



AMERICAN  
ENERGY  
SOCIETY

The world's exclusive network for energy professionals;  
Connecting experts, thought leaders and decision-makers in pursuit of a sustainable energy future.

## *Energy Matters*

23 February 2015

### Members: Welcome to the e-Newsletter of the American Energy Society

Below you will find a rundown of what you need to know about energy right now. Topics include: conventional, renewables, funding, electricity, events, technology, policy, jobs, featured organizations and experts, and a new entry, "Climate News."

For more information about these and other stories please visit your account: [www.energysociety.org](http://www.energysociety.org).

### *Conventional*

Ameren, a coal-heavy utility in Missouri, believes **some tweaks in the EPA 111(d) rule can make the plan achievable** and save billions. AES Members can see the Scientific American [report](#).

The current price of crude oil is making the Keystone Pipeline irrelevant, at least in the short run. Further **eroding the economics of the KP, there is growing interest in surface-mining bitumen-rich sandstone in northwestern Alabama**, commonly known as tar sand.

The American Shale & Manufacturing Partnership (ASMP) issued a report on the **U.S. manufacturing renaissance led by natural gas**: [Ideas to Empower America's Emerging Shale-Based Manufacturing Renaissance](#)

### *Renewables*

- **Biofuel Downgrade** - Time to significantly lower expectations for and commitments to biofuels: "There are other, more effective routes to get to a low-carbon world."

- New report: **greatest opponent of renewables is not O&G, but the nuclear industry**.

- AES Members get free access to the **new S&P Summary Report** on Renewables

## *Funding*

**The EERE is going to announce new funding opportunities** - register for webinars that provide first-mover insights about these upcoming opportunities.

March 3rd, 2015, 2:30-3:30pm - [Registration Link](#)

**Sustainable Transportation** (led by DAS Reuben Sarkar)

Programs detailed: Bioenergy, Vehicle Technologies, and Fuel Cell Technologies

March 4th, 2015, 2:30-3:30pm - [Registration Link](#)

**Energy Efficiency** (led by DAS Kathleen Hogan)

Programs detailed: Building Technologies, Advanced Manufacturing, Weatherization & Intergovernmental, and Federal Energy Management

March 5th, 2015, 2:30-3:30pm - [Registration Link](#)

**Renewable Power** (led by DAS Doug Hollett)

Programs detailed: Solar, Geothermal, and Wind & Water

## *Electricity*

**FERC is holding four technical conferences about the EPA's proposed carbon GHG rules.** The conferences provide more insight on the Commission's plan and on the state of power markets in general. Read the first Conference's [Report](#).

## *Events*

- **Attend the MIT Energy Conference, February 27 and 28.**
- **ACORE Renewable Energy Policy Forum - April 22-23**, Westin Washington, D.C. City Center.
- **Energy Expo at Georgia Tech, April 3** [TICKETS](#)
- **Town Hall Energy Summit, Darden School, Charlottesville, Virginia, April 17** - [TICKETS](#)

## *Technology*

The **DOE national labs** are pivotal institutions. As centers of basic and applied technology research and development (R&D), the labs are unique focal points for technology exchange among regional firms, universities, and economic development intermediaries. However, the Technology Transfer Society is looking for ways to **reform the NLS** to "improve technology transfer, commercialization, and the creation of metropolitan cluster development. **Please reply by email to provide comments.**

### **New ways to charge smart-phones**

- **Sole Power:** an energy-harvesting shoe insert powerful enough to charge a smart-phone.
- **Ampy:** a wearable lithium-ion battery that harnesses kinetic energy to charge itself while you move. A day of walking can gather enough juice for three hours of smartphone use.

## *Policy*

**The EPA is seeking non-D.C. based participants from academia or small business** who would contribute to an Advocacy Review Panel that evaluates the potential impact of a proposal to reduce carbon dioxide emissions from existing power plants.

**California Is Fuel Efficient, and That's a Problem** - The federal and state highway trust funds are running out of money because people aren't using enough gasoline. As energy consumption gets more efficient, less is contributed to infrastructure repairs. Since transportation repair costs don't go down, there is a serious funding shortfall.

**The Senate Committee on Energy** and Natural Resources will convene a hearing on Tuesday February 24th to **examine the President's proposed budget request** for fiscal year 2016.

## *Featured Organization - Marine Corps Air/Ground Combat*

**Video Interview** - The Marine Corps Air/Ground Combat group just implemented a series of very aggressive energy-efficiency and combined heat & power clean energy technologies (CHPs). All of their CHP renewable energy plants are built and maintained at no cost to the taxpayers. The commitment of the Marine Corps Air/Ground Combat group to clean energy is part of a larger effort by the Department of Defense to deploy clean energy and energy security measures at bases all over the world. The American Energy Society applauds **the Marine Corps Air/Ground Combat group for their leadership and commitment to clean and renewable energy.**

## *Featured Expert - Zhenan Bao and the Bao Group*

**The American Energy Society would like to recognize Zhenan Bao and the Bao Research Group in the Chemical Engineering Department at Stanford University.** Dr. Bao and her group are a perfect example of how you don't have to be "in" energy to make valuable contributions to energy. The multidisciplinary Group is drawn to virtually anything that is practical, important, or interesting. At the moment, the Group is working on: carbon nanotube thin film transistors, organic photovoltaic cells, chemical/biological sensors, molecular switches, nano-scale electronics, alternative energy sources, low cost and large area flexible plastic circuits, displays, and disposable sensors.... The Bao Group consistently demonstrates the courage to explore, test, trial, fail, and discover. Not surprisingly, Dr. Bao recently received the Andreas Acrivos Award in Chemical Engineering for her influential leadership and outstanding contributions to the field. It will be years before we will know the full measure or impact of the Bao Group, but we do know that the future of energy is more sustainable because of their work today.

## *What You Missed at AES - BOOKS!*

**Special Feature** - The American Energy Society recommends these 7 best books on energy:

1) [The Boom: How Fracking Ignited the American Energy Revolution and Changed the World](#), by Russell Gold. A well written and thorough treatment of fracking, including technological, environmental, economic and social aspects.

2) - 7) ... visit the American Energy Society ([www.energysociety.org](http://www.energysociety.org)) for more information

## *What's in store at AES - Town Hall Energy Series*

Three special events co-hosted by the American Energy Society

- Energy Expo at Georgia Tech, April 3 [TICKETS](#)
- Town Hall Energy Summit, Darden School, Charlottesville, Virginia, April 17 - [TICKETS](#)
- Town Hall Energy Summit; MGM at Las Vegas, Nevada, April 24 - Respond to this email for more information

Please respond to this email for more information or to attend at a discount rate.

### *Jobs*

The energy industry is hiring.

- **E.On**, [Senior Wind Analyst](#), MS Degree, Texas
- **Tendril**, [Software Engineer](#), BS in Computer Science, Colorado
- **Solar City**, [Senior Financial Analyst](#), MBA, California
- **Brookfield Renewables**, [Summer Intern](#), at or near degree completion, BS in Engineering, NYC
- **A123**, [Battery Engineer](#), BS/MS in Chemical Engineering, Massachusetts

Dayaway founder Michael Brownell has advice for aspiring energy professionals:

"Consider taking a job with an electric, utility or O&G company ... learn the basics from the best, master the field, then go off on your own and change the world."

### *Climate News*

**Is it time to take a serious look at climate engineering through 'geo-engineering'?**

Reports suggest that the window for addressing global warming is fast closing.

Reply to this email or visit the [AES website](#) for more information or access to these reports.

Who is the biggest producer of carbon dioxide and greenhouse gases? In the United States it is **Suburbia**; in **China it is the primary urban centers**; in **Australia it is the rural Outback**; in **India it is any economically impoverished region**.

Hard to believe but true: **India pollution in New Delhi is MUCH WORSE than Beijing**, cutting short [3.2 billion years](#) of life.

### *Thanks - Zack Farrell*

The American Energy Society would like to thank its own Director and Editor of Content and Ph.D. candidate at the University of Virginia, Zack Farrell. For the last 4 years Zack has done yeoman's work making sure that "we get the content right, to the right people." Thank you, Zack, for all that you do and all that you've done for the Society and its Members.

## *Encourage Colleagues To Join AES*

Please encourage your colleagues to **join the [American Energy Society](#)**  
Basic membership is free, and the current Premium Membership rate - \$27/year.  
**Please reply to this email if you know of a colleague who might be interested in Membership.**

### Contacts

**The Bao Group**

<https://baogroup.stanford.edu/>

**MIT Energy Conference**

<http://mitenergyconference.org/>

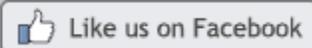
**White House Budget Proposal**

<http://www.whitehouse.gov/omb/budget/>

**Energy Jobs at Dayaway Careers**

[www.dayawaycareers.com](http://www.dayawaycareers.com)

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On the web at [www.energysociety.org](http://www.energysociety.org)



### Quote of the month:

"I'm exhausted. Now I know how a battery feels when it pours electricity into a non-conductor."

- Arthur Conan Doyle