

knowledge of how buildings are designed and built

outstanding writing and verbal communication skills

ability to facilitate and coordinate group discussions with multi-stakeholder groups including architects, developers, general contractors, and mechanical and civil engineers.

proficiency with Word, Excel, Outlook and PowerPoint

deep passion and personal commitment to sustainability

ability to work well with a team: to learn from and share experiences in a learning organization environment

fluency in both Mandarin and English is required

Brightworks mission is to foster the emergence of a sustainable society. We support sustainable building projects and organizational development and planning using sustainability frameworks. As of February 2008 we have over 70 active projects in Oregon, Washington, California, Colorado, Texas, Florida, Hawaii and New York. Our projects include some of the highest performance green buildings in the United States, including the first LEED Gold certified condominiums, the first LEED Gold certified US Courthouse, and the largest LEED-NC Platinum project yet certified. We provide excellent benefits including medical, dental, vision, disability, 401k and generous vacation and flex-time policy. In addition, we have a lot of fun. Check out our web site for more information: [www.brightworks.net](http://www.brightworks.net)

Interested applicants are encouraged to submit resumes and writing samples to [jobs@brightworks.net](mailto:jobs@brightworks.net). Due to the volume of applications we receive, we cannot guarantee a response to all applications.

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## **21. Research Analyst Intern - Mercedes-Benz Research and Development**

Key Tasks and Responsibilities:

- Assist in investigating innovative business practices, for example help evaluate business, policy, and technology aspects of electricity provisioning for plug-in vehicles
- Gather and organize business and technology information to support evaluation of enabling technology for potential future vehicles and services, e.g. advanced batteries, mobile data communications
- Help develop various means to communicate results including slides, spreadsheets, and written documents for an international, senior management audience
- Perform administrative tasks as necessary

Skills and Attributes:

The ideal candidate will have the following:

- The ability to construct and critique business cases
- A fundamental understanding of electronic technology and technology innovation
- Ability to collect, organize and interpret data
- Experience performing library and internet research
- Proficient using MS Word, Excel, Powerpoint, and Lotus Notes
- Excellent communications skills including strong phone skills and ability to gather information from other people
- Strong organizational skills
- Comfortable working independently

Education and Experience:

- Ideal candidate will have a Bachelor's degree in a technical field together with an MBA
- Bachelor's degree in a business-related field with technology experience

Reply to: danica.powell@daimler.com

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**22. Tenure-track Assistant/Associate Prof. Sustainability Engineering, UColo, Denver**

TENURE TRACK ASSISTANT/ASSOCIATE PROFESSOR

OF SUSTAINABILITY ENGINEERING

Civil Engineering, University of Colorado Denver

The Civil Engineering Department at the University of Colorado Denver (UCD) invites applications for a tenure-track Assistant or Associate Professor position in Sustainability Engineering. Outstanding applicants at higher rank may also be considered. UCD incorporates the new Anschutz Medical Campus (formerly the University of Colorado Health Sciences Center), from which the Colorado School of Public Health is being launched in 2008. Links between infrastructure, sustainability and health are of high interest. UCD's Civil Engineering Department is leading a recent NSF IGERT award on Sustainable Urban Infrastructure (<http://thunder1.cudenver.edu/IGERT/>).

The successful candidate is expected to develop a vigorous sponsored research program in her/his area of expertise in sustainability, teach and advise student research at all levels, and provide leadership to a campus-wide signature area in sustainability through cross-discipline and cross-campus collaborations. Example areas of expertise include: sustainable infrastructures e.g., renewable energy, water, waste, transportation and information infrastructures, green buildings, industrial ecology, green engineering and integrated systems analysis for sustainability. This is a broad search that seeks the most promising candidate from a range of specialty areas that complement our current activities.

Required education/experience/skills (minimum qualifications):

- Candidates must have a Ph.D. degree in engineering
- A proven record of scholarly activities and sponsored research pertaining to sustainability engineering.
- Deep knowledge of the field of sustainability and the role of engineering in sustainable development.
- Deep knowledge in their field of expertise (see examples above).

Desired qualifications:

- Teaching experience in academia including both courses relating to sustainability as well as traditional engineering courses
- Success in cross-discipline, large-team projects

Interested candidates should apply electronically at [www.jobsatcu.com](http://www.jobsatcu.com) (refer to [job posting #802957](#)) by submitting a cover letter, curriculum vitae, and the names, affiliations, phone numbers, and e-mail addresses of three references. Also attach a two-page statement of teaching philosophy and a two-page research plan as "other documents." For more information, contact [anu.ramaswami@cudenver.edu](mailto:anu.ramaswami@cudenver.edu).

Application review is in April 2008 and will continue until the position is filled.

The University of Colorado is committed to diversity and equality in education and employment. Women and individuals from under-represented minority groups are strongly encouraged to apply. The University of Colorado Denver is dedicated to ensuring a safe and secure environment for our faculty, staff, students and visitors. To achieve that goal, we conduct background investigations for all prospective employees.

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### Associate or Full Professor

George Mason University, Department of Environmental Science and Policy invites applications for a full-time Associate or Full Professor in energy policy for January 2009. We seek a dynamic person with expertise in renewable energy, fossil fuels, carbon sequestration, energy efficiency and conservation, energy economics or a related topic. This person will be central in helping to fulfill the university's plan. Preference will be given to candidates whose expertise complements existing departmental teaching and research areas. Candidates should have demonstrated a vigorous externally-funded research program, teaching excellence and an ability to engage in interdisciplinary collaboration. Teaching will be at the undergraduate and graduate level. A Ph.D. is required. The department offers undergraduate degrees in global and environmental change, geology and Earth science; and an M.S. and Ph.D. in environmental science and policy. Our faculty has specialties in public policy, anthropology, geology, oceanography, ecology and biology. The university's location in the Washington, D.C. area offers unique opportunities for faculty to engage directly in policy-making. Additional information about the department and university may be found at [www.esp.gmu.edu](http://www.esp.gmu.edu) and [www.gmu.edu](http://www.gmu.edu), respectively.

Special Instructions : Please apply online at <http://jobs.edu> for position number F9123z. Candidate should submit a cover letter of application, CV and contact information (with e-mail addresses) of three references. Questions about the position may be addressed to Dr. Allison Macfarlane at [atamacfarl@gmu.edu](mailto:atamacfarl@gmu.edu) or Dr. R. Christian Jones at 703-993-1127. Review of applications will begin on April 21, 2008, and continue until filled. George Mason University is an affirmative action/equal opportunity employer. We strongly recommend women and minority candidates to apply.

MasonAd : George Mason University is an innovative, entrepreneurial institution with national distinction in a range of academic fields. Enrollment is 30,000, with students studying in over 150 degree programs at campuses in Arlington, Fairfax, Loudoun, Prince William and the United Arab Emirates.

Equity Statement : George Mason University is an equal opportunity employer encouraging diversity.

Job Close Date : Open Until Filled

Apply at <http://jobs.gmu.edu/applicants/Central?quickFind=73502>

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### **23. Project Intern, International Business Development, SunEdison**

Objective: The Intern will assist the International group with strategic market analysis and developing a market entry and financial model for one or several potential countries, including: France, Portugal, Greece, Romania, Australia, and possibly others.

Reporting: Director International Business Development

Duration: Minimum of 10 weeks, 12 weeks preferred. This is intended to be a summer internship (May-September)

Primary Responsibilities:

This individual will be responsible for creating a market entry strategy, which will be highly interdisciplinary endeavor, requiring frequent internal and external interaction with experts in Sales, Engineering, Finance, Legal and Regulatory Affairs. Activities required for a successful project will include researching, documenting modeling and analyzing:

- Project Economics
  - the incentive system for PV projects
  - the potential for renewable energy credits or other "Green-credits"
  - opportunities to utilize Kyoto mechanisms to enhance project economics
- Utility Regulation and Pricing
- Political Climate
- Market Size
- Project Development
  - the permitting process for PV projects
  - the electrical transmission system
  - the interconnection process
  - potential partnerships, M&A opportunities
- Project Financing
  - corporate and tax rules/incentives
  - work with project finance group to analyze various debt/equity structures
- Competitive landscape

Qualifications

The ideal candidate will be able to speak/read the language of the target country, and preferably will be from or have worked in the target country. Ideal candidates will be self-starters that have exceptional analytical capabilities and strong intellectual curiosity. Must be able to learn on the fly and drink from the fire hose. Prior analytical and financial modeling experience is required. Transactional experience is a plus. Enrollment in a Masters in Business Administration program is preferred.

Location: Beltsville office.

Travel: TBD, possibly 1 trip.

Deadline to Apply: April 15, 2008

Contact: Michael Grenier, Director International Business Development,  
[mgrenier@sunedison.com](mailto:mgrenier@sunedison.com) with cover letter and resume [www.sunedison.com](http://www.sunedison.com)

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## **24. Transportation & Energy Systems: TIAXX LLC, Irvine & Cupertino**

Job Opportunities: Staff Engineer / Scientist and Senior Engineer / Scientist

TIAX LLC Southern California (Irvine) and Northern California (Cupertino) Offices

TIAX LLC is seeking multiple exceptionally qualified individuals to join our California offices. We seek individuals to work for TIAX in one of the following two possible capacities: 1) Staff Engineer / Scientist, or 2) Senior Engineer / Scientist. The final determination as to the position filled will depend on the qualifications of available candidates, and other factors. TIAX's salary and benefits package are highly competitive and are commensurate with the winning candidate's experience and the position being filled.

### Description of Responsibilities

The available positions are in TIAX's Transportation & Energy Systems group, which works with public and private clients to analyze and implement energy, greenhouse gas, and air quality solutions involving advanced transportation technologies and alternative fuels. The Irvine position will be focused in the near-term on air quality impacts of the goods movement in California, including working on cutting-edge, multi-million dollar programs to reduce emissions from

heavy-duty diesel vehicles in California. The Cupertino position will support a variety of projects involving emissions assessments, energy analyses, advanced technology evaluations, and policy analyses. Recent topics encountered in both Irvine and Cupertino office include: alternative fuels and infrastructure, fuel cell and hybrid-electric light- and heavy-duty vehicles, advanced diesel technologies such as NOx and PM after-treatment devices, and greenhouse gas reduction incentives.

The Staff Engineer or Senior Engineer will perform engineering assessments of low-emission technologies and fuels including well-to-wheels analyses, develop analysis tools, collect and analyze technical data, write technical reports and presentations, meet with clients, and occasionally provide engineering services in the field. Both positions have task or project management responsibilities and significant opportunities for career development.

The most competitive candidates will have the following skills, capabilities and experience. TIAX will consider variations from these qualifications (e.g., differing academic degrees or direct experience) on a case-by-case basis.

#### A. Desired Qualifications for Staff Engineer Position (entry-level to moderate experience)

BS/MS degree in engineering or related field; 0-3 years of professional experience assessing, analyzing, and/or developing advanced energy technologies or air pollution control strategies in mobile or stationary source applications. Excellent written and verbal skills, with fluency in English and proven ability to work effectively with staff, clients, and the general public. Proficiency with MS Word, MS Excel, and MS Power Point. Eagerness and capacity to learn new skills, take on increasing responsibility, and work with minimal supervision. Experience in development of tools and models will be beneficial.

#### B. Additional Desired Qualifications for Senior Engineer / Scientist

MS or PhD in engineering or related discipline with 3-10 years of experience. At least two years of experience in project management.

Contact for Position in Northern California (Cupertino)

Jeffrey Rosenfeld, Technologist

408-517-1562

[rosenfeld.jeff@tiaxllc.com](mailto:rosenfeld.jeff@tiaxllc.com)

Contact for Position in Southern California (Irvine)

Jon Leonard, Principal

949-833-7131

[Leonard.jon@tiaxllc.com](mailto:Leonard.jon@tiaxllc.com)

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## **25. Senior Mechanical Engr - Tracker Technology, Energy Innovations, Pasadena**

Energy Innovations  
Pasadena, CA

Position Description:

The position responsibilities are:

- Hands on mechanical design of high volume, low cost solar tracking products.
- Drive mechanical design through sound principles of ME design, performance, reliability and cost-sensitivity
- Participate in high-level design and specification
- Execute projects according to Energy Innovations' formal Product Development Process
- Interface with internal teams to implement product designs that meet design specifications
- Perform analysis as needed-both numerical (FEA, CFD, etc.) and hand calculations
- Design and drive ME engineering validation test planning
- Integrate mechanical systems with other subsystems
- Maintain high standards of design information configuration management
- Work with vendors, Supply Chain and Manufacturing to introduce new products and control yields
- Lead efforts to prototype new products and changes to existing to products

Requirements:

- \* 5+ years experience product development for high volume and cost-sensitive consumer or industrial products
- \* BSME or MSME required
- \* Hands-on mechanical design skills
- \* Experience using CAD software-Solidworks experience highly desirable
- \* History of successful delivery of products to market
- \* Ability to work and succeed in a team environment

Contact [jp@energyinnovations.com](mailto:jp@energyinnovations.com)

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Senior Structural Engineer  
Energy Innovations  
Pasadena, CA

Position Description:

The position responsibilities are:

- Hands on structural design of high volume, low cost solar tracking products and foundation structures.
- Open building design and site development
- Drive structural design through sound principles of design, performance, reliability and cost-sensitivity
- Participate in high-level design and specification
- Execute projects according to Energy Innovations' formal Product Development Process
- Interface with internal teams to implement product designs that meet design specifications
- Perform analysis as needed-both numerical (FEA, CFD, etc.) and hand calculations
- Design and drive structural and mechanical validation test planning
- Integrate structures with other subsystems
- Maintain high standards of design information configuration management
- Work with vendors, Supply Chain and Manufacturing to introduce new products and control yields
- Lead efforts to prototype new products and changes to existing to products

Requirements:

- \* 7+ years experience product development for high volume and cost-sensitive

consumer or industrial products

- \* Degree in Civil Engineering required
- \* Hands-on structural design skills
- \* Experience using CAD - Solidworks experience is most desirable
- \* History of successful delivery of products to market
- \* Ability to work and succeed in a team environment
- \* PE registration a plus but not required

Contact [jp@energyinnovations.com](mailto:jp@energyinnovations.com)

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-----Inline Attachment Follows-----

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energyfolks mailing list

[energyfolks@lists.stanford.edu](mailto:energyfolks@lists.stanford.edu)

<https://mailman.stanford.edu/mailman/listinfo/energyfolks>