

THE GOLDEN 1 CENTER

AFFILIATION: SACRAMENTO KINGS
LEAGUE: NBA
LOCATION: SACRAMENTO, CA

By Kate West



The NBA's Sacramento Kings will soon be known for more than basketball when they open the 2016-17 season this October at the world's greenest sports and entertainment venue. **Golden 1 Center** will be 100% solar powered, provide locally grown food—reflecting Sacramento's farm-to-fork culture—and become a global model for an indoor/outdoor arena that not only sets a new standard in arena architecture but demonstrates how innovative design can attract new development to a region. Kings owner and chairman **Vivek Ranadive** calls it "the 21st Century Coliseum."

The inspiration for the design, created by **AECOM**, comes from the Sacramento region and lifestyle. "The design combines high-performance sustainability and metaphorical inspiration, for instance, from the granite walls of the Sierra Nevada," says **Rob Rothblatt**, design principle. "Residents here really feel the power of nature—they like to hike, be outdoors, and they're at the center of the farm-to-fork movement." Golden 1 Center reflects that sentiment with five aircraft hangar doors that literally allow the outside in. And to control the temperature, a state-of-the-art temperature displacement system was designed instead of traditional top-down air conditioning. "This puts out air under the seats down to the court, keeping people comfortable much more efficiently," Rothblatt says. "We can also keep the aircraft hangar doors open for hours, taking advantage of cool Delta breezes, and maintain a constant temperature and humidity on the court." It's all powered by a combination of 3,300 SPI solar panels on the arena's roof and electricity from a new solar farm near Rancho Seco. This will make Golden 1 Center the first indoor sports arena in the world to derive 100% of its power from solar—all sourced within 50 miles of the venue.

While 300 days of sunshine are good for solar, it can be bad news for an arena

RENDERINGS: COURTESY OF THE SACRAMENTO KINGS

NOTHING BUT NET SAVINGS

85%

of electricity sourced from local solar farm—15% from solar panels on the arena roof

2,000

By moving to Downtown Sacramento, 2,000 tons of greenhouse gas emissions from guests will be eliminated annually—the equivalent of 4 million vehicle miles

3,300

SPI Solar panels on the Golden 1 Center roof

40%

Up to 40% reduction on water consumption due to low flow fixtures



RENDERINGS: COURTESY OF THE SACRAMENTO KINGS

that incorporates glass windows throughout. In an effort to diffuse the sunlight, fritted glass windows were installed and **Solera Windows** used around the practice court facility. “The Solera glass allows plenty of daylight to come in without the heat radiation,” Rothblatt says. These greening efforts are estimated to reduce the arena’s greenhouse gas emissions by 2,000 tons annually.

The team has even committed to a charter of 10 guiding principles that will help them educate fans on sustainability and nutrition, reduce their impact on the environment, and benefit the region. The charter calls for a reduction in food waste by donating left over concessions to local food pantries and sourcing 90% of the food and beverages prepared at the

ABOVE Golden 1 Center will be 100% solar powered and provide locally grown food.

FACING PAGE In an effort to diffuse the sunlight, fritted glass windows were installed and Solera Windows used around the practice court facility.

arena from local farms and producers within 150 miles. All of this stems from a partnership with the **National Resources Defense Council** and the **Green Sports Alliance** to change the way sports teams think about arena food and the environment.

It’s a combination of sustainability, architecture, and vision that is transforming a once underused three-block mall into a hub for entertainment and activity. During the demolition of the former mall, 100,000 tons of waste was recycled, which represents 99% of the material from the mall. The attraction of this arena has been the springboard for hotels, shops, and apartments aiming to implement similar sustainable and environmentally friendly energy plans. **gb&d**