

Hello All!

The new year is started, and ASEA is as busy as ever with activity. Included in this month's e-newsletter is information on:

1. ASEA Board elections
2. Spring Solar Tours
3. Arizona Solar Legislation & Action Alert
4. APS rate hikes
5. State of the Union Energy Policy
6. 2006 ASEA out-look
7. Local Chapter Events

**1.** ASEA is holding it's annual elections for members of the board of directors. Members have the option of receiving electronic or paper ballots. Ballots will be sent in the next few days. Please remember to include your contact info with your vote.

**2.** The Spring Solar Tours are happening in April. The Fall Tours were so successful, we felt that it merited more than 1 time per year. The Phoenix Metro Area tour will be on Saturday (and possibly Sunday) April 29th (& 30th). More info on this, and tours around the state will be released in future newsletters. Planning meetings for the Phoenix event are being held every other Thursday, with the next meeting set for Thursday, February 23rd. For more information on how to participate, respond to this email.

**3.** Arizona Solar Legislation. There are several bills in the Arizona legislature that have to do with sustainable energy and environmental issues. We will be following them from committee to committee, as well as when it comes to the house and senate floors for votes. Not only that, we will let you know who the committee members are, and what districts they are from, so you will know when you need to contact your district representative and have them vote for sustainability. The legislative session should run approximately 100 days this year, so almost all of the updates and action alerts will be released in the next few months. After that, many representatives and corporation commissioners will be up for re-election this year. As election season draws closer, we will update you on where the politicians stand on sustainability.

HB 2429 – ACTION ALERT!!!

Perhaps the most important piece of solar legislation already in the pipeline for this year is HB 2429.

This bill has made it through the Environmental Committee in the state legislature, and is going to be heard in the Ways and Means Committee THIS MONDAY, FEBRUARY 13TH!!!

Details from the AZ Legislature can be found here:

[http://www.azleg.state.az.us/FormatDocument.asp?inDoc=/legtext/47leg/2r/summary/h.hb2429\\_01-25-06\\_wm.doc.htm](http://www.azleg.state.az.us/FormatDocument.asp?inDoc=/legtext/47leg/2r/summary/h.hb2429_01-25-06_wm.doc.htm)

Details below are from AriSEIA:

"HB 2429 - solar energy tax incentives has been introduced in the Arizona House of Representatives. This legislation would make changes to Arizona's tax policies regarding solar energy equipment for residential and commercial applications. If you recall, last year, solar tax legislation failed late in the session. This year, we need your help to push this legislation through the Arizona Legislature and on to the Governor for signature. We need to show public support for the bill.

HB 2429 would make the following changes to Arizona tax policy regarding solar energy:

- \* Raise the cap on the Residential Tax Credit from the current limit of \$1000 to a maximum of \$2000. New language would also allow a homeowner to take a total of \$5000 in solar tax credits per residence. A sunset date of December 31, 2012 is added.
- \* Create a Commercial Solar Tax Credit that will allow a 10% credit for the installation of solar energy devices for commercial or industrial purposes in a trade or business located in Arizona. The credit is limited to \$25,000 dollars with respect to the same building annually and \$50,000 annually per company. There is an annual cap of \$7 million. This provision shall sunset on December 31, 2012.
- \* Eliminate any potential property tax increase when adding solar energy systems to a property.
- \* Remove the \$5000 limit on the solar sales tax exemption.

On Monday, January 30th Representative Mason's Ad Hoc Committee on Renewable Generation and Energy Efficiency Committee held their first meeting. The purpose of that meeting was to review renewable

energy and energy efficiency legislation proposed in the Arizona legislature this session. Corporation Commissioner Kris Mayes attended the hearing and made strong comments in support of the bill.

She commented that with the massive growth in Arizona there is not any reason for a utility to fear loss of revenues from passage of this legislation. Also at the meeting supporting the bill were Salt River Project, Arizona Public Service and Tucson Electric Power. The day after the meeting, Southwest Gas notified us that they would no longer be opposing the bill. The next step is passage through the Ways and Means Committee.

Please contact your Representative in the House and ask for their support for HB2429 - solar energy tax incentives when it comes to a vote on the floor. If your representative is on the Ways and Means Committee please call and ask for their support in Committee. If your business is located in their legislative district please call as well. We need to continue to let our Legislature know that this bill is a comprehensive solar package designed to bring the air quality and economic development benefits of solar energy to Arizona and to limit solar water heating would limit these benefits Arizona. Please contact your Legislators today! Please e-mail your Legislators in the House and follow up with a telephone call to have the greatest impact."

### **Ways and Means Committee**

Steve Huffman, Chair, (R) District 26, Tucson 602-926-3394  
[shuffman@azleg.state.az.us](mailto:shuffman@azleg.state.az.us) <<mailto:shuffman@azleg.state.az.us>>

Steve Yarbrough Vice-Chair R District 21, Chandler 602-926-5863  
[syabrou@azleg.state.az.us](mailto:syabrou@azleg.state.az.us) <<mailto:syabrou@azleg.state.az.us>>

Jack Brown, (D) District 5, St. Johns 602-926-4129  
[jbrown@azleg.state.az.us](mailto:jbrown@azleg.state.az.us) <<mailto:jbrown@azleg.state.az.us>>

Pamela Goman, (R) District 6 Anthem, 602-926-4002  
[pgorman@azleg.state.az.us](mailto:pgorman@azleg.state.az.us) <<mailto:pgorman@azleg.state.az.us>>

Anne Kirkpatrick, (D) District 2 , Flagstaff 602-926-5160  
[akirkpat@azleg.state.az.us](mailto:akirkpat@azleg.state.az.us) <<mailto:akirkpat@azleg.state.az.us>>

Leah Landrum-Taylor District 16, Phoenix 602-926-5864  
[llandrum@azleg.state.az.us](mailto:llandrum@azleg.state.az.us) <<mailto:llandrum@azleg.state.az.us>>

Warde Nichols, R District 21, Chandler, 602-926-5168

[wnichols@azleg.state.az.us](mailto:wnichols@azleg.state.az.us) <<mailto:wnichols@azleg.state.az.us>>

Michele Reagan, R, District 8, Scottsdale, 602-926-5828  
[mreagan@azleg.state.az.us](mailto:mreagan@azleg.state.az.us) <<mailto:mreagan@azleg.state.az.us>>

Bob Stump, R, District 9, Peoria, 602-926-5413  
[bstump@azleg.state.az.us](mailto:bstump@azleg.state.az.us) <<mailto:bstump@azleg.state.az.us>>

How can you help?

Please e-mail your Legislators in the House and follow up with a telephone call to have the greatest impact.

After the Ways and Means Committee, it goes to the Caucus and COW. We will let you know when the best time to act will be.

To email your legislators go to <http://www.azleg.state.az.us/MemberRoster.asp> If you are not sure who your legislators are, you may go to <http://www.vote-smart.org> <<http://www.vote-smart.org/>> (You will need to know your nine digit zip code) You may also call the House or Senate information desks. Outside of the Phoenix area, you may call your legislators office toll-free at 1-800-352-8404. In the Phoenix area, call 602-926-3559 for the Senate and 602-926-4221 for the House.

Correspondence goes to 1700 W Washington, Phoenix, AZ 85007-2890 For more information on legislation go to <http://www.azleg.state.az.us> <<http://www.azleg.state.az.us/>> .

There are other bills as well that have to do with sustainable energy and environmental policy that we are following. As these bills come to important committees and votes, we will try to let you know.

HB 2030

This bill makes it easier for state buildings and schools to become more energy efficient. Details can be found at:  
[http://www.azleg.state.az.us/FormatDocument.asp?inDoc=/legtext/47leg/2r/summary/h.hb2430\\_02-01-06\\_caucuscow.doc.htm](http://www.azleg.state.az.us/FormatDocument.asp?inDoc=/legtext/47leg/2r/summary/h.hb2430_02-01-06_caucuscow.doc.htm)

HB 2430 increases the energy cost savings performance contracting maximum terms for state buildings and school facilities to 25 years. The current eight year payback requirement for solar energy and energy conservation design, equipment and materials in state buildings and schools is deleted. Additionally, current provisions of law relating to energy and cost avoidance analysis, reporting and shared

savings are removed.

#### Provisions

- Increases the guaranteed energy cost savings performance contracting terms for school facilities to 25 years from 10 years.
- Increases the life cycle cost methods and performance contracting terms for state buildings to 25 years from 15 years.
- Deletes the current eight year payback requirement for solar energy and energy conservation design, equipment and materials in state buildings and schools.
- Removes the current energy and cost avoidance analysis, reporting and shared savings provisions for state buildings and schools.

Other bills:

HB 2501 funds for energy efficiency for schools.

HB 2374 cities and towns; energy code

HB 2435 water protection fund; funding

HB 2591 compressed natural gas; particulate program

HB 2711 tax incentives; biodiesel; ethanol E85

HB 2843 tax credit; energy efficient products

2006 will be an important year for solar politically, and you can play an important role in making sure that it is a fruitful year as well.

**4.** APS, Arizona's largest utility, implemented a 5% rate hike on Wednesday, February 1st (an increase of \$0.004 / kWh for every rate on every plan). It is likely that another large rate hike will take effect April 1st, 2006. APS will have requested some 30%+ in rate hikes between April 1, 2005 and April 1, 2006. APS cited the increased price of natural gas, and the lowering of the bonds to just one level above junk status by S&P (APS is a subsidiary of Pinnacle West) as the reason behind the hike. If they don't raise rates, they will be reduced to junk status, and the increased interest charges will force them to raise rates. Effectively: if they don't raise rates, they will have to raise rates. APS spokesman Jim McDonald claimed, in an Article in the Arizona Republic on January 5th, that, "we [APS] are hemorrhaging cash by the day."

**5.** Bush announced his Advanced Energy Initiative -- a 22-percent increase in clean-energy research -- at the Department of Energy in

his 2006 State of the Union Address. I have it itemized below ([http://www.greencarcongress.com/2006/02/state\\_of\\_the\\_un.html](http://www.greencarcongress.com/2006/02/state_of_the_un.html)) with my commentary after each item.

\$150 million—a \$59-million increase (65%) over FY06—for the Biorefinery Initiative, the purpose of which is to help develop bio-based transportation fuels from agricultural waste products, such as wood chips, stalks, or switch grass. -- A recent article in Science magazine ("Ethanol Can Contribute to Energy and Environmental Goals" Farrell et al. Science 27 January 2006: 506-508) states that celulosic ethanol from sources such as switch grass, wood chips, and stalks, offer the best "energy payback," and reduced green house gas (GHG) emissions compared with ethanol from corn and other sources.

\$30 million—an increase of \$6.7 million (29%) over FY06—to speed up battery development for hybrids and plug-in hybrids. -- Plug-in hybrids offer the most practical mid-term solution to oil consumption, and can offer gas mileage in excess of 100 mpg.

\$289 million—an increase of \$53 million (22%) over FY06—to accelerate the development of hydrogen fuel cells and hydrogen-powered cars. -- Hydrogen cars, even though they have been given the most funding out of any energy technology for a solution to the impending liquid fuels crisis in recent years, are still decades from being practical, and are still only 50% efficient in the conversion of hydrogen to energy. Where is the funding and minimum requirements for improved gas mileage on vehicles currently being made?

\$281 million for the development of clean coal technologies. The President had committed \$2 billion over 10 years to speed up research in the use of clean coal for power generation. The 2007 Budget request will nearly complete that \$2-billion promise 4 years ahead of schedule, according to the White House.

\$54 million for the FutureGen initiative—a public-private partnership to develop an emissions-free coal plant. -- An emissions-free coal plant involves trapping the GHG emissions, and burying them underground.

\$148 million for a new Solar America Initiative—an increase of \$65 million (78%) over FY06—to accelerate the development of solar photovoltaic cells. -- This number is tiny when taking in to consideration that solar energy is the only harvestable energy source plentiful enough to supply both electricity and liquid fuels substitutes

for the entire planet forever, and is very safe and produces no GHG emissions, toxic, or nuclear waste.

\$44 million for wind energy research—a \$5-million increase (13%) over FY06 levels."

Bush wants to reduce Middle East oil consumption by 75% by 2025. Currently, Mideast oil consists of less than 20% of US oil imports. However, this number is slated to increase dramatically over the next several years. Mexico is the US' second largest source for oil imports. Mexico's largest oil field is peaking right now, and is expected to decrease in capacity by 5% per year. ExxonMobile's 2005 Energy Outlook to 2030 shows a non-OPEC oil peak next decade, and assumes that OPEC, and especially Saudi Arabia (Matt Simmons), is to fill in the gap in production. So, even though the 75% decrease doesn't seem like much now, in 20 years, when we are planning on Mideast oil to fill the gap, this will be much more significant.

(graph: ExxonMobile's 2005 Energy Outlook;  
[http://www.exxonmobil.com/Corporate/Citizenship/Imports/EnergyOutlook05/index\\_full.html](http://www.exxonmobil.com/Corporate/Citizenship/Imports/EnergyOutlook05/index_full.html))

**6.** ASEA has a lot on its plate this year, and as the board takes shape, more will certainly be happening. At this point, here is what we are working on:

1. The Solar Spring Tours
2. Several lecture series' being hosted across the state
3. New sub-chapters
4. Political action in AZ and Washington are being watched and acted upon, including bills, initiatives, and elected officials
5. Fall Solar Tours
6. And more!!!

## **7.** Local Chapter News

Rio Salado Chapter (Phoenix Metro Area)

Az. Solar Energy Association/Arizona Solar Center 2006 Lecture Series

The Phoenix Metro area Arizona Solar Energy Association/Arizona Solar

Center lectures and workshops continue with the 2006 Environment and Energy series starting February 16 under the auspices and sponsorship of the Scottsdale Green Building Program.

The lecture series occurs every third Thursday of the month, running through November 2006, at the City of Scottsdale Urban Design Studio located at the Northeast corner of 75th St. and Indian School Road. The free lectures are from 7 p.m. to 9 pm, with no need for registration.

Lecture topics will range from big picture energy issues to site and environmental design to solar equipment and do-it-yourself hands on implementation.

Some lectures will provide attendees with materials and information re: actions and activities that can be implemented.

A full calendar detailing the 10 lectures in 2006 (one a month, February thru October) will be included in next month's newsletter.

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#### February Environment and Energy Lecture

Today's Energy Resources - Peak Oil - the reality and the alternative  
Speaker - Geoff Sutton - ETA Engineering, Inc.

From the Energy field, Geoff is directly involved in both the fossil fuel industry and the renewable sector, and has made it his passion in tracking the movements of all fuels from fossil based to solar.

Come join Geoff and take an educational trip in understanding the extraction of, multiple uses, the eventual peaking of the fossil fuel era, and what the solar, wind, hydro, and hydrogen alternatives hold. There are exit strategies to allow society to meet and conquer this inevitable event that will impact and effect all of our lives in the coming years. The speech will touch on not just oil and natural gas, but coal, nuclear, and other energies.

For further information regarding the Environment and Energy lecture and workshop series please check the Az. Solar Center website - [www.azsolarcenter.com](http://www.azsolarcenter.com)

or contact Dan Aiello (ASEA/AzSC) at [j2envarch@aol.com](mailto:j2envarch@aol.com) or 602-952-8192.

Also in Phoenix, coming up next month:

## **Chandler-Gilbert Community College**

**COURSE** Solar Energy

**CODE** NC5009555

**OFFERED** 3/27 or 4/7 2006

INSTRUCTOR: Jim Stack, Email: [judy.rich@cgcmail.maricopa.edu](mailto:judy.rich@cgcmail.maricopa.edu)

Registration: [http://www.cgcc.maricopa.edu/cont\\_ed](http://www.cgcc.maricopa.edu/cont_ed)

Spring 2006 schedule [here](#).

Learn all about solar energy here in Arizona. There are incentives from SRP and APS to help you save money and the environment. This course will allow you to use and understand this renewable energy source which is so abundant in Arizona. Fee \$15. Friday 6:00-8:00 p.m., March 24 or April 7. CGCC 2626 E. Pecos Rd. Chandler, Room B151.

Jim Stack lives in a solar grid tied home. He is a member of American Solar Energy Society. Mr. Stack is also a member of the Arizona Solar Energy Association (State Chapter) which sponsors and supports this educational lecture and others throughout the Valley and the State. Register online or call (480) 732.7320.

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The Arizona Science Center has a "Solar in Arizona," day on March 25th. More information next month.

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ASEA Sedona Chapter

Meeting **February 22** - (4th Wednesday of every month). 7:15 p.m.

Sedona Winds Retirement Home, 405 Jacks Canyon Rd. For more information, contact Bill Buckner, [realtorbill@earthlink.net](mailto:realtorbill@earthlink.net) or (928) 203-1018, **Sedona, AZ**

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Stay tuned for more! 2006 will be a great year for solar, and will be even better with your support!

Next month: a breakdown of all the incentives for solar technology in Arizona for 2006, + more!

Stay in touch with solar news and events in Arizona at  
<http://www.azsolarcenter.com>

Ben  
ASEA

P.S. Please give me feedback on this newsletter. I welcome your thoughts, comments, criticism, etc.