

From: Gil Masters (gmasters@stanford.edu)
To: energyfolks@lists.stanford.edu
Date: Tuesday, February 17, 2009 12:24:13 PM
Subject: Coal, solar, stimulus, wind/transmission, embodied PV nrg

STANFORD AREA

1. Energy Seminar, 4:15 Weds, Feb 18: Sequestering Carbon Dioxide
2. Clean Technologies for a Sustainable Energy Future, Prof. Jacobson, Feb 23, 5:00 pm, 300-300
3. CEO of Exxon Mobil Corp (XOM) Rex Tillerson lecture Feb 17, 4:30 - 5:30 (Carbon Taxes?)
4. Implementation of Renewable Energy in the Emerging Markets of Africa, Latin America and the Caribbean
5. Women of Wind Energy fellowships for AWEA Conference, May 4-7

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15. Energy Financial Analyst: Chevron Energy Solutions, San Francisco
16. International Council on Clean Transportation, SF and DC
17. Building Energy Modeling: TAG Mechanical Systems, N
18. Sales Executive with National Energy Efficiency Firm - Arlington, VA
19. HVAC Engineer, mechanical design and engineering firm (Oakland, CA)
20. Engineering Manager (+ 3 other positions), Solar as a Service firm (Bay Area)
21. AeroVironment clean transportation: dozens of jobs

STANFORD AREA

1. Energy Seminar, 4:15 Weds, Feb 18: Sequestering Carbon Dioxide

February 18, Bldg 420, Room 40: Brent Constantz, President and CEO of Calera Corporation; Consulting Professor, Stanford University
Sequestering Carbon Dioxide in the Built Environment: a Revolutionary Cement Technology.

Future Seminars:

February 25, Jacques Bouchard, former head of the Nuclear Energy Division of Commissariat a L'Energie Atomique in France
Can Nuclear Energy be a Sustainable Contribution to Address the Climate Change Concerns? The French Experience

March 4, Richard Morse, Program on Energy and Sustainable Development, Stanford University
Future Coal Markets

March 11 John McDonald, Vice President and Chief Technology Officer, Chevron Corporation
TBD

Reception to follow

2. Clean Technologies for a Sustainable Energy Future, Prof. Jacobson, Feb 23, 5:00 pm, 300-300

Prof. Mark Jacobson, Civil & Environmental Engineering, Stanford University

The role of technology in developing a sustainable energy infrastructure and reducing greenhouse gases in both China and the U.S. The feasibility of solutions provided by the world today and trade-offs with conventional goals like profit maximization.

3. CEO of Exxon Mobil Corp (XOM) Rex Tillerson lecture Feb 17, 4:30 - 5:30 (Carbon Taxes?)

The Global Climate and Energy Project (GCEP) at Stanford University is sponsoring a special talk on addressing global energy and environmental challenges given by Rex W. Tillerson, Chairman and CEO of Exxon Mobil Corp. McCaw Hall, Arrillaga Alumni Center. Doors close at 4:25 pm. You were supposed to have already rsvp'd for a ticket, so with this late notice you may have to take your chances if you want to attend. Clare Swan at crswan@stanford.edu or 650-724-9619 is the contact person.

After a decade of pressure to get XOM to change course on its position regarding climate change (some of which was applied year-after-year by activist stockholders, such as our own Kirk Miller), in January XOM did a U-turn and announced they now favor a carbon tax (over cap and trade). "A carbon tax is also the most efficient means of reflecting the cost of carbon in all economic decisions – from investments made by companies to fuel their requirements, to the product choices made by consumers," Mr Tillerson said in a speech to the Woodrow Wilson Centre for International Scholars, a Washington think-tank. "As a businessman it is hard to speak favourably about any new tax. But a carbon tax strikes me as a more direct, a more transparent and a more effective approach."

4. Implementation of Renewable Energy in the Emerging Markets of Africa, Latin America and the Caribbean

April 27-29, 2009 - Hotel Nikko, San Francisco, www.reem09.net

REEM09 is sponsored by the Centers for International Trade Development and coordinated by the Bay Area Center for International Trade Development

5. Women of Wind Energy fellowships for AWEA Conference, May 4-7

Women of Wind Energy (www.womenofwindenergy.org) supports and encourages the participation and advancement of professional women in the wind energy industry. Each year, WOVE awards Rudd Mayer Memorial Fellowships to women college students or recent graduates to attend the premier networking and educational conference for the U.S. wind industry, the American Wind Energy Association’s WINDPOWER conference. This year’s event will happen in Chicago, May 4 – 7; details on the conference are available at www.windpowerexpo.org.

Women of Wind Energy (WoWE) created the Rudd Mayer Memorial Fellowships, named in honor of wind energy pioneer Rudd Mayer, to support women to participate in this important conference. The Fellowships are available to women who are a currently enrolled students or recent graduates of college, university, or technical certificate programs and are interested in pursuing careers in the United States wind energy industry. Fellows are selected based on their commitment to renewable energy development, academic achievement, and potential for future leadership.

By attending WINDPOWER 2009, women exploring the wind energy field can attend seminars on current issues, view state-of-the-art technology, meet women and men in the wind energy field, and connect with employers about potential internships or permanent positions.

Please spread the word about this important opportunity to explore a rapidly growing, vital field.

DEADLINE: Applications are due by March 2, 2009. Awardees will be notified by March 31, 2009.

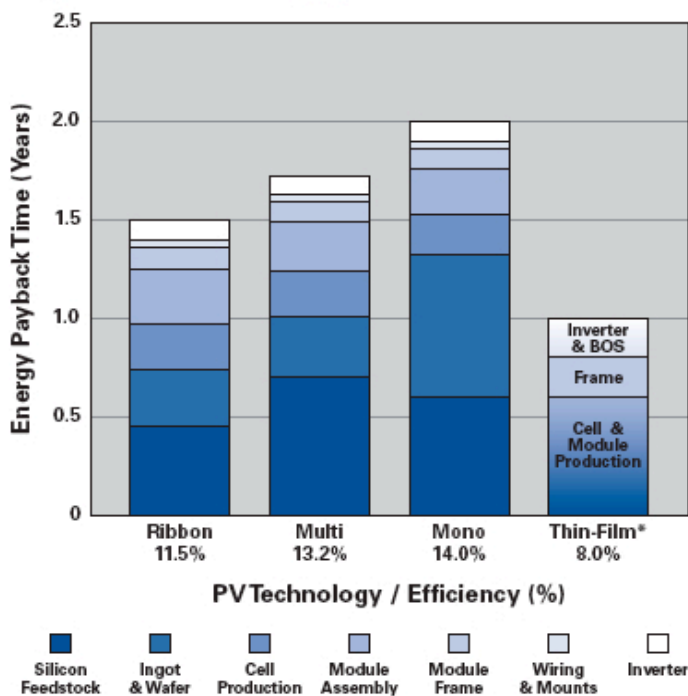
FOR INFORMATION: To learn more and to download a Fellowship application, visit the Women of Wind Energy website, www.womenofwindenergy.org

ENERGY NEWS

1. Nice figure from a PV Embodied Energy article in Home Power

PV Energy Payback, Justine Sanchez, Home Power 127, Oct/Nov 2008

PV Energy Payback by Technology



Notes: Energy payback time of PV systems in 2006, rooftop systems in southern Europe, irradiation 1,700 KWH/m²/year, system efficiency 75%. *2004 study on Thin-Film (CdTe) lumped all BOS together, not separating wiring/mounts and Inverter.

Source: Erik Alsema and Mariska de Wild-Scholten, "Reduction of Environmental Impacts in Crystalline Silicon Photovoltaic Technology— An Analysis of Driving Forces and Opportunities," November 2007.

2. Coal in the News: Clean and Otherwise

From "Is America Ready to Quit Coal?" By [MELANIE WARNER, NYTimes, Feb 14](#)

For their part, nearly all utility companies yearn for the day when coal isn't a dirty word and when plants can capture and store their carbon dioxide. No one is a bigger cheerleader for this idea than Mr. Morris of American Electric.

This fall, the 150-foot smokestack at the company's Mountaineer coal plant in New Haven, W.Va., will be outfitted with technology that uses chilled ammonia to trap carbon dioxide. The greenhouse gas will then be turned into a liquid and injected into the ground. It will be the first such project that will both capture and store carbon from an existing plant, and Mr. Morris is wildly optimistic. "At the end of the day we will develop this technology," he says.

BUT Mr. Morris's plans, as ambitious as they are, say a lot about just how far away "clean coal" is. *Of the 8.5 million metric tons of carbon dioxide emitted annually by the Mountaineer plant, only 100,000 to 300,000 will be removed with the new technology. And American Electric and the maker of the technology, Alstrom, are spending \$100 million on the initiative — a daunting expense for some producers.*

Meanwhile... the Cost of that Coal Ash Spill may be \$825 Million

Associated Press: <http://www.forbes.com/feeds/ap/2009/02/12/ap6045707.html>, 2-12-09

TVA: Cleaning Tenn. spill could cost \$825 million

By DUNCAN MANSFIELD , 02.12.09, 01:24 PM EST Cleanup costs could run as high as \$825 million after a coal ash spill considered one of the worst environmental disasters in the history of the Tennessee Valley Authority, the utility's chief executive said Thursday. President and CEO Tom Kilgore told the TVA board of directors that the federal utility had spent \$31 million on the cleanup through the end of January.

Kilgore said the estimated cost of cleaning up the spill was between \$525 million and \$825 million, depending upon "a number of things we don't know yet." TVA hasn't yet decided how it will pay for the cleanup.

3. Solar Plants Under Review

Matt Nauman SJ Mercury News:

http://www.mercurynews.com/business/ci_11576208

The California Energy Commission has several solar-thermal plants under review. Here's a look at the plants, the location, the builder, the capacity and when it's expected to go online.

- Ivanpah Solar. San Bernardino County. BrightSource Energy of Oakland. 400 megawatts. 2012.
- Carrizo Energy Solar Farm. San Luis Obispo County. Ausra of Palo Alto. 177 megawatts. 2012.
- Beacon Solar Energy Project. Kern County. FPL Energy of Florida. 250 megawatts. 2011.
- SES Solar Two. Imperial County. Stirling Energy Systems of Phoenix. 750 megawatts. 2013.
- SES Solar One. San Bernardino County. Stirling Energy Systems of Phoenix. 850 megawatts. 2014.

Less than a year ago, Ausra was one of the leaders among an ambitious group of companies planning to fill California's deserts and other sunny spots in the Southwest with huge solar plants.

Today, the Palo Alto company says it has responded to the financial crisis by downsizing its goals and now plans to make smaller energy-generation plants and to sell its technology and equipment to utilities and other companies. Ausra's chief executive said he now doubts the viability of the large-scale solar-thermal segment.

Bullard said Ausra's position is unique because the company planned to manufacture and use its own proprietary technology and "got caught short quicker than everyone else."

But another Bay Area company, OptiSolar of Hayward, which has a utility contract for a photovoltaic solar plant, just laid off half of its employees because of problems getting financing for factories and big projects.

4. Stimulus Bill Energy Summary

Following are preliminary (as of February 11) Nancy Pelosi Office Fact Sheet highlights of the energy provisions in the stimulus bill.

- Smart Grid/Advanced Battery Technology/Energy Efficiency
 - o Provides a total of \$30 billion for such initiatives as a new, smart power grid, advanced battery technology, and energy efficiency measures, which will create nearly 500,000 jobs.
 - o Transforms the nation's electricity systems through the Smart Grid Investment Program to modernize the electricity grid to make it more efficient and reliable.
 - o Supports U.S. development of advanced vehicle batteries and battery systems through loans and grants so that America can lead the world in transforming the way automobiles are powered.
 - o Helps state and local governments make investments in innovative best practices to achieve greater energy efficiency and reduce energy usage.

- o Spurs energy efficiency and renewable energy R&D.

· Tax Incentives to Spur Energy Savings and Green Jobs

- o Provides \$20 billion in tax incentives for renewable energy and energy efficiency over the next 10 years.
- o Includes a three-year extension of the production tax credit (PTC) for electricity derived from wind (through 2012) and for electricity derived from biomass, geothermal, hydropower, landfill gas, waste-to-energy, and marine facilities (through 2013).
- o Provides grants of up to 30 percent of the cost of building a new renewable energy facility to address current renewable energy credit market concerns.
- o Promotes energy-efficient investments in homes by extending and expanding tax credits through 2010 for purchases such as new furnaces, energy-efficient windows and doors, or insulation.
- o Provides a tax credit for families that purchase plug-in hybrid vehicles of up to \$7,500 to spur the next generation of American cars.
- o Includes clean renewable energy bonds for State and local governments.
- o Establishes a new manufacturing investment tax credit for investment in advanced energy facilities, such as facilities that manufacture components for the production of renewable energy, advanced battery technology, and other innovative next-generation green technologies.

· Landmark Energy Savings at Home

- o Provides \$5 billion for landmark provisions to improve the energy efficiency of more than 1 million modest-income homes through weatherization.
- o This will save modest-income families on average \$350 per year on their heating and air conditioning bills.

· Repairing Public Housing and Making Key Energy Efficiency Retrofits to HUD-Assisted Housing

- o Provides a total of \$6.3 billion for increasing energy efficiency in federally-supported housing programs.
- o Specifically, establishes a new program to upgrade HUD-sponsored low-income housing (elderly, disabled, and Section 8) to increase energy efficiency, including new insulation, windows, and frames.
- o Also invests in energy efficiency upgrades in public housing, including new windows, furnaces, and insulation to improve living conditions for residents and lower the cost of operating these facilities.

5. Renewables and natural gas price risk: AEO 2009 update report

With the early release of the EIA's Annual Energy Outlook 2009 (AEO 2009) back in mid-December, we at LBNL have taken the opportunity to update our past analysis comparing natural gas futures prices to contemporaneous long-term price forecasts with the new data from AEO 2009. A 10-page memo, available at http://eetd.lbl.gov/ea/ems/reports/53587_memo.pdf, summarizes our findings.

As in previous years (i.e., since at least AEO 2001), natural gas futures prices have, on average, once again been trading at a premium to the reference case natural gas price projection contained in AEO 2009. The average

premium, however, is considerably smaller this year than we have observed in the past.

Mark Bolinger and Ryan Wisler
Berkeley Lab

6. New Berkeley Lab Report on the Cost of Transmission to Access Wind Resources

We are pleased to announce that Lawrence Berkeley National Laboratory today released a new report: "The Cost of Transmission for Wind Energy: A Review of Transmission Planning Studies." This report summarizes the implied transmission cost per kW of wind from a sample of 40 detailed transmission studies that include wind energy resource areas in their analysis. This sample of studies, completed from 2001-2008, covers a broad geographic area across the U.S.

The primary goal of reviewing these studies was to develop a better understanding of the transmission costs needed to access increasing quantities of wind generation. A secondary goal was to gain a better appreciation of the differences in transmission planning approaches used in the U.S., in order to identify those methodologies that might best be used to estimate the incremental transmission costs associated with wind development. Finally, the resulting dataset and discussion may inform the assumptions, methods, and results of higher-level assessment models that also seek to estimate the transmission costs associated with wind deployment.

The total range in transmission costs per kW of wind implicit in our study sample is vast, but the median cost of transmission from all scenarios is \$300/kW, roughly 15 – 20% of the cost of building a wind project. In terms of cost per megawatt-hour of wind power generation, the median implied cost of transmission is found to be \$15/MWh. These mid-range costs, though not insignificant, are also not overwhelming. Additionally, the limitations of our methodology likely err towards an over-statement of the incremental cost of transmission for wind. Finally, it deserves note that the transmission studies in our sample are reasonably consistent, as a whole, with two recent higher-level assessments of the transmission investments required to provide 20% wind electricity in the U.S. by 2030.

The report can be downloaded from:
<http://eetd.lbl.gov/ea/ems/reports/lbnl-1471e.pdf>

A PowerPoint presentation that summarizes key findings can be found at:
<http://eetd.lbl.gov/ea/ems/reports/lbnl-1471e-ppt.pdf>

7. Announcing FEDS 6.0 Building Energy Efficiency Analysis Software

The latest release of the powerful, versatile, and easy-to-use building energy efficiency analysis software.

FEDS 6.0:

- Calculates lowest life cycle cost-effective energy systems for all building types
- Provides a consistent basis for decision-making on retrofit options
- Reduces time and labor required to collect, analyze, store, and update building data
- Delivers the information necessary for writing project funding proposals
- Serves as an integral part of a cost-savings program and puts you well on your way to meeting Executive Order 13423 and EPAAct 2005 requirements

FEDS provides a unique set of capabilities found in no other energy-efficiency software including:

Life Cycle Cost Optimization selects the minimum life cycle cost retrofit for a single building or an entire installation considering the interactions not only between energy systems but also between buildings; second and third best retrofits can also be determined.

Technology and Fuel Independence chooses the technology that provides the required service at the minimum life cycle cost; no technology or fuel bias.

Peak Tracking determines the hourly contribution of each technology to the installation's peak demand allowing accurate determination of the value of the energy and demand savings associated with a retrofit.

- Experience with distributed I/O and sensors (CAN, Modbus, 802.15) is valued
- Experience with experimental design and investigation
- Proficiency with MS Office suite
- A self-starter with the ability to work independently as well as in a cross-disciplinary environment with controls & system design engineers to achieve results
- Good communication and writing skills are required

Interested individuals are encouraged to include a cover letter with their resume. In you cover letter, please describe how your background, experience, and drive will allow you to excel in the position. At PVT Solar we like to describe ourselves as pragmatic visionaries – we want to change the world, profitably. If this inspires you, we'd like to hear from you. All replies will be treated confidentially.

Ron Hofmann
 510-547-0375(o)
 510-908-2759(c)

2. SunPower Corp. R&D M.E. Design Engineer

Join the SunPower Systems Ground Mounted Product Development team and play an integral role in bringing the world's lowest cost solar tracking technologies to market. This role entails all aspects of product development of the world's leading large scale commercial tracking PV tracking systems. The products are targeted for distribution through both internal direct sales channels and 3rd party distributor and installers. Visit <http://www.sunpowercorp.com/Products-and-Services/Trackers.aspx> to see our ground system products.

The ideal person will have vast product development and senior level design experience. You are a capable technical lead and/or project manager with demonstrated success in fast paced environments. You possess a powerful drive for data driven analysis and a passion for focused and impactful design. You enjoy working with many people on varied projects in the office, lab, and field and your communication with all levels of coworkers is easy and effective. You welcome obstacles as challenges to overcome but strive to avoid head on collisions. Ideally you are an expert in high-volume and low cost electro/mechanical/structural/civil PV system design for outdoor products with 25+ year operating lives.

Education, Experience, and Qualifications

- . BS/MS/PhD in Mechanical Engineering, Mechatronics, or related technical field.
- . BS + 3-5 years experience, MS + 1-3 years experience, or PhD in mechanical engineering design, or electromechanical product design.
- . Hands-on prototyping capability and experience with common machining practices highly desirable.
- . Demonstrated success as technical project lead – bring examples please.
- . SolidWorks skills and drafting experience required.
- . Excellent written and verbal communication skills required.
- . Self motivated, with ability to work both independently and with multiple teams.
- . Strong analytical modeling & cost analysis capabilities preferred

We will compete with retail electric rates by reducing system cost by 50% by 2012.

3. Fellowships, Alliance for Climate Protection, WE, Menlo Park, CA

Fellowships for Undergrads & Recent Graduates, Spring - 2009

Founded by former Vice President Al Gore, the Alliance for Climate Protection is a nonpartisan organization committed to igniting public support for solutions to the climate crisis. In April 2008, the Alliance launched the We Campaign – which is already the largest climate group in the U.S.

The Alliance is offering full-time fellowships to undergraduates and recent graduates in our Menlo Park, CA office. Fellows will be assigned in the following areas:

- **Social/ Online Networking.** Build the climate change presence on social networking sites, assist in the dispersion of online media material, develop new mechanisms for viral marketing, and help with other online efforts as needed. Experience and interest with social marketing is required.
- **Grassroots.** Support events where “We” has a presence, including working with sponsors and coordinating materials with volunteers. Create and distribute compelling materials to assist members of the We Campaign who are hosting house parties. Work with We campus chapters to develop events at universities nationwide. Excellent communications skills, creativity and event/party planning experience are a plus.
- **Partnerships & Development.** Coordinate requests for partnerships and develop a plan for annual review of our corporate partnerships. Help write proposals and other fundraising documents, and manage our relationship with large donors. Attention to detail is a must.
- **Marketing & Communications.** Field, screen, and track requests for media participation and public speaking appearances. Assist with media research activities and tracking earned and paid media. Knowledge of marketing or corporate social responsibility is a plus.
- **Solutions Development and Analysis.** Provide climate and energy research support to all aspects of the campaign's messaging and on-and-offline efforts. Excellent analytical research skills and knowledge in energy systems, climate change, or climate/energy policy required.

Fellows will also gain a breadth of experience working on collaborative and independent projects across sectors. In addition, they will have the opportunity to draft short articles focused on climate change issues and climate change activism.

Applications consist of your resume, a one-page cover letter, and references.

- Your cover letter must state how you can help the Alliance and what you hope to learn during the fellowship. It must specify which fellowship program areas are of greatest interest to you and why. It must note your availability, with start and end dates.
- Include contact information for two references. At least one must be a professor or advisor at your university or college.
- Your application should indicate your GPA and any classes relevant to the Fellows program.
- Applicants may also send one short (1-page) writing sample.
- Send all materials electronically to: fellowships@climateprotect.org

- Fellowships will be for a period of ten or twelve weeks
- Applications must be received by March 7th for Spring fellowships
- Fellows will receive a \$3,000 stipend for a twelve-week fellowship, or a \$2,500 stipend for a ten-week fellowship.

Fellowships are open to all undergraduate students who have completed two or more years of college. Eligibility extends through the year following graduation.

- Fellows will work in our Menlo Park, CA headquarters, located a short walk from the Menlo Park Caltrain station and other public transportation.

Susan Cumberpatch
 Alliance for Climate Protection
 Office: 650.543.7352
susan.cumberpatch@climateprotect.org
www.climateprotect.org

4. Green Corps, Environmental Organizing 1-yr Fellowships

Green Corps, the Field School for Environmental Organizing, offers one-year paid fellowships to recent college graduates, providing them with them with the hands-on training and experience they'll need to launch their environmental and social change advocacy careers.

We are currently accepting applications for our 2009-2010 fellowship online at www.greencorps.org/apply . The deadline for Stanford students to apply online is February 20 th .

Applicants should also sign up for an on-campus interview through Cardinal Recruiting online beginning February 1 st through February 19 th . Campus interviews will take place on February 24 th .

5. Paid summer internships at NREL STRATEGIC ENERGY ANALYSIS CENTER

The Strategic Energy Analysis Center (SEAC) at NREL is looking for interns at the graduate level (or last year of undergraduate studies) with backgrounds in engineering, physics, operations research, economics, or business.

NREL's SEAC aims to increase the understanding of the current and future characteristics, roles, and interactions of government, markets, and technologies. The acquired understanding is used to inform policy and investment decisions and research and system installation decisions as energy-efficient and renewable energy technologies advance from concept to commercial application.

Interns could work in the following areas:

Energy Market and Policy Impact Analysis SEAC conducts analysis related to electric regulation and policy; transportation market, fuels, and policies; technology cost and feasibility assessment; economic impact analysis; international markets; advanced financial analytic methods; portfolio and risk assessment; and green power and renewable energy certificate (REC) markets.

Technology Systems and Sustainability Analysis SEAC applies its analysis capabilities to technoeconomic assessment, energy-equity analysis, sustainability assessment, environmental impact and life-cycle assessment, infrastructure and systems analysis, and water requirements analysis.

Energy Forecasting and Modeling SEAC conducts energy market penetration, system integration, policy, and financial analyses using models that account for economics, uncertainty and risk, environmental issues, transmission constraints, infrastructural development, etc.

Data Analysis and Visualization SEAC helps NREL communicate effectively to industry, DOE, legislators, and other stakeholders by collating, analyzing, and visualizing data. Key activities could include data and knowledge management, data collection, geographic information system (GIS) and geospatial analytics, and Web application development and support.

For more information about internship opportunities, please visit the jobs site at <http://www.nrel.gov/employment/>. You also may contact Laura Davis at laura_davis@nrel.gov or 303-

384-7583.

National Renewable Energy Laboratory NREL is a national laboratory of the U.S. Department NREL/FS-6A2-44435 • October 2008 1617 Cole Boulevard Golden, Colorado 80401-3393 of Energy, Office of Energy Efficiency and Renewable Printed with a renewable source ink on 303-275-3000 • www.nrel.gov Energy, operated by the Alliance for Sustainable 50% wastepaper, including 10% post

6. Internships: Environmental Defense Fund, SF and Sacto

Every year, Environmental Defense Fund hires interns to work on issues in our San Francisco and / or Sacramento offices. Right now we are recruiting 2 summer interns (paid) to work with our climate change team in Sacramento on legislative and regulatory issues.

Briefly, we ask our interns to work with EDF staff on ongoing and emerging policy issues in both regulatory and legislative settings. Interns typically assist both in policy analysis and advocacy outreach, immersing themselves in one to three main issue areas during the course of their 10 - 12 week stay. If a particular intern needs to develop a paper to complete coursework requirements, we will work with them to develop their documents.

Timothy J. O'Connor
Attorney - California Climate Initiative
Environmental Defense Fund
Office: (916) 492 - 4680
Cell: (916) 549 - 8423
1107 9th St. Suite 540
Sacramento, CA, 95814
toconnor@edf.org

7. Danish Climate Scholarship

Are you interested in environmental engineering, climate change studies or sustainable energy planning? If so, the Danish Climate Scholarship may be for you.

The scholarship covers tuition and living expenses while studying for a climate-related Master or MSc at a Danish university.

Still interested?

Go to www.studyindenmark.dk/climate to learn more!

Deadline for applications: March 1st 2009

8. Building Energy/Daylight Modeler, YRG, New York

YRG is seeking a Building Energy / Daylight Modeler to support our green building consulting work. The ideal candidate should have energy and building science knowledge and an ability to support development of energy and daylight models for building optimization as part of the integrated design process. In addition, the candidate should be familiar with, and ready to learn related building performance standards and provide design guidance to project teams. Knowledge of and experience with the LEED green building rating systems is preferred but not required. Position Type: Full Time, Part Time, or Hourly

Qualifications

We are looking for a candidate with a background in energy or mechanical engineering and a focus on energy efficiency and renewable energy. The candidate should have knowledge of at least one LEED-compliant energy modeling software package (e.g. eQuest) and knowledge of, or a willingness to learn the IES VE software package. An eagerness to learn new software and resources as they are developed is also desired. The ideal candidate will have strong analytical and modeling skills, as well as strong communication skills, and be both willing and able to support project teams in all aspects of building design.

Additional preferred technical knowledge and experience could include:

- * Daylight design, including glare, contrast, light levels, lighting controls, etc.
- * RemDesign energy modeling for residential applications
- * ASHRAE 90.1, ASHRAE 55, and ASHRAE 62.1
- * HVAC system operation and maintenance
- * Energy efficient mechanical systems and controls, including building management/automation systems
- * Implementation of energy efficiency strategies for existing buildings
- * Interior and site lighting calculations and specifications
- * Carbon footprint and baseline analysis
- * Life cycle analysis
- * Renewable energy technologies and analytical models
- * Building commissioning and retro-commissioning
- * Direct experience with the LEED-EB Rating System
- * Conduct walk-through audits of existing facilities,
- * Cost-benefit analyses
- * LEED rating system requirements and protocols

If interested, please send a resume to Josh Radoff at jradoff@yrgsustainability.com

9. Transmission Planning Analyst: Western Resource Advocates, CO

Western Resource Advocates (WRA) is a non-profit conservation organization of lawyers, economists, and analysts that focuses on energy, lands, and water issues in the Interior Western United States.

WRA seeks a Transmission Planning Analyst within our Energy Program to develop and advocate for policies that accelerate the region's transition to renewable energy and other clean energy technologies. The Analyst will provide technical and economic modeling expertise on the need for new transmission infrastructure in the region to interconnect renewable energy sources. The Analyst will represent WRA in state and regional transmission planning forums and provide analytical expertise for specific transmission proposals in the region. He/she will participate in state public utility commission and other policy forums, and will work directly with the region's electric utilities, the renewable energy industry, and the environmental community.

Candidates should have excellent quantitative and analytical abilities, strong written and oral communication skills, and be able to work independently. The successful candidate should have two or more years experience in the electricity industry, with particular experience in transmission planning, technical design, modeling and siting issues, and a personal commitment to a cleaner environment and a more sustainable energy future. A degree in economics and/or electrical engineering is highly desirable. Salary and benefits are comparable to regional non-profit organizations and are dependent on experience and qualification.

Position starts ASAP. E-mail cover letter, resume, three references, and a writing sample (no longer than 20 pages) to andria@westernresources.org by February 15, 2009.

www.westernresourceadvocates.org

10. Manager Sustainable Building Technologies, Vienna, Austria

Arsenal research GmbH (Vienna , Austria), is currently looking for a Manager of the "Sustainable Building Technologies" -

Research Group.

arsenal research

Als Unternehmen der Austrian Research Centers – Österreichs größte außeruniversitäre Forschungseinrichtung – sucht arsenal research die besten Köpfe für außergewöhnliche Leistungen auf den Gebieten Mobilität und Energie. Unsere Mitarbeiter/innen sind die Träger unserer Hauptressource Wissen und die Basis unseres unternehmerischen Erfolges.

Energy

DI(FH) Florian Stift

Sustainable Building Technologies - Nachhaltige Gebäudetechnologien

Österreichisches Forschungs- und Prüfzentrum Arsenal Ges.m.b.H.

FN 165088b; UID-Nr.: ATU 46577208

Sitz der Gesellschaft: Wien; Gerichtsstand: Wien

Austria, 1210 Wien, Giefinggasse 2

ph: +43 (0) 50550-6277, f: +43 (0) 50550-6613

mobile: +43 (0)664/ 81 57 946

florian.stift@arsenal.ac.at

www.arsenal.ac.at

11. Building energy modeler, NY City

Here is an opening for a junior energy modeler in the New York City area with a company that focuses heavily on energy remodeling stages for various commercial and industrial buildings in New York and would like to bring on a mechanical engineer with a minimum of 2-3 years of experience.

Any experience with the following software is necessary: Trane Trace, E-Quest, DOE-2, TREAT etc.

Please contact Joseph Parks, Aerotek Energy, 212-588-5850 or email at jpark@aerotek.com

Joseph Park | Aerotek Energy
757 Third Avenue, Suite 201, New York NY 10017

12. LEED Energy Modeling, The Epsten Group, Atlanta

The Epsten Group in Atlanta, GA is searching for individuals with energy modeling experience to join our team as a LEED energy modeler. See the attached documents for job descriptions. Please contact apply@TheEpstenGroup.com.

HVAC Engineer / Mechanical Engineer (P.E. or E.I.T.) or Energy Engineer for LEED Energy Modeling

The Epsten Group, providing building consulting, LEED certification reviews and architectural services, is currently looking for an experienced energy simulations specialist to join our team of design professionals. The ideal candidate will have completed a minimum of 10 energy simulations, preferably some in the energy modeling software equest. In this position, you will work on energy simulations of prominent national and international buildings, reviews of energy modeling documentation provided as part of national and international LEED certification applications, and other tasks related to energy use in buildings.

Gregg Liddick, EIT, LEED® AP

The Epsten Group, Inc.
429 Edgewood Avenue
Atlanta GA 30312
Phone: 404-577-0370 ext. 102
Fax: 404-577-1739
www.theepstengroup.com

13. Summer IT Intern: SunRun, SF

SunRun is a start up in San Francisco that provides residential power purchase agreements.

We are hiring a summer intern to help our IT team. See the following job description o--

http://www.sunrunhome.com/about_sunrun/operational_programmer/

SunRun is a fun and successful opportunity and I think this is a fantastic and well-paid opportunity for junior or above with an IT background. The dates say June 1 - Aug 14 but those are actually a bit more flexible.

Rachel Dyke
radyke@gmail.com

14. Tenure-line Faculty Position, High Performance Buildings, Georgia Tech

The College of Architecture (www.coa.gatech.edu) of the Georgia Institute of Technology invites nominations and applications for one or more Tenure/Tenure-Track Faculty Position with a joint appointment in Architecture and Mechanical Engineering at the Assistant, Associate, or Full Professor level.

The College of Architecture and the School of Mechanical Engineering aspire to advance the design of high performance buildings through innovative teaching and research in building physics and simulation, including areas such as heat and mass transfer, ventilation, sustainable space-conditioning equipment and integrated subsystems, HVAC technologies, sensing and control, and/or acoustics, and passive and active energy harvesting as applied to energy efficient building and construction practices. Candidates must demonstrate proven record of scholarship in one or more of these areas. Senior candidates must have a demonstrated record of research and scholarship. Specifically, we seek candidates with a commitment to leading interdisciplinary research and teaching between Architecture and Mechanical Engineering on the application of energy efficient technologies in buildings.

The successful candidate would be expected to develop and teach courses in environmental systems to architecture and engineering students, participate in architectural studio reviews, and advise post-professional Master of Science and PhD students in the areas of building performance and advanced building technologies. Candidates holding a PhD in architecture, building science, architectural engineering, or related fields, along with a professional degree in architecture are highly preferred. We particularly encourage candidates who can increase the diversity of our faculty. The position will begin in August 2009 or as otherwise negotiated. We offer a competitive salary and

benefits package.

Consideration of applications will begin on February 15, but will be accepted until the position is filled. Interested individuals are invited to submit a letter of application, a curriculum vitae, and the names, addresses and telephone numbers of three references to: Dr. Russell Gentry, Associate Professor and Chair of the Search Committee, Office of the Dean, College of Architecture, Georgia Institute of Technology, Atlanta, GA 30332-0155. Information on the composition and programs of the College of Architecture will be sent upon request or can be accessed on our website <http://www.coa.gatech.edu>

Professor Godfried Augenbroe
Doctoral Program, College of Architecture, Georgia Tech
fried.augenbroe@coa.gatech.edu
Office: 404-894-1686
Community: <http://hdcp.coa.ad.gatech.edu/bt>

15. Energy Financial Analyst: Chevron Energy Solutions, San Francisco

Our division builds wind farms, installs solar panels and develops countless other kinds of renewable energy projects for the public and private sectors. We are dedicated to helping public schools, colleges, government organizations and public companies reduce their carbon footprint.

THE POSITION – “Build and Scale Renewable Energy Businesses”

We need to add a couple great “athletes” that are capable of doing several different things to help build each of our different businesses (we look at each type of energy – wind, solar, biomass, etc. as a business).

Our primary need today is for an analyst – someone really comfortable with spreadsheets and someone that understands some of the basics of business. Ideally, you also have solid marketing instincts and feel like you could likely sell a city official on why they should be installing solar panels, if you were somehow trapped with them on an elevator for a few minutes.

We need someone that is also really comfortable doing research and digging in and learning a lot about each new business we are considering. Right now, our core business is growing very fast and our key challenge is to run simple business case analysis on the new opportunities that are coming in, so that we can determine which one to pursue. We also have a lot of customers that want to understand the economics of the projects we are proposing and we want someone that can help customers evaluate the financial impact of those opportunities.

We are located in downtown San Francisco in the heart of the financial district and the building is easily reachable by almost all popular forms of public transit. Note that if you were thinking of driving your Hummer or Suburban to the office, this probably wasn't the right job for you anyway...

Note that this is a contractor position and we aren't committed to making this a permanent hire. We want to hire someone for six months and we'll evaluate at the end of that period whether there is a longer term role. The ideal hire would be a superstar that believes enough in themselves to know that we will want them as a permanent member of our team at the end of that assignment. Our last three permanent hires all started in contractor roles and convinced us that we couldn't possibly be as successful if they weren't a part of our team.

The ideal candidate either recently graduated from college or is willing to work at an entry level wage. The ideal candidate probably has no experience in green energy but feels really passionate about it

and is searching aggressively for a visionary employer that will just give them a chance to demonstrate the impact that they can bring to an organization.

To begin our rather unique recruiting process, send your resume and a thoughtful cover letter to energysuperstar@gmail.com. You will be writing Rhiannon, who is a subcontractor for our group that manages all of our recruiting and she is unusually talented and friendly.

Note that your cover letter MUST specifically address each of the ideal qualifications described below.

1. Measurable Success. Unfortunately, academics are one of the few places we really compete with others in a (mostly) objective and fair environment. For that reason, it is great to see candidates that graduated near the top of their class from one of the world's most competitive universities. But if you don't have that, share something else that demonstrates your success competing against a group of really bright and motivated cohorts.
2. Analytical Skills - Strong analytical skills and what gives you confidence that these skills are really strong.
3. Career Goals - A short description of what you want to do with your career and how your next job might fit into those goals.
4. Trail of Tears – Tell us about a boss or coworker that nearly or actually cried when you left their team (either in a business or academic environment) and your best guess as to the key reasons that they were nearly in tears. What is it specifically about you that they are going to miss?
5. And Gosh Darn It, People Like Me - Something that gives us confidence that if we were on an elevator with you and the elevator malfunctioned between floors, that we wouldn't hate being stuck on that elevator with you for more than three hours while the doors are being repaired by the elevator services team.

16. International Council on Clean Transportation, SF and DC

The International Council on Clean Transportation (ICCT) has multiple openings in both the San Francisco and Washington DC offices.

In San Francisco, we are looking for a Senior Researcher to work on Global Transportation Emission Modeling and Policy Analysis and Researchers for the Aviation and Heavy-duty Vehicle Programs. In DC, we are looking for a Program Lead for the Marine Program and a Researcher for the Passenger Vehicle Program. Both the Passenger Vehicle and Heavy-duty Programs prefer to hire a Spanish speaker.

Senior Researcher, Emission Modeling, SF
Researcher, Aviation Program, SF
Researcher, Heavy-duty Vehicle Program, SF
Program Lead, Marine Program, DC
Researcher, Passenger Vehicle Program, DC

Individual job descriptions can be found on our website: www.theicct.org. We ask that candidates send their resumes and cover letters to jobs@theicct.org, with the position title of interest in the subject heading.

Kate Blumberg
Climate and Health Director
International Council on Clean Transportation
+1 (415) 399-9019
+1 (415) 640-6352 (mobile)
kate@theICCT.org

17. Building Energy Modeling: TAG Mechanical Systems, NY

We are a partner in the NYSERDA Multi-family Performance Program (New and Existing Construction) and are looking for someone experienced with eQuest and/or TREAT modeling experience. Certification as a Multi-family Building Analyst would be a benefit but is not required.

TAG Mechanical Systems, Inc. is a Mechanical Contractor serving Central NY, New England and the Mid-Atlantic States. We offer competitive wages, 401K with company match, health/dental, vacation and a dynamic work environment. We are committed to green building, commercially and residentially. We installed the HVAC system in the first LEED certified building in Syracuse, are the HERS raters of record for an 845 Home Residential project at Ft Drum, are working with the developer at Ft Drum to have 465 homes being constructed during 2009-10 certified to LEED for Homes and are an active contractor in the NYSERDA Home Performane with Energy Star program.

Resumes can be forwarded to my attention at the email listed below.

Ellis G Guiles, Jr. P.E.
Vice President
TAG Mechanical Systems, Inc.
4019 New Court Avenue
Syracuse, NY 13206
Tel: (315) 463-4455
Fax: (315) 463-4459
Cell: (315) 575-0455
Email: eguiles@tagmechanical.com

18. Sales Executive with National Energy Efficiency Firm - Arlington, VA

This company aims to educate Americans about their energy use through a combination of cutting edge technology and world-class design.

As a Sales Executive, you will win new business and grow the company's client base. You will carry a quota against our annual operating plan, and will be well-compensated for achieving and exceeding quota. You will work with our VP of Client Solutions and our President to define key short, medium, and long-term prospects, and build a robust book of business. This is an ideal job for a professional sales executive with at least 3-5 years experience selling to Utilities clients, who wants to be part of a rapidly growing startup, wants to win in the marketplace, and has the capability to help fuel the growth of our company. (\$750 referral award)

For more information and to apply, see <http://bgt.catsone.com/careers/index.php?m=portal&a=details&jobOrderID=53391>

(This firm is also hiring a Senior Product Manager - Software: <http://bgt.catsone.com/careers/index.php?m=portal&a=details&jobOrderID=36525>).

19. HVAC Engineer, mechanical design and engineering firm (Oakland, CA)

This growing mechanical design firm works with LEED Platinum, zero-carbon, award-winning projects. They are leaders in the design of energy and water efficient buildings, and compete and win against the largest firms in the industry.

They're looking for a sharp and motivated HVAC engineer with the following qualifications:

Required:

- Minimum 5 years HVAC design experience
- Demonstrated passion for sustainability beyond LEED AP registration
- BS Degree in Mechanical Engineering from a well-known and reputable university
- Excellent communication skills

Desired:

- PE
- LEED AP
- Worked on LEED rated buildings
- Lab or Data Center experience
- Plumbing design experience on top of HVAC experience

For full job description and to apply, see: <http://bgt.catsone.com/careers/index.php?m=portal&a=details&jobOrderID=36497>

20. Engineering Manager (+ 3 other positions), Solar as a Service firm (Bay Area)

This firm is a leading distributed power developer and the industry pioneer in Solar as a Service. The company owns and operates onsite solar power systems, selling clean electricity to its customers at grid-competitive rates.

Duties & Responsibilities:

- Manage project design performed in-house or produced by engineering contractors and consultants for submittal of completed design for permits from City/County authorities.
- Provide for the selection of design consultants, perform technical liaison with each consultant, and review the technical products of each consultant for quality.

Skills and Qualifications:

- Minimum 8-10 years experience in project design with a large engineering and construction company or a firm in the commercial building industry and at least the last 3-5 years as an Engineering Manager in the commercial PV solar industry.
- Design experience in the commercial solar photo-voltaic industry is a requirement.
- BS degree in a relevant engineering field. A degree in Electrical Engineering and a Professional Engineer license is highly desirable.

For full description and to apply, see: <http://bgt.catsone.com/careers/index.php?m=portal&a=details&jobOrderID=43204>

This firm is also hiring a Senior Project Engineer, Performance Engineer, and New Technology and Products Evaluation Engineer. See <http://bgt.catsone.com/careers/index.php?m=portal> for full job descriptions.

Bright Green Talent is a mission-critical recruiting firm driven by the goal of helping solve climate change by 2050.

We offer a \$750 referral award if we place someone you recommend for any of the above three jobs (you could mention the energyfolks). They can apply on our site and mention the energyfolks list.

www.brightgreentalent.com

1% of the proceeds from this search will go to non-profits that are working towards a socioeconomically-inclusive transition to a green economy.

Carolyn Mansfield
Bright Green Talent
www.brightgreentalent.com

Fixed: 415 391 0729 x 104

21. AeroVironment clean transportation: dozens of jobs

LATimes 2-14-09

"We're looking to hire a lot of people," said Steven Gitlin, director of marketing strategies at AeroVironment. "There seems to be a lot of interest and activity in clean transportation and that happens to be an area that we've been working on for a long time."

All told, the company is looking to hire more than 100 people. And while the company's biggest line of business is currently unmanned surveillance aircraft that it sells to the military, it also does a lot of work in engineering services for alternative fuel cars and, lately, infrastructure for electric vehicles. That work is under the umbrella of AeroVironment's energy systems division, which is looking to hire between 30 and 40 people, mostly engineers.

The company needs them to work on projects such as fast-charging installations for electric vehicles and developing test systems for new generations of lithium ion and other kinds of batteries that could be marketed to car companies working on EVs.

AeroVironment's site lists 123 job openings, many of them for engineers or technicians. One such position, for an energy storage engineer, says the successful candidate

will be involved in and responsible for the development, production and test of advanced energy storage systems and battery chargers for electric and/or hybrid powered systems, distributed energy systems and aircraft.

That sounds a lot like working on the future. Not surprisingly, in a state where unemployment is at 9.3%, well over the national average, interest has been high. Gitlin said that over 1,000 people had visited the Web page with sign-up sheets for the job fair, and over 300 had pre-qualified for jobs.

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

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energyfolks mailing list
energyfolks@lists.stanford.edu
<https://mailman.stanford.edu/mailman/listinfo/energyfolks>

