



AZSC



# AZ Solar Center Newsletter

[[www.azsolarcenter.org](http://www.azsolarcenter.org)]

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The Arizona Solar Center's mission is to present unbiased information about renewable energy in Arizona, particularly solar energy, its most abundant renewable resource. In conjunction with the mission, the Arizona Solar Center uses its website, [www.azsolarcenter.org](http://www.azsolarcenter.org), to support commerce and industry in the development of solar and other sustainable technologies.

### \*\*\* Featured Project \*\*\*

**Alpha Energy recently engineered and installed a 191kW** grid-tied, rooftop solar power system at the Arizona State Game & Fish Department to provide power to the main facility located at 5000 W. Carefree Highway, Phoenix AZ. As part of a comprehensive program at this government building, this renewable energy system helped the agency attain Platinum LEED status. Alpha Energy own and maintain the solar system and sell the solar electricity to the agency through a Power Purchase Agreement.

The 191kW solar power system utilizes (1,092) 175W photovoltaic panels connected



by (2) 82kW and (2) 13kW inverters. The custom, roof-mounted, ballasted system was designed to minimize live and dead loading during heavy rain. The innovative ballasted approach also provides a zero-roof penetration system to maximize longevity and reduce lifecycle roofing costs. A complete web-interface and weather monitoring system features auto-alerts to help ensure optimal system performance at all times. The performance data from the system can be viewed at:

<http://www.alpha.com/alphatal>

It is estimated that the system will generate more than 297,500 kilowatt hours per year, which is roughly the amount required to power 21 homes. The resulting CO2 offset of 358,282lbs is equivalent to preventing the emissions of more than 30 cars.



(This project was partially funded by APS ratepayers through the APS Renewable Energy Incentive Program)

(For more information please contact [nforman@alpha.com](mailto:nforman@alpha.com))

### We're looking for sponsors!

**Would you like** to sponsor this newsletter? If you're interested in sponsoring just one edition or a whole year's production please contact [Janet@azsolarcenter.org](mailto:Janet@azsolarcenter.org)

Each AZSC Newsletter will showcase a Featured Project. If you would like one of your projects to be considered for this article please send a one page description of your project with four photographs to [janet@cactusmooneducation.com](mailto:janet@cactusmooneducation.com)

We thank the following AZSC Sponsors:



## Around the State

**Cochise College adds more solar** at their Douglas campus. On Tuesday August 10<sup>th</sup>, Officials at the Cochise College in Douglas dedicated their new 355kW single axis tracking PV solar system.

The system was constructed by SPG Solar and will supply approximately 40% of the college's annual electricity needs. The performance of the solar system is monitored using a web based data acquisition system. To see the performance visit:



[http://webkiosk.mypvdata.net/c/cochise\\_college/index.php?pg=today&hl=today](http://webkiosk.mypvdata.net/c/cochise_college/index.php?pg=today&hl=today)

(This project was partially funded by APS ratepayers through the APS Renewable Energy Incentive Program)

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## Out of State Companies Providing Solar Services

**Last week New Jersey-based NRG** announced plans to invest millions of dollars into solar systems being developed through Phoenix-based Kennedy Partners for schools, non-profits and governments. This follows a recent decision by the ACC to allow third parties to enter into solar service agreements for those types of customers without the need for ACC regulation.

(For more information visit:

<http://phoenix.bizjournals.com/phoenix/stories/2010/09/27/story10.html>

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## Solar Production, How Does Your System Compare?

**We would like** to show typical solar PV system performance figures in this newsletter so that you can compare the performance of your system with others in the state. Simply divide your monthly solar generation in kWh by the system DC capacity in kW and compare the result with the figures below. If your number is less than 90% of ours, it MAY indicate a problem. For the months of August and September we have the following number of kWh produced for each kW of capacity installed.:

<u>Location</u>	<u>August</u>	<u>September</u>	
Phoenix:	131	131	kWh/kW
Tucson:	125	132	kWh/kW
Yuma	135	132	kWh/kW
Flagstaff	128	134	kWh/kW

Please send us your system generation numbers.

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Your suggestions are welcomed: If you have suggestions or ideas as to how we can make this newsletter more useful or interesting please let us know. Contact us at [janet@cactusmooneducation.com](mailto:janet@cactusmooneducation.com) with your ideas.

## Roger Road Project

**Tucson-based SOLON** Corporation and SunEdison recently completed a 1 MW single axis tracking PV system at the Roger Road Wastewater Reclamation Facility in Tucson.

Pima County will purchase the energy from the solar system via a "solar service agreement". It is estimated that the solar plant will



provide 9% of the energy used by the facility and Pima County will save \$1.2M over the 20 year energy purchase contract.

The project is located at 3035 W El Camino del Cerro, Tucson and is easily visible from the road.

(This project was partially funded by TEP ratepayers through the TEP Renewable Energy Credit Purchase Program)

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## From the Utilities

**Want to know what** your utility is doing with solar and renewable energy. Visit this new website that the ACC recently commissioned.

[www.arizonagoessolar.org](http://www.arizonagoessolar.org)

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## Advertisers

**Want to advertise your business** on the AZ Solar Center website? The AZ Solar Center offers free advertising to companies located in Arizona. For the full range of advertising options visit.:

[www.azsolarcenter.org/directory/vendor-links/submission-advertising-options.html](http://www.azsolarcenter.org/directory/vendor-links/submission-advertising-options.html)

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## Upcoming Events

**October 2:** ASES National solar home tours. The ASES National Solar Tour is the world's largest grassroots solar event. <http://nationalsolartour.org>

(For more information on upcoming events see the full calendar at [www.azsolarcenter.org/events-calendar.html](http://www.azsolarcenter.org/events-calendar.html))

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