# CASE STUDY CENTURYLINK FIELD, HOME OF THE SEATTLE SEAHAWKS AND SOUNDERS FC



#### **VENUE STATS**

Location: Seattle, Washington Opened: July 29, 2002 Seating Capacity: 67,000 Owner: Washington State Public Stadium Authority Operator: First & Goal Inc. (FGI) Venue Uses: NFL games; MLS games; NCAA football and international soccer games; Supercross and a variety of community events Construction Cost: \$430 million (\$566 in 2012 dollars)

## CENTURYLINK FIELD'S GREENING STORY: MOTIVATIONS, CHALLENGES AND LESSONS FROM THE FIELD

Thanks to the widespread public and professional interest in sustainability in the Northwest, environmental stewardship was built into CenturyLink Field even before the first U.S. sports greening programs were established. Back in 2000, 35 percent of the concrete from the Kingdome was recycled onsite to construct Seahawks Stadium (which has since been renamed "CenturyLink Field").

To this day, CenturyLink Field, the Seattle Seahawks and Seattle Sounders FC are leaders in professional sports greening, as founding members of the Green Sports Alliance, and business leaders in sustainability, with an onsite solar array, an aggressive recycling program and a strong environmentally preferable purchasing program.

### WHY GO GREEN?

For Seattle-based First & Goal Inc. (FGI), operator of CenturyLink Field and CenturyLink Field Event Center, greening is about responding to the interests of their clients, which are the Seahawks and Sounders FC fans. Darryl Benge, assistant general manager at FGI and founding board member of the Green Sports Alliance, explains that it's especially important to respond to the environmental interests of the fan base.

#### WHERE TO START?

"Our greening started with the building of the facility and recycling the concrete from the Kingdome in order to use as much as we could to build the new stadium," says Benge. FGI was formed by Paul G. Allen in 1997 after Washington State voters approved the proposal to build a new football/soccer stadium and exhibition center, now called CenturyLink Field and Event Center. The Kingdome was demolished in 2000 to make way for the new stadium; 97 percent of the concrete was recycled locally, with 35 percent of it reused in the new facility.

"During 2005–2006 many venues and professional teams began the discussion on recycling and composting," notes Benge. In 2005 the Seahawks also partnered with Seattle City Light and Western Washington University to recognize local commitments to renewable energy with a Power Players award. "It was an opportunity to highlight and learn from different smart energy programs," Benge says.

In 2006 FGI launched CenturyLink Field's recycling program with the installation of 75 new recycling bins around the venue, fan and staff recycling education, and a new dedicated Recycling Sorting Area created to track and separate 17 different recyclable materials. "It grew in 2006, when FGI staff began to actively track recycling by materials, including plastics, metals, paper and cardboard," Benge relates. That year CenturyLink Field was also selected to participate in a study through the EPA WasteWise Partnership program.

"That was also the time of the development of the Green Team," says Benge. FGI's Green Team was made up of FGI and Seahawks staff, vendors and contractors who sought to

"OUR RECYCLING EFFORTS AND NEWLY FOUNDED GREEN TEAM WERE THE TWO BIGGEST KEY FACTORS TO SPRINGBOARD OUR ORGANIZATION'S THINKING ON OPPORTUNITIES IN SUSTAINABILITY," says Darryl Benge, assistant general manager at First & Goal Inc., operator of CenturyLink Field. develop long-term policies and initiatives to reduce energy and resource consumption. "From there we really looked at what we were doing and how to document our practices so that we could analyze our data and hopefully improve it."

The Green Team met on a quarterly basis to discuss greening initiatives, with representatives from all FGI departments, the Seahawks (the Sounders FC didn't begin to play until 2009) and key partners like ARAMARK and Levy Restaurants. "We didn't ask corporate partners or

# TIMELINE OF CENTURYLINK FIELD'S STANDOUT GREENING ACCOMPLISHMENTS

- ★ **2000:** 97 percent of Kingdome concrete was recycled and 35 percent was used at Seahawks Stadium.
- ★ 2006: FGI staff began to actively track recycling by material, establishing a Recycling Sorting Area in order to measure and separate 17 different recyclable materials. FGI also created a Green Team to develop long-term policies and initiatives to reduce energy and resource consumption.
- ★ 2007: FGI invested in new composting equipment and a cardboard baler, increasing cardboard recycling by 16 percent. FGI also launched a composting program and added 200 new recycling bins.
- ★ 2010: It also installed additional point-of-use lighting controls in concession stands, restrooms and storage spaces and became certified as an EnergyStar Portfolio Manager partner.

The Seahawks, Sounders FC and FGI joined with MLB, NFL, NHL, NBA and WNBA teams in the Pacific Northwest to help found the Green Sports Alliance.

★ 2011: FGI committed to using nontoxic cleaning supplies, and 84 percent of cleaning and soap products were Green Seal-certified. FGI purchased only post-consumer paper products for toilet paper, hand towels and office paper and also purchased 100 percent recycled plastic trash liners. The amount of waste that was recycled rose to 70 percent (from 58 percent in 2010 and 47 percent in 2009).

FGI donated 5,083 pounds of unused prepared food to Food Lifeline and 5,975 pounds to Operation Sack Lunch, helping to provide 4,596 meals overall.

Seattle Sounders FC received the Green Globe Award for using reclaimed water for field irrigation at the Starfire training facility.

★ 2012: In March, FGI implemented a single-stream recycling strategy with Allied Waste, to further their goal of achieving an 80 percent landfill diversion rate.

representatives from the city to join our team," says Benge. "It was an internal yet holistic group, as we wanted our partners to also be invested and pass our green mission back to their organizations. This made it more successful."

According to Benge, FGI's diverse Green Team was crucial for growing the organization's green program. "Our Green Team would discuss how we could be better stewards of the environment as well as improve our business. This helped establish greening as a core belief from the organization," he explains.

Benge stresses that FGI's program involved a systematic and thoughtful evaluation of current processes. The Green Team started with waste. "Those early Green Team discussions involved the operational staff looking at all of the material going to the landfill and working with our vendors to (1) find a better and more sustainable process and (2) see if there was a business case to divert the waste from landfill to recycling," he says. A subgroup of the Green Team-made up of an FGI operations representative, a general manager from ARAMARK and FGI's loading dock manager-quickly formed to tackle waste-stream tracking and make improvements. "That core group of three would look at the invoices from the haulers, track the tonnage of different materials and create a spreadsheet," says Benge. "Once they had the data they could analyze and adjust the current processes to collect more recyclable material."

### CHALLENGES: OVERCOME AND ONGOING

To ramp up their waste diversion rates, in 2007 FGI invested in 200 additional recycling bins (with the help of a subsidy from Anheuser-Busch), new composting equipment and a cardboard baler. The onsite baler immediately enabled the facility to increase cardboard recycling by 16 percent by minimizing material contamination. FGI later switched from fountain drinks to beverages in recyclable bottles, in partnership with Jones Soda, and launched a composting program. The Seahawks also announced a partnership with Levy Restaurants and Food Lifeline to recover all unused prepared food and donate it to local shelters following all Seahawks home games.

"We went from a 3 percent diversion rate in 2006 to receiving the Event Recycler of the Year award from the Washington State Recycling Association in 2009," says Benge. "That was because we went from recycling 3 percent to more than 47 percent—460 tons—of all our waste in under three years by working with ARAMARK, our housekeeping vendor, Levy Restaurants, our food and beverage partner, Cedar Grove Organics, our local composter, and Allied Waste, our waste vendor. We just reached out to our partners and said, 'Here's what we want to do,' and they helped us succeed."

FGI grew the composting program incrementally. "We started out in the kitchens, then worked on moving into the concession stands, and then into the concourse," says Benge. "We started out small to really make sure it worked before taking it to the next level." He points out that integrating composting throughout the concourse had its challenges. "Moving composting to concessions is difficult because they



are run by all different people, including volunteers and not-for-profits that have constantly changing staff." He recommends extensive signage and training tools to help get transient staff on board.

"Then in 2010 we took the next step and moved to all-compostable serviceware. We gave the fans only two disposal options: either recyclable (plastic, aluminum) or compostable. That system worked really well," says Benge. "We found that if you give fans the option of landfill bins, they usually choose landfill because it's familiar, even when the signs say compost." That year FGI installed more than 175 compost bins and another 200 recycling bins throughout the facility. By the end of 2010, the composting program, which was motivated by a city mandate, helped FGI reach a 58 percent diversion rate from landfills, totaling more than 525 tons of waste.

FGI has also been gradually improving the resource efficiency of CenturyLink Field over the past few years. FGI first hired Seattle-based McKinstry, a firm specializing in energy solutions, in 2008 to conduct a facility-wide energy audit and offer recommendations to further reduce energy and water use. "The results from that 2008 audit provided the springboard for the energy and solar initiatives we took during 2011," Benge says.

The teams managed the up-front financial investment and implemented the energy upgrades with help from rebates provided by Seattle's two main utilities, Seattle City Light and Seattle Public Utilities. "The energy and resource projects have a very good return on investment by themselves," says Benge. "Seattle City Light covered half of the fee associated with the McKinstry study, and the cost savings from the upgrades would help address that expense." Based on the audit, FGI worked with McKinstry to cut resource use throughout the complex by installing mechanical system upgrades, high-efficiency lighting and ultra-low-flow water fixtures, all of which support the facility's commitment to sustainability.

As FGI planned its energy upgrades, the company saw an opportunity to pursue an onsite renewable project. "Solar in the Northwest isn't the most convincing investment because our energy rates are really low and we don't get sun like Arizona or Southern California. So we decided to package solar with energy efficiency," explains Benge. FGI also relied on a guide produced by NRDC and BEF called "Solar Electric Energy for Your Stadium or Arena" to evaluate financing options. "NRDC's solar guide really assisted us because it did a lot of the work putting together information on the different renewables rebate programs and resources for us," says Benge. "It was a very helpful tool."

In May 2011, the Seahawks, FGI and Sounders FC announced the installation of a solar array on the roof of the CenturyLink Field Event Center. The solar installation covers 2.5 acres, spreading across 80 percent of the Event Center roof. The project consists of 3,750 thin-film solar panels, which generate more than 830,000 kilowatt-hours of electricity annually, enough to power 95 Seattle-area homes for a year.

The combined energy projects resulted in a 21 percent reduction in annual utility costs. This new clean energy source, alongside the new energy conservation measures, reduced the facility's carbon footprint by about 1,350 metric tons of carbon emissions per year. The facility is also equipped with a "cool roof" that conserves energy by reducing heat absorption, thereby lowering building cooling costs. CenturyLink Field also partnered with Seattle's electrical union to provide training opportunities and clean-energy jobs for local tradespeople. "THE ENERGY AND RESOURCE PROJECTS HAVE A VERY GOOD RETURN ON INVESTMENT BY THEMSELVES, BUT THEY REQUIRE UP-FRONT CAPITAL, WHICH IS A BATTLE, ESPECIALLY WHEN YOU'RE IN A BUILDING THAT ISN'T THAT OLD," says Benge. "SEATTLE CITY LIGHT PICKED UP HALF OF THE FEE ASSOCIATED WITH THE MCKINSTRY STUDY, AND THE COST SAVINGS FROM THE UPGRADES WOULD HELP ADDRESS THAT EXPENSE."

#### LESSONS FROM THE FIELD

USE THE NRDC/BEF SOLAR GUIDE FOR STADIUMS

**AND ARENAS**: FGI used NRDC's and BEF's solar guide to instruct their planning process and get the project off the ground. "The solar guide provided by the NRDC and BEF was instrumental in helping us develop our request for proposal and the evaluation of each contractor's submission," says Benge. "Without this resource, we wouldn't have been able to be as comprehensive in our approach. This tool made the process much easier for all parties involved."

LEARN FROM THE GREEN SPORTS ALLIANCE TO

**MINIMIZE INVESTMENT RISK**: "Dialogue with peers who have already looked into greening initiatives and/or have even been successful can be very helpful to challenge or validate plans," suggests Benge. He recommends the Green Sports Alliance for learning from peers and sharing better practices. "Large venues typically haven't talked across venues because of the competition in the sporting world. However, the Green Sports Alliance has provided a very important mechanism for collaboration because members have a common goal and interest."

**USE ONLINE TOOLS TO ENGAGE FANS**: "We plan to build an interactive website that allows the fans to engage and let them know what we're doing and what they can do at home," Benge says. His team is building on its existing online promotions. In 2008, the Seahawks partnered with Puget Sound Energy (PSE) and Seattle City Light to develop a Blue Is Green educational program featuring interactive green tips for fans on the team's website.

#### **CREATE A GREEN BRAND TO ENHANCE FAN**

**ENGAGEMENT:** "In terms of new initiatives," Benge notes, "we just went through the process of developing our brand around sustainability, and it's called Defend Your Turf. We're working with our PR departments, marketing departments and corporate partners departments to roll that out in the next six to eight months. We want to make it visible to fans as well as individual partners who may want to align with that message." In 2010 the Seattle Seahawks/Sounders FC launched a fan education campaign on compost and recycling programs that encourages fans to leave beverage cups, food trays, napkins and unconsumed food in the seating area so staff can collect and sort items and minimize contamination for the compost program. "Our strategy for education was about good signage on the waste and compost bins, and we also worked with our promotions department to make sure we had good PSAs that were featured on the video boards during games about what bins to use. They built these small PSA commercials to loop through the content. We're fortunate that 80 to 90 percent of our fan base is season ticket holders. So they learn once and remember at future games."

#### USE LEAGUE-BASED CONTACTS TO OVERCOME REGIONAL INFRASTRUCTURE CHALLENGES: "Every

region and venue is different but they all share similar features. Sometimes the solutions for one facility translate to others, although sometimes they don't translate so well. The Kansas City Chiefs, for example, wanted to start a composting program but discovered they do not have a local composting company. It really depends on the organization, the building and the region," says Benge.

# CENTURYLINK FIELD'S SUSTAINABLE FOOD PROGRAM

In 2010 FGI worked with Levy Restaurants to implement a sustainable food program, with four suppliers showcasing local and organic products from around the region. The suppliers were:

- ★ Charlie's Produce, which features certified organic growers from Washington and Oregon
- Niman Ranch, a network of 600 sustainable U.S. farmers and ranchers who raise livestock traditionally and humanely
- ★ Uli's Famous Sausage of Pike Place Market
- ★ Beecher's Cheese of Pike Place Market and Farm to Fork

FGI also follows the guidance of the **Monterey Bay Aquarium** by hand-picking seafood products that are not currently listed on the endangered species list, according to their guide.