

AT&T PARK, HOME OF THE SAN FRANCISCO GIANTS



BALLPARK STATS

Location: San Francisco, California

Began Construction: December 11, 1997

Opened: March 31, 2000

Seating Capacity: 41,915

Owner: China Basin Ballpark Corporation, San Francisco Giants subsidiary

Operator: San Francisco Giants

Venue Uses: MLB games (primary), international soccer and MLS games, collegiate football games, big-air ski and snowboard contests, concerts and private events

Construction Cost: \$482 million (in 2012 dollars)

LEED Certification: Certified LEED Silver for Existing Buildings: operations and maintenance in April 2010

THE GIANTS' GREENING STORY: MOTIVATIONS, CHALLENGES AND LESSONS FROM THE FIELD

Since opening in the spring of 2000, AT&T Park has been home to the San Francisco Giants Major League Baseball team, which owns and operates the facility. The ballpark doubles as a venue for concerts, corporate programs and other sporting events, including pro soccer games, collegiate football games, and even big-air ski and snowboard contests.

From day one the Giants have made environmental stewardship a business priority at the park by integrating sustainability into their company mission and operations. AT&T Park was the first major league ballpark to install a solar array and the first to receive LEED Silver Certification for existing buildings: operations and maintenance (EBOM). The Giants also divert the most waste from landfill of any professional sports venue in North America, with an 85.2 percent diversion rate for 2011. Here are some lessons from their greening successes to date.

WHY GO GREEN?

Even in the beginning, greening was a no-brainer for the Giants operations team. "It was not so much a question of why do it, but why wouldn't we do it?" says Alfonso Felder, senior vice president of facilities and a Giants front-office veteran of 16 years. "The reasons to go green and become more efficient are all so compelling," adds Jorge Costa, who has been with the Giants for 23 years and is senior vice president of ballpark operations, "but there's also an element of leadership, innovation and commitment that can't be overlooked."

Felder explains that sustainability and efficiency have always been core values for the Giants. "We're always pushing the envelope because innovation is a defining principle for us as an organization," he says. "We recognize that innovation and sustainability go hand in hand. Sustainability is one of the ways that we can be innovative as a business."

Playing in one of the United States' greenest cities was also a factor motivating the team to pursue greening. "One of the benefits we have is that we're in an incredibly enlightened and environmentally conscious city that really buys into the whole greening movement. People are cognizant of how their actions in and around their homes and businesses impact the environment," says Costa. "Given our location, we were committed to building in a very sustainable way from the beginning. It was the right thing for where we are and who we are as an organization."

WHERE TO START?

"We started our process of becoming green the minute we opened the park, and it's ongoing," says Shana Daum, vice president of public affairs and community relations for the Giants. "But it was really just baby steps at the beginning," admits Costa. "We began by trying to figure out how to reduce our electricity and water use."

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LIGHTING RETROFITS

The Giants' lighting retrofit projects include:

- ★ replacing incandescent lights with compact fluorescent lamps ballpark-wide,
- ★ installing motion-sensor lighting,
- ★ replacing concourse signage lighting with an infrared-type high-output lamp controlled by a low-output ballast,
- ★ converting the 18 home batting cage sports lights to LEDs,
- ★ upgrading to a Mitsubishi Electric Diamond Vision HD scoreboard that is 78 percent more efficient than its predecessor, and
- ★ installing strip curtains in all walk-in refrigerators.

As with all companies, operations initiatives at AT&T Park start with the financials. “We have a cost savings evaluation phase for every new initiative that considers all of the financial impacts of a proposal,” says Costa. “All of the decisions that we make are based on the return on investment, the outlay, and making sure we have enlightened systems management that we’re constantly improving over time.”

Ever since opening day in 2000, improvements in energy efficiency have been a daily priority of the ballpark operations team, especially regarding lighting retrofits. The Giants have already saved approximately 171,000 kilowatt-hours of energy—the equivalent of powering 25 average American homes for a year—with lighting upgrades throughout the park.

For example, the Giants recently converted the 18 large sports lights in their batting cage to LEDs. “You can already really see the benefit—they use less energy and the fixtures are going to last longer, saving on labor costs,” says Costa. “But that was only 18 lights, and now we’re working on upgrading the other 538 huge, expensive sports lights around the ballpark. It’s a pretty significant budget hit in the short term, but we know we’ll recoup the investment, even if it’s a 5- to 10-year commitment.”

Costa’s advice? Plan ahead by calculating how the energy and labor cost savings will recover the upfront outlay. But most important, keep it affordable by doing incremental upgrades and working your way around the facility. “No one can do it all at once, unless they have unlimited resources,” he says. “Most teams need to take on smaller, incremental initiatives that you orchestrate the right way, in concert with your whole system, to continue to make progress every day,” he explains. “We take a dogmatic, methodical approach to greening. You’ve got to just make a base hit and work your way around while keeping the larger picture in mind.”

CHALLENGES: OVERCOME AND ONGOING

The Giants continue to lead the industry in diverting waste from landfills. Thanks in large part to their jaw-dropping waste diversion rate, the Giants have won the coveted MLB Green Glove Award four years in a row for being the leading team in recycling and other sustainability initiatives. The Giants’ aggressive recycling and composting program has ratcheted up their waste diversion rate from 57 percent in 2009 to 75 percent in 2010 to the all-time high of 85.2 percent in 2011.

“We faced some really hard challenges to get to where we are,” says Costa. “When we were slapped with a statewide mandate that said all California businesses had to divert 75 percent of their waste from landfill, we thought, ‘Really? How are we going to make that happen?’ It was initially very onerous for us, but it’s actually become a really important rallying point for our mindset about greening.”

According to Costa, one secret to their success is hand-sorting waste. “We process all waste at the end of the game by hand as it comes through the loading dock,” Costa says. “Even though it’s costly and a dirty job, we get our money back and definitely see dividends.”

Another tactic the Giants use is evaluating their entire waste management program as one system to identify inefficiencies and cost savings potential. “There is a constant yin and yang of cost evaluations with all of your partners on a systemic level,” explains Costa. “For example, to upgrade our loading dock we proposed to spend something like \$60,000 to revamp the layout, so we needed to calculate how we would recoup that investment. We worked with Recology, our waste partners, to minimize the number of trash hauls and dumping costs. We reevaluated and economized on the bags and bins we’re using. We also thought more systemically about savings around the ballpark by cutting down on broom costs and labor costs.”

STANDOUT GREENING ACCOMPLISHMENTS

- ★ The Giants' ballpark was the first in the major leagues to receive LEED Silver certification for existing buildings: operations and maintenance.
- ★ In 2007 AT&T Park became the first MLB ballpark to install a solar array. At 123 kilowatts, it provides enough power to supply 5,200 homes (avoiding 360,000 pounds of greenhouse gases) and generates green energy for PG&E customers across San Francisco.
- ★ The Giants achieved 100 percent waste diversion ballpark-wide in March 2012 and an 85.2 percent annual waste diversion rate for 2011. The team recycles or composts cans, bottles, plastic cups, cardboard, paper, wood pallets, electronic components, lightbulbs, batteries, cooking grease, food waste and grass clippings.
- ★ Close to 100 percent of drinkware and food packaging sold at the ballpark is recyclable or compostable.
- ★ An irrigation clock receives weather data and couples it with site data to establish zone watering times, saving 33 percent to 50 percent in irrigation water use.
- ★ Amendments to the infield mix (from 66 percent sand, 20 percent silt and 14 percent to clay to 50 percent sand, 25 percent silt and 25 percent clay) have reduced field watering by 33 percent.

Thanks to the Giants' new Recycle Processing Center, Costa is now setting the waste diversion bar even higher and has already seen glimpses of greater success. "This year we're aiming to get to a 90 percent average annual diversion rate, which is a very aggressive goal."

In fact, in March of this year the Giants achieved the herculean accomplishment of 100 percent waste diversion, though it was during the off-season. During March the Giants completely overhauled their 2011 playing field, processing approximately 3,000 tons of soil to become recycled topsoil and giving all of the sand to the San Jose Giants, their minor-league affiliate, for use on their infield.

"Now that we've reached 100 percent diversion once, I want to keep the pedal to the metal and get as close as we can every month," says Costa. "I can't stress it enough: You are never done. I will never say to my staff, 'We're in a really good spot.' I always say, 'OK, this is where we're at, now how can we get to the next level or a higher goal? How can we get better by refining our systems even more, making them more efficient and more affordable?' Today, a 75 percent diversion rate would be a failure."

"NOW ALL OF OUR DRINKWARE IS RECYCLABLE AND [THE] FOOD PACKAGING [WE USE] TENDS TO BE COMPOSTABLE. BY SIMPLIFYING THAT MESSAGING, YOU CREATE A MORE EFFECTIVE SYSTEM. LESSONS LIKE THAT YOU NEED TO LEARN ALONG THE WAY," says Felder.

Fan adoption of recycling and composting was not always smooth sailing for the Giants. "Like many facilities, we've had the challenge of learning what works and what doesn't work in terms of managing our waste stream," Felder says. "For example, there was a time when people were really pushing for compostable plastic cups, but we found that it created some conflict and confusion within the public."

Felder explained that the Giants, among other teams, rejected the compostable cups after testing them at the ballpark and finding that fans didn't compost them and that they consistently contaminated the waste stream. "So the prevailing wisdom changed, and now all of our drinkware is recyclable and [the] food packaging [we use] tends to be compostable. By simplifying that messaging, you create a more effective system. Lessons like that you need to learn along the way."

Yet even with a more efficient system and educated public, Costa warns that there will always be more people to educate, remind or prod to get the job done. Patience is key. "Despite all of our outreach and accomplishments, I still see fans struggling, not understanding which items are compostable or recyclable. Just yesterday I spent five minutes explaining to a fan what goes where and why it's important to separate," he adds. "It's crucial to educate both our staff and our fans about these issues, not only because fans are really important for helping us achieve our diversion goals, but also because they'll go home and use that same knowledge elsewhere."

The same is true for business partners. Costa points out that working closely on greening initiatives with concessionaires is particularly important, though it can also present challenges. The main problem he has encountered is how to source affordable, specialized products from large concessionaires that buy much of their product in bulk for their many accounts spread across the country. "It's very costly to start making site-specific orders to get specialized products [like compostable serviceware] that are acceptable for certain locations like San Francisco," says Costa. "And it's particularly challenging when many of the concessionaires' other accounts are in cities that aren't as cognizant of the product impacts or don't have local mandates. It's something that we're still really struggling with, though we've made a lot of inroads."



LESSONS FROM THE FIELD

CREATE THE RIGHT WORK ENVIRONMENT: For those just getting started or struggling to get green initiatives off the ground, Costa suggests going back to basics by creating the right work environment for success. “You’ve got to really circle the wagons. You need to create a different mindset and environment based on cooperation,” he explains. “Meet and talk through every aspect of these issues, from the financial to the emotional to the practical to the fundamental realities of your business and partners.”

ESTABLISH A DIVERSE AND DEDICATED GREEN STEERING COMMITTEE (ESPECIALLY FOR PURSUING LEED): Start by getting the right people together. “We’d recommend establishing a steering committee made up of a variety of people from many departments within the company and from external partners that come together and are dedicated to the process,” says Costa. “The desire and the resources all need to be in alignment to make it happen. No single person can get this done. You need a collaborative group of people with the vision, passion and commitment to put their money where their mouth is. That takes courage and conviction.”

INVOLVE ALL PARTNERS: Given the complex nature of ballpark services, the Giants involve all venue stakeholders including PG&E (sponsor), ABM Services (building and facilities management), Centerplate (hospitality and concessions), Toro Irrigation (landscape management), and Recology (waste management) to ensure successful ballpark-wide integration of green initiatives. They also recommend capitalizing on the opportunity to share your green story by having your partners assist you in telling it. Involving stakeholders will increase the volume of your voice and the penetration of the message.

HOLD REGULAR GREEN MEETINGS TO STAY ON TOP OF MARKET TRENDS: Costa likens the rapidly changing green-tech space (such as the lighting industry) to the Apple iPad. “What’s good yesterday may not be so good tomorrow, and you find yourself constantly questioning

when to invest in upgrades if newer and newer versions continue to be released,” he explains. “The iPad is actually a great analogy for what it feels like trying to stay on top of the many increasingly efficient technologies available in the marketplace.” For instance, Felder points out, “the packaging that was available five years ago wouldn’t have allowed us to be where we are now.”

The Giants use regular meetings with their partners to keep themselves informed on new products. “We do evaluations of our product use during every home stand and have regular meetings with our partners on an ongoing basis. We use a combination of internal staff research and the advice of external partners like PG&E, Recology and Centerplate to vet the market for new products and technologies,” says Costa. “Centerplate is a particularly helpful resource because they are able to learn a lot from working with a lot of venues across the country on these issues.”

“We also look for technological trends in the marketplace,” adds Felder. “ABM, our engineering group, has done a lot of work with us on lighting and does a lot of research on electronic products for us.”

COORDINATE WITH OTHER BUYERS TO HELP WITH PRODUCT COST AND AVAILABILITY: Partner with other teams, venues and even other companies in your area to harmonize purchasing requests and build the market for environmentally friendly products.

GOING GREEN IS AN INVESTMENT: “The single greatest issue that we face today is that it’s not inexpensive to go green. That’s just being flat-out honest,” says Costa. “You will need to spend some money.” Though Costa believes strongly in the benefits of increased efficiency (including resource savings, financial savings, favorable press, brand enhancement, environmental benefits, public health benefits and the strengthening of community ties), he says, “You are constantly balancing cost and the willingness of your partners to adapt.”

“Achieving LEED certification is a six-figure application process and requires you to devote staff resources almost exclusively to the LEED application,” points out Costa. “It took us about 14 months from the time we started at the beginning of 2009 until we got certified in March of 2010.” Felder agrees that large projects like pursuing LEED certification may be difficult to justify financially in the short term. “You could say that LEED certification was an expense that might have been hard to justify, but what we’re finding is that it really does pay off over time.”

PURSUE GREEN INITIATIVES INCREMENTALLY: It’s often more affordable to pursue incremental upgrades and work your way around a facility. “No one can do it all at once, unless they have unlimited resources,” says Costa. “Most teams need to take on smaller, incremental initiatives that you orchestrate the right way, in concert with your whole system, to continue to make progress every day,” he explains. “We take a dogmatic, methodical approach to greening.”