From: Gil Masters (gmasters@stanford.edu)
To: energyfolks@lists.stanford.edu
Date: Tuesday, January 1, 2008 12:45:02 PM
Subject: socials, summit, Li-ion nano, LEED, bldg feebate, PV/grid

New Year's Resolution: Do these blurbs more often so they aren't so darned long... gilly

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Quote for Today: NYTimes Editorial, 1-1-08 "The One Environmental Issue"

So far, the Democratic candidates seem more engaged with climate change than some of their interrogators in the news media. In a recent study, the League of Conservation Voters found that as of two weeks ago, the five main political talk-show hosts had collectively asked 2,275 questions of candidates in both parties. Only 24 of the questions even touched on climate change.

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TIMELY STUFF

1. Energyfolks hits 1000, How to find old EnergyFolks blurbs
2. Winter 2008 Stanford Energy Social Schedule
3. Final MAP Sustainable Energy Fellows Brown-bag Lunch
4. Summit: "Advancing the New Energy Economy in California" Jan 14, S.F.
5. Energyfolks get together in S.F., Wednesday, Feb 13th.

IN THE NEWS

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7. Nice article in Forbes about Vehicle-to-Grid
8. Stanford's nanowire Li-ion battery holds 10 times the charge of existing ones
9 From the Dark Side: Coal Power Plants Survive Power Play... CCS nope
10. Carbon Emissions Past and Future .. nice Graphic
11. LEED Delivers on Predicted Energy Savings
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17. Bali Conference Debriefing
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19. Uranium constraints on nuclear growth?
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21. Ausra Locates 700 MW/yr Solar Thermal Power Manufacturing Plant in Nevada
22. Low-cost GHG emission reductions possible
23. PG&E and Finavera Renewables Announce Wave Energy Power Purchase Agreement

JOBS

24. Taylor Engineering Summer Intern and Full-Time M.E. Buildings, Alameda, CA
25. Sr. Sales Analyst: SunPower Corp, Pt. Richmond, CA
26. NREL Engineer/Programmer, Buildings and Thermal Systems, Golden, CO
27. EDC Energy Group: VP Energy Efficiency, VP Energy Policy, Sr. Project Engr. NYCity
28. Energy Innovations, Senior PV Product Manager, Pasadena, CA
29. Invenergy, Wind Asset Managers, Chicago
30. Architectural Energy Corp, Sustainable Green Bldg Services position, S.F.
31. GreenVolts High Concentration PV Job Openings, S.F.
32. TerraPass: Manager, Sales & Business Development, S.F.
33. Glumac, Building Energy Analyst/Energy Engineer, Santa Clara, CA
34. Solaria: M.E. CAD Engineer, Silicon Valley, CA
35. World Bank Group: Consultant, Sr.Energy Specialist, innovative vehicles. D.C.
36. Ecoenergy: Associate Engr, Staff Engr. Carbon management. Boulder, CO, WA DC
37. NRDC Network Economist for Climate Analysis
38. E3: Energy Analyst Position, SF
39. ARUP, Senior Mechanical Engr, Seattle
40. U. Colorado, Boulder: Tenure track faculty position Building Systems
41. Ecos Efficiency Solutions: Account Manager, S.F.
42. Climate Cooler: Scientific/Technical Director Social Venture GHG mgt
43. MMA Renewable Ventures: Lots of jobs, S.F.
44. Atelier Ten: Building Energy Analyst, Energy Modeler, NYC
45. RDWI Consulting: Project Coordinator - Sustainable Design, Vancouver
46. Flack + Kurtz, Senior building energy analyst, NYC, Boston, S.F.
47. CA Air Resources Board: multiple positions related to AB32, Sacramento

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TIMELY STUFF TIMELY STUFF

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1. Energyfolks hits 1000: How to get old EnergyFolks blurbs:

Some of you relatively new people on the energyfolks list (we just crossed the 1000 threshold, by the way) have asked about old blurbs sent before you joined.

The following MAP website archives them.. so, if you care to, you can poke around there to find out what you missed.

http://www.maproyalty.com/e-archives.html

gil

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2. Winter 2008 Stanford Energy Social Schedule

Students, faculty and local community members who share an interest in energy issues are invited for refreshments and conversation at Energy Socials (former "Icebreakers").

Where: Stanford Faculty Club
When: Wednesday, Jan 16
Wednesday, Jan 30
Wednesday, Feb 6
Wednesday, Feb 27
Wednesday, April 9
Wednesday, April 30
Wednesday, May 21

Time: 5:30 pm-7:30 pm

To help us with numbers, please let us know if you plan on attending the January Energy Socials. RSVP to judith@maproyalty.com.

Sponsored by MAP (www.maproyalty.com)

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3. Final MAP Sustainable Energy Fellows Brown-bag Lunch

Four MAP Sustainable Energy Fellows will discuss their experiences as working for the NRDC. Join us for insights, discussion, pizza and drinks as you consider applying for 2008 Fellowships. The Fellows
will discuss their life-changing experiences with this exceptional NGO.

Speakers: Andrew Chang, Diana Ginnebaugh, Jacek Pruski, Amul Sathe
Monday, January 14, 12:00-1:30PM
Hartley Conference Room, Earth Sciences Building

Sponsored by School of Earth Sciences - Earth Systems Program and MAP

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4. Summit: "Advancing the New Energy Economy in California" Jan 14, S.F. (special student discount)

Space is limited, so register now to reserve your space at this unique one-day summit, "Advancing the New Energy Economy in California." This Summit will take place January 14th in San Francisco and is hosted by the California Public Utilities Commission, the Willie L. Brown Jr. Institute on Politics and Public Policy, the California Clean Energy Fund, the Apollo Alliance, and the Ella Baker Center for Human Rights. And for a limited time only, Stanford students can register for 50% off the student rate! Hurry, since this offer will expire on January 5th. Just enter the following code

when registering: STU50X9EZJ.
This Summit is the first of its kind, uniting over 700 investors, policy makers, educators, industry experts and labor leaders to advance long-term investment, financial growth and job creation within the green technology sector. It will provide an unprecedented opportunity for decision-makers to come together to build the California of tomorrow.
Key figures at the state and national level will articulate the challenges and solution strategies for diversified, continuous expansion of green business and technology. The Summit will unite principals from businesses, agencies and organizations to explore the expectations for growth and demand, new labor opportunities, education and training in the new energy economy in California.
For more information on the Summit, please visit the website www.NewEnergySummit.com

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5. Hold the date: Energyfolks get together in S.F., Wednesday, Feb 13th.

Every once in a while we have a casual energyfolks drinks and dinner get together in San Francisco.. the next one is being scheduled for Feb 13. Great opportunity to mix it up with locals earning their living in energy efficiency, renewables, climate. Details to follow...

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IN THE NEWS... AND SOME NICE GRAPHICS

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6. Portland proposing feebate energy efficiency program for buildings

Dec 27: Portland City Commissioner Dan Saltzman hopes to bring a new building efficiency proposal it to the City Council in three to six months.

Details are still being worked out. But so far, the policy includes:

For new homes and commercial buildings, three options for their energy efficiency. Meet the state's code and pay a fee to the city; beat the code's efficiency requirements by 30 percent and pay no fee while qualifying for incentives from the state and local nonprofits; beat the code by 45 percent and get a cash rebate from the city, in addition to the other incentives.

For existing homes and commercial buildings, owners would be required to disclose energy and stormwater performance to potential buyers or tenants.

Incentives for developers building green, and energy efficiency training for building trades workers.
The rules would take effect in 2010.

http://www.energycentral.com/centers/news/daily/article.cfm?aid=9460763

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7. Nice article in Forbes about Vehicle-to-Grid

Willett Kempton, a wiry, 59-year-old renewable energy professor at the University of Delaware with round, wire-rimmed glasses and a shock of white hair, is the nation's foremost proponent of what's known as vehicle-to-grid technology. Kempton argues his idea doesn't have to wait for cheaper batteries, the main stumbling block to production of electric vehicles.

But is there enough economic value for a consumer? Kempton sketches out the (admittedly hypothetical) economics of an all-electric car. The car costs $36,000, he estimates, which is $20,000 more than a fuel-sipping subcompact. Because electricity is cheaper than gasoline, the car owner saves $1,250 a year on fuel. (He's assuming 8 cents a kwh for the juice and $3 a gallon for the gas.) So far, the electric car is no winner. It has a 16-year payback, and you can't take it on a long trip.

Now look at the money to be made balancing transmission grids. Grid operators are willing to pay an average $42 an hour to have a megawatt of power on call, Kempton says. This is over and above any payment the grid makes for the electricity itself; it's simply a standby fee. In Kempton's scenario the car owners get no payment for the electricity because they are not generating it. Whatever the grid operators borrow from their batteries they replace a short while later.

At this point Kempton makes some heroic assumptions. He divides the $42 pot 57 ways to come up with 73 cents per car per hour. Next, he figures that utilities will happily pay these standby fees all day long. He assumes each car will be available for standby work 21 hours a day. (A questionable hypothesis, considering he needs 300 cars to guarantee at least 57 are plugged in at the right time.) Multiply this out and you get $5,600 a year per car. Subtract maintenance costs and a fee for a middleman, and the car owners supposedly will be cashing $2,000 checks every year. Now the electric car begins to make economic sense.

Kempton's group needs to sort out some thorny issues, like how to make sure that enough parked cars are available to produce electricity when the utilities need it and that car owners aren't stranded with a depleted battery. "This could easily degenerate into chaos," concedes Paul Heitman, a senior program architect at Comverge, which hopes to extend its metering expertise for air-conditioning systems to plug-in cars. Says Heitman: "It's hard enough to keep track of switches bolted to the side of your house, much less hundreds of thousands of vehicles driving around."

Such details could kill the feedback car. But credit Kempton for getting people to think about innovative ways to lower energy costs.

http://www.forbes.com/claytonchristensen/forbes/2008/0107/100.html

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8. Stanford's nanowire Li-ion battery holds 10 times the charge of existing ones

BY DAN STOBER, Stanford Report, December 18, 2007

http://news-service.stanford.edu/news/2008/january9/nanowire-010908.html

The breakthrough is described in a paper, "High-performance lithium battery anodes using silicon nanowires," published online Dec. 16 in Nature Nanotechnology, written by Professor Yi Cui, his graduate chemistry student Candace Chan and five others.

The electrical storage capacity of a Li-ion battery is limited by how much lithium can be held in the battery's anode, which is typically made of carbon. Silicon has a much higher capacity than carbon, but also has a drawback.
Silicon placed in a battery swells as it absorbs positively charged lithium atoms during charging, then shrinks during use (i.e., when playing your iPod) as the lithium is drawn out of the silicon. This expand/shrink cycle typically causes the silicon (often in the form of particles or a thin film) to pulverize, degrading the performance of the battery.

Cui's battery gets around this problem with nanotechnology. The lithium is stored in a forest of tiny silicon nanowires, each with a diameter one-thousandth the thickness of a sheet of paper. The nanowires inflate four times their normal size as they soak up lithium. But, unlike other silicon shapes, they do not fracture.

Cui said that a patent application has been filed. He is considering formation of a company or an agreement with a battery manufacturer. Manufacturing the nanowire batteries would require "one or two different steps, but the process can certainly be scaled up," he added. "It's a well understood process."

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9. From the Dark Side: Power Plants Survive Power Play .. CCS nope

Dec 21 - Las Vegas Review - Journal Southern Nevadans tired of seeing their checkbooks clobbered by electric bills got some great news Monday: Senate Majority Leader Harry Reid failed in his first legislative effort to block the construction of new coal-fired power plants near Ely.

Dec 27 - McClatchy-Tribune Regional News - Chris Mulick Tri-City Herald, Kennewick, Wash.
Energy Northwest is abandoning plans to consider injecting some carbon dioxide emissions underground at its proposed Pacific Mountain Energy Center near Kalama.

The 793-megawatt project initially was touted as a candidate for the country's first large-scale power station that would burn a gas derived from a slurry of coal or petroleum coke and permanently store some carbon dioxide emissions underground.

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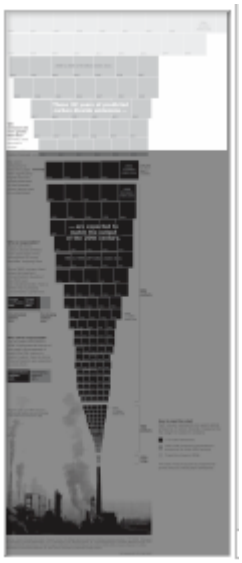
10. Carbon Emissions Past and Future Graphic

This is a quite powerfully presented graphic (when seen in full scale at the link below) from the NYTimes Dec 16 on historic and future carbon emissions

http://www.nytimes.com/interactive/2007/12/16/weekinreview
/20071216_EMISSIONS_GRAPHIC.html



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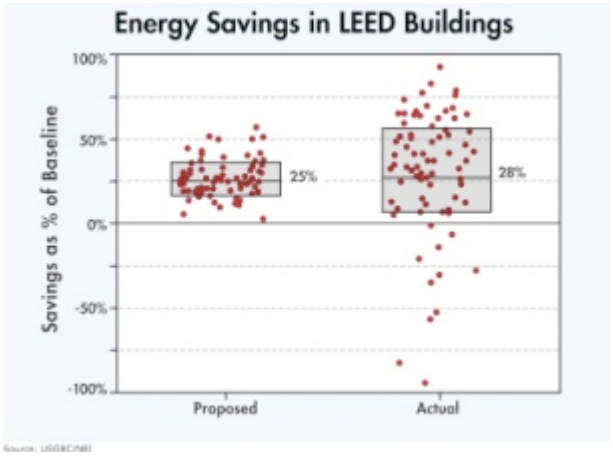
11. LEED Delivers on Predicted Energy Savings

With its dominant position defining green building in the North American market, the LEED Rating System is a popular target for critics with a wide range of axes to grind, some justified, others less so. One of the more valid concerns is that LEED's promises of energy savings (and therefore carbon reductions) are just that-promises. With the exception of LEED for Existing Buildings, which looks at actual operations, LEED's various rating systems assign energy points to buildings based on predictions made during design. How well those predictions hold up in reality has, until now, been subject to conjecture. Here's a new study that compares prediction to reality.



http://www.buildinggreen.com/auth/article.cfm?fileName=161201b.xml

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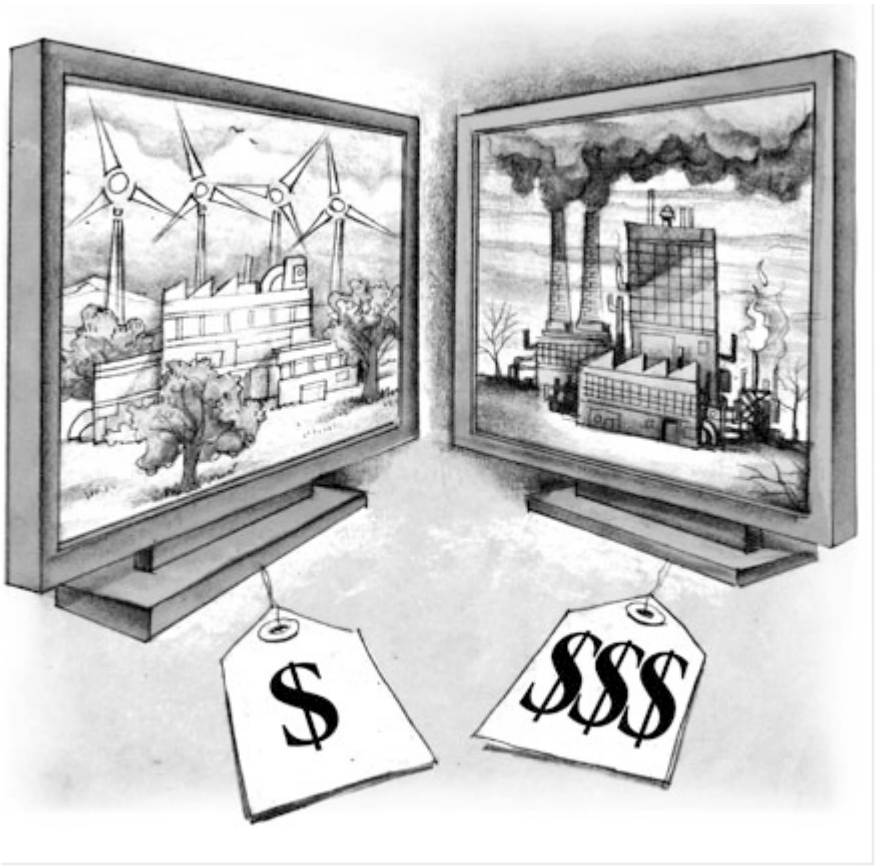
12. Cap and Trade "Leakage" a nice graphic and an interesting statistic:

A Carbon Cap that Starts in Washington by Judith Chevalier, NYTimes, Dec 16

... in which she suggests a consumption import tax based on carbon emissions for countries not part of an overall cap and trade scheme.

"...a study by the Tyndall Center for Climate Change Research in Britain estimated that in 2004, net exports accounted for 23 percent of Chinese greenhouse gas emissions."



David G. Klein

http://www.nytimes.com/2007/12/16/business/16view.html

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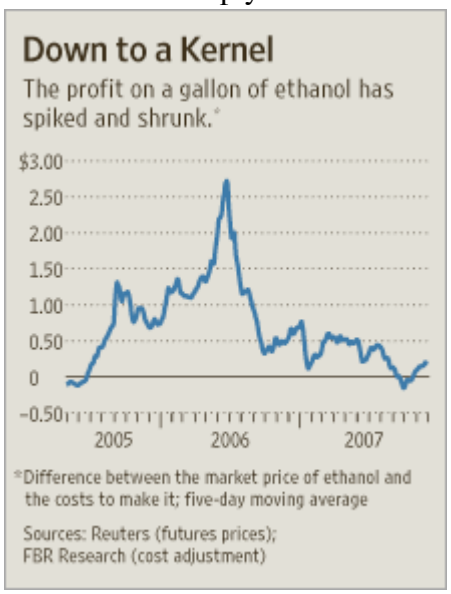
13. Ethanol on front page of Wall Street Journal: "A Cure Worse than the Disease?"

http://online.wsj.com/article/SB119621238761706021.html

A recent study by the Organization for Economic Cooperation and Development concluded that biofuels "offer a cure [for oil dependence] that is worse than the disease." A National Academy of Sciences study said corn-based ethanol could strain water supplies. The American Lung Association expressed concern about a form of air pollution from burning ethanol in gasoline. Political cartoonists have taken to skewering the fuel for raising the price of food to the world's poor.

Last month, an outside expert advising the United Nations on the "right to food" labeled the use of food crops to make biofuels "a crime against humanity," although the U.N. Food and Agriculture Organization later disowned the remark as "regrettable."

Ethanol Craze Cools
As Doubts Multiply



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14. Presentations from the December PHEV Workshop in Anaheim

The presentations from the EVS-23 Plug-in Hybrid Electric Vehicle Workshop that was held on December 2 in Anaheim are now available on the EDTA website.

The direct link is:
< http://www.magnetmail1.net/ls.cfm?r=28074434&sid=3226177&m=4 09065&u=EDTA&s=http://www.electricdrive.org/index.php?tg=articles&topics=226>http://www.electricdrive.org/index.php?tg=articles&topics=226

...thanks, Felix.

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15. Physics of Sustainable Energy: Renewables and Efficiency, Berkeley, Mar 1-2

The APS Forum on Physics and Society and Amer. Association of Physics Teachers will hold an energy short course on March 1-2 at UC Berkeley on "Physics of Sustainable Energy: Using Energy Efficiently and Producing it Renewably," The AIP Conference proceedings will follow the tradition set by AIP25(1975) and AIP135(1985).

The speakers are some of the nation's foremost experts, including Steve Chu, Art Rosenfeld, LBL, NREL, EPRI, etc. For $100, the participants get 23 forty-minute talks, 2 lunches and a 500 page AIP Conf. Proceedings! Banquet is $35 additional.

More at http://www.calpoly.edu/~dhafemei/APSenergy.html

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16. Sandia Labs RFP for PV/Grid Integration

Sandia National Laboratories, in conjunction with the United States Department of Energy's Solar Energy Technology Program (SETP), has issued a Request For Proposal (RFP) on November 28, 2007 for the Solar Energy Grid Integration Systems program (SEGIS).

This RFP provides up to $6.25 million for the development of advanced inverters, controllers, and other balance-of-system components for photovoltaic (PV) distributed power applications. The goal of the SETP is to increase the value of PV as large numbers of systems are incorporated into the utility distribution system.

The deadline for the RFP is January 21, 2008. The RFP can be downloaded at:
http://www1.eere.energy.gov/solar/solar_america/open_upcoming_fund_opps.html

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17. Bali Conference Debriefing:

In response to inquiries about the international climate negotiations, Holmes Hummel has compiled and posted a debriefing memo fielding 15 questions about the issues and the outcomes in Bali:
http://www.holmeshummel.net/Bali-Debrief.pdf

Also..Reuters News Service offers the following summary of key points agreed to at the Bali Conference

The final text distinguished between rich and poor countries, calling on developed nations to consider "quantified" emissions cuts and developing countries to consider "mitigation actions".

THE BALI AGREEMENT KICKS OFF A TWO-YEAR DIALOGUE
Negotiators agreed to start two years of talks on a new climate deal to succeed the Kyoto Protocol, the main deal for fighting climate change until 2012, to bind outsiders led by the United States, China and India.

The talks will start with a first meeting by April 2008 and end with adoption of a new treaty in Copenhagen in late 2009 for a new regime that takes over from Kyoto in 2013.

A U.S. U-turn allowed the deal to go ahead after a dramatic session in which Washington was booed for

opposing demands by poor nations for the rich to do more to help them fight warming.

ADAPTATION FUND
The Bali meeting agreed to launch a U.N. fund to help poor nations cope with damage from climate change such as droughts or rising seas. The Adaptation Fund now comprises only about $36 million but might rise to $1-$5 billion a year by 2030 if investments in green technology in developing nations surges.
The accord, enabling the fund to start in 2008, broke deadlock on management by splitting responsibility between the Global Environment Facility, which funds clean energy projects, and the World Bank. The fund would have a 16-member board with strong representation from developing nations.

PRESERVING TROPICAL FORESTS
A pay-and-preserve scheme known as reducing emissions from deforestation in developing countries (REDD) aims to allow poorer nations from 2013 to sell carbon offsets to rich countries in return for not burning their tropical forests.
The 189 nations recognized the urgent need to take further action to cut carbon and methane emissions from tropical forests. The draft decision encourages parties to undertake pilot projects to address the main causes of deforestation.

TECHNOLOGY TRANSFER
The final draft called for more financial resources and investment for developing countries on adaptation, mitigation and technology cooperation, especially for the most vulnerable.
Technology transfer is a key demand of developing nations. They say they should not have to sacrifice growth to fight warming, but cannot afford the clean technologies that would allow them to expand their economies while curbing emissions.

FINALLY, No Agreement on reward of offsets to CCS

http://www.reuters.com/article/environmentNews/idUSSP18660020071215?pageNumber=1&virtualBrandChannel=0

And here is a nice quote from the Tom Friedman NYTimes column, December 16:

I interviewed Barnabas Suebu, the governor of the Indonesian province of Papua, home to some of its richest forests. He waxed eloquent about how difficult it is to create jobs that will give his villagers anything close to the income they can get from chopping down a tree and selling it to smugglers, who will ship it to Malaysia or China to be made into furniture for Americans or Europeans. He said his motto was, "*Think big, start small, act now - before everything becomes too late*."

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18. Nanosolar ships its first thin-film panel

SAN JOSE, California – December 18th, 2007 - Nanosolar Inc.,and Beck Energy, a leading integrator of large-scale solar power systems, today announced that they have won a highly competitive public selection process for a solar power plant located on a former landfill owned by one of the largest waste

management companies in Eastern Germany.

The project will employ the Nanosolar Utility Panel™ in combination with systems technology and services from Beck Energy. The initial size of the plant is 1MW, an amount sufficient to power approximately 400 homes. The Nanosolar Utility Panel™ is Nanosolar's first product as part of its award-winning PowerSheet™ product line – recently named the Top Innovation of the Year 2007 by Popular Science Magazine – and the company's solution for building solar power plants on free fields at the outskirts of towns and cities.

Nanosolar has developed a proprietary CIGS ink that makes it possible to simply print the semiconductor of a high-performance solar cell.

- the world's first printed thin-film solar cell in a commercial panel product;

- the world's lowest-cost solar panel – which we believe will make us the first solar manufacturer capable of profitably selling solar panels at as little as $.99/Watt;

http://www.nanosolar.com/blog3/2007/12/18/nanosolar-ships-first-panels/

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19. Uranium constraints on nuclear growth?

from the EnergyBiz Insider..

"There is only so much uranium available right now, and China is far ahead of the U.S. in the nuclear power race," says George Bell, CEO of UNOR, a Canadian uranium mining company. "China's expected growth will curtail western development because of a lack of supply to feed any new reactors in the U.S."

A recent study by the Massachusetts Institute of Technology supports that premise, noting that the nuclear industry has lived off commercial and government uranium inventories that are nearly depleted. Globally, uranium production now meets only 65 percent of current reactor requirements, which has led to uranium prices rising from $7 a pound in 2000 to as much as $120 per pound. Such prices are now around $95 a pound, which according to Bell is a bargain and which should encourage nations with nuclear aspirations to push for new exploration.

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20. EIA Annual Energy Outlook: More Renewables ..while oil gets cheaper!

EERE Network News - 12/19/07 DOE's Energy Information Administration (EIA) is now projecting renewable energy to experience 23% faster growth between now and 2030 than previously anticipated. The EIA's latest "Annual Energy Outlook" foresees renewable energy providing 12.2 quadrillion Btu (quads) of energy by 2030, up from only 9.9 quads estimated in last year's outlook.

For comparison, total U.S. energy use was 100 quads in 2006 and is projected to increase to 123.8

quads by 2030.

The EIA projections include hydropower, which is expected to increase from 2.89 quads in 2006 to 3 quads in 2015, staying level after that. In contrast, biomass energy is projected to increase from 2.97 quads in 2006 to 5.52 quads in 2030, an 86% increase, while "other renewable energy" is projected to increase from 0.88 quads in 2006 to 2.49 quads in 2030, a nearly threefold increase. And this is just the EIA's reference case, often characterized as the "business as usual" case; a full EIA report examining alternative scenarios will be released early in 2008.

Breaking down the numbers for electricity production, geothermal power production is expected to increase 88.4% by 2030, while the power generated from wood and other biomass is expected to increase nearly ninefold. Solar thermal power generation is expected to increase more than fourfold, while grid-connected solar power, which provided a miniscule share of the country's power in 2006, is projected to experience a 73-fold increase. Wind power is projected to experience a fivefold increase, but the EIA does not project any significant offshore wind power in its reference case. Meanwhile, the contributions from biofuels are expected to nearly quadruple, growing from 0.5 quads in 2006 to 1.87 quads in 2030. In addition, residential and commercial use of geothermal heat pumps, solar hot water, and solar and wind power are expected to contribute only 0.17 quads by 2030.

Overall, the EIA report projects higher oil prices in the future, although ***it anticipates that oil prices will gradually decline to a low of $58 per barrel in 2016.*** After that, oil prices steadily escalate back to today's prices by 2030, due to an increasing reliance on "higher cost supplies."

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21. Ausra Locates 700 MW/yr Solar Thermal Power Manufacturing Plant in Nevada

LAS VEGAS - Dec. 13, 2007 - Ausra Inc., the developer of utility-scale solar thermal power, announced today it is building the first U.S. manufacturing plant for solar thermal power systems in Las Vegas. The 130,000-square-foot, highly automated manufacturing and distribution center will produce the reflectors, towers, absorber tubes, and other key components of the company's solar thermal power plants.

Ausra's solar thermal power plants use fields of mirrors to capture the sun's power to produce electricity without pollution. Ausra's innovations in mirror systems have brought the price of solar power down to the level of gas-fired power today, and will soon reach prices associated with coal-fired generation. Solar thermal power plants can store energy as heat to continue power generation at night and during cloudy periods.

"Ausra can fill four square miles with 700 MW of solar collectors every year from this one factory, enough to provide market-priced power to 500,000 homes. In November 2007, Ausra and California utility PG&E announced a power purchase agreement for a one-square-mile, 177-megawatt power plant.

http://ausra.com/news/releases/071105.html.

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22. McKinsey: Low-cost GHG emission reductions possible

McKinsey just released a major study on reducing U.S. greenhouse gas emissions: http://www.mckinsey.com/clientservice/ccsi/greenhousegas.asp

The central conclusion: The United States could reduce GHG emissions in 2030 by 3.0 to 4.5 gigatons of CO2e using tested approaches and high-potential emerging technologies. These reductions would involve pursuing a wide array of abatement options with marginal costs less than $50 per ton, with the average net cost to the economy being far lower if the nation can capture sizable gains from energy efficiency. Achieving these reductions at the lowest cost to the economy, however, will require strong, coordinated, economy-wide action that begins in the near future.

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23. PG&E and Finavera Renewables Announce Wave Energy Power Purchase Agreement

SAN FRANCISCO, Dec. 18 /PRNewswire-FirstCall/

http://www.energycentral.com/centers/news/daily/printer_friendly.cfm?aid=9420642

Pacific Gas and Electric Company today announced that it has entered into a long-term, two megawatt (MW) commercial wave energy power purchasing agreement (PPA) with Finavera Renewables Inc. ('Finavera Renewables') . Located off the Northern California coast, the Humboldt County Offshore Wave Energy Power Plant will be developed by Finavera Renewables. The project is expected to begin delivering renewable, clean electricity in 2012.

Finavera Renewables has initiated development plans for the two megawatt wave energy project to be constructed approximately 2.5 miles off the coast of Humboldt County, California for electricity delivery to PG&E's customers throughout its northern and central California service territory. The power purchase agreement calls for 3,854 MWh of clean, renewable electricity to be delivered annually to PG&E over the term of the contract.

Finavera Renewables' planned offshore power projects consist of wave energy converters that are based on marine buoy technology. Energy transfer takes place by converting the vertical component of wave kinetic energy into pressurized seawater by means of two-stroke hose pumps. The pressurized seawater is directed into an energy conversion system consisting of a turbine driving an electrical generator. The power is transmitted to shore by means of a secure, undersea transmission line.

. http://www.pge.com http://www.finavera.com/

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JOBS JOBS JOBS

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24. Taylor Engineering Summer Intern and Full-Time M.E. Buildings, Alameda

Taylor Engineering, a nationally
recognized leader in state of the art and efficient commercial building design and commissioning, is looking for both a summer intern and long term mechanical engineer staff. Information on our summer internship can be found on our website at
http://www.taylor-engineering.com/staff/internship.shtml.

Professionals seeking a permanent engineering position are encouraged to visit our website at http://www.taylor-engineering.com/staff/employment.shtml.

Alumni of Stanford University at Taylor Engineering include three of the Principals and one of the employees: Mark "Moose" Hydeman, Allan Daly, Steve Taylor and Molly McGuire.

Our portfolio of projects includes a number of energy efficiency projects on Stanford's campus. To be fair we also do lots of work at Cal and have alumni from Cal, MIT, CU Boulder, Tsinghua University, UCLA, Santa Clara University, Walker College, College of San Mateo, UC Santa Cruz, Cornell, Brown, CCSF, University of Florida and the Delft University of Technology.

We look forward to hearing from you and hope that you'll consider joining us.

- Mark

Mark Hydeman, P.E., FASHRAE=20
Principal Taylor Engineering, LLC
1080 Marina Village Parkway, Suite 501, Alameda CA 94501
(510) 263-1543 office, (510) 749-9136 fax, (415) 602-9982 mobile

mhydeman@taylor-engineering.com
www.taylor-engineering.com=20

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25. Sr. Sales Analyst: SunPower Corp, Pt. Richmond, CA

This person will generate quotations and comprehensive proposals based on technical, project economics, and financial information acquired through a variety of channels. The role requires this person to strategize with outside sales personnel to ensure greatest possible gross margin and manage strategies provided by salespeople.

ESSENTIAL DUTIES AND RESPONSIBILITIES include the following. Other duties may be assigned.

* Provide creative input to bid strategy

* Maximize available incentives to ensure greatest positive impact on bottom line
* Work closely with cost estimator
* Work closely with the Project Finance Group on creative deal structuring, new financing options, green tags, power purchase agreements, etc.
* Continually streamline, standardize and improve proposal templates for all SunPower system types
* Form excellent working relationships with other SunPower departments, including Projects, Engineering and Finance, to promptly and efficiently drive proposals through the design and approval process
* Determine feasibility and unique cost savings for new value propositions
* Periodically analyze orders and quotes to determine hit rates, top market segments, effectiveness of different value proposition, sources of leads, etc
* Analyze individual SunPower vertical markets to determine best deal structure for highest value propositions
* Analyze best incentive program structures for SunPower and provide input on lobbying strategies to Director of Regulatory Affairs

QUALIFICATIONS

* Familiarity with project economics analysis and financing.
* Strong mathematical and analytical skills.
* Excellent written communication skills., with
* Proficiency in Excel, Word, and PowerPoint.
* Ability to apply concepts such as fractions, percentages, ratios, and proportions to practical situations.
* Well organized, and able to work on multiple tasks simultaneously
* Excellent attention to detail

EDUCATION and/or EXPERIENCE

Bachelor's degree in finance or business administration and 4-6 years of sales analyst experience or MBA with 1+ years experience. Proficiency with Excel and Word is also required. Demonstrated ability to proactively identify and resolve problems and to operate with minimal supervision. Sales, Marketing or Business Development background is a plus

Please contact Phil Li, philip.li@sunpowercorp.com , 510-868-1330 with questions.

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26, NREL Engineer/Programmer, Buildings and Thermal Systems, Golden, CO

The National Renewable Energy Laboratory's (NREL) Center for Buildings and Thermal Systems is seeking to hire an engineer/programmer to develop design tool software for residential buildings.
For more information and to apply go to: http://www.nrel.gov/employment/job_postings /1763_rev.html

Regards,
Craig Christensen
National Renewable Energy Laboratory

1617 Cole Blvd.
Golden, CO 80401
303-384-7510 phone
303-384-7540 fax

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27. EDC Energy Group: VP Energy Efficiency, VP Energy Policy, Sr. Project Engr. NYCity

"Our Energy Group coordinates and addresses all energy-related issues on behalf of the City. We are involved in planning for both short and long-term energy resources, advocating for competitive energy prices for all City consumers, managing energy supply discount programs and supporting the City's response to proposed energy projects such as power plants, electric transmission lines and natural gas pipelines."

http://www.nycedc.com/Web/AboutUs/WhatWeDo/InfrastructurePolicy/EnergyTaskForce.htm

The three jobs are:

Vice President for Energy Efficiency
VP for Energy Policy
Senior Project Manager - Public Sector energy efficiency projects

http://www.nycedc.com/Web/Marketing/Careers/EDC_FindJob.html

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28. Energy Innovations, Senior PV Product Manager, Pasadena, CA

Manage mission critical projects within our development organization
Bring successful products to market efficiently.

Title: Senior Product Manager
Reports to: Senior Director, Product Management

Leads a team charged with product line contributions as a business unit.
Manages products throughout their lifecycle starting with project selection and planning.

Company

Energy Innovations' mission is to deliver cost effective, grid-competitive solar electric power.

Our immediate goal is to reduce the payback time for a solar electric system so that it becomes a straightforward investment choice for electricity users around the world.

To execute this strategy, we are bringing products to market that enable more efficient energy collection from photovoltaic materials. We have created our first product, the Sunflower, and are performing extensive

testing to ensure reliability and ease of installation. Following successful domestic deployment, we will
expand to markets outside the US.

The funds required to date for design and development efforts have been provided by Idealab, MDV-Mohr
Davidow Ventures and private investors.

INTERESTED CANDIDATES SHOULD SUBMIT THEIR RESUME TO:
jp@energyinnovations.com

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29. Invenergy, Wind Asset Managers, Chicago

Invenergy LLC is looking for eligible candidates to be wind asset managers:

<http://www.invenergyllc.com/career_html/asset_op_mgr_wind.html>
http://www.invenergyllc.com/career_html/asset_op_mgr_wind.html

John Igo
Project Engineer
Invenergy LLC
One South Wacker Suite 2020
Chicago, IL 60606

(312) 506-1492 (office)
(312) 506-1455 (fax)
jigo@invenergyllc.com

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30. Architectural Energy Corp, Sustainable Green Bldg Services position, S.F.

Architectural Energy Corporation (AEC), an energy engineering firm, is seeking an individual to lead its Sustainable (Green) Building Services. This position will include management of San Francisco office staff, coordination with team leaders in all four offices nationwide, and collaboration with other AEC employees, as necessary. Must have B.s. Engineering or Bachelor of Architecture; graduate degree and LEED AP desirable. Minimum of ten years experience in energy and environmental engineering. E-mail Laurel at hr@archenergy.com with resume / cover letter.

Tasks include, but are not limited to, the following:

Project Development and Management
Prepare new proposals for green building services.

Work on and manage specific projects.
Conduct project or program work, providing energy efficiency and sustainable support and expertise.
Review and approve monthly invoices and progress reports. Work with accounting personnel and clients to ensure that project-specific invoice policies are followed.
Monitor the quality of reports and technical analysis.
Assure compliance with contract terms and conditions.
Business Area Management
Assist in development of annual revenue, operating cost, and profit goals for green building services.
Develop and implement a plan and solicit business from new clients.
Work with Business Area Team leaders to review compliance with business targets.
Use AEC's enterprise software (Deltek Vision) for integrated project planning, progress tracking, and time reporting.
Maintain a database of important deadlines and flag problems.
Participate in weekly management forum conference calls.
Personnel Management
Work with project managers to assess San Francisco office staffing needs and balance work loads among staff members.
Assign San Francisco staff to project activities.
Work with project managers / team leaders to assess staff performance on a regular basis.
Review and approve timecards and expense reports.
Coordinate / approve professional training opportunities for staff.
Mentor technical staff.

A candidate for this position must have the following skills:

Licensed architect or professional engineer.
Technical experience in energy modeling, daylight analysis, commissioning, retro-commissioning, and LEED and/or other green building rating systems.
Management experience estimating workloads, developing job descriptions, screening job candidates, evaluating financial performance.
Project experience negotiating scopes of work and budgets, writing proposals, evaluating work of staff, and implementing programs of quality control.

Laurel Van Driest
Office Administrator
Architectural Energy Corporation
2540 Frontier Avenue, Suite 201
Boulder, Colorado 80301
Direct phone: 303-459-7418
Direct fax: 303-459-7399

Main phone: 303-444-4149 x418
Main fax: 303-444-4304

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31. GreenVolts High Concentration PV Job Openings, S.F.

GreenVolts is a solar power start-up developing concentrated photovoltaic technology for the utility market since 2005. Our unique technology will deliver clean, reliable energy to utility companies on a massive scale - so that they can provide green, CO2 emission free, energy to the public economically and with only a flick of the switch. The GreenVolts' system will allow everyone to enjoy green energy directly from their regional power grid.

For detailed job descriptions, please visit Greenvolts.com.
· R&D Power Electronics Engineer (MS in EE or a related field, or a BS with strong work experience; 3-8 years work experience desired)
· R&D Embedded Systems Engineer (MS or BS with strong experience in EE, ME, CS or related fields; at least 2 years work or internship experience working with embedded microcontrollers)
· R&D Mechanical Engineer (MS or BS with strong experience in ME or related fields; 0-5 years work experience)
· R&D Optical Design Engineer (MS or PHD in an optics or physics related field)
· Reliability Test Engineer (BS/MS Physics, Material Science, Metallurgy, Chemistry, or equivalent experience; at least 3 years work experience)
· Marketing Communications Manager (at least 2 years in similar position)

GreenVolts offers competitive compensation. We invite you to send your resume and a brief statement of interest to jobs@greenvolts.com . In the subject line, include the position title.

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32. TerraPass: Manager, Sales & Business Development, S.F.

If you are passionate about building sustainable, market-scale progress on climate change through partnerships with businesses, this is your dream green job.

TerraPass already has successful partnerships with Expedia, Enterprise Rent-A-Car, Ford Motor Company, and Sam's Club, and was the gift to the presenters and performers at the 2007 Academy Awards. We're hiring a talented Manager of Sales and Business Development to help manage inbound inquiries and take responsibility for specific outbound business focused programs.

Here's what our Sales and Business Development Manager will do
§ Capitalize on inbound channel partnership opportunities
§ Prospect and build relationship with potential channel partners
§ Meet and exceed ambitious quarterly account and revenue goals

Here's what we're looking for in a candidate:

§ A highly driven people-oriented sales person
§ Flexible enough to appropriately service both large and small accounts
§ Comfortable with an analytical approach to sales partnerships
§ Creative and independent thinker
§ Enjoys accomplishing a lot with resourcefulness not resources

And here are the qualifications we're looking for:

§ 3+ years experience in sales and/or account management, with at least 2 years direct sales experience
§ Demonstrated results orientation and track record, backed up by references
§ Demonstrated experience in combining sales activities with marketing campaigns, or working very closely with marketing teams
§ Willingness to learn the basics of climate change science and policy; interest in working with energy usage data, carbon calculations and new technologies.
§ BA/BS degree
§ Experience with startup preferred
§ Personal passion for TerraPass company mission essential

TerraPass offers an excellent compensation and benefits package, including stock options. Our work environment is casual and highly energetic. TerraPass is an equal opportunity employer.

Send resume and cover letter to salesjobs@terrapass.com.

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33. Glumac, Building Energy Analyst/Energy Engineer, Santa Clara, CA

Glumac is looking for an energy engineer/analyst for our Santa Clara Valley, CA office. Please feel free to email Greg Knopp at gknopp@glumac.com.

This opportunity is for a Mechanical Engineer/Energy Analyst with at least 2 years experience in building energy systems, HVAC design/applications, heat transfer, thermodynamics, psychrometrics, fluid mechanics, and technical writing. An energy analyst participates early on in design planning, and throughout the design cycle to analyze and recommend energy efficiency options for Glumac clients. Clients also depend on the energy analyst to assist them with obtaining tax credits, incentives, and LEED certification. The right candidate will possess outstanding interpersonal skills and the ability to articulate conceptual ideas with clients and design engineers. We are looking for professionals who are not only passionate about their work, has initiative, and are creative and innovative. Glumac is an exciting, high energy company that offers opportunities for growth, diversity, and advancement.

Typical Duties of the position:

* Model and analyze energy use in buildings in compliance with guidelines or requirements from ASHRAE, LEED, utilities, and other state or local code jurisdictions.
* Evaluate code requirements and propose interpretations, as applied to energy savings opportunities.

* Perform cost analysis of energy efficiency measures.
* Document modeling assumptions and results. Produce high-quality technical reports suitable for both technical and lay audiences.
* Prepare documentation for tax credits, utility incentives, and LEED certification.
* Participate in energy charrettes and propose energy efficient alternatives to design teams.
* Show initiative in addressing client concerns and demonstrate a proactive approach in advocating for energy-efficient design.
* Provide technical leadership by mentoring junior staff and advising design teams on how to integrate energy-efficient measures.
* Support company efforts in the areas of commissioning, cost estimating, and the design and analysis of HVAC, lighting, and architecture alternatives to standard-practice design.
* Work independently, contribute to proposals, and participate in business development activities.

Knowledge and Experience

1. At least 2 to 5 years experience required in modeling and analyzing energy use in buildings.

2. Experience with the interpretation and application of one or more city and/or state energy codes.

Contact: Greg Knopp, Director of Human Resources gknopp@gluamc.com

Thinking. Inside the building.
http://www.glumac.com

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34. Solaria: M.E. CAD Engineer, Silicon Valley, CA

Solaria is a privately held, well-funded solar company based in Silicon Valley. Utilizing its expertise in the semiconductor and optics industries, the Company has developed breakthrough innovations that make solar cell and module production more efficient. The Companyâ*™ s extensive IP portfolio is initially focused on a reliable PV-maximizing process that - via solar cell simulation and optical concentration - yields two highly efficient cells from one. Such seamless integration with the existing PV supply chain allows the Company to deliver crucial capacity that is low risk, scalable, and available for rapid adoption. By solving the economics of solar energy without having to reinvent the industry, Solaria is driving down costs and making solar a mainstream
reality. Currently in pilot production, the Company plans to reach high-volume capacity in 2008.

Position Description:
Solaria is seeking an experienced Mechanical CAD Engineer with an expertise in SolidWorks and material properties to join its pioneering organization. The successful candidate will design, model, and document prototype photovoltaic system designs based on design rules and DFM as well as work closely with the R&D team to review and to provide CAD support for existing design improvements and prototype designs. This requires an understanding of the impact that environmental stresses have on system design in order to ensure long-term product reliability. In addition, the CAD Engineer will generate layouts for a production environment, working closely to support the manufacturing team. (S)he will help the team to understand the limitations of the manufacturing process as well as suggest modifications to the factory floor and equipment layout to maximize

manufacturing efficiencies.

Qualifications & Experience:
Engineering
~ 5+ years relevant industry experience working with design tools (i.e., at semiconductor equipment companies or similar)
~ Solid knowledge of material properties â*“ particularly plastics, metals, and non-metals - including an understanding of their various tolerances and limitations
~ Expertise in SolidWorks design tools is critical
~ Ability to perform finite element analysis is a bonus
Personal
~ Hands-on with proven ability to multi-task on a timely basis
~ Comfortable working with small teams and participating in small meetings
~ Good written and communication skills that ensure quick and effective interactions
~ A creative bent with an attention to detail
~ A strong work ethic and self-starter with a positive attitude
Education
~ BS or MS in engineering with 5+ years experience in CAD; mechanical design engineering degree is preferred, but not necessary

Please cut and paste your resume, CV, or brief bio into the body of an email and send to dgerstel@artemisassociates.com. Email attachments will not be opened or read

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35. World Bank Group: Consultant, Sr.Energy Specialist, innovative vehicles. D.C.

The World Bank Group (WBG) is exploring innovative vehicles to accelerate the commercialization of new clean energy technologies with developing country applications. We are looking to add an individual consultant to our team who is an Expert in Clean Energy Technologies. The consultant would be available as soon as possible to work on this highly visible project for about 2-3 months - an extension of the contract may be well possible based on consultant performance and project needs. If you know of anyone that meets the criteria, we ask you to refer us to that individual or forward this email to him or her.

Tasks
The consultant will develop in cooperation with the WBG and external experts draft prospectuses/term sheets for proposed vehicles for the acceleration of clean energy technologies. This work will build upon the ongoing analysis of the WBG.

Specifically, the consultant will help:
- identify technologies not yet commercial on a large scale but the development of which could have large impact in terms of climate change mitigation and

meeting other energy goals of developing countries.
- determine the technical barriers and technical path to commercialization for each.
- refine the proposed innovation vehicles to most effectively advance the development of these technologies.

Selection Criteria
- Advanced degree in engineering, finance, economics or related discipline with preference for engineering
- Minimum 5 years of relevant experience in clean energy technology at a research center, technology consultancy or financial institution

Jonathan Coony
email: jcoony@worldbank.org tel: (202) 473-2468
Consultant, Energy Anchor,
World Bank
Washington DC
Cell: 617-710-4896

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36, Ecoenergy: Associate Engr, Staff Engr. Carbon management. Boulder, CO, WA DC

Econergy International, a leading global clean energy and carbon management company, is seeking entry-level and mid-level engineers for its carbon consulting practice. These positions will be based in Boulder, Colorado USA or Washington, DC USA. Strong language skills in Spanish or Portuguese are highly valued, but not required. Please send a resume to evans@econergy.com.

Associate Engineer, Carbon Practice: Attractive candidates have a BS degree and 1 - 5 years of professional practice or an MS degree and 0 - 4 years of professional practice. Preferred disciplines include chemical engineering and mechanical engineering, but any energy-focused technical degree of comparable rigor is acceptable. Specific carbon management experience is preferred but not required.

Responsibilities will include developing greenhouse gas emissions inventories for corporations and governments, identifying prospective opportunities for acquiring emissions reductions, quantifying emissions reductions achievable through implementing specific emissions mitigation projects, and designing carbon management plans and strategies.

Staff Engineer, Carbon Practice: Attractive candidates have a BS degree and 6 - 10 years of professional practice or an MS degree and 5 - 9 years of professional practice. Preferred disciplines are the same as for the Associate Engineer position. Specific carbon management experience is required.

Responsibilities will include those described for the Associate Engineer position, plus a limited project management role.

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37. NRDC Network Economist for Climate Analysis

The NRDC is looking for an E3 Network economist to work full time as a climate analyst. NRDC is at the forefront of the climate policy debate in Washington. This is a great opportunity for the right person. Please share it with others you think might be interested and encourage them to sign up for E3 Network's Green Economist Directory. Click on the link below to view the job add.

http://www.prohire.com/candidates/jobprofile.cfm?szWID=16314&szCID=73415&szOrderID=437936

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38. E3: Energy Analyst Position, SF

Energy and Environmental Economics, Inc (E3), a small economics and engineering consulting firm in downtown San Francisco specializing in the electric energy industry, is seeking an Energy Analyst to join our team.

Energy Consultant Position Description
Energy and Environmental Economics, Inc (E3), a small economics and engineering consulting firm in downtown San Francisco specializing in the electric energy industry, is seeking an Energy Consultant to join our team.

E3 has an influential and growing role in integrated resource planning, energy efficiency, climate change policy analysis, distributed generation and renewable energy. E3 works closely with leading utilities, interest groups and policy makers on such issues as implementing the Renewable Portfolio Standard, valuing demand response and peak load reduction programs, developing capacity markets, and evaluating traditional, renewable and demand-side resources on an equal basis.

Founded in 1993, E3 is built upon the partners' extensive experience in integrated resource planning, avoided cost quantification, procurement cost and risk management, and financial evaluation. E3 complements its comprehensive knowledge of the industry's business practices with state-of-the-art analysis techniques, software development and extensive publications in scholarly journals. Our clientele are approximately 1/3rd U.S. and international energy utilities, 1/3rd generation companies, energy service providers and industrial customers and 1/3rd regulatory commissions, government agencies, and law firms. Our practice areas are described further on our website at www.ethree.com.

E3 has a productive, efficient and enjoyable work environment. As a small firm with a structure that is both flat and fluid, we are looking for employees able to work independently with minimal direction as well as within a team. Some projects will require developing creative solutions to complex analysis problems with minimal guidance. Others will require thorough attention to detail, accuracy and client driven requirements.

Energy Analyst Primary Responsibilities

… Project research and information/data gathering
… Maintaining and developing spreadsheet models

… Technical and statistical data analysis
… Report writing and editing
… Other project support as required

Minimum Requirements

… Demonstrated interest in energy, economic and policy analysis
… Degree in engineering and/or economics or related technical field
… 0-3 years experience
… Very high proficiency in Microsoft Excel (incl. Visual Basic for Applications, form controls)
… Strong quantitative, analytical and statistical skills, including proficiency in SAS
… Proficiency in Microsoft Word and Power Point
… Ability to write and communicate technical analyses clearly
… Familiarity with engineering economics and financial calculations
… Able to work independently
… Interest in working in a small office environment

Contact Information
To apply for this position, send a resume, cover letter, and references to:
Anya Engen
Energy & Environmental Economics, Inc.
101 Montgomery Street, Suite 1600
San Francisco, CA 94104
Fax: 415-391-6500
Email: recruiting@ethree.com
www.ethree.com

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39. ARUP, Senior Mechanical Engr, Seattle

From the Sydney Opera House, to the Bill & Melinda Gates Foundation Headquarters, Arup's engineering design work is world renowned!

Arup is seeking a Senior Mechanical Engineer with superior design and analysis skills, to lead projects, mentor staff and function as a high level technical lead for their Seattle, WA office. (Generous relocation package offered!)

The successful candidate will have a passion for sustainability, energy efficiency and complex design.

Arup is a leading, 60 year old, international design firm with over 9,000 members worldwide in 86 offices.

At Arup, you will be working in a team of talented engineers developing designs and delivering projects in the US and around the world. We design a wide range of project types including the Seattle Public Library, the 2008 Beijing Olympic Stadium, the Air Force Memorial, The Denver Art Museum....for more information, check us out a www.arup.com

We have excellent benefits and we work in a collegiate, multi-disciplinary environment where engineers mix and work in teams such that you will experience sustainability in its broadest sense as well as working with talented sustainability consultants, acousticians, fire engineers, facade specialist, energy modellers, lighting specialists and many others.

Want to learn more? www.arup.com

Send resumes to: susanne.sipola@arup.com

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40. U. Colorado, Boulder: Tenure track faculty position Building Systems

The University of Colorado at Boulder Department of Civil, Environmental and Architectural Engineering invites applications for a tenure track position in its Building Systems group to begin in Fall 2008. We are seeking candidates with research and teaching interests in general areas of architectural engineering and building systems including heating, ventilating, and air conditioning (HVAC), lighting and illumination, building electrical power, renewable energy technologies, and building controls. We also recognize the value of teaching and professional experience in these areas. The applicant will be expected to develop an externally funded research program and to teach at both the undergraduate and graduate levels. The applicant must hold a Ph.D. in Engineering or other appropriate discipline. The position is offered at the Assistant Professor level, though exceptional candidates at other levels will be considered.

Interested persons should apply through the web site http://www.jobsatcu.com, posting # 802338, and submit electronic files (.pdf format) containing their curriculum vitae, separate research and teaching statements, and names of at least three references with contact information. The Search Committee will begin reviewing applications on November 30, 2007.

The University of Colorado at Boulder is committed to diversity and equality in education and employment. Applications from women and people from underrepresented minority groups are strongly encouraged.

For inquiries, you may contact:

Moncef Krarti, Ph.D., P.E. (krarti@colorado.edu)
Chair, Search Committee

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41. Ecos Efficiency Solutions: Account Manager, S.F.

The Efficiency Solutions business unit is the revenue engine of our company and as a member of this team, you are critical to our success. Our Efficiency Solutions Team has an immediate need for a senior level Strategic Account Manager in our San Francisco office.

In this key role, you will report to our VP, Efficiency Solutions to develop and launch the strategy and key account management for Northern California. As our Strategic Account Manager, you will

experience all the benefits of working for a fast-paced, entrepreneurial company while having a significant impact in energy efficiency, climate and sustainability.

Role Description

As our Strategic Account Manager, you will be responsible for building, maintaining and leveraging relationships with our key customers in Northern California with the objective of increasing customer satisfaction and loyalty while growing a book of business.

You will be responsible for generating new business and providing stewardship for our energy efficiency / demand side management portfolio. You will combine multiple functional attributes such as sales, business development and marketing to develop an effective account strategy and implementation plan focused on building profitable business relationships. You will evaluate and manage new strategic business opportunities, initiatives, partnerships, alliances and/or joint ventures by working with our Product & Service Innovation Team.

You will be responsible for reviewing market analysis, initiating deployment strategies, monitoring competitive activity, identifying and resolving customer needs. You will ensure customer communication across all of Ecos' business channels is seamless and Ecos is positioned to leverage all revenue opportunities.

Through effective leadership, you will help drive efficiencies through business processes, goal deployment, sales operations, organizational effectiveness, resource planning and allocation to insure customer satisfaction in assigned accounts.

As a member of our collaborative team, you will utilize cross-functional teams of subject matter experts, engineers and implementation leaders to insure excellent execution of program design, program execution and client management. You will mentor others to ensure world class performance through the business development, program management and marketing organizations.

Role Competencies

As our ideal candidate, you will possess a bachelor's degree and seven years of relevant work experience building and developing high-quality customer relationships. An advanced degree in business management or energy-related field and proven experience building relationships in energy efficiency, demand side management programs in the residential, commercial and/or industrial sectors is preferred.

To apply for this position, please email your resume and cover letter to jobs@ecosconsulting.com

To learn more about Ecos, please visit our website at: www.ecosconsulting.com

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42. Climate Cooler: Scientific/Technical Director Social Venture GHG mgt

Cooler is a for-profit social venture whose mission is to connect every purchase to a solution for global warming. We are seeking a scientific/technical director.

This position involves the assessment of markets and technologies for calculating, reducing, and offsetting greenhouse gas (GHG) emissions and development of methods for comparing greenhouse gas offset and reduction options. The Director's responsibilities also include developing industry leadership in GHG emissions calculation protocols.

The position requires managing a consensus certification process and driving that process to closure. The process will involve the company and various outside entities, including major non-profit environmental groups, academics, and for-profit companies. This process, which evaluates protocols for certifying GHG emissions offsets, will be both technical and political in nature, so experience with the technical aspects of GHG emissions offsets and in management of such consensus processes is required for success. Finally, the position will involve calculation of GHG emissions embedded in various products using some of the world's leading models for such calculations.

RESPONSIBILITIES:
Track current developments in the GHG emissions and offsets markets. Develop deep understanding of emissions trading and offsets and use that understanding to improve the quality of offsets being used by the company.
Assist the CEO and Director of Partnerships in managing a consensus process between the company and various non-profit, academic, and for-profit partners. This process will identify and evaluate various protocols for certifying GHG emissions offsets, and will determine which of those protocols are appropriate for the company to adopt.

Calculate GHG emissions (carbon footprint) associated with key products, and develop a database of emissions to be used by other members of the company. Cooler has ready access to cutting edge technology in this field.

QUALIFICATIONS
Extensive knowledge of GHG emissions and offset policy issues and markets
Extensive knowledge of and experience in calculating GHG emissions from energy use.
Knowledge of and experience with techniques for understanding conventional financial markets, for application to the market for emissions offsets.
Experience with consensus processes on technical issues.
Excellent quantitative abilities including demonstrated mastery of Excel and other financial tools.
Excellent writing and presentation skills.
Education: Master's degree and several years of experience in Environmental science and policy related to greenhouse gas emissions and offsets. Significant quantitative coursework (or equivalent experience) required.
Cooler is an angel-funded startup company. Compensation will be a combination of salary and equity until the next round of investment.
The company is seeking to fill the position as soon as possible, and is an equal opportunity employer.
People of color, women, veterans and disabled people are strongly encouraged to apply.
If interested, please send a resume, writing sample and references to jobs@climatecooler

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43. MMA Renewable Ventures: Lots of jobs, S.F.

From: "John Woody" <John.Woody@mmarenew.com>
To: <gmasters@stanford.edu>

Gil,
I wanted to send you a big list of jobs that are opening up at MMA Renewable Ventures. If you could post it on your Energy Folks list, that would be great. They're all listed on the MuniMae jobs site here: http://www.munimae.jobs/
If you scroll down to the MMA Renewable Ventures section, you'll see each job posting:

- Admin/Office Assistant
- Business Development Analyst
- Business Development Director
- Business Development Manager
- Deal Associate
- Director of Environmental Markets
- Fund Accountant
- Fund Manager
- Fund Specialist
- Human Resources/Office Manager
- Policy Director (Marketing)
- Senior Channel Manager

I've pasted individual links to the specific job postings below:

- Admin/Office Assistant (http://www.munimae.jobs/opportunities/MRV-Admin-OfficeAssistant.htm)
- Business Development Analyst (http://www.munimae.jobs/opportunities/MRV-BusinessDevelopmentAnalyst.htm)
- Business Development Director (http://www.munimae.jobs/opportunities/MRV-BusinessDevelopmentDirector.htm)
- Business Development Manager (http://www.munimae.jobs/opportunities/MRV-BusinessDevelopmentManager.htm)
- Deal Associate (http://www.munimae.jobs/opportunities/MRV-DealAssociate.htm)
- Director of Environmental Markets (http://www.munimae.jobs/opportunities/MRV-DirectorOfEnvironmentalMarkets.htm)
- Fund Accountant (http://www.munimae.jobs/opportunities/MRV-FundAccountant.htm)
- Fund Manager (http://www.munimae.jobs/opportunities/MRV-FundManager.htm)
- Fund Specialist (http://www.munimae.jobs/opportunities/MRV-FundSpecialist.htm)
- Human Resources/Office Manager (http://www.munimae.jobs/opportunities/MRV-HRManager.htm)
- Policy Director (Marketing) (http://www.munimae.jobs/opportunities/MRV-PolicyDirector.htm)
- Senior Channel Manager (http://www.munimae.jobs/opportunities/MRV-SeniorChannelManager.htm)

John Woody

MMA Renewable Ventures, LLC
44 Montgomery Street, Suite 2400
San Francisco, CA 94104
415.229.8853 direct | 415.734.0687 mobile
415.986.8038 main | 415.276.8962 fax
john.woody@mmarenew.com | www.mmarenewableventures.com

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44. Atelier Ten: Building Energy Analyst, Energy Modeler, NYC

Atelier Ten is looking for an experienced and ambitious building energy analyst and energy modeler to join its interdisciplinary environmental design team in our New York City office. Working closely with an integrated environmental design team in our New York office, the candidate will provide energy analysis and building energy simulations for a range of technically ambitious projects. The candidate will also support other building analysis work including daylight and shading design, HVAC design optimization, and LEED program management. The candidate will work on environmentally and architecturally ambitious projects that ranging widely in types and scale. Typical projects include university buildings, high rises, cultural and institutional buildings, and master plans for new development.

The candidate must have an undergraduate or graduate degree in architecture, engineering, and/or building technology. Strong experience in building physics and in energy modeling with eQuest or another DOE2-based analysis tool is required; knowledge of EnergyPlus, TRNSYS, IES, or other similar software is a plus. Proficiency in written and spoken English is required. The candidate should have a minimum of 3 years' experience in sustainability or green building consulting , LEED Accreditation is a plus.

Interested candidates should send their resume and cover letter via email to me at gp@atelierten.com or to Catherine Nueva Espana at cne@atelierten.com .

Gerald Pde

Associate

Atelier Ten
Consulting Environmental Designers
45 East 20th Street, 4th Floor
New York, NY 10003
T +1 (212) 254-4500
F +1 (212) 254-1259
E gp@atelierten.com
W www.atelierten.com

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45. RDWI Consulting: Project Coordinator - Sustainable Design, Vancouver

Rowan Williams Davies & Irwin Inc. (RWDI) is an international consulting engineering company specializing in environmental engineering, wind engineering, microclimate, noise and vibration, acoustics and industrial processes. We are a firm of 350+ professional and support staff with offices in Guelph, Calgary and Vancouver as well as in the United Kingdom, India and the United States.
We are responsible for providing the wind engineering services for many landmark projects worldwide, including: the Petronas Towers, Taipei 101, Luxor Hotel and Casino and the new Tacoma Narrows Bridge to name a few. Currently, we are working on many exciting projects including the Freedom Tower in New York City and Burj Dubai which, when completed, will be the world's tallest building.
In an integrated design approach we provide our clients with innovative ideas, concepts, early feedback and fast advice; as well as with detailed analyses, simulations and physical testing. Our advice and analyses enable our clients to make informed decisions and build better buildings.
RWDI Sustainable Design develops and validates ideas, concepts and detailed designs for green buildings and sustainable communities. These concepts include measures ranging from passive design - solar performance, natural ventilation, daylighting -, high performance façade design, energy performance of mechanical and electrical systems, to renewable energy systems and energy storage concepts. We support design teams in achieving their performance goals, including LEED® certification. For these analyses we use a number of tools for whole building energy simulations, dynamic thermal simulations, computational fluid dynamics (CFD), heat transfer calculations, and daylight simulations.
RWDI is looking for an experienced whole building energy simulations specialist to join the Sustainable Design team as a Project Coordinator in our Vancouver office.

The role includes but is not limited to the following:

* Participation in design meetings and charettes
* Planning and coordinating all technical aspects of assigned projects
* Solve challenging fluid flow design problems in consultation with engineering, architectural and industrial clients
* Conduct fluid flow modelling, data collection, analysis, post-processing, interpretation, and documentation of engineering results
* Consulting with and answering technical questions from engineers and architects
* Writing technical project reports that present the methodology, results and recommendations
* Providing advice on technical problems and the appropriate QA/QC procedures

* Assisting with preparation of proposals, marketing materials and/or technical papers
* Working under the general supervision of senior staff with considerable latitude for the exercise of independent judgment

Applicants should have the following qualifications:

* Degree in mechanical engineering or related field
* Solid education in thermodynamics, heat and mass transfer
* Experience with HVAC systems
* Experience with whole building energy simulations
* Excellent verbal and written communication
* Demonstrated initiative, independent problem solving methods/capabilities
* Proven ability to successfully meet deadlines and manage a number of projects at once
* Strong people and team skills as well as highly motivated
* An ability to work in a fast-paced team environment with minimal supervision
* Exceptional organizational capabilities, coordination and consultation skills

You can submit your resume online at
http://www2.recruitingcenter.net/clients/ceridiancanada/publicjobs/canada800/controller.cfm?jbaction=JobProfile&Job_Id=15762&esid=az
or go to http://www.rwdi.com and follow the Careers link to the Job Listing Portal.

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46. Flack + Kurtz, Senior building energy analyst, NYC, Boston, S.F.

Flack + Kurtz, Inc. offers an opportunity for a senior building energy analyst with at least 10 years of commercial bulding simulation experience. Responsibilities of the position would include oversight of all building energy simulation activities for the firm, including quality assurance, standards for documentation, identification, confirmation and transfer of approved simulation techniques, and management of personnel. The position is a senior position requiring outstanding technical skills, along with management and communication skills. Significant experience with all DOE2 variants is required, along with experience with Energyplus. Experience with Trnsys and any ESP variants is also desirable. Prefered location is New York City, but Boston or San Francisco would be a possible location for the right candidate. Salary negotiable.

Flack + Kurtz is a 600 person engineering firm with offices in New York, Boston, Washington, DC, Houston, San Franciso, Seattle and Las Vegas. Flack + Kurtz, Inc is a wholly owned subsidiary of the WSP Group, an 8000 person international professional services firm headquartered in London with offices throughout the world.

Contact: Daniel H. Nall - dannall@mindspring.com; daniel.nall@ny.fk.com; 1 212 951 2691

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47. CA Air Resources Board: multiple positions related to AB32, Sacramento

CLASSIFICATION: Air Pollution Specialist/

Air Resources Engineer (Multiple Positions) SALARY: $3,903 - $7,214/month
FFD: Open for one month or Until Filled
DIVISION/SECTION: Research Division/Greenhouse Gas Reduction Strategy Section CONTACT: Teresa Lestingue PHONE: (916) 322-3893
LOCATION: Sacramento, CA MAILING ADDRESS: 1001 I Street, Sacramento, CA 95814

DESCRIPTION: Climate change is one of the greatest environmental, social and economic threats facing the planet. Human activities associated with industrial revolution such as burning of fossil fuels and deforestation has significantly increased the concentration of heat-trapping Greenhouse Gases (GHG) in our atmosphere resulting in Global Warming. The projected climate change may affect California in a variety of ways including adverse impact on public health, agriculture, forest ecosystems, shrinking of Sierra snowpack and endanger coastal areas. California Global Warming Solutions Act of 2006 (AB 32) creates a comprehensive, multi-year program to reduce GHG emissions in California. It makes the California Air Resources Board (ARB), traditionally a pioneer in efforts to reduce air pollution, responsible for monitoring and reducing GHG emissions. ARB is looking to deploy a highly focused and scientifically strong group to lead the identification, prioritization, analysis, development, and implementation of GHG emission reduction strategies that are consistent with the AB-32 goals.

The Greenhouse Gas Reduction Strategy Section (GHGRSS) is a new Section in the Research Division of ARB. The primary role of this Section is to focus on developing and implementing mitigation strategies addressing some of the most potent GHGs including emissions of hydrofluorocarbons (HFCs) used in a variety of applications such as refrigeration and air-conditioning (RAC). In addition, the Section will lead research efforts to inventory, as well as identify mitigation strategies for highly potent GHGs, such as the chlorofluorocarbons (CFCs), not presently included amongst the six Kyoto gases. The Section also closely coordinates with other local/national/international stakeholders, performs ongoing policy-relevant research to further its goals of GHG mitigation, develops and supports a technology clearinghouse as well as the technical design of outreach

DUTIES: The mission of the section will be accomplished in multiple ways including 1) advancing in a timely fashion the climate change reduction strategies already identified in the Climate Action Team Report and in the recently approved Early Action Measures Report that are under the jurisdiction of the ARB; 2) informing ARB on climate change science, mitigation, adaptation, and clean air technology issues; 3) mitigate climate change impacts from commercial and residential RAC sectors and insulating foams; 4) developing feasibility roadmaps for additional climate change strategies for attaining the stated emission reduction targets; 5) coordinating with other ARB Divisions, CalEPA, U.S. EPA as well as local/national/international climate change stakeholders; and 6) participating in climate change related emissions research to inform policy direction and advance the health-protection mission of the agency.

QUALIFICATIONS: The most competitive candidates will have a strong science or technical background and knowledge of climate change, as well as experience with the functions and procedures of the agency or willingness to learn and execute them. Other essential job requirements include excellent written and verbal communication skills, ability to work effectively and cooperatively with a diverse stakeholder group including the public, other government agencies, and research organizations, and strong interpersonal and leadership skills. The ability to work proactively and efficiently on multiple projects with strict deadlines is expected.

The most desirable qualifications include an educational background in science or engineering with general or specific knowledge of climate change, air quality, emissions, clean air technology, and regulatory development. The qualified applicants must have a strong desire for making original and sustained contributions to the mission of the ARB. You should also be a motivated team player with an enthusiastic attitude and the dedication to work hard on one of the most important issues of our time.

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

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