

**From:** Gil Masters (gmasters@stanford.edu)  
**To:** energyfolks@lists.stanford.edu  
**Date:** Sun, January 31, 2010 5:10:37 PM  
**Subject:** Energyfolks: 50% Wind/Grid, ZEB talk, Cap'n Dividend, 50 jobs

Here's a reminder that old Energyfolks blurbs are archived at the MAP website: <http://www.maproyalty.com/e-archives.html>

**Quote of the DAY:**

January 30, 2010 NYTimes

TIANJIN, China — China vaulted past competitors in Denmark, Germany, Spain and the United States last year to become the world's largest maker of [wind turbines](#), and is poised to expand even further this year. China has also leapfrogged the West in the last two years to emerge as the world's largest manufacturer of solar panels.

AND, as Tom Friedman, put it in his 1-10-10 NYT column:

The Beijing leadership clearly understands that the E.T. — Energy Technology — revolution is both a necessity and an opportunity, and they do not intend to miss it. We, by contrast, intend to fix Afghanistan. Have a nice day.

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**INTERESTING ENERGY STUFF**

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1. U.S. Wind Energy Industry Installs Nearly 10,000 MW in 2009
2. Venture Capital flowing to Energy Efficiency
3. CA Cap-and-Dividend Climate Proposal
4. Two New LBNL Reports: Hidden Value in Community Wind Projects; Financial Impacts of Energy Efficiency
5. Stirling Engine Concentrating Solar Power System: 1.5 MW, On its way to 1500 MW?

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**STANFORD STUFF**

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1. Upcoming Energy Seminars: Feb 3 Integrating > 50% Wind onto the Grid
2. From Green Lighting to Zero Energy: Recent Trends in Sustainable Building Design, Feb 1, 4:15
3. King Fahd University of Petroleum and Minerals, Recruitment team visit Feb 10-12

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**JOBS                      JOBS                      JOBS                      JOBS**

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1. DOE's Office of Energy Efficiency and Renewable Energy, DC, 20+ jobs.
2. ARPA-E Announces Fellows Program
3. Facebook: M.E. Data Centers, HVAC, Palo Alto
4. CA Sustainability Alliance: Interns, SF or Sacramento
5. Building Energy Consultant, RMI, Boulder
6. Energy-Efficiency Engineers: CLEAResult Consulting, Houston, Dallas, Lansing
7. Paid Intern – LEED EBOM Project Administration
8. Solar (PV) Systems Design Engineer: Blue Oak Energy, Davis, CA
9. Green Building Modeling Professionals: Cadmus Group, VA and Utah
10. Analyst, Environmental Finance, Wells Fargo, San Francisco
11. Energy Codes and Standards Engineer/Advocate-Hi Tech Sector, NRDC, SF
12. Project Managers to Evaluate Energy Efficiency Programs, Harvard
13. Senior Analyst-Renewable Energy Market Transformation: NREL Golden, CO

- 14. Faculty Position, Sustainable Infrastructure, U Washington
- 15. Transportation Analyst, Intern, Communications Associate: The Center for Clean Air Policy, DC
- 16. Senior Energy/Sustainability Project Manager, HDR, San Francisco
- 17. Program Analyst: Energy and Environmental Policy, USDA, DC
- 18. Summer Fellows Program with Focus on Climate and Energy, and National Security and Counterterrorism, Oakland
- 19. Renewable Energy Engineers, Google, Mountain View, CA
- 20. Program Officer, Electric Power Sector, ClimateWorks Foundation
- 21. enXco Developer: Utility-Scale Solar Developers, San Ramon, CA
- 22. Radiance Senior Scientific Associate, LBNL, Berkeley
- 23. Client Project Manager, Monitor 360, SF
- 24. California Foundation on the Environment and the Economy, 2010 Fellows Program
- 25. Senior Lecturer, Architectural Design, University of Sydney
- 26. Energy Efficiency/Renewables, Summit Blue, CA
- 27. Senior Energy Engineer/Engineering Manager, Partner Energy, Los Angeles
- 28. Energy-Efficiency Engineers, Texas, Oklahoma, Michigan

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## INTERESTING ENERGY STUFF

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### 1. U.S. Wind Energy Industry Breaks All Records, Installs Nearly 10,000 MW in 2009

WASHINGTON, Jan 26, 2010 -- BUSINESS WIRE. The U.S. wind industry broke all previous records by installing nearly 10,000 megawatts (MW) of new generating capacity in 2009 (enough to serve over 2.4 million homes), but still lags in manufacturing, the American Wind Energy Association (AWEA) said today in its Q4 report. These new projects place wind power neck and neck with natural gas(1) as the leading source of new electricity generation for the country. Together, the two sources account for about 80% of the new capacity added in the country last year. "The U.S. wind energy industry shattered all installation records in 2009, chalking up the Recovery Act as a historic success in creating jobs, avoiding carbon, and protecting consumers," said AWEA CEO Denise Bode. "But U.S. wind turbine manufacturing -- the canary in the mine -- is down compared to last year's levels, and needs long-term policy certainty and market pull in order to grow. We need to set hard targets, in the form of a national Renewable Electricity Standard (RES), in order to provide the necessary stability for manufacturers to expand their U.S. operations and to seize the historic opportunity we have today to build up a thriving renewable energy industry."

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### 2. Venture Capital flowing to Energy Efficiency

Jan 25 - McClatchy-Tribune Regional News - Dana Hull San Jose Mercury News, Calif.

Solar and wind power may get the headlines and attention, but green-tech experts say 2010 will be dominated by energy efficiency, the mundane but critical process of cutting the amount of gas and electricity that homes and offices use.

Energy Secretary Steven Chu regularly describes himself as an "energy-efficiency nut." Sixteen states, including California and New York, have passed legislation enabling homeowners to finance energy-efficiency upgrades through their property taxes. President Barack Obama even declared insulation "sexy" at a Home Depot last month.

Then there are the sheer numbers. Venture capital investment in energy efficiency hit a record in 2009: at least 115 deals worth nearly \$1 billion, according to a preliminary tally by the Cleantech Group and Deloitte. That's up 39 percent from 2008. Meanwhile, solar, which had 84 deals worth about \$1.2 billion, was down 64 percent from 2008, and there's increasing talk about solar being "overfunded."

"In 2009, there was a pullback and realization by investors that because of the capital intensity of solar, there may be safer places to put their money," said Scott Smith, U.S. cleantech leader for Deloitte.

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### 3. CA Cap-and-Dividend Climate Proposal

A state legislative panel in California has proposed the largest portion of the new fees California plans to impose on greenhouse gas emissions be returned to consumers in the form of annual dividend checks that could eventually exceed \$1,000 for a family of four. The dividends would be paid to consumers regardless of their energy spending, but the consumers would benefit the most financially if they dramatically reduced their fuel bills.

The plan to offer California consumers a payback is an offshoot of the state's 2006 Global Warming Solutions Act. The state plans to essentially tax emissions and fuels that produce them when burned. Emitters will have to purchase carbon allowances after 2012. Permit sales are expected to reap up to \$22 billion a year by 2020, with 75% of the proceeds being distributed to households. (Wall Street Journal, January 12, 2010)

[http://online.wsj.com/article/SB126325739326825569.html?mod=WSJ\\_hpp\\_MIDDLETopStories](http://online.wsj.com/article/SB126325739326825569.html?mod=WSJ_hpp_MIDDLETopStories)

Sustainable Practices web site: David Schaller, [daschaller@me.com](mailto:daschaller@me.com).)

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### 4. Two New LBNL Reports: Hidden Value in Community Wind Projects; Financial Impacts of Energy Efficiency

*"Revealing the Hidden Value that the Federal Investment Tax Credit and Treasury Cash Grant Provide to Community Wind Projects."*

The global financial crisis of 2008/2009 has, in several respects, been a blessing in disguise for community wind project development in the United States. In addition to creating much-needed slack in the supply chain, the financial crisis spawned two major stimulus packages in the U.S. that, in combination, have fundamentally reshaped the federal policy landscape for wind power in general, and for community wind projects in particular. Most notably, qualifying wind projects can now, for a limited time only, choose either a 30% investment tax credit (ITC) or a 30% cash grant in lieu of the production tax credit (PTC) that wind has historically received.

It stands to reason that community wind, which has had more difficulty using the PTC than has commercial wind, may benefit disproportionately from this newfound ability to choose among these federal incentives. This report confirms this hypothesis. On the basis of face value alone, the 30% ITC or cash grant -- both of which depend on the size of the investment rather than on the quantity of power produced -- will be worth more than the PTC to many community wind projects, which on average may cost more or generate less than their commercial counterparts.

Just as importantly, however, and not to be overlooked, are a handful of ancillary benefits that accompany the 30% ITC and/or cash grant, but not the PTC. Many of these ancillary benefits -- including relief from the alternative minimum tax, passive credit limitations, and certain PTC "haircuts" -- circumvent barriers that have plagued community wind projects in the United States for years. This report demonstrates that these ancillary benefits could, in aggregate, be worth even more to a typical community wind project than the greater face value provided by the 30% ITC or cash grant relative to the PTC.

Quantitative analysis of these ancillary benefits also informs the development of a policy agenda for community wind, by revealing which of these benefits are most valuable to the sector. For example, the analysis highlights the importance of the 30% cash grant -- and particularly the relief that it provides from passive credit limitations -- for passive investors in community wind projects. In this light, seeking to extend the very limited window of opportunity for the 30% cash grant may be a logical top policy priority for the community wind sector.

The full report can be downloaded from:  
<http://eetd.lbl.gov/EA/EMP/re-pubs.html>

Mark Bolinger  
Lawrence Berkeley National Laboratory

*"Financial Impact of Energy Efficiency under a Federal Renewable Electricity Standard: Case Study of a Kansas 'super-utility'."*

In this study, we modeled a combination of the four largest vertically-integrated electric investor-owned utilities in Kansas which were required to comply with a Combined Efficiency and Renewable Electricity Standard (CERES) consistent with The American Clean Energy and Security Act (ACES) passed by the United States House of Representatives in June 2009. The LBNL-version of the original Benefits Calculator (developed for the National Action Plan for Energy Efficiency), a pro-forma financial model, was significantly expanded to provide insights on the trade-offs between various stakeholders' financial positions under different CERES compliance strategies.

Our analysis first compares the effects when the utility enters into long-term purchase power agreements to meet its CERES obligation relative to a case where the Kansas super-utility meets the standard by building renewable projects under cost-of-service regulation. If only these supply-side options are considered, our analysis suggests that a Kansas "super-utility" will prefer to build and own renewable energy resources as shareholder returns increase on average by 5 basis points between 2009 and 2028, while ratepayers may favor a procurement strategy that relies primarily on long-term renewable power purchase agreements because aggregate bills will be reduced by ~\$520M over that time horizon.

We introduced a portfolio of energy efficiency programs with varying target savings goals as a contributing CERES resource and found that ratepayer bills are reduced by ~\$400M to ~\$1.0B between 2009 and 2028, but commensurately erode shareholder returns by ~10 to ~100 basis

points. If a business model for energy efficiency is implemented that includes both a lost fixed cost recovery mechanism and a shareholder incentive mechanism, our results illustrate how shareholder returns can be improved through the pursuit of energy efficiency, by at most 24 basis points if the utility pursues a very aggressive EE portfolio while expensing authorized program costs compared to a supply-side only strategy where the utility buys the output from merchant renewable generating facilities under power-purchase agreements. Ratepayer bills are reduced between \$10M and ~\$840M over 20 years under this scenario that includes shareholder incentives for energy efficiency.

The report can be downloaded from: <http://eetd.lbl.gov/EA/EMP/ee-pubs.html>

Peter Cappers and Chuck Goldman

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**5. Stirling Engine Concentrating Solar Power System: 1.5 MW, On its way to 1500 MW?**

[http://tesseractosolar.com/north-america/pdf/2010\\_01\\_22.pdf](http://tesseractosolar.com/north-america/pdf/2010_01_22.pdf)

Only four months after breaking ground, Tessera Solar and Stirling Energy Systems (SES) showcased the highly anticipated Maricopa Solar power plant today at a special event for key partners, stakeholders and media. Maricopa Solar is the first commercial project for the SunCatcher™ concentrating solar power (CSP) technology designed and manufactured by SES. Joining in the celebration were Arizona Governor Jan Brewer and officials from Salt River Project (SRP), local and state government, the U.S. Department of Energy, Sandia National Laboratories, utility customers, suppliers and NTR plc, Tessera Solar and SES's majority shareholder.

"The opening of Maricopa Solar is a significant milestone for our companies and for the solar industry," said Bob Lukefahr, Tessera Solar North America CEO. "Maricopa Solar represents a genuine breakthrough in solar energy and demonstrates that Dish Stirling solar power is now ready for commercial deployment in the US and around the world. With this milestone now behind us we look forward to breaking ground on our initial 1,500 megawatts of projects in California and Texas later this year."

Maricopa Solar is comprised of 60 SunCatcher™ dishes and will provide 1.5 megawatts of renewable energy to SRP customers in Greater Phoenix, Arizona.

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**STANFORD STUFF STANFORD STUFF STUFFY STANFORD**

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**1. Upcoming Energy Seminars: Feb 3 Integrating > 50% Wind onto the Grid**

February 3, 4:15-5:15, Building 420, Room 40  
Marija Ilic, Carnegie Mellon University  
Mini-Series on the Smart Grid #3: Integrating more than 50% Wind on the Grid: A Case Study

February 10, 4:15-5:15, Building 420, Room 40  
Bert Metz, Former Co-Chair of the Working Group on Mitigation of the Intergovernmental Panel on Climate Change  
Controlling Climate Change (His new book)

February 17, 4:15-5:15, Building 420, Room 40, Followed by a MAP Energy Social  
Noah Diffenbaugh, Stanford University  
Dynamics and Impacts of Climate Variability and Change

February 24, 4:15-5:15, Building 420, Room 40  
Panel headed by Steve Schneider and Terry Root, Stanford University  
Stanford Student Experience in Copenhagen

March 3, 4:15-5:15, Building 420, Room 40  
Reyad Fezzani, Chief Executive Officer, BP Solar  
China's Growing Global Influence: A Solar Energy Perspective

March 10, 4:15-5:15, Building 420, Room 40  
Paul De Martini, VP of Advanced Technology, Southern California Edison  
Jim Detmers, Vice President of Operations, California Independent Systems Operator Corporation  
Mini-Series on the Smart Grid #4: What Does the Smart Grid Enable?: A Utility and Grid Operator's Perspective

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**2. From Green Lighting to Zero Energy: Recent Trends in Sustainable Building Design, Feb 1, 4:15**

CEE Department Special Seminar

Monday, February 1, 2010 at 4:15 PM Y2E2 Lecture Hall 111

Friedrich Linhart Swiss Federal Institute of Technology Research Assistant at the Solar Energy and Building Physics Laboratory

From « Green Lighting » to « Zero Energy » -Recent Trends in Sustainable Building Design

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**3. King Fahd University of Petroleum and Minerals, Recruitment team visit Feb 10-12**

A KFUPM recruitment team will visit Stanford Feb 10-12 to conduct interviews with Stanford Ph.D. graduates and near completion candidates in the sciences, engineering, humanities and business disciplines.

Applications will be accepted for a range of academic and research positions at KFUPM.

Mohammed Misbhauddin  
KFUPM Recruiting Team  
www.kfupm.edu.sa

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**JOBS JOBS JOBS JOBS**

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**1. DOE's Office of Energy Efficiency and Renewable Energy, DC, 20+ jobs.**

Apply through the following link:

<http://jobview.usajobs.gov/getjob.aspx?JobID=85765553&sort=rv&vw=d&brd=3876&ss=0&FedEmp=N&FedPub=Y&q=ARRAHQ-10-DirHir-EE0-0023&AVSDM=2010-01-20+07%3a10%3a00&rc=2&TabNum=2>

Energy Project Specialist

OPEN PERIOD: Tuesday, January 19, 2010 to Wednesday, February 03, 2010

OPEN TO ALL U.S. CITIZENS.

SALARY RANGE: 89,033.00 - 136,771.00 USD /year

The successful candidate will serve as an Energy Project Specialist (EPS) in the Office of Weatherization and Intergovernmental Programs for the Weatherization Assistance Program, State Energy Program, or Energy Efficiency and Conservation Block Grant Program. The Energy Project Specialist serves as a portfolio manager, managing contracts and relationships with states, cities, counties, tribes and other entities receiving financial assistance from OWIP.

The WAP, SEP, and EECBG programs have received unprecedented funding under the American Recovery and Reinvestment Act of 2009.

Energy Project Specialists serve a critical role in the successful implementation of these programs under the Recovery Act. The EPS is responsible for ensuring the success of OWIP grantees in creating/retaining jobs, increasing energy efficiency, decreasing total energy consumption, and increasing renewable energy generation. The incumbent serves as the focal point for implementing a project(s), sub-project(s), and/or initiative(s) in a particular state or states or geographic area; or serves as a portfolio manager dealing with multiple, cross-cutting EE activities such as marketing, outreach, or communications that contribute to the successful implementation of all EE programs and initiatives within a particular geographic area. The Energy Project Specialist is the primary channel and implementation catalyst for EE project delivery and customer interface in assigned areas. This includes providing technical and financial assistance through grant projects and providing educational and public information services.

More DOE jobs within the office of Energy Efficiency and Renewable Energy (EERE):

The U.S. Department of Energy's Appliance Standards Program is seeking engineers to manage the development and update of test procedures and energy conservation standards for consumer products and certain commercial and industrial equipment. The Appliance Standards Program is part of the Department's Building Technologies Program (BTP). BTP is the nation's premier energy conservation program for building equipment and building systems. BTP manages a regulatory, research and outreach program designed to increase the energy efficiency of buildings and building systems. You can find detailed information on BTP and the Appliance Standards Program on the Department's website at: <http://www1.eere.energy.gov/buildings/>.

The Appliance Standards Program is seeking entry-level engineering staff (GS-7/9/11); mid-level engineering staff (GS-11/12/13); and senior level engineering staff (GS-13/14). The announcements are posted on USAJobs at the following address:

GS 11/12/13 (from \$60,989 to \$113,007 per year)

<http://jobsearch.usajobs.gov/search.aspx?sort=rv&vw=d&brd=3876&ss=0&FedEmp=N&FedPub=Y&q=HQ-10-MP-06-EE10-0078>

GS-13/14 (from \$86,927 to \$133,543 per year)

<http://jobsearch.usajobs.gov/search.aspx?vw=d&brd=3876&ss=0&FedEmp=N&FedPub=Y&q=HQ-10-MP-07-EE10-0080&pg=1&re=0>

GS-7/9/11 (from \$42,209 to \$81,204)

[http://jobview.usajobs.gov/GetJob.aspx?JobID=85767323&JobTitle=General+Engineer&q=HQ-10-DE-08-EE10-0081&sort=rv%2c-dtex&cn=&rad\\_units=miles&brd=3876&pp=50&jbf574=DN\\*&vw=d&re=134&FedEmp=Y&FedPub=N&caller=basic.aspx&ss=0&AVSDM=2010-01-20+00%3a03%3a00](http://jobview.usajobs.gov/GetJob.aspx?JobID=85767323&JobTitle=General+Engineer&q=HQ-10-DE-08-EE10-0081&sort=rv%2c-dtex&cn=&rad_units=miles&brd=3876&pp=50&jbf574=DN*&vw=d&re=134&FedEmp=Y&FedPub=N&caller=basic.aspx&ss=0&AVSDM=2010-01-20+00%3a03%3a00)

Please help us advertise: some more jobs just became available at Department of Energy, Energy Efficiency and Renewable Energy division, within the Weatherization and Intergovernmental Programs group. Applications are due Feb 9 for 17 open positions, and 8 open positions are due Feb 3. All these individuals will be instrumental in the successful implementation of \$11.3 Billion in funding through the Recovery Act to create green jobs and transform energy efficiency and renewable energy throughout the country! Anyone interested can contact me at [tyler.huebner@ee.doe.gov](mailto:tyler.huebner@ee.doe.gov).

13 Field Account Reps / Project Officers

<http://jobview.usajobs.gov/GetJob.aspx?JobID=85928126&JobTitle=Energy+Technology+Program+Specialist%2c+GS-301-13&q=ARRAHO-10-DirHir-EE-00024&where=&brd=3876&vw=b&FedEmp=N&FedPub=Y&x=72&y=12&AVSDM=2010-01-27+14%3a17%3a00>

1 Lead Energy Technology Program Specialist (Field Ops)

<http://jobview.usajobs.gov/GetJob.aspx?JobID=85928192&JobTitle=Lead+Energy+Technology+Program+Specialist%2c+GS-301-14&q=ARRAHO-10-DirHir-EE-00025&where=&brd=3876&vw=b&FedEmp=N&FedPub=Y&x=39&y=13&AVSDM=2010-01-27+14%3a21%3a00>

3 WAP technical assistance/training liaisons

<http://jobview.usajobs.gov/GetJob.aspx?JobID=85927982&JobTitle=Energy+Technology+Program+Specialist%2c+GS-301-13&q=ARRAHO-10-DirHir-EE-00027&where=&brd=3876&vw=b&FedEmp=N&FedPub=Y&x=38&y=11&AVSDM=2010-01-27+14%3a09%3a00>

7 Field Account Reps / Project Officers - Due Feb 3

<http://jobview.usajobs.gov/GetJob.aspx?JobID=85765553&JobTitle=Energy+Project+Specialist&jbf574=DN00&FedEmp=N&FedPub=Y&sort=rv%2c-dtex&vw=d&re=134&caller=basic.aspx&AVSDM=2010-01-19+16%3a30%3a00>

1 Legislative Affairs person - Due Feb 3

<http://jobview.usajobs.gov/GetJob.aspx?JobID=85778385&JobTitle=Legislative+Affairs+Specialist%2c+GS-0301D-14&q=owip&where=&brd=3876&vw=b&FedEmp=N&FedPub=Y&x=0&y=0&AVSDM=2010-01-23+06%3a31%3a00>

We are actively hiring at the Department of Energy, Office of Energy Efficiency and Renewable Energy, in Washington, D.C. for individuals that will help implement three EE and RE programs that were funded through the Recovery Act: Low-Income Weatherization with \$5 billion, State Energy Program with \$3 billion, and Energy Efficiency and Conservation Block Grants with \$3 billion. These programs are within the Weatherization and Intergovernmental Programs area of EERE. We are rapidly scaling up these programs to help achieve President Obama's goals of weatherizing homes, creating green jobs, and transforming energy efficiency and renewable energy markets.

The primary job we currently have open is "Project Officer," a role where you will directly interface between our HQ staff that manage the DOE side of the programs, and the state-level management that oversee their state's of these programs. The individuals that fill these positions will be hugely valuable in helping us achieve our very ambitious missions.

The first round of applications, for seven of these positions, is due Feb 3. We expect there will be additional three announcements for 23 more jobs within the next month or two.

<http://jobview.usajobs.gov/GetJob.aspx?JobID=85765553&JobTitle=Energy+Project+Specialist&jbf574=DN00&FedEmp=N&FedPub=Y&sort=rv%2c-dtex&vw=d&re=134&caller=basic.aspx&AVSDM=2010-01-19+16%3a30%3a00>

There is also one position for a Legislative Affairs person:

<http://jobview.usajobs.gov/GetJob.aspx?JobID=85778385&JobTitle=Legislative+Affairs+Specialist%2c+GS-0301D-14&q=owip&where=&brd=3876&vw=b&FedEmp=N&FedPub=Y&x=0&y=0&AVSDM=2010-01-23+06%3a31%3a00>

You can contact me directly at [tyler.huebner@ee.doe.gov](mailto:tyler.huebner@ee.doe.gov) if you have any questions about these jobs or the application process, which is quite rigorous. You can learn more about these programs at <http://apps1.eere.energy.gov/wip/>. Please forward this announcement to anyone interested.

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**2. ARPA-E Announces Fellows Program**

ARPA-E announces the creation of the "ARPA-E Fellows Program" and invites America's next generation of leading energy innovators to help shape our nation's energy future. ARPA-E Fellows will be competitively selected from the best and the brightest up and coming researchers and entrepreneurs in the U.S. energy sector.

Participants in the ARPA-E Fellows Program will actively help create the strategic direction and vision of the country's first agency devoted exclusively to transformational energy technology research and development. Fellows will support Program Directors in program creation, in addition to undertaking independent explorations of promising future research areas for ARPA-E. Fellows will engage with world class researchers and innovators to develop theses for high impact ARPA-E research program areas, will prepare energy technology and economic analyses, and will make recommendations to Department of Energy senior management. Fellows will also gain exposure to energy policy and all aspects of the energy technology development lifecycle, including scientific research, technology prototyping and development, and technology commercialization.

ARPA-E Fellow terms will not exceed two years. It is expected that Fellows will go on to be leaders in the energy field after their tenure at ARPA-E.

ARPA-E Fellows will be expected to have strong technical backgrounds and deep expertise in at least one energy technology related field. Senior Fellows will be expected to have three or more years of relevant work experience in energy innovation related fields, while Fellows will represent recent PhDs, postdoctoral researchers and recent graduates with less than three years of work experience.

Highly qualified candidates should possess the following attributes:

Senior Fellows:

- More than three years after earning a PhD degree in an energy relevant scientific or engineering field
- A passion for energy technology research and development
- An interest in working in a multi-disciplinary, fast paced energy technology research and development focused environment
- Strong analytical and research skills and a demonstrated capacity for creative thinking
- Three or more years of distinctive work experience in an energy innovation related field
- A record of distinguished scholarship and publication
- Experience and knowledge in technology commercialization is desirable, but not required

Fellows:

- Recent PhD (less than three years) or in rare cases in the process of working toward a PhD in an energy relevant scientific or engineering field
- A passion for energy technology research and development
- An interest in working in a multi-disciplinary, fast paced energy technology research and development focused environment
- Strong analytical and research skills and a demonstrated capacity for creative thinking
- A record of distinguished scholarship and publication

All ARPA-E Fellows and Senior Fellows are full-time federal employees paid at a competitive salary.

Candidates should apply by sending the following to [ARPA-E-jobs@hq.doe.gov](mailto:ARPA-E-jobs@hq.doe.gov).

Updated CV

One-page statement of interest describing relevant experience and expertise, as well as a description of the energy topic areas/project areas they would have the strongest interest in working on as an ARPA-E Fellow

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**3. Facebook: M.E. Data Centers, HVAC, Palo Alto**

Facebook is seeking an experienced Mechanical Engineer to join our data center engineering team. Our datacenters are the foundation upon which our software operates with efficient ease. Building and operating data centers the "right" way from the day they go live is synonymous with ensuring capacity availability and capital conservatism. The data center engineering team thinks from chip to chiller (or electrical substation), determining configurations and ensuring maximum efficiency of our compute infrastructure. This position is full-time and located in our Palo Alto office.

Responsibilities

- Technical lead for the design and development of data center infrastructure
- Develop design standards, specifications, and method of procedures (MOP) for consistency and maximum system reliability
- Provide HVAC system consulting services to local data center operations teams
- Research new designs, materials and construction methods for data center gear and related components
- Oversee the data center commissioning (Integrated System Test) for new and retrofitted data centers
- Provide energy efficient solutions to optimize cooling systems

Provide and review detailed scripts for change management request (CMR) activities  
Develop capital project budgets and complex business case analyses  
Travel to datacenter sites for engineering studies, mechanical systems audits, startup testing, and full commissioning, as required  
Provide cooling system related Root-Cause-Analysis (RCA)  
Ensure data center "as-built" mechanical documentation is accurate  
Respond on an as-needed basis to emergencies.

#### Requirements

BS in Mechanical Engineering  
Mechanical Professional Engineer registration is required  
Minimum of twelve (12) years professional experience in data center design, construction, operations, and maintenance  
Must hold high level knowledge of HVAC system, Chilled Water Systems, Condenser Water Systems, Pump controls, Glycool/Glycols, AHU units (DX, split, RTU, CRAC, etc), CRAC, Raised Floor Systems, HOT/COLD aisle containment, Building Management System  
Should possess knowledge of industry standards, building codes and safety standards including UMC, NFPA, ASHRAE, UBC, and UMC  
Strong trouble shooting and analytical skills  
Ability to provide solutions to complex projects under pressure  
Must have effective written and verbal communications skills  
Must be familiar with AutoCAD, Visio, FLOTHERM or Tileflow.

To apply for this position, please check at <http://www.facebook.com/careers/department.php?dept=tech-ops&req=161409680030#/careers/apply.php?id=161409680030>

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#### 4. CA Sustainability Alliance: Interns, SF or Sacramento

The California Sustainability Alliance (<http://sustainca.org>) is looking for 2-3 paid interns to immediately assist in research, interviews, and writing on sustainability best practices. Projects may include developing website content on [emerging technologies](#) and [organizations](#) exemplifying holistic adoption of sustainability. We may also ask interns to research local government sustainability issues and/or develop materials for an upcoming utility sustainability forum. Interns familiar with web development and Flash may be asked to assist in web development activities; however, these skills are not required. The minimum time commitment is 10 hours per week (more may be possible). Interns must be able to meet with Alliance staff on occasion, either in San Francisco or in Sacramento. To apply, please send your resume along with a brief description of your interests and availability to Joanna Gubman at [joanna.gubman@navigantconsulting.com](mailto:joanna.gubman@navigantconsulting.com).

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#### 5. Building Energy Consultant, RMI, Boulder

Rocky Mountain Institute: This position will focus on building energy analysis and energy efficient building design. The energy consultant will engage closely with an RMI project manager, as well as the project design team, to manage and complete energy models, life cycle cost analysis, and other technical research and models during the design of retrofit and new construction projects. The candidate must be comfortable with thermodynamic principles and be ready to take on the challenges of simulating cutting edge technologies and effectively communicating and discussing results with clients. In the long-term, there will be research, teaching, and consulting components to this position, some of which will focus on developing and disseminating useful tools to the energy analysis community to facilitate higher quality, faster, and more effective energy analysis.

After one year in this position, it is expected that the selected Building Energy Consultant will have completed numerous building models and analyses that will have successfully impacted clients to make decisions that lead to substantially more energy efficient design and operations. In addition, the Building Energy Consultant will have trained and mentored others in energy analysis. After one year, the Building Energy Consultant will begin to contribute to research in the building energy analysis field as well as begin to grow their skill sets beyond modeling and engineering to project management and other areas of interest.

#### Mandatory Qualifications

- Organized and hard working
- Excellent written and verbal communication skills
- Bachelor's degree in engineering
- 2 years HVAC design experience
- Mastery of eQUEST or EnergyPlus
- Well versed in word processing and design software (Word, Excel, PowerPoint, AutoCad)

#### Desired Qualifications

- Masters degree from building engineering or building systems program
- Analysis experience with other thermal or CFD modeling programs
- Experience with LEED rating system and documentation
- Economic background and ability to perform life cycle cost analysis
- Consulting experience
- Energy auditing or commissioning experience

#### Contact Information

Please send cover letter and resume to [schan@rmi.org](mailto:schan@rmi.org) (Siu Chan) with a subject line of "Building Energy Consultant Position"

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#### 6. Energy-Efficiency Engineers: CLEARresult Consulting, Houston, Dallas, Lansing

CLEAResult Consulting ([www.clearesult.com](http://www.clearesult.com)) is an energy-efficiency consulting firm that designs and implements programs to help utilities manage load growth and meet legislative requirements by helping end customers identify energy-savings opportunities and implement energy-efficiency improvements. We are looking to hire energy-efficiency engineers with commercial & industrial experience. The openings are located in Houston, Dallas, Tulsa, and Lansing. (We do offer a relocation package.) We're seeking engineers who have experience in building energy use analysis, energy auditing, and building energy simulation/modeling. These are full-time positions with benefits. If interested, please contact James Hatheway at (512) 259-2383 or [jameshatheway@jhrecruiting.com](mailto:jameshatheway@jhrecruiting.com) Thanks!

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### **7. Paid Intern – LEED EBOM Project Administration**

Mary Davidge Associates is seeking an individual to join our team in providing management of a campus-wide LEED EBOM certification project for a leading technology corporation. The project offers the opportunity to participate in a highly innovative collaborative process within a cross functional team.

Part time contract position averaging 20 hours per week.

#### **Responsibilities:**

Assessing, collecting and organizing existing building operations data and plans for the corporate campus.

Assisting client to achieve Energy Star rating for each building on the campus by entering required energy data and managing the Energy Star process.

Meeting with in house operations managers to collect required data for LEED EBOM certification process. This would include documentation of purchasing policies and documentation of actual expenditures for performance periods in each of the LEED credit categories.

Assist with LEED Online documentation and project administration.

#### **Qualifications:**

The ideal candidate would be a graduate student or recent graduate with exceptional qualifications in a relevant engineering program.

Demonstrated knowledge of green building strategies and building operation requirements is also desired.

Experience in LEED Certification and Energy Star Labeled Buildings is preferred. Priority will be given to LEED accredited professionals.

Candidates should be well organized, team oriented and self motivated, possessing strong verbal and written communication skills. They must also have the ability to meet commitments and deadlines within a fast paced corporate environment.

Submit Cover letter and resume to [mdajobinfo@gmail.com](mailto:mdajobinfo@gmail.com)

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### **8. Solar (PV) Systems Design Engineer: Blue Oak Energy, Davis, CA**

Blue Oak Energy, Inc. is a commercial and utility scale solar electric project firm based in Davis, California. We are one of North America's leaders in designing, planning, and managing the installation of some of the largest solar electric projects in North America. Our core mission is to develop as much high-quality photovoltaic generated energy as possible in our lifetimes.

We are currently seeking a talented Solar Systems Design Engineer to focus on solar electric design and engineering for major projects. In this position, you will coordinate directly with clients and internal staff to create construction plans for large-scale rooftop and ground mounted PV systems.

We believe that our employees are the future success of our company. Thus, we offer a fun, challenging and rewarding environment with competitive salaries, outstanding benefits and career development opportunities. You will be a part of a dynamic and dedicated staff of 20+ people. The environment at Blue Oak Energy is fast paced and energetic. We are anticipating national growth and are looking for people who are interested in growing with us.

is a solid opportunity to work on the forefront of a vital, growing industry!

#### **Responsibilities:**

- Design commercial and utility scale solar electric systems, including but not limited to the electrical, structural and mechanical aspects of the projects.
- Conduct site visits to plan the locations of equipment and interconnection to the site's existing electrical system.
- Produce AutoCAD-based designs and drawings for a variety of solar electric projects.
- Create multidisciplinary engineering designs which produce the associated details and construction documents necessary to direct the installing contractors.
- Document and develop industry best practices and design standards.
- Represent Blue Oak Energy as an experienced and knowledgeable team member.
- Contribute to an amicable working environment with other associates and employees.

Qualifications:

- BS Degree in Electrical, Mechanical or Civil Engineering
- Minimum of 2 years of related work experience
- Solar electric experience highly desirable
- Thorough knowledge of the National Electrical Code, the International Building Code and other related codes and standards.
- Knowledge of power distribution and transmission systems design is a plus
- PE license preferred but not required
- Self-motivated, proactive and committed to excellence
- Proven AutoCAD and other graphical skills
- Hands-on construction experience
- Demonstrated ability to communicate effectively with clients of all disciplines
- Excellent PC computer skills and familiarity with MS Office and Windows
- Highly organized and skillful at working on multiple projects simultaneously
- Willingness to travel
- A "Can Do" positive attitude, coupled with superior problem-solving skills

Only resumes submitted with a cover letter will be considered. References will be contacted for all final candidates.

Respond to: [careers@blueoakenergy.com](mailto:careers@blueoakenergy.com), with SSDESTAN in the subject line

Start date: Feb/Mar 2010

Annual Salary: Competitive

Benefits: Medical, dental reimbursement, 401k, 3 weeks paid vacation and more!

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**9. Green Building Modeling Professionals: Cadmus Group, VA and Utah**

The Cadmus Group, Inc. is seeking mid-level professionals for our Green Building (GB) practice with experience in energy modeling and ASHRAE 90.1. Mid-level professionals should have three or more years of experience. Daily activities include consulting on LEED and energy modeling projects, reviewing LEED certification applications (primarily EA credit 1), supporting federal, state and municipal energy programs, reviewing standards and codes, creating and manipulating spreadsheets and databases, working with standard software packages to benchmark building energy use, offering technical support to organizations, training and writing reports and other documents. This position involves extensive work with the ENERGY STAR platform for residential and commercial buildings, and working with LEED Accredited Professionals (APs) to review designs and operational practices in new and existing buildings for maximum sustainability.

The ideal candidate will be a detail-oriented problem solver who is able to handle multiple tasks in a fast-paced consulting environment. This position is located in our Arlington, VA or Salt Lake City, UT office and will require some travel (5-15%).

Minimum requirements:

- B.S. Mechanical Engineering, or related field with at least 5-7 years of extensive energy modeling and ASHRAE 90.1 experience in lieu of B.S. in Mechanical Engineering.
- Energy modeling and ASHRAE 90.1 experience (Design + Construction EAc1 submittal or review experience a plus)
- Hands-on experience with common energy modeling software (eQuest, Trace 700, HAP, EnergyPlus, EnergyPro, etc.)
- LEED Accredited Professional (AP) with at least 1 year of LEED-related experience
- Academic or field experience with building audits (ASHRAE and green building)
- Commitment to green building and sustainability
- Excellent written and verbal communication skills in English
- Proven analytical skills
- Ability to work well independently and in teams

Optional but desirable attributes:

- At least 1 year of experience reviewing applications for LEED certification with USGBC, GBCI, or a Certification Body
- Spanish language ability
- Field experience in existing home remodeling or renovations
- Familiarity with California Title 24

Cadmus is an Affirmative Action Equal Opportunity Employer. For more information, and to apply, please visit our Online Career Center at <https://careers.cadmusgroup.com/apply/>.

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#### 10. Analyst, Environmental Finance, Wells Fargo, San Francisco

Wells Fargo's Environmental Finance Group in San Francisco is seeking an analyst who will support activities related to the Bank's growing efforts to deploy capital to environmentally-beneficial businesses and projects, across a range of industries - including renewable energy, energy efficiency, green real estate, greenhouse gas (GHG) markets, sustainable agriculture and forestry, water, and resource management. This position is for an individual inspired by the opportunity to support the bank's efforts to develop new products and investment/lending strategies for rapidly developing cleantech, renewable energy, and environmentally-related businesses.

Wells Fargo's Environmental Finance Group has supported the Bank's deployment of over \$5 billion in environmental commitments since 2005, including \$1.6 billion in solar and wind project investments, \$3 billion to support LEED-certified buildings, and other loans and investments for environmentally beneficial business opportunities.

##### Minimum Qualifications

The ideal candidate will have at least 2 years of work experience, including some combination of specific industry or educational experience - such as in renewable energy, environmental economics or policy, or resource management - and banking or related experience.

##### Preferred Skills

Specific attributes and skills should include:

- \* Strong analytical skills - ability to analyze opportunities through qualitative and quantitative analytical frameworks, financial modeling/statistical analysis experience is useful
- \* Strong research skills - need for detail oriented market and industry research
- \* Strong communication skills - both written and oral
- \* Strong interpersonal skills - ability to work effectively both with people inside and outside the bank
- \* Self-starter - someone who is very motivated and able to work independently.
- \* Strong computer skills - Excel, Powerpoint, etc.

To Apply: <https://www.wellsfargo.com/careers/> Requisition #: 3324017

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#### 11. Energy Codes and Standards Engineer/Advocate-Hi Tech Sector, NRDC, SF

The Natural Resources Defense Council Energy Program focuses specifically on curbing global warming by advancing sustainable energy solutions such as energy efficiency, location efficiency, renewable energy, cleaner vehicles, and renewable fuels. The San Francisco Energy Codes and Standards Engineer/Advocate would be an integral part of the California Energy Program team, working to promote effective policies to reduce the greenhouse gas emissions and health related air pollutants emitted as a result of building sector development, in a manner that provides other economic and environmental benefits nationally and globally. This position will focus on increasing the efficiency of consumer and office electronics products, the fastest growing source of electricity use in the home. The new hire will bring highly specialized technical expertise to NRDC and the greater efficiency community.

In support of our goal of accelerating the adoption of energy efficient products, we pursue both voluntary and mandatory policies and work with a wide range of stakeholders including retailers, manufacturers, component makers, researchers, and policy makers. Policy forums in which we participate most actively include state and national-level efforts in the U.S., China, and at the European Union.

This position represents a challenging, entrepreneurial, and enjoyable opportunity for the right person.

apply through [www.nrdc.org/jobs](http://www.nrdc.org/jobs)

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#### 12. Project Managers to Evaluate Energy Efficiency Programs, Harvard

The ideas42 think tank at Harvard's Institute for Quantitative Social Science is seeking full-time or part-time project managers to run scientific evaluations of pilot energy efficiency programs. The job will involve experimental design, understanding academic literatures, recruiting project partners from the private sector, and a large amount of nitty-gritty detail work in making the pilot projects happen. The projects include testing the effects of energy information disclosure for the purchase of autos, houses, and household durable goods. The ideal candidate might be a former management consultant who is interested in energy or environmental issues and plans to apply for PhD programs, although none of those criteria are necessary conditions. People who are interested should send a cover letter and resume to [allcott@iq.harvard.edu](mailto:allcott@iq.harvard.edu). (One of the Principal Investigators is Hunt Allcott, a former CEE 176 student at Stanford from long ago.)

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#### 13. Senior Analyst-Renewable Energy Market Transformation: NREL Golden, CO

Advanced-level analysis position, directing some projects, and having responsibility for work delivery in the area of solar energy technology market transformation, i.e., aimed at addressing the market barriers to successful deployment of renewable energy technologies, with an initial focus on solar electricity generation. The successful candidate will provide technical leadership in three areas: (1) lead and carry out foundational analysis on market transformation issues broadly, and specifically on workforce development requirements and benefits in the solar sector, (2) work with a wide range of stakeholders to develop and execute a multi-year plan for market transformation related analysis, and (3) manage both internal staff and subcontractors engaged in market transformation related analysis.

#### Job Duties

The successful candidate will provide expertise and support to the following functions:

- Initiates innovative analysis and research related to market transformation in the solar sector.
- Holds responsibility for technical work delivery and participation in:
  - Planning and performing required analysis with advanced analysis and problem solving skills.
  - Developing advanced models, programs, theories, and approaches.
  - Interpreting results for policy, market, economic and/or technology analysis.
  - Providing input and tracking for project budgets.
- Write clear, detailed reports and presentation materials on solar related issues to inform solar policy making at the federal, state, and local levels.
- Lead collaborative activities with other national laboratories, universities, and non-governmental organizations
- Perform innovative analyses and interpretations of solar technology related market barriers, regulations, and policies.
- Publish and present results of studies in technical reports, peer-reviewed journals, and at conferences, symposia, and review meetings.

#### Required Education and Experience

Relevant Master's and 6 years experience or equivalent relevant education/experience.

#### Preferred Qualifications

Advanced degree in technology policy, energy policy, environmental policy, or other related field, or equivalent relevant experience. Also five to ten years of experience directly in the renewable energy or energy efficiency sectors. Knowledge of renewable energy, energy efficiency technologies, and market opportunities and barriers related to their use. Experience in analysis of energy technology policies, impacts, and strategies. Demonstrated experience in managing high-impact analysis projects. Excellent interpersonal and communication (oral and written) skills.

The posting says 6 years experience, but 3 years could be fine if it's in solar; intermediate spreadsheet user with some knowledge of energy issues and industry, knowledge of finance and econ preferred. Need an interface between NREL modeling tools' users and modelers. Send resumes to [barry.friedman@nrel.gov](mailto:barry.friedman@nrel.gov).

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#### 14. Faculty Position, Sustainable Infrastructure, U Washington

##### [Faculty Position, Sustainable Infrastructure, U Washington](#)

The University of Washington is seeking applicants for a faculty position in sustainable infrastructure. The successful candidate will be expected to develop an internationally recognized research program and to participate in the teaching and service missions of the department. Candidates capable of developing collaborative relationships in research and teaching are of particular interest. A Ph.D. in civil engineering or a related discipline is required. Applicant review will begin January 15, 2010, and will continue until the position is filled.

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#### 15. Transportation Analyst, Intern, Communications Associate: The Center for Clean Air Policy, DC

##### Communications Associate

The Center for Clean Air Policy, a leading DC-based climate think tank, has an immediate opening for a Communications Associate. Ideal candidate will strategically coordinate press and media content; cultivate media relationships; and build online community. Candidate should be: an exceptional writer who is able to quickly understand and translate complex documents into concise and digestible pieces; comfortable cultivating relationships with press; skilled at optimizing social media outlets; and familiar with developing web content. Policy experience a must. 2-5 years of communications/PR experience preferred. Please visit our website ([www.ccap.org](http://www.ccap.org)) for more information and application instructions.

##### Transportation Analyst

The Policy Analyst will apply research and analytical skills to the development of transportation and climate change policy. The ideal candidate will bring at least five years of relevant experience and an ability to work with a diverse group of stakeholders to craft practical policy solutions. Knowledge of economics, smart growth, transportation policy, transportation data and the transportation and planning research literatures is required.

The Policy Analyst will play a key role in CCAP's research and analysis on the economic costs and benefits of travel efficiency policies and the relationships between VMT and various economic indicators such as GDP. The Policy Analyst will also support CCAP's assessment of the types of technical assistance, tools and data that state and local governments will need to meet the requirements of future transportation GHG reduction legislation and regulations. In addition the Policy analyst will support CCAP's efforts on performance measurement and the integration of transportation, climate and air quality policies. This position affords tremendous opportunity to participate in the development of cutting edge

transportation and climate change policy work.  
Please visit our website ([www.ccap.org](http://www.ccap.org)) for more information and application instructions.

#### Transportation Intern

The intern will assist program staff with the execution of CCAP's transportation work. This work includes preparation for stakeholder dialogues on transportation and climate policy. In addition to research and writing, the intern may be asked to conduct tasks such as scheduling meetings, formatting documents, assisting in event planning, and other administrative tasks. Knowledge of transportation and climate policy at a national, local and/or regional level; interest in and familiarity with and current legislation is desirable. This internship is available immediately, 10-40 hours per week, for 4-8 months. This is a paid internship with no benefits provided.  
Please visit our website ([www.ccap.org](http://www.ccap.org)) for more information and application instructions.

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#### 16. Senior Energy/Sustainability Project Manager, HDR, San Francisco

HDR's San Francisco office is seeking a Senior Project Manager to assist in growing HDR's energy and sustainability practice. HDR's San Francisco office is focused on energy and waste management consulting, with our staff having over 25 years of experience providing a full range of technical services related to energy efficiency, renewable energy, and cogeneration projects. The ideal candidate has experience in marketing and management of projects in one or more of the following areas: energy efficiency, energy and climate action plans, renewable energy, cogeneration, and energy/sustainability policy. Experience with Federal clients preferred, but not required. This individual will have the opportunity to work on a variety of exciting projects already underway with California utility companies, cities and municipalities nationwide, local government agencies, and private companies, most notably, many projects throughout the company related to the Energy Efficiency Conservation Block Grant Program with an energy management component. The main focus of the position will be project management and business development, however, the position will have an integral role in local staff leadership and marketing. As HDR expands its San Francisco Energy Management practice, opportunity exists for further developing and leading a local Energy/Sustainability group, as well as providing support and interacting with our National market sector team.

Bachelors degree in Engineering preferred. Masters preferred.  
8+ years related project and/or business management and staff supervision experience.  
Excellent oral and written communication skills required.  
Demonstrated leadership skills.

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#### 17. Program Analyst: Energy and Environmental Policy, USDA, DC

<http://www.fas.usda.gov/icd/drd/icdjobs.html>

\*You must be a U.S. citizen to apply for this position and be able to be security cleared for assignment. This is an Excepted Service, Schedule B appointment for up to five years. \*

Development Resources and Disaster Assistance Division coordinates major facets of USDA participation in technical assistance and developmental programs. Its mission is to provide USDA technical assistance, training, and information to cooperating countries and institutions to achieve sustainable agricultural production, mutual economic growth, and a better environment. The Program Analyst (Energy and Environmental Policy) will work in the USAID Bureau for Economic Growth, Agriculture, and Trade (EGAT)=

Office of Infrastructure and Engineering (I&E), Energy Team.

The Program Analyst (Energy and Environmental Policy) will assist with the conceptualization, formulation, implementation, and management of comprehensive programs that support energy sector reform, global climate change mitigation, and clean energy development in developing countries. These energy programs create and shape institutions, policies, and legal/regulatory frameworks that impact the development of energy markets, help to implement effective clean energy programs, and increase access to modern energy services in USAID-assisted countries.

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#### 18. Summer Fellows Program with Focus on Climate and Energy, and National Security and Counterterrorism, Oakland

The Breakthrough Institute, a leading public policy think tank, is seeking up to ten of the country's top young writers and thought leaders for a paid fellowship in Summer 2010 as part of its young leaders initiative, Breakthrough Generation. Fellowships are highly competitive -- in 2009, 5 percent of applicants were accepted -- and involve cutting-edge writing, research, and analysis on energy/climate and national security/counterterrorism issues. Breakthrough Fellows have published in the Harvard Law & Policy Review, San Francisco Chronicle, Baltimore Sun, and the Huffington Post, and their projects have been cited in the New York Times, Newsweek, Time Magazine,

the Financial Times, and the Wall Street Journal, among others.

For 2010, Breakthrough Fellows will divide into an energy and climate team and a national security team, which will work closely with Senior Breakthrough Institute staff, including Michael Shellenberger and Ted Nordhaus, Breakthrough's founders and two of Time Magazine's [Heroes of the Environment 2008](#). Energy and climate fellows will focus on quantitative and qualitative analyses of the global energy economy and policies designed to decarbonize the economy and make clean energy cheap and abundant. The national security fellows will focus on scientific analyses of the terrorist threat and policies to prevent terrorism.

The Breakthrough Institute has a history of reinventing older political paradigms with big ideas. In 2002, Breakthrough co-founded the Apollo Alliance and the New Apollo Project for clean energy, which is one of President Obama's main priorities. In 2004, Shellenberger and Nordhaus wrote "[The Death of Environmentalism](#)", an essay that triggered a national debate about the future of environmentalism and interest group liberalism. Their 2007 book, [Break Through: From the Death of Environmentalism to the Politics of Possibility](#), was called "prescient" by Time Magazine. Wired Magazine said "the book could be the best thing to happen to environmentalism since Silent Spring." Breakthrough's climate and energy analysis has been featured in The Wall Street Journal, The New York Times, and the Los Angeles Times. Most recently, the Breakthrough Institute was profiled on [National Public Radio](#) for their work promoting an investment and innovation centered framework for addressing climate change.

The Breakthrough Institute succeeds by tapping cutting-edge progressive thinking, sharp analysis, and superb communication to create and advance ideas capable of achieving the broad social and ecological transformations America and the world need.

Fellowships pay \$300 per week and are awarded to individuals aged 18-25 who will be closely involved with Breakthrough's high-level work. Activities and projects include writing short articles and op-eds, researching and writing policy white papers, and conducting interviews with the nation's top political and policy experts. Fellows will work 40 hours per week for ten weeks during Summer 2010 from Breakthrough's central office in Oakland, CA.

To apply, please submit a cover letter, resume or CV, and three writing samples to [fellowship@thebreakthrough.org](mailto:fellowship@thebreakthrough.org). In your cover letter, please indicate why you are interested in working with the Breakthrough Institute, making reference to Breakthrough's policy work, the "Death of Environmentalism" essay, and/or Break Through. If you are interested in applying and your library does not have a copy of the book, please notify us and we will send you a copy free of charge. In your application please indicate if you are interested in participating in the climate/energy track or the national security track. Applications are due by 5:00PM PST on March 15th, 2010. Writing samples should include at least one oped-style piece and one research paper (these do not have to be published). Personal recommendations are welcomed but not required.

For more information, contact Devon Swezey at [Devon@thebreakthrough.org](mailto:Devon@thebreakthrough.org)

This announcement can be viewed online at: <http://www.thebreakthrough.org/action.shtml>

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### **19. Renewable Energy Engineers, Google, Mountain View, CA**

Business as usual will not deliver low-cost, clean energy fast enough to avoid potentially catastrophic climate change. We need a clean energy revolution that will deliver breakthrough technologies priced lower than carbon-intensive alternatives such as coal. Google has launched an R&D group to develop electricity from renewable energy sources at a cost less than coal.

Google's initiative to develop renewable energy cheaper than coal, known as RE<C, will perform Research and Development in advanced solar thermal power, wind power, enhanced geothermal systems, and other breakthrough technologies. This effort is about more than our own needs as an energy consumer, but rather the planet's needs for clean and cheap renewable energy.

Renewable Energy Mechanical Designer  
<http://www.google.com/support/jobs/bin/answer.py?answer=167724>

Renewable Energy Mechanical Engineer  
<http://www.google.com/support/jobs/bin/answer.py?answer=167086>

Renewable Energy Test Engineer  
<http://www.google.com/support/jobs/bin/answer.py?answer=166948>

Renewable Energy Manufacturing Engineer  
<http://www.google.com/support/jobs/bin/answer.py?answer=166406>

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### **20. Program Officer, Electric Power Sector, ClimateWorks Foundation**

The ClimateWorks Foundation seeks a Program Officer with expertise in the power sector to provide institutional development and sector-based strategy support for the ClimateWorks Network. We thought this position might be of interest to you or people in your network.

As you may know, ClimateWorks is a worldwide network of philanthropic and non-governmental organizations whose goal is to prevent climate change. The organization's objective is to reduce greenhouse gas emissions by 30 billion metric tons per year by the year 2030, and ensure that global average temperatures do not increase by more than 2° C. For more information, visit [www.climateworks.org](http://www.climateworks.org).

The Program Officer - Power Sector will focus on the design and implementation of policies that lead to energy suppliers maximizing opportunities for energy efficiency, maximizing the use of renewable energy, and limiting the use of unabated coal-derived energy. In addition, the Program Officer will support the entire ClimateWorks Network on this topic, helping to develop and refine sector-based strategies and research, facilitate exchange between internal and external groups to uncover and address new issues within the sector, convene key decision-makers to increase the understanding of and commitment to implementing sound energy policies, and help build internal Network capacities to deliver on our collective goals. The Program Officer will also support the organizational development of the Best Practice Network, including the development of strategic plans, operational plans, staff and governance plans and mechanisms which increase the organization's access to and impact in influencing key decision-makers.

. California Environmental Associates is assisting ClimateWorks with this search; if you have questions regarding this position, please contact [jamaica@cearecruiting.com](mailto:jamaica@cearecruiting.com). To apply directly, please follow the directions on the position description, or visit: [www.cearecruiting.com](http://www.cearecruiting.com).

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### **21. enXco Development: Utility-Scale Solar Developers, San Ramon, CA**

enXco is hiring both experienced and associate developers to join the utility-scale solar development group based in San Ramon, CA. Join one of the leading renewable energy developers and bring solar to the masses! Please apply through our website at [http://www.enxco.com/employment\\_job\\_associate\\_solar\\_developer.php](http://www.enxco.com/employment_job_associate_solar_developer.php) or by email [employment@enxco.com](mailto:employment@enxco.com).

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### **22. Radiance Senior Scientific Associate, LBNL, Berkeley**

Join a team of motivated building scientists, architects, and engineers developing new daylighting tools and technology solutions that will provide highly efficient solutions for the next generation of net zero energy buildings.

The Lawrence Berkeley National Laboratory has a new opening in the Building Technology Department for a Radiance Senior Scientific Engineering Associate. The successful candidate will participate in the development, validation and maintenance of the next generation of facade, lighting and daylighting simulation and analysis tools and utilize these tools for the design, evaluation, and operation of innovative low-energy building solutions.

Details are posted at: <http://cio.lbl.gov/details.asp?jid=23906&p=1>

For an informal discussion about the opening, call Eleanor Lee (510 486 4997).

To review recent projects, see:

[http://windows.lbl.gov/comm\\_perf/newyorktimes.htm](http://windows.lbl.gov/comm_perf/newyorktimes.htm)

<http://lowenergyfacades.lbl.gov/resources.html>

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### **23. Client Project Manager, Monitor 360, SF**

MONITOR 360 ([www.monitor-360.com](http://www.monitor-360.com)), a division of leading consulting firm The Monitor Group with offices around the world, is seeking a qualified candidate to help lead client work and build our practice based in the San Francisco office. The practitioner will apply consulting skills to help address a range of complex problems for U.S. government clients. Our clients bring us their most difficult, open-ended challenges that involve a high degree of uncertainty and complexity. They expect us to help them generate insights and provide novel, innovative answers and solutions to big questions, such as:

- What are the risks and opportunities for US national security from emerging developments in telecom and power grid technologies?
- How will the uses and adaptations of communications technology pose unique opportunities for global actors to organize and mobilize?
- What is the future relationship of Russia and China and its impact US national security?

#### **RESPONSIBILITIES**

- Lead day-to-day management of consulting projects at the intersection of science and technology with geo-economics/politics and national security
- Manage all aspects of a given project, including workflow planning, budgeting, research agenda, team assembly/allocations, deliverables crafting, progress reporting, client meeting and workshop coordination, sourcing of experts from networks, etc.
- Contribute to the intellectual agenda for and approach to the execution of each project
- Structure and facilitate interactive client workshops and learning journeys
- Collaborate closely with the account leader and the partners managing Monitor 360 to determine the course of each case and the overall strategy for the client relationship
- Contribute to the group's business development and marketing campaigns aimed at developing client relationships

## REQUIREMENTS

- Advanced degree from top university in electrical engineering, computer science, technical design, communications or power systems
- 5+ years of professional experience, of which 2+ years spent in consulting
- Proven ability to deliver value-added client experiences
- US national with strong desire to work on national security issues
- Global outlook, intellectual curiosity and demand for diversity of opinions
- Strong inclination to co-create solutions with a diverse set of team members
- Superior written and oral communication skills, focused on crafting impactful narratives
- Highly motivated self-starter with versatile, entrepreneurial approach
- Ability to travel domestically approx. 25% of the time and internationally on occasion
- Familiarity with text- and graphics-based software tools, and online collaboration and knowledge sharing platforms

## HOW TO APPLY (BY FEBRUARY 15th)

If you are interested in this position and feel that you have the relevant experience, skills, and qualities, please apply by sending the following three items:

- 1) A cover letter that outlines how your skills and experience make you a viable candidate for this particular position, and why you feel you'd be a good fit for Monitor 360
- 2) A résumé
- 3) A recent writing sample that displays analytic ability. The writing sample may be from academic coursework or a professional environment.

Please send your application to: [recruiting@monitor-360.com](mailto:recruiting@monitor-360.com).

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## 24. California Foundation on the Environment and the Economy, 2010 Fellows Program

The purpose of the California Foundation on the Environment and the Economy (CFEE) is to bring together business, labor, community, and environmental leadership with legislative and regulatory officials and expert academicians, in forums designed to address fundamental environmental and economic infrastructure issues. CFEE focuses on policy issues in the areas of energy, water, transportation infrastructure, telecommunications and advanced technologies, as well as air quality/climate change. The forums, roundtable conferences and workshops, as well as international study travel projects, engender positive discussions of creative solutions and clear delineation of potential policy options and their consequences, in an atmosphere of non-adversarial cooperation and a common desire to achieve long-term beneficial solutions for society.

For further information about CFEE, please see our website: [www.cfee.net](http://www.cfee.net)

Job Description: CFEE is seeking a full-time Fellow (intern) to provide support and coordination for CFEE through the execution of responsibilities critical to the success of the Foundation's mission. The Fellow will report to the President, and will act in coordination with senior staff.

Salary, Hours and Duration: \$1,923.08 bi-weekly plus medical benefits, full time, for one year.

Start Date: Immediately upon acceptance

Qualifications: Skills/Competencies

- Recent college graduate
- Excellent written and oral communication skills
- Excellent time and process management skills, with follow up and attention to detail critical
- Strong computer and information management skills, including access to, and retrieval of, internet-based information and academic research
- Demonstrates interest, energy and enthusiasm for public policy issues

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## 25. Senior Lecturer, Architectural Design, University of Sydney

The successful applicant will teach in design studios, particularly in the March Digital Architecture Research Studio and in Architectural Communications in the undergraduate BDesArch course, develop opportunities for interaction and cross-teaching and research between staff of the Design Lab and Architecture programs, develop a program of research in architectural computing and supervise undergraduate Honours and postgraduate research student.

You will have a demonstrated track record in research publications and/or peer-assessed creative input, the ability to teach in an architectural design studio, a track record in applying for competitive research grants or competitive commissions and a record of higher degree research supervision.

The Faculty is particularly interested in hearing from candidates with research interests in one or more of the following areas: urban computing, parametric modelling, generative design, kinetic architecture, computer-supported collaborative design, building-information modelling, responsive/smart spaces and digital fabrication technologies.

The position is full-time continuing subject to the completion of a satisfactory probation period for new appointees. Membership of a University approved superannuation scheme is a condition of employment for new appointees.

Remuneration package: a competitive remuneration package is available (consisting of a base salary Level B/C \$78,538 p.a - \$96,207 p.a, leave loading and up to 17% employer's contribution to superannuation).

More specific information relating to the role can be found here: [Senior Lecturer/Lecturer Architectural Design/Digital Architecture](#).

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## **26. Energy Efficiency/Renewables, Summit Blue, CA**

We are currently seeking qualified candidates for entry and mid-level engineering positions for work on a wide range of energy efficiency, energy conservation and renewable energy projects. Internships are also available. Expected duties and responsibilities include analysis of energy efficiency and renewable energy technologies, energy simulation modeling, energy auditing and field measurement of the performance of buildings, industrial processes and energy systems. Preferred candidates will have an engineering degree with a focus on energy issues (advanced degree is a plus), strong analytic skills and experience with energy analysis tools and methods, and good verbal and written communication skills. Summit Blue offers excellent advancement opportunities for motivated candidates. A desire to develop professionally in the exciting and fast moving energy field is important. Compensation is commensurate with education and experience. For more information and to arrange a job interview, please contact Marshall Keneipp at 720-564-1130 or by email at [marshall.keneipp@navigantconsulting.com](mailto:marshall.keneipp@navigantconsulting.com)

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## **27. Senior Energy Engineer/Engineering Manager, Partner Energy, Los Angeles**

The Senior Energy Engineer/Engineering Manager will perform all aspects of energy analysis and modeling including LEED® certification requirements as part of an energy consulting team. Our clients include real estate owners, real estate developers, and business owners. The successful candidate will work with associates and management to pursue and execute various projects involving the verification, design, and implementation of energy efficiency and renewable energy projects.

Conduct level I, II, III energy audits per ASHRAE standards for multiple asset types including apartment, office, industrial, medical, and retail.  
Whole-building energy modeling of multiple asset types including apartment, office, industrial, medical, and retail.  
Develop best practices and templates for energy audits reports, energy modeling, and project implementation  
Conduct feasibility analysis of renewable energy generation projects for real estate applications.  
Lead and train a team of associates, energy engineers, and sub-contractors to conduct energy audits, energy modeling, and project implementation

Bachelors Degree in Engineering and at least 10 years experience in energy efficiency and /or performance contracting, or Master's degree in Engineering and 7 years of related experience

Licensed Professional Engineer, Certified Energy Manager, and LEED certification.

Excellent verbal and written communication, math and problem solving skills.

Ability to work both independently and in a team environment.

Ability to lead and train a team of engineers and associates.

Demonstrated experience in:

Energy analysis of building systems, including HVAC systems, chillers, boilers, variable speed drive applications

Building Automation Systems

Building Envelop

Designing, recommending, estimating, and implementing energy efficiency and renewable energy generation projects

Commissioning of energy efficiency projects

Energy modeling using programs such as Trace 700 or Energy Plus

Identifying and applying for federal, state, utility energy rebates and incentives

Salary:

\$110K + commensurate with experience.

Partner Energy is an Equal Opportunity Employer. M/F/V/D

Partner Energy and its affiliate company, Partner Engineering and Science, Inc is one of the fastest growing environmental, building sciences, and energy consulting companies in the nation. We service clients around the nation with seven regional offices. Partner Energy specializes in helping owners and users of real estate make informed decisions about implementing energy efficiency and renewable energy generation projects. We are an entrepreneurial and innovative energy consulting company focused on seizing new opportunities in the rapidly expanding and changing energy industry.

Will Shoard, PE, LEED AP  
Senior Engineer

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## **28. Energy-Efficiency Engineers, Texas, Oklahoma, Michigan**

I'm currently seeking experienced energy-efficiency engineers on behalf of a client company that has current openings in several states including Texas, Oklahoma, and Michigan. The company is an energy-efficiency consulting firm, and it designs and implements energy-efficiency, demand-side management (DSM), and peak-reduction programs for utility clients.

Essential Duties and Responsibilities:

Perform building energy simulation/modeling using eQUEST and/or similar tools.  
Review design drawings to determine building energy use, provide design recommendations, and calculate energy savings.  
Design program templates and calculators to assess energy use and potential energy savings.  
Effectively communicate technical terms and concepts to non-technical stakeholders and provide education to non-technical internal staff.  
Provide technical knowledge base to explain complex energy issues to internal as well as external parties.  
Perform special projects and research new emerging technologies related to energy efficiency.  
Provide creative market transformation ideas and/or innovative implementation strategies.  
May require travel up to 30%.

Education/Experience:

Bachelor's degree in engineering  
Minimum 5 years of related experience in consulting engineering, energy services, and/or utility energy-efficiency  
Knowledge of energy-efficiency technologies, programs, and policies  
Expertise in energy use analysis  
Expertise in energy auditing  
Certificates and Licenses: no certifications required, but CEM preferred

If interested, please contact James Hatheway at [jameshatheway@jhrecruiting.com](mailto:jameshatheway@jhrecruiting.com) or (512) 259-2383.

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