



Living With the Sun: Valley Style



2013 Solar & Sustainable Buildings Tour

October 26th and 27th, 2013

Presented by:



Welcome to the “Living with the Sun—Valley Style” 2013 Solar & Sustainable Building Tour

This free, self-guided tour of 10 sites in the Phoenix metropolitan area, has a great cross-section of sustainable, green, solar and energy efficient buildings. There is something for everybody’s interest and curiosity—new resource and energy efficient construction to green remodels; passive and active solar strategies and technology—for heating and cooling and other applications; sustainable water practices for the desert—landscaping, rainwater catchment and storage, and gray water systems; and much, much more.

This Valley tour is part of a month-long series of tours around the State—Arizona’s part in the American Solar Energy Society’s National Solar Tour, an annual event that last year had over 200,000 visitors nationwide. While the national activity is only one day out of the entire year, we in Arizona have an entire month of tours, activities and open-houses—not only in October, but also in April, during the Solar Spring event.

The Living With the Sun—Valley Style tour focuses on strategies, practices, materials and technologies appropriate for our urban desert conditions and resources. Resource efficient equipment and materials; arid region appropriate design, construction, and implementation; and basic common sense—all manifest themselves in the tour experience.

Especially significant are the people who live in and use these sites. They are a tremendous resource for the solar “tour-ists”—sharing their experiences in choosing to take the critical steps to implementation—a real and direct resource to provide information and to answer questions.

TOUR TIPS

While the Valley tour is over a two-day period, and some sites are open both Saturday and Sunday, there are more buildings than can be reasonably visited.

- Select those sites that have the most interest to you—probably no more than 3 or 4 in a single day. Remember—there will be other tours/open houses throughout the year—i.e. the Solar Spring tour.
- Avoid the hurry-up-and-go-on-to-the-next-one mentality. Spend time to observe the variety of elements a particular site—many have a great cross-section of strategies, techniques materials and technologies for living sustainably in our desert condition.
- Take advantage of the opportunity to listen to, and learn from, the tour site owners—they are a font of information and are excited to share both technical information as well as personal experiences about how they went about implementing their own project.

For last minute updates to the tour schedule, please visit:

azsolarcenter.org/solartour2013

- Please show courtesy at the sites and to the owners who have been gracious in opening up their homes and themselves to share.
- If you have children please monitor them closely. Many sites have interesting and fragile objects that may attract inquisitive children.
- Most of all, relax and enjoy the opportunity to see the variety and to hear people, like yourself, who have taken the steps in moving themselves, and our state forward in solar, green building, and sustainability.

Thanks go out to:

- All of the tour sponsors who have provided input and materials, as well as in-kind services, for the production of this Tour Guide, as well as materials for the solar “tour-ists” to use in implementing their own sustainable, solar and green actions. Additional thanks to other Arizona organizations, like the ASU, media outlets and many others, for assisting in promoting the event through their various members and public communications systems.
- The various volunteers who will be assisting site owners, and especially to Arizona Solar Center Board Member Dr. Mike Pasqualetti for getting ASU students involved in this event, thereby gaining direct exposure to real world solar and sustainability for the desert.
- The people of the Arizona Solar Energy Association, the Arizona Solar Center, the City of Mesa Green Events and the City of Scottsdale Green Building program, and others, who have put in personal time and energy in the planning and the implementation necessary to make this event happen.

A special thanks to Governor Brewer, proclaiming October to be Arizona Solar and Renewable Energy month.

A very special thanks to those site owners and creators who have been gracious in agreeing to allow the public entry to their personal property and lives, and showing a willingness and enthusiasm in sharing their thoughts and actions for this event.

My personal thanks to all of you solar and sustainability tour-ists seeking to learn of, and benefit from, the tour experience in meeting your own needs, and in moving Arizona into a more positive energy and sustainable future.

DANIEL PETER AIELLO

Daniel Peter Aiello
 Living With the Sun—Valley Style
 2013 Solar & Sustainable Buildings Tour
 Coordinator



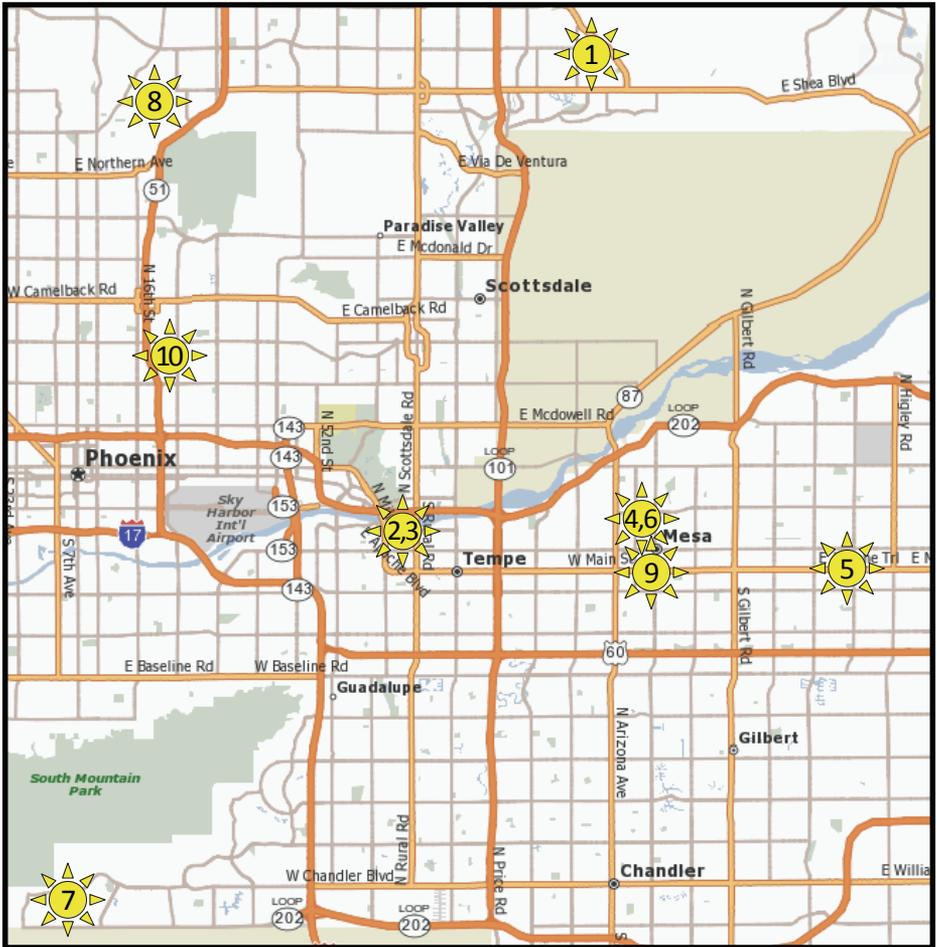
2013 Solar & Sustainable Building Tour Addresses

Most tours start: 9am, 10am, 11am, 1pm, 2pm, 3pm, and 4pm

- | | |
|--|--------------------------------|
| 1. Allsop Residence
10933 E. Sahuaro Drive, Scottsdale, 85259 | Saturday Only |
| 2. ASU Campus Solar Tour
555 S. Packard Drive, Tempe, 85281 | Sat. 10:00am-3:30pm |
| 3. ASU Global Institute of Sustainability
800 S. Cady Mall, Tempe, 85281 | Sat. 1-4:30pm
Sun. 1-4:30pm |
| 4. Barnhart Studio/Gallery
506 N. Center Street, Mesa, 85201 | Saturday Only |
| 5. Catlin Residence
120 S. Omaha Street, Mesa, 85206 | Saturday Only |
| 6. DiFrancesco/Priebe Residence
463 N. MacDonald Street, Mesa 85201 | Saturday Only |
| 7. Dunton Residence
16026 S. 14th Drive, Phoenix, 85045 | Saturday and Sunday |
| 8. Frost Residence
9820 N. Turquoise Avenue, Phoenix, 85020 | Saturday Only |
| 9. Mesa Urban Garden
212 E. 1st Avenue, Mesa, 85210 | Sat. 9am-1pm |
| 10. Vali Homes Prototype
2302 E. Curnow Drive, Phoenix, 85016 | Sunday Only |

For last minute updates to the tour schedule, please visit:
azsolarcenter.org/solartour2013

2013 Solar & Sustainable Building Tour Locator Map



Map copyright © 2009 MapQuest, Inc.

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| 4. Barnhart Studio/Gallery | 506 N. Center Street, Mesa, 85201 |
| 5. Catlin Residence | 120 S. Omaha Street, Mesa, 85206 |
| 6. DiFrancesco/Priebe Residence | 463 N. MacDonald Street, Mesa 85201 |
| 7. Dunton Residence | 16026 S. 14th Drive, Phoenix, 85045 |
| 8. Frost Residence | 9820 N. Turquoise Avenue, Phoenix, 85020 |
| 9. Mesa Urban Garden | 212 E. 1st Avenue, Mesa, 85210 |
| 10. Vali Homes Prototype | 2302 E. Curnow Drive, Phoenix, 85016 |

Janice K. Brewer
Governor

Office of the Governor

* ARIZONA SOLAR AND RENEWABLE ENERGY MONTH *

WHEREAS, solar and renewable energy technologies and sustainability practices are of great value to Arizona's economic development, energy security and reliability, and environmental benefit for the citizenry; and

WHEREAS, solar and renewable energy technologies and sustainability practices have the capability to positively impact current state and local concerns regarding rising energy costs, waning typical energy resources, increasing energy dependence and energy resource insecurities, and reducing our energy footprint; and

WHEREAS, Arizona has the abundance of natural resources and expertise to continue moving the State to national and global leadership in education, research, design, construction, manufacturing, and application in the use of solar and renewable energy technologies and sustainability practices; and

WHEREAS, solar and renewable energy technologies and sustainability practices offer Arizonans a beneficial, affordable, stable, safe, secure, and healthy lifestyle; and

WHEREAS, the activities of Arizona state and local government, Arizona Solar, Renewable Energy, and Sustainability non-profit and industry organizations, Arizona utilities, and Arizona educational institutions promote solar and renewable energy technologies and sustainability practices in Arizona; and

WHEREAS, the Arizona component of the American Solar Energy Society National Tour of Solar and Sustainable Buildings will offer the public opportunities to see local buildings using solar, green, and sustainable building practices and technologies, and meet other Arizonans that will be sharing their experiences and knowledge to live better at less economic cost to people and the environment; and

WHEREAS, the Arizona component of the National Tour will include local educational energy events, lectures, and programs; and

WHEREAS, the activity supporting greater understanding and use of Arizona's naturally abundant renewable energy resources, and implementation of solar and sustainable design and construction, is important to Arizona's energy mix, and to the State, its future, and the legacy bequeathed to its children.

NOW, THEREFORE, I, Janice K. Brewer, Governor of the State of Arizona, do hereby October 2013 as

* ARIZONA SOLAR AND RENEWABLE ENERGY MONTH *

IN WITNESS WHEREOF, I have herunto set my hand and caused to be affixed the Great Seal of the State of Arizona

Janice K. Brewer
GOVERNOR

DONE at the Capitol in Phoenix on this twenty-third day of September in the year Two Thousand and Thirteen, and of the Independence of the United States of America the Two Hundred and Thirty-eighth.

ATTEST:

Karen Blumett

Secretary of State





Allsop Residence

10933 East Sahuaro Drive, Scottsdale, 85259

An architect's focus on transforming an existing Valley home into an appropriate desert residence, this rehabilitation shows what can be done with an existing energy inefficient and sometimes inappropriate desert building.

A repurposed, revised existing building in a traditional neighborhood with all the bells and whistles for solar, green building and sustainability.

A transformation from the old housing stock to the appropriate desert residence.



The owners applied basic "Architecture, Engineering and Product Design 101" principles to the construction detailing and insulation systems and the selection of components. The total cost was about \$95/sf. They controlled everything about the design and all construction details so as to make them simple, easy to build and install, affordable and elegant.

The underside of the roof and gable ends were spray-foamed with 6" of 1/2 pound open cell insulation foam (soy-based). They took off the asphalt shingles and replaced them with a standing seam highly-reflective metal roof.

Energy usage was cut by 40% just by applying simple building science techniques in insulation in the walls and roof plus the use of radiant barriers where hot-rolled steel plates were the finish to the gable ends. After nearly a year, a 6.7kW Solar array (Sun Power) was installed, and since then (two years) there have not been any electricity bills. The rooftop system produces a little more electricity to the grid than is used, the APS bills show an average credit at wholesale rates of \$40 a month since the PV system was installed in October of 2011.

DRIVING DIRECTIONS

Heading east on Shea turn left at 110th Street. Take the second left onto East Sahuaro Drive. Our house sits on the corner of 109th Place and East Sahuaro Drive about 30 yards down from the 110th street turn in. It has a green standing seam metal roof.

Home is Open Saturday Only



ASU Campus Solar Tour

555 S. Packard Drive, Tempe, 85281 or

Parking Lot 59 East on east side of S. Rural at 6th Street

Tour #1 of the Sun Devil Athletics District (starting at Packard Drive Parking Structure #7) will let you see the following, including a few sites that you can get “Up Close and Personal” (UCAP) with:

- Packard Drive Parking Structure #7 (fixed) – UCAP, you can park underneath it.
- Lot 58/59 covered parking (fixed) – UCAP, you can park underneath it.
- Wells Fargo Arena (rooftop) also, interior lighting is all LED.
- Carson Student Athletic Center (rooftop).
- Stadium Parking Structure #5 (single-axis tracker) – UCAP, you can park underneath it.
- Lot 59 PowerParasol (Packard/Rio Salado) – UCAP, you can park underneath it; it’s 25-ft tall so hard to see “up close”.
- Adjacent site = Fulton Center Parking Structure (single-axis tracker) – UCAP, you can park underneath it.



Tour #2 of the Sun Devil Athletics District (starting at Parking Lot 59 East) will let you see the following, including a few you can get “Up Close and Personal” with:

- Starting point – Parking Lot 59 East on east side of S. Rural at 6th Street (adjacent to Verde Dickey Dome – white bubble).
- Verde Dickey Dome (fixed ground mount) – UCAP, stand at the fence and look in.
- Sun Devil Sports Performance covered parking (fixed) – UCAP, you can park underneath it.
- Weatherup Center (rooftop).
- Farrington Softball Stadium (fixed covered seating) – UCAP, you can sit underneath it, but it is hard to see “up close.”

DRIVING DIRECTIONS

From AZ-Loop 202 take exit 7 south to Rural Road and ASU. In half mile, turn at 2nd light, E. 6th Street. For Tour 1, turn west (right). Destination is on your right. For Tour 2, turn east (left); destination is straight ahead.

Site is Open Saturday 10:00am-3:30pm Only

Tours are self-guided, you may start a tour at any time



ASU Global Institute of Sustainability

800 S. Cady Mall, Tempe, 85281

ASU's premier program and location of sustainability in education, research and implementation. See the building; the techniques; and the continuing evolution of sustainability in Arizona, nationally, and globally. The Global Institute of Sustainability is the hub of Arizona State University's sustainability initiatives.



The Institute advances research, education, and business practices for an urbanizing world. Its School of Sustainability, the first comprehensive program of its kind in the U.S., offers transdisciplinary degree programs focused on finding practical solutions to environmental, economic, and social challenges.

What used to be ASU's College of Nursing and Healthcare Innovation is now Wrigley Hall, the Institute and School's headquarters. The recycled building was renovated in 2007 to reduce energy consumption and waste and increase efficiency. The building is now a healthier work and studying environment thanks to low-VOC carpeting and paints, floor-to-ceiling windows, and natural lighting. Wrigley Hall boasts wind turbines and solar panels as well as dual-flush toilets, open breezeways, and drought-tolerant native landscaping.

For more sustainable features, visit sustainability.asu.edu/about/our-place.php.

DRIVING DIRECTIONS

Wrigley Hall is located at ASU's Tempe campus on the corner of College Ave. and University Dr. across from the ASU Fulton Center. Parking is available at the ASU Fulton Center parking garage on College Ave. From there, walk south on College Ave. and cross University Dr. Wrigley Hall is the brick building with white wind turbines on the roof.

Site is Open Saturday 1:00pm-4:30pm and
Sunday 1:00pm-4:30pm Only



Barnhart Studio/Gallery

506 N Center Street, Mesa, 85201

See this unique and creative studio embodying recycled and repurposed materials. Completed in 2008, the studio is constructed from glass and steel, and a vast amount of additional material in this project are used or recycled.

The Studio is 3,700+ sf with 28 foot ceilings. Beautiful natural light pours through the 7 skylights and north windows.

The Studio features sustainability and green practices in design and execution—including a repurposed VW bus mounted 12 feet off the floor that has been used as a sleeping loft and is accessible by a glass catwalk. Also included is a rock climbing wall, sculpture garden, and a fireman's pole.



A 1,500 lb arched steel and concrete-ball entry gate gently pivots across the driveway to the front, and a lushly planted xeriscaped sculpture garden graces the rear of the property. Living With the Sun — creatively, whimsically, and appropriately.

DRIVING DIRECTIONS

From Main Street and Center Street in Mesa, north on Center for ½ mile to University. Studio is on West side of street approximately 500 feet north of University.

Site is Open Saturday Only



Catlin Residence

120 S. Omaha Street, Mesa, 85206

This residence of a solar specialist for the Native American community, incorporates energy equipment and strategies providing a level of energy independence in the form of power generation and water heating.

This unobtrusive but highly effective remodel includes a variety of PV and SHW equipment and strategies, along with other solar and

sustainable improvements including improved insulation, water efficient landscaping, energy efficient interiors and much more.



There are three different photovoltaic systems with three different inverters located here (roof- and pole-mounted panels with one system having battery backup) for a total of 12 kW of installed capacity.

The home also features:

- A solar water heater
- Solar clothes dryer (clothes line)
- Solar-powered attic fan
- Water feature with fish, raised gardens and fruit and pecan trees.

Information about energy production, system costs, and return on investment will be provided.

DRIVING DIRECTIONS

From Main Street and Val Vista, drive East on Main Street. Turn right on S. Norfolk. Make a left turn on E. Alder. At the end of that street turn right onto Omaha. The home is the next to last house on the right side of Omaha.

Home is Open Saturday Only



DiFrancesco-Priebe Residence

463 N. MacDonald Street, Mesa, 85201

A solar and green residence designed and built from the ground-up in the middle of Mesa's core historic district, this eight-year old residence incorporates numerous green building/sustainable strategies while keeping with the neighborhood.

The home incorporates appropriate design for desert conditions—the east-west axis with large southfacing windows coupled with stained concrete floors and countertops for thermal mass provide much of the winter heating requirement.

Low water consumption is achieved with gray water lines to the landscape and many other water-saving strategies are incorporated.



Exterior walls are constructed of OmniBlock with an additional inch of insulation applied to the exterior of the wall and interior insulation is made from recycled denim blue jeans! Lots of natural daylight provided by windows and solar tube, high-efficiency air cooling, tankless water heater and a PV solar power system make this a super-livable home.

DRIVING DIRECTIONS

From University Dr. and Country Club go east on University approximately 3/8 of a mile to MacDonald. Head north on MacDonald—home is the 5th house on the right.

Home is Open Saturday Only



Dunton Residence

16026 S. 14th Drive, Phoenix, 85045

The home of a solar technical specialist, inventor, educator and sustainability advocate, this existing building adaptation incorporates solar power generation, green building materials and equipment/fixtures, and sustainable landscaping.

Half of the lawn in the back has been converted to a vegetable garden, the front lawn is now a desertscape, window shades and added film on all south and west windows.



There are four PV systems: Two grid-tied PV systems (3.8 kW on the house and a 7kW solar structure in back yard), an off-grid 1.3kW PV pool pump and an off-grid PV powered greenhouse (pumps and lights).

The system monitoring station will be running, with current and past energy harvest information visible.

The owner is commercial and residential PV system design engineer, and will be available to answer questions people may have about solar energy. There will be a number of solar modules and other system components on display.

DRIVING DIRECTIONS

Take Pecos off of the I-10 heading west. Exit north on S. 17th. Ave. and head north until Chandler Blvd. Turn right (East) on Chandler Blvd. take first right on S. 14th Ave. (Club West Golf Course), then take the 2nd right onto Wildwood Dr.; then head north (right) up to the end of S. 14th Dr.

Home is Open Saturday and Sunday



Frost Residence

9820 N. Turquoise Avenue, Phoenix, 85020

The Frost home is nestled in the western foothills of the Phoenix mountain preserve. Built in 1974, this slumpblock home was first designed in the 1960's by renowned valley architect, Ralph Haver.

Known throughout the valley for their signature style, Haver homes are simple, classic and mid-century modern. The Frost's purchased the home in 2006 with the intention of doing an eco-renovation; converting the home



to be free of toxins, energy efficient and low water use. While still in the midst of an 8 year renovation process, the Frost home has been fully transformed from its original form. No room has been left untouched. Every surface is a showcase of eco-friendly, non-toxic materials, many reused from their former business, a.k.a. Green.

In 2012, the failure of the heat pump prompted an in depth research into converting the home to Net Zero energy. All gas was removed, the highest efficiency HP and water heater were installed and a 9.1kW SunPower PV system was added to the home. After 12 months of operation, the home is operating at Net Zero energy. It is certainly one of the "greenest" homes in the Valley; combining net zero energy, water efficiency, drought tolerant landscaping, natural and non-toxic materials and finishes, LED lighting, high performance, thermally broken glazing and much more.

DRIVING DIRECTIONS

Easiest route is from Mountain View and Cave Creek road. This intersection is North of Northern, South of Cactus, East of 7th Street. From the Mountain View/Cave Creek intersection (street light) head east on Mountain View towards the Phoenix Mountain Preserve. At the end of Mountain View, the road will turn left and become 17th Street. Immediately after this turn, you will turn right onto Mountain View again. MV will again curve gradually to the North and briefly change to N. Turquoise Avenue. The home is on the left hand side of the street, set below the street. Look for the canvas carport and the large PV array on the roof. The addresses get confusing because they switch from 9800 numbers and 1700 numbers. Don't panic, just look for the home on the left.

Home is Open Saturday Only



Mesa Urban Garden

212 E. 1st Avenue, Mesa, 85210

Newly opened in January of 2013 in the heart of downtown is Mesa Urban Garden, a non-profit community garden whose board members specialize in scalable and sustainable project management.

The garden offers over 100 garden beds to lease out to individuals, groups, or sponsors in the community. Communal beds are tended to by volunteers where the yields are made available to food banks and shelters.

ASU design students have provided drawings and plans for a handicap-accessible bed and a Ramada that includes solar PV panels and rainwater harvesting. The accessible bed construction is in progress and completion of the Ramada is pending additional funding.

Besides gardening, various community activities have already taken place such gardening classes, art and music events, entertainment and more!

For more information, visit mesaurbangarden.com.

DRIVING DIRECTIONS

From Main Street and Center Street in downtown Mesa, drive East on Main. Turn right on S. Hibbert. Make a left turn on East 1st Ave. The Mesa Urban Garden is 200 feet east of the intersection of Hibbert and 1st Ave.



Site is Open Saturday 9:00am-1:00pm Only



Vali Homes Prototype

2302 E. Curnow Dr., Phoenix, 85016

This new prototype desert residence is influenced by early contemporary designs of California (Eichler) and Arizona (Beadle). The architect-designed residence takes those design icons to a new level in the desert.

This new, energy efficient and sustainable residence embodies appropriate desert design, materials and up-to-date technologies and practices in the Valley setting. Passive/active solar, Green Building and sustainability practices, and simplicity of desert form make for a remarkable and elegant living experience.



The concept of the house is a reflection of the forward thinking architecture of the simple, modernist homes of the 1960's with an emphasis on everything we have learned since about energy efficiency, comfort and durable construction.

The goal is to have a house that will last and stay relevant for the next 100 years with minimal maintenance and worry. It is very simple but very well executed. The house is designed to be net zero energy and very low water use.

The idea was to take as much load off the house as possible through passive solar design, air sealing and proper insulation to reduce the demand of the systems and create a comfortable and healthy environment year round.

The builders and architect will be on hand to answer questions.

DRIVING DIRECTIONS

Crossroads from the North are Osborn and 24th St., Thomas and 24th from the South. From 24th turn West on Earl Dr., North (right) on 23rd St., house is on the right and hard to miss (its a green and rusty steel box).

Home is Open Sunday Only

About the Arizona Solar Energy Association

The Arizona Solar Energy Association (ASEA) is the Arizona affiliate of the American Solar Energy Society (ases.org). Founded in the 1970's as a technical association of early solar technology professionals, the group has evolved into a diverse assemblage of individuals from all walks of life who share a common interest in sustainable human activity and the use of solar energy. ASEA reaches out to both professionals and non-professionals alike.

As a founding and sustaining organizational member of the Arizona Solar Center (AzSolarCenter.org), ASEA provides a platform for its members to educate and advocate for a sustainable future for Arizona. Depending upon local preferences, local chapters may have meetings, workshops, a newsletter and other activities.

Members are active in industry associations, workshops with the Arizona Corporation Commission (ACC), the State Legislature, Maricopa Association of Governments (MAG), the Governor's Solar Energy Advisory Council (SEAC), and other groups that welcome our input.

In addition, ASEA conducts lectures on sustainability and solar technology at the invitation of groups from all over the State. A long-standing lecture series in Scottsdale continues to draw large attendance. Our speakers' bureau is available to address your organization on many sustainability and solar-related topics.

Your donation supports ASEA efforts. ASEA is entirely a volunteer, non-profit organization and welcomes new supporters. Whether you simply want to support our efforts with your donation, or want to also become actively involved, we welcome your participation. Please join us in our efforts to achieve a sustainable future for Arizona. Visit the ASEA website or Facebook page for more information.



Arizona Solar Energy Association
P.O. Box 5583
Scottsdale, Arizona 85261
arizonasolarenergy.org



About the Arizona Solar Center

The Arizona Solar Center, Inc. (AzSC) is a not-for-profit collaborative of professionals dedicated to the development, implementation and integration of solar, renewable energy and sustainability in Arizona. The AzSC Board is comprised of representatives from various elements of the solar, RE and sustainability arena including government (the Arizona Department of Commerce Energy Office); the solar industry (Arizona Solar Energy Industries Association—AriSEIA); non-profits (Arizona Solar Energy Association—ASEA); Arizona utilities (APS, SRP and TEP); the educational community (ASU, UofA, NAU); the architecture, design and construction industry; the renewable energy and sustainability businesses sector; and solar and sustainability professionals.

The AzSC hosts an informational and interactive website, which is the go-to central location for unbiased and trusted information for Arizonans; provides, and partners in, public and professional education programs, lectures, and workshops, and is involved in a variety of state-wide events such as the bi-annual Solar and Sustainability tours and open houses.

Informative and educational outreach is performed at a number of levels: information and education for the general public; specific audience programs; and the new professional/business forum of the Arizona Solar Center Meet-Up Group (www.meetup.com/az-solar-center), which produces technical tours, and talks/information exchange from industry, manufacturers, business people, researchers and professionals in the various RE, solar, and sustainability industry arenas. This professional/business focused AzSC element currently has participation by the AzSC, AriSEIA, ASEA, the City of Scottsdale Green Building Program, and the Phoenix Alternative Energy Meet-up Group.

The AzSC is also a resource, directly and with others, in the development and production of informational and education materials and teaching/lecture tools; participates in local, regional and national renewable energy and sustainability forums; and is evolving a physical center to further its solar and sustainability education and development mission, as well as support the exploration and development of renewable energy, resource-efficient applications and appropriate materials, and equipment.



Arizona Solar Center

Your Guide to Solar and Other Renewable Energy Sources in Arizona

www.azsolarcenter.org

About the Scottsdale Green Building Program

The Scottsdale Green Building Program encourages a whole-systems approach through design and building techniques to minimize environmental impact and reduce the energy consumption of buildings while contributing to the health of its occupants.

OVERVIEW

The Scottsdale Green Building Program rates building projects in the following six environmental impact areas: Site Use, Energy, Indoor Air Quality, Building Materials, Solid Waste, and Water.

A green building point rating system is used to qualify projects into the program. Design flexibility is achieved by offering over 135 green building options, while maintaining a whole building systems approach. A builder, designer, or developer may enter any given number of projects into the program. The Green Building Program is voluntary and open to builders in the Scottsdale area.

INCENTIVES

As a consumer-driven program, the city of Scottsdale is engaged in an ongoing effort to bring the program to the attention of the general public and building industry:

- Development process assistance (expedited plans)
- Construction job site signs
- Directory of participating builders and designers
- Certification (green building inspections)
- Lecture series, workshops, and special events

PARTICIPATION

Every builder and designer who enters a project into the Green Building Program is expected to attend at least two green building related lectures, workshops, or seminars. These educational programs provide information on energy/resource efficient and environmentally responsible buildings, and feature experts in all areas of environmental design and construction. Lectures, workshops, and special events are held throughout the year.



scottsdaleaz.gov/greenbuilding

About City of Mesa Living Green Events

Building a Sustainable Community

Every single thing we do every day has an impact on the planet, but even small and simple actions can make a big difference. The aim of Mesa's "Living Green" events is to inform the public about why and how to increase the sustainability of our community, and is part of larger effort by the City to develop and implement innovative and effective programs to address environmental issues and concerns.

SOLAR PROGRAM

Mesa launched a one-year solar pilot program for City of Mesa electric customers. Incentives for residential program participants are \$.50 per watt, limited to \$2,500 for up to a five kW system. Commercial participants' incentives will be limited to \$15,000 or \$.50 per watt up to 30 kW. Visit our website below.

GREEN MESA – SUSTAINABILITY WEBSITE

We are always updating our website with sustainability news, but we also keep year-round pages dedicated to Earth Day, Arbor Day and Solar Day. Our Solar Day page offers great links to help you be a smarter solar consumer. Our website has more information.

\$USTAINABILITY \$AVINGS TIP

Mesa publishes a monthly Sustainability Savings Tip on a variety of topics such as composting, local food movements, energy efficiency, solar, rainwater harvesting, Xeriscape landscaping, green building and more. Find the current monthly tip and past archived tips at our website.

LIVING GREEN EVENTS EMAIL ALERTS

Each month, we'll send you an email with all of the latest news as well as exciting green events and programs happening in Mesa and surrounding communities. Visit mesaaz.gov/Home/EmailLists.aspx to sign up.





OF SOMETHING BIGGER THAN ALL OF US.

Together, we can keep Arizona majestic. SRP is proud to help customers take action with programs focused on the environment. You can help reforest land destroyed by fire. Give the gift of solar to local nonprofits. Or purchase energy for your home from a local solar plant. After all, taking care of Arizona takes all of us. That's why SRP is dedicated to ongoing environmental measures, including using a diverse mix of wind, solar, and other sustainable resources. To learn what SRP is doing and how you can be a part of it, visit srpnet.com/environment.



Delivering more than power.™



ASU is home to the largest solar portfolio of any university in the country.

Arizona State University has a comprehensive solar program that extends to all four campus locations and the ASU Research Park.

ASU Solarization program milestones as of Sept. 30, 2013:

81 Total Solar Systems

**69-Tempe campus | 3-West campus | 2-Downtown campus
4-Polytechnic campus | 3-ASU Research Park**

- **Total Solar Generation Capacity:** 22.4 MWdc equivalent (PV: 20.1 MW; Solar thermal: 13,908 MMBTUs = 2.3MW equivalent)
- **Total PV Panels Installed:** 74,975
- **Total CPV Modules Installed:** 8,652
- **Total Solar Collectors Installed:** 9,280
- **Total Shaded Parking Spaces:** 5,036
- **Total Solar Generation Capacity under construction:** 2.4 MWdc
- **Total Solar Systems in Construction:** 8 on the Tempe campus

The ASU Solarization program and the ASU Solar Team are located in Facilities Development & Management, which is responsible for the planning, design, installation and operation of ASU's solar production systems.

ASU solar-system installations on the Tempe, West and Downtown Phoenix campuses are facilitated, in part, by Arizona Public Service's (APS) Renewable Energy Incentive Program.

Solar-system installations on the Polytechnic campus and ASU Research Park are facilitated, in part, by Salt River Project's (SRP) EarthWise Commercial Incentive Program.

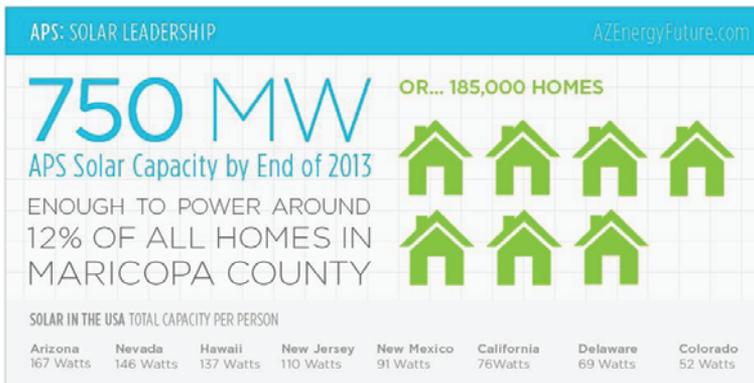
Solar Leadership

We can make Arizona the solar capital of America.

Generating solar energy may sound like something new, but for nearly 60 years, since helping bring the first ever world solar conference to Phoenix, APS has been finding ways to harness the power of the sun.

Now, with more solar per capita and more energy from large solar plants than any other state, Arizona is poised to become the solar capital of the country. We see a future in which solar power plays a big part in meeting Arizona's energy needs and more APS customers choose to install solar rooftop panels on their homes and businesses.

APS is spending \$1 billion on solar projects statewide. Solar projects span across Arizona, from the Grand Canyon to Chase Field to Flagstaff and to Yuma. These projects, together with rooftop solar, will be powering more than 185,000 homes by the end of 2013.



The future of energy is bright!

For more information, click over to www.azenergyfuture.com



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