Polk County, Florida

Photo: Lake Mirror, Polk County, FL

CASE STUDY

SOLAR OUTREACH PARTNERSHIP

Polk County, Florida

Polk County is 2,048 square miles of land and water located in the center of the Florida peninsula. Lying on the Interstate-4 corridor, 25 miles east of Tampa and 35 miles southwest of Orlando, the county is equidistant from Florida's east and west coasts as well as halfway between the Georgia-Florida border and the southern tip of the peninsula. Polk has a total of population size of 609,492, but as it is the geographic center of Florida, it is estimated that more than 7.5 million people reside within a 100-mile radius of the county, making it one of the largest concentrations of population in the southeast. Its central cities, Lakeland and Winter Haven, form the heart of the developing area as a Standard Metropolitan Area.

Most of the county's land is undeveloped, which accounts for the rural setting of many of its municipalities. Phosphate production, citrus growing, and cattle farming are among the mainstays of the county's economy.

The county's executive and legislative powers are vested in a five-member Board of County Commissioners. Jim Freeman is county manager. The county has seventeen municipalities, each of which is governed separately, with different plans, priorities, and resources. And each municipality arranges for power from different utilities on an individual basis. Some use Duke Power, some Lakeland, some Orlando Power, etc.

Such variation presents challenges to the establishment of a uniform approach to solar deployments across the county. What accounts for the success of solar development within Polk County? The answer is multilayered, to say the least. Among the many initiatives one can point to are the statewide program PV on Schools, which began in 2003 and was later renamed SunSmart; the statewide E-Shelters (emergency shelters) program, which began in 2006 and was later expanded through American Recovery and Reinvestment Act (ARRA) funds; and a proactive utility in Lakeland, which brought to light the Florida Solar Access law, an effort that led to a streamlined process in building codes and a large solar deployment in Lakeland.

PV on Schools

In 2003, the Florida Department of Environmental Protection/Florida Energy Office allocated $600,000 for a program called PV on Schools, an initiative that encouraged the installation of grid-connected PV systems on schools through partnerships with local school districts and communities, the state's electric utilities, corporate sponsors, and the solar industry. The project, later

Map of the seventeen municipalities in Polk, County, Florida[1]

Solar array with battery backup at Haines City High School, Polk County, Florida

renamed SunSmart Schools, initially provided rebates of $5 per watt, based on the system's nameplate rating, and up to $25,000 for systems without batteries. An additional rebate of $1 per watt was offered for systems that included a battery backup component to provide electricity to a school designated as a disaster relief shelter.

The program also had several educational objectives, including raising awareness and understanding of solar and other renewable energy technologies among students, teachers, and the general public, as well as expanding the classroom learning experience through inquiry lessons that used the PV system as a teaching and learning tool. Through these lessons, students could explore renewable energy technologies, and teachers could use data from the array to improve science and mathematics instruction. Key components of the program were the installation of PV systems on schools (typically 10 kW for E-Shelters schools), training for teachers, and hands-on materials (provided by utility partners). In addition, each participating school was required to allow two teachers to attend a one-day professional development workshop on solar technology, coordinated by the Florida Solar Energy Center (FSEC). And a one-day workshop was also held for facilities personnel to develop a fundamental understanding of the PV system components and their functions. This ensured that each system would be properly monitored by a knowledgeable person.

PV for Schools was renamed SunSmart Schools in 2005 and received $300,000 in funding to install 1–2 kW demonstration systems and 10 kW emergency shelter PV systems on schools throughout Florida. Schools were selected to participate on the basis of a number of factors, including the school's educational plan, the number of students and teachers affected and their designation as an emergency shelter. Rebates for the schools following program requirements are $4 per watt for the 1–2 kW grid-connected systems without battery storage and $5 per watt for the 10 kW grid-connected systems with battery storage installed on state-designated emergency shelters.

E-Shelters Program

In 2010, the FSEC received ARRA grants to expand the E-Shelters and the SunSmart Schools program. As part of the program, more than ninety schools were selected to serve as emergency shelters; selections were based on demographics, emergency shelter needs, partnerships, and existing energy education and outreach plans. E-Shelter schools in Polk County include Haines City Senior High and Dr. NE Roberts Elementary, both funded through ARRA funds. Two other E-Shelter schools, Alta Vista Elementary and Horizons Elementary, were funded through the utility Progress Energy (Duke Energy). Davenport School of the Arts also received funding from the utility. System installers and component manufacturers were required to be licensed electrical or solar contractors and to comply with the Buy American Act (41 U.S.C. 10a-10c).

The E-Shelters program provides 10 kW PV systems to public schools designated by the state as Enhanced Hurricane Protection Area shelters. The PV systems provide enough power for critical energy needs such as lighting, communications, and essential medical equipment, and they feature a battery backup that provides power to critical loads in the E-Shelter in the event of an electrical power outage.

Solar panel testing at the Florida Solar Center

Solar array with battery backup at Haines City High School, Polk County, Florida

E-Shelters Curriculum

The program includes operation and maintenance workshops for facility managers, solar-energy education initiatives for students, and workshop training for teachers. The education curriculum meets Florida's Sunshine State Standards and is rich in STEM (science, technology, engineering, and math) content for students to explore

- how photovoltaics work
- what impact the system has on their schools
- other alternative energy sources
- how to prepare for disasters
- relationships between energy and the environment, history, geography, economics, and the arts.

The curriculum encourages best teaching practices through project-based learning that enables students to solve problems using critical thinking and data analysis. The curriculum is available online, and each school receives a kit of instruments that provide students with hands-on opportunities for learning, turning ordinary classrooms into mini-PV laboratories. More than 50,000 students have been introduced to PV and renewable energy technologies through the SunSmart E-Shelters program.

Colleen Kettles from the FSEC said, "The curriculum that we've developed has been run through our department of education and it meets our Sunshine State Standards. The state's department of education has blessed our curriculum, but the way that it's implemented is at the county level so we do professional development workshops for teachers and then rely on the county to implement a statewide uniform curriculum." Susan Schleith, also from the FSEC, talked about the excitement over—and possibilities with—the installations: "The thing that is so great about solar is that it is a positive message for the students. They are hungry for it. And that is the thing that makes this grow. It's a solution to a big problem."

Steve Scheloske, assistant principal at Haines City High School, spoke of his school's array:

> We have three teachers here on campus that have been through the training at the Florida Solar Energy Center (FSEC) and will be able to incorporate the data from the system into their teaching plans and use the curriculum developed by the FSEC. It gives people a hands-on experience that they cannot take for granted; it is not theoretical, it is tangible. Having the array is a source of pride for the school. . . . We're able to learn from it; the kids see it every day. And what is also great is that the elementary school down the road has an installation as well, so the students will learn about it there from an early age and then transition to this high school, where they will learn more advanced lessons. It becomes something that is normal in their lives and helps create a new generation of people that have a different vision for energy.

Brodie Ogzwalla, director of the Environmental Science Academy at Haines High School, also spoke of the program:

> The 10 kW array is like a shining beacon: even if you're not using the real-time data online, you can still go out and take measurements and get the stats off the back of the installation. You can teach the kids the different formula for size versus energy, consumption, absorption. . . . The formula for converting solar into usable energy is right on the back of the array. You can also go into what the actual solar panels are made of themselves. There's lots of things you can do to show the kids it's something that's viable and easy. Just based on the specs you could say, "Okay, a hurricane hit and we need to use the building as a shelter. Let's do an algebra crossover and see how long we can run the ninth-grade building (the E-Shelter) based on the energy this is pulling in or that has been stored in the batteries. You can talk about the tilt, the angle of the panels. . . . It all figures in really well with environmental science. So, we're working on different things like that. There's a lot of excitement about it.

Mark Lester, energy manager for Polk County Schools, reported that "the curriculum and the battery backup is what sold us as cost managers, as the cost savings were incidental (about $1,500 per year). The shelter is a big deal, however. The idea of people having lights at night in these shelters is great. The battery backup is about 30 kW. You want to shoot for having enough to go for three days, using 10 kW per night."

Challenges within the E-Shelter Schools

While the solar arrays are a welcome addition to the schools, the initiative also presented challenges. Florida public school security measures required contractors to

receive security clearance for each worker who set foot on school grounds. As Colleen Kettles noted,

> A big challenge here in Florida was getting people on site to work there. We have what's called the Jessica Lunsford Act, which requires that anybody coming on school grounds must be badged, and they have to go through FBI-level fingerprinting and a background check. So every one of the contractors, all their workers, had their fingerprints taken, background checks, photo ID's on them at all times, [and] every county has their own process. . . . There's no reciprocity. You can't use your badge in Brevard County and go to Polk County. The school districts have varying levels of requirements, and Polk County is a very strict county; it is one of the strictest that we've dealt with.

And while the arrays are performing beautifully in terms of delivering power to the buildings, software compatibility issues created problems in accessing some data from the arrays. Teachers and students can now log on to the SunSmart E-Shelter website where each solar school is represented geographically and get daily performance stats from the arrays.

Susan Schleith discussed yet another challenge: educating the management for school facilities:

> Looking from the SunSmart Schools aspect, going back, the lessons that we have learned going through this program are largely centered on educating the facilities people at the school district. Once you have them on board with the program, they are wonderful proponents of it, but you have to get buy-in and understanding. For the most part, I think part of the success of the program is in educating not just the students and teachers, but [also] the facilities people and the code officials. The school districts in Florida have their own code officials, and we had to engage in an educational process to show them what solar was all about. If we could go back and do it over, I would've taken a whole year just to do the education piece up front . . . [to] just work with the school district facilities people at the district level and the school level and help them to understand what was going to be happening. Before you put anything in the ground or on the roof, you need to do a lot of education.

Lakeland Electric

With a population of 94,500, Lakeland is the largest city in Polk County. Its municipal utility, Lakeland Electric, has been a long-standing supporter of solar energy. Highlights of its proactive solar outlook include the installation of PV systems on portable classrooms as part of a joint effort with Utility PhotoVoltaic Group, Florida Solar Energy Research and Education Foundation, and FSEC; solar-heated domestic hot water on a "pay-for-energy" basis; and the rewriting of land use development regulations in the process of developing a solar farm. By performing multiple installations of the same configuration, Lakeland Electric has been able to reduce costs and install school PV systems for under $1 per watt (installation labor cost only).

Lakeland Electric supplies power to about 120,000 customers. For residential customers who install solar PV systems up to 10 kW in capacity and to commercial customers who install PV systems up to 500 kW in capacity, Lakeland Electric offers a net metering program by which they can offset the electricity they would have purchased from the utility: customers are charged for the metered kilowatt hours received from Lakeland Electric and credited for the metered kilowatt hours sent to Lakeland Electric during each month. Currently about 97 solar PV units—46 business/residential customers and 51 billboards owned by Lamar Advertising—take advantage of the net metering program.

Another solar option for Lakeland customers is the Solar Hot Water Program, which is unique in the nation. This program installs solar water heaters on participating customers' homes and bills customers $34.95 per month regardless of use; the monthly charge is a bulk energy purchase. Each solar heater is owned and maintained by the vendor, and each is metered and equipped with a heating element timer as a demand management feature. Lakeland provides program policy management, meter reading, and billing and collection services. Residents must live in the Lakeland Electric service territory, and all candidate homes are subject to a site inspection to determine suitability.

Lakeland Electric's proactive approach is most obviously demonstrated in the development of the 5.5 MW solar farm located at the Lakeland Linder Regional Airport. The completed first phase of the solar farm, built on forty acres, includes 9,504 solar panels that produce more than 9 million kWh of solar electricity per year.

Lakeland electric solar farm at the Linder Regional Airport

The solar farm was made possible through a strategic solar power service agreement between SunEdison and Lakeland Electric. In the agreement, SunEdison will finance and deploy the solar farm with no upfront costs from Lakeland Electric; and in return, Lakeland Electric will purchase the power produced at long-term predictable rates for twenty-five years. "Lakeland Electric is very excited about this project because environmental stewardship and renewable energy options are keys to our success as a utility. It is vital that every utility consider carefully how to meet customers' increasing needs for electricity and do it in a way that is fiscally and environmentally prudent. Deploying utility-scale solar with no upfront costs is a win-win for Lakeland," noted Jim Stanfield, general manager for Lakeland Electric. 'Lakeland plans for a total of 24 MW in different locations.

What is equally notable is the effort that the utility led to develop the solar farm. Lakeland Electric sought to build the farm on city-owned land that was adjacent to the municipally owned airport outside the city limits and was zoned agricultural. However, its bid to annex the property and buy a permit to build the facility was initially denied because of land use rules and zoning designations. The State of Florida defines solar panels as "power generation devices"; thus, solar panels were lumped in with all the other conventional energy generators, and solar farm developments were zoned as heavy industrial, a category that severely limited where solar could be installed. So even though they had no impact on the atmosphere or on water resources, solar farms were treated much the same as coal-fired power plants. Unbundling solar from that early definition was the key to getting solar approved for installations on land other than that designated as heavy industrial.

Lakeland Electric played a key role in changing land use development rules in both the city of Lakeland and Polk County. It presented the city and county with the practically forgotten State of Florida solar access law, which disallows any codes or ordinances from prohibiting the installation of solar panels. In both cases, officials had believed that the law only applied to homeowners associations and not to codes, as it was originally written in response to aesthetic concerns and pushback from certain communities during the 1980s. As some communities were trying to prevent residential solar, the state intervened, enacting the law that stated solar cannot be disallowed by code. After reviewing the law, both jurisdictions, in consultation with Lakeland Electric staff, representatives from the solar energy industry, and the FSEC, rewrote their land development regulations to enable the installation of solar in all classifications.

With this 5.5 MW installation and plans for additional solar arrays, Lakeland remains at the forefront of solar PV in Polk County. Without these changes, it would not have been possible to realize the proposed solar farm and the environmental benefits that it will provide for the area:

- **Carbon dioxide offset:** An estimated 324 million pounds over twenty-five years of production
- **System offset in everyday equivalents:** Over 31,000 cars off the road for one year after twenty-five years of production.
- **System energy production in everyday equivalents:** Enough energy produced over the twenty-five-year term to power more than 22,000 area homes for one year.

Bartow

Bartow, the county seat of Polk County, is located forty miles east of Tampa and sixty miles southwest of Orlando at the intersection of U.S. Highway 98 and State Road 60. With a population of more than 17,000, Bartow has the county's fourth-largest population. Appropriately named "City of Oaks and Azaleas," Bartow contains many historic homes built in the late nineteenth and twentieth centuries.

In 2010, Bartow sought to be a progressive solar community with plans to install solar on numerous municipal buildings. While the plan was still in the formative stages of development, however, financial issues arose with the solar company with which the city was working and so many of the municipal projects never came to fruition. Regardless, the city pushed forward in advancing its sustainability initiative. The Florida Municipal Power Association and the Florida Municipal

Solar PV demonstration project at Bartow Public Library, Polk County, Florida

Electric Association applied for an Energy Efficiency and Conservation Block Grant (EECBG), which was part of Florida's portion of the ARRA funds. Of the five projects that they applied for, one was the solar PV demonstration project at the Bartow Public Library.

A 5 kW array was installed in May 2012. As Matt Culverhouse, the city's engineering supervisor, explained, "We weren't trying to offset the load from the library at all; instead, we wanted it to be comparable to something [people] might put on their home. We wanted them to relate to the output from that system to what their energy needs are in their home." The other projects that were completed with funds from the EECBG grant were LED streetlight retrofits (172 lamps); a study that helped to develop an energy conservation strategy ("Bartow Energy Efficiency & Conservation Strategy" pdf attached); energy audits for forty-seven commercial/industrial customers; and energy efficiency retrofits for eleven different city facilities. These projects were all completed before summer 2012.

As for future solar PV installations, there is currently a proposal with local firm Greenovative Design and Engineering to build a 4 MW solar farm within the city limits, tie it to the grid, and partner with the city. The project started out as a power purchase agreement on a site near the Bartow Water Plant. As for residential installations, Bartow has developed a net metering policy (pdf attached), which is being used by four homes in Bartow with solar PV. Permitting for solar installation on a home or business is a standard building permit.

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Brodie Ogzwalla, director, Environmental Science Academy, Haines City High School, 863-419-3371

Endnotes

1 Unless otherwise noted, photos were taken by the authors.
2 Provided by Jeff Curry at Lakeland Electric

Author

AK Consulting, LLC

Appendix

PDF files referenced:

- Bartow_Energy_Efficiency_&_Conservation_Strategy_Final_082712.pdf
- COB Net Metering Policy.pdf

MEMORANDUM

DATE: DECEMBER 20, 2011

TO: PENNY MCAULEY, CHAIRMAN
PLANNING & ZONING BOARD

FROM: JIM STUDIALE, DIRECTOR
COMMUNITY DEVELOPMENT DEPARTMENT

SUBJECT: PROPOSED CHANGES TO THE LAND DEVELOPMENT REGULATIONS TO ESTABLISH STANDARDS FOR SOLAR ENERGY SYSTEMS AS AN ACCESSORY USE IN ALL ZONING DISTRICTS AND SOLAR POWER GENERATION FACILITIES AS A PRINCIPAL USE IN CERTAIN ZONING DISTRICTS.

CASE NUMBER: 11-DEC-024-Z

The Land Development Regulations currently do not address solar energy systems and facilities, either as an accessory use or as a principal use. The proposed regulations recognize both types of uses and establish standards for each. The proposed changes are included in Attachment "A."

As an accessory use, solar energy systems are not unlike other mechanical and electrical systems that serve a principal use. As with these other type of systems, the proposed standards establish building bulk standards and allow for both ground mounted and rooftop systems within all zoning districts.

Solar power generation facilities as a principal use are considered to be a relatively low-impact use although currently the LDRs treat them the same as other, more intense power production facilities such as coal-fired power plants. Recognizing this distinction, the proposed changes allow for solar power generation facilities as a principal use permitted by right within areas that have industrial zoning and as a conditional use within the majority of areas with LD (Limited Development) zoning.

The proposed changes were developed in consultation with Lakeland Electric staff and representatives from the solar energy industry and further the City's commitment to renewable energy sources and sustainable development.

ATTACHMENT "A"

SOLAR ENERGY STANDARDS

30.02.02.00 BUILDINGS AND STRUCTURES PERMITTED ACCESSORY TO SINGLE-FAMILY DETACHED AND TWO-FAMILY USES

30.02.02.02 Accessory Buildings And Structures Permitted In Required Rear Setbacks
…
Solar Energy System
…

30.02.03.00 BUILDINGS AND STRUCTURES PERMITTED ACCESSORY TO SINGLE-FAMILY ATTACHED AND MULTIPLE-FAMILY USES

30.02.03.01 Accessory Buildings And Structures Permitted In Accordance With Setbacks Of Principal Buildings
…
Solar Energy System
…

30.02.04.00 BUILDINGS AND STRUCTURES PERMITTED ACCESSORY TO NON-RESIDENTIAL USES PERMITTED BY RIGHT

30.02.04.02 Accessory Buildings And Structures Permitted In Required Rear Setbacks
…
Solar Energy System
…

30.02.05.00 BUILDINGS AND STRUCTURES PERMITTED ACCESSORY TO NON-RESIDENTIAL USES PERMITTED AS CONDITIONAL USES

30.02.05.01 Accessory Buildings And Structures Permitted In Accordance with Setbacks of Principal Buildings
…
Solar Energy System

...

30.03.16.00 SOLAR ENERGY SYSTEM

30.03.16.01 Intent

It is the intent of this section to establish standards for solar energy systems as an accessory use to any principal use in all zoning districts.

30.03.16.02 Definitions

For the purposes of this section, the following words shall have the meaning stated herein:

Solar Energy System

A set of components that can collect, store and convert solar energy for the purpose of providing electric generation, water heating, pool/spa heating, space heating or space cooling as an accessory use to a permitted principal use. This definition allows for net metering of any surplus energy to an electric utility provider. A rooftop solar energy system as defined by this section shall allow for the interconnection of the system with an electric utility provider whereby all or part of the electric power that is produced is consumed off-site and is distributed and sold by the electric utility provider.

Ground Mounted Solar Energy System

A solar energy system in which the components that collect solar energy are placed on free standing supports, masts or poles on the ground.

Rooftop Solar Energy System

A solar energy system in which the components that collect solar energy are placed on the roof of a building or structure. Ancillary equipment used for the purposes of storing solar energy or converting the solar energy to electricity may be located on the ground.

30.03.16.03 Standards

1. Residential Districts

Solar energy systems shall be permitted as an accessory use in all residential zoning districts and within any Planned Unit Development that allows residential uses, subject to the provisions in this section.

a. Ground Mounted Solar Energy Systems.

Ground mounted solar energy systems shall be installed in accordance with the setbacks of principal buildings and within required side yards and rear yards subject to the following provisions:

i. Minimum street side setback: 20 ft.
ii. Minimum interior or rear setback: 5 ft.
iii. Maximum height: 10 ft.
iv. Ground mounted solar systems are prohibited within front yards except where the lot depth allows for the placement of the solar system a minimum of 100 ft. from the front lot line.

b. Rooftop Solar Energy Systems.

Rooftop solar energy systems shall be installed on principal and accessory structures in accordance with the setback and height limitations of such structures except that the components of the system may exceed the maximum height up to a maximum of 3 ft. In no case shall the solar energy system extend more than 3 ft. above the roof or, when placed on a pitched (gable, hip and gambrel) roof, cover more than 50 percent of the roof area of the structure.

2. Non-Residential Districts

a. Solar energy systems shall be permitted as an accessory use in all zoning districts that are not residential districts, subject to the provisions in this section.

b. Ground mounted solar energy systems shall be installed in accordance with the setbacks of principal buildings and within required side yards and rear yards subject to the following provisions:

i. Minimum interior side and rear setback from non-residential lot line: 15 ft.
ii. Minimum interior side and rear setback from residential lot line: 30 ft.

iii. Minimum street side setback: 30 ft.
iii. Maximum height: 15 ft.
iv. Ground mounted solar systems are prohibited within front yards except where the lot depth allows for the placement of the solar system a minimum of 100 ft. from the front lot line.

c. Rooftop solar energy systems shall be installed on principal and accessory structures in accordance with the setback and height limitations of such structures except that the components of the system may exceed the maximum height up to a maximum of 5 ft. In no case shall the solar energy system extend more than 5 ft. above the roof.

3. Historic Districts and Other Special Districts

Solar energy systems that are installed within a designated local historic district and within the Lakeland Downtown Development Authority special taxing district, shall be subject to design review by the board or authority designated to perform such design review.

31.14.00.00 SOLAR POWER GENERATION FACILITY

31.14.01.00 PROCEDURES AND STANDARDS FOR ESTABLISHMENT

Solar power generation facilities shall be permitted as a principal use within all industrial zoning districts and within any Planned Unit Development that lists permitted uses as those within an industrial zoning district. Solar power generation facilities shall be permitted as a conditional use within the (LD) Limited Development zoning district except that such facilities shall not be permitted in areas designated P (Preservation). Such facilities shall be subject to the development standards generally applicable to the district in which they are located and to the standards set forth in this section.

31.14.02.00 SPECIFIC STANDARDS FOR APPROVAL

1. All photovoltaic modules (panels) and associated above-ground equipment that is used in the conversion of solar energy to electricity shall be located no closer than 50 ft. from all parcel boundaries. This distance may be reduced to 30 ft. for interior side yards that are adjacent to property that is zoned for industrial uses.

2. A buffer fence or wall shall be required along all parcel boundaries that are adjacent to or across the street from residentially zoned property or adjacent to a public right-of-way. The buffer wall or fence shall meet the standards of Section 30.03.08.02.

31.14.03.00 DEFINITIONS

For the purpose of this section, the following terms and words shall have the following meanings:

Solar Power Generation Facility

A production facility for electric power that utilizes photovoltaic modules (panels) to convert solar energy to electricity whereby all of the electricity that is produced is consumed off-site and is distributed and sold by an electric utility provider. This definition does not preclude the use of photovoltaic modules that are installed on a rooftop in accordance with Section 30.03.16.00 and whereby the electric power that is produced is consumed off-site and is distributed and sold by an electric utility provider.

35.02.12.00 UTILITY AND ESSENTIAL SERVICE FACILITIES
Solar Power Generation Facility
…

I-1 (SMALL LOT COMMERCIAL-LIGHT INDUSTRIAL) DISTRICT

22.02.01.00 PRINCIPAL USES PERMITTED BY RIGHT
…
Solar Power Generation Facility
…

I-2 (MEDIUM INDUSTRIAL) DISTRICT

22.05.01.00 PRINCIPAL USES PERMITTED BY RIGHT
…
Solar Power Generation Facility

…

I-3 (HEAVY INDUSTRIAL) DISTRICT

22.08.01.00 PRINCIPAL USES PERMITTED BY RIGHT

…

Solar Power Generation Facility

…

LD (LIMITED DEVELOPMENT) DISTRICT

23.02.02.00 PRINCIPAL USES PERMITTED AS CONDITIONAL USES

23.02.02.02 In Areas Designated C (Conservation)

…

Solar Power Generation Facility

23.02.02.03 In Areas Designated R (Recreation)

…

Solar Power Generation Facility

…

23.02.02.04 In All Other Future Land Use Designations

…

Solar Power Generation Facility

…

23.02.03.00 ACCESSORY USES, BUILDINGS AND STRUCTURES PERMITTED BY RIGHT

…

Solar Energy System

…

SunShot Solar Outreach Partnership Case Studies are based upon work supported by the U.S. Department of Energy under Award Number DE-EE0003526. The U.S. Department of Energy (DOE) SunShot Initiative is a collaborative national effort to dramatically reduce the cost of solar energy before the end of the decade. The SunShot Solar Outreach Partnership (SolarOPs) is a U.S. DOE program providing outreach, training, and technical assistance to local governments to help them address key barriers to installing solar energy systems in their communities. The International City/County Management Association (ICMA), American Planning Association (APA), and National Association of Regional Councils (NARC), along with ICLEI-Local Governments for Sustainability and its partners, were competitively selected by the U.S. DOE to conduct outreach to local governments across the United States, enabling them to replicate successful solar practices and quickly expand local adoption of solar energy. For more information visit the SolarOPs website (solaroutreach.org) or contact Emily Dodson (edodson@icma.org).

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U.S. Department of Energy

SOLAR OUTREACH PARTNERSHIP

ICMA