

Annual Sustainability Summary July 2011 - June 2012



Leadership in Sustainability

Saint Paul RiverCentre and neighboring Roy Wilkins Auditorium have been working since 2009 to become regional leaders in sustainability, starting with bringing Xcel Energy Center on as a partner in these efforts. The two buildings have made great progress over the past three years and plan to continue pushing forward into the future.



"I am very impressed by the outstanding work our staff and partners have accomplished in the last year. I am even more proud of how sustainability has become such an integral part of our work culture and ingrained in our day-to-day work habits. The care and attention paid by the entire team is a testament to their dedication to the environment, our clients and our guests."

- Jim Ibister

General Manager, Saint Paul RiverCentre and VP Facility Administration, Minnesota Wild

Major Awards in Last 12 Months:

US Environmental Protection Agency – WasteWise 2011 Midsize Business Partner of the Year

The EPA awards a small number of businesses each year for showing national leadership in their waste reduction practices.

Recycling Association of Minnesota – 2011 Green Project Award

Each year RAM recognizes a special green project in Minnesota that has demonstrated outstanding environmental results.



"The National Hockey League applauds the great environmental work of the Minnesota Wild. The Club continues to show outstanding environmental leadership, proving the business case for sustainability and advancing their deep-rooted concern for the environment. Xcel Energy Center's impressive initiatives are models of goal setting standards for other NHL Clubs to follow."

- Bernadette Mansur

NHL SVP of Public Affairs & NHL Green

In early 2010, the NHL launched its league-wide sustainability program called "NHL Green." Xcel Energy Center and the Minnesota Wild were early participants in these efforts, and in summer 2011 were key contributors to the development of the NHL's Sustainability Initiatives Best Practices Guide. The arena was also part of a pilot program to develop a system for all 30 teams to collect



and share data related to utility use, waste stream and purchasing practices.

2011-2012 Facility Programs and Accomplishments:

- Minnesota Wild offset electricity use for entire season with wind power purchase
- Free Wi-Fi throughout complex increased connectivity
- Online exhibitor forms and iPad-based event management reduced paper use
- Event Sustainability Planning Guide launched
- Staff coordinated and participated in third annual Earth Day Saint Paul clean-up

Leadership in Sustainability

Programs at these facilities make it easy for all events, not just Minnesota Wild games, to throw a great event without throwing away their conscience. We compost and recycle in all areas of the buildings, use paperless event management tools whenever possible, and consider sustainability from the earliest planning stages of an event.









Reducing Carbon...Increasing Efficiency

The 2011-2012 event season marked the third and final year of "80-20 in 3," the energy program aimed at reducing carbon emissions by 80% and increasing efficiency to 20% better than the average for buildings in the region. Management approached these goals strategically with three main points of focus: equipment retrofits, operational changes and the integration of renewable energy.

Retrofit projects completed this year included two highspeed doors to help seal the building and an upgrade of all loading dock lights to higher-efficiency fluorescent models. Operationally, multiple processes were adjusted to improve scheduling and communication about lighting in the buildings. Together, these efforts enabled us to reach our efficiency goal three months ahead of schedule.

Additionally, the facilities added on-site solar power at the parking ramp and expanded off-site wind power purchases, bringing us almost halfway to the carbon reduction goal.

Although these goals are measured in kBTUs and CO₂, energy initiatives like these also save money and improve our working environment – a true triple bottom line benefit.

Did you know...

Last year, Saint Paul RiverCentre and Xcel Energy Center were the 11th largest Windsource purchasers in Minnesota.

On March 31, 2012, both facilities participated in Earth Hour, turning off lighting in multiple areas as part of a global effort to raise awareness about climate change.

Over the Last 12 Months:

Carbon Reduced vs. Benchmark 7,130 metric tons

Amount of Windpower Purchased 2,314,716 kWh

Current Campus Efficiency Rating 20.4% (More Efficient than Average)

Onsite Renewable Energy Generated 1,055 MWh







By the Numbers...

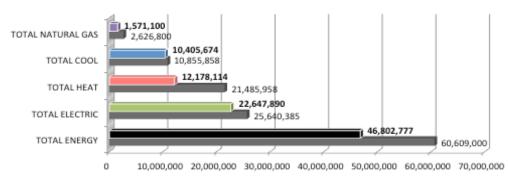
In just three years, this campus increased its energy efficiency to 20.4% better than average buildings in the region while reducing its operational carbon footprint by 35%.

Before this program began, our buildings already had a lower carbon footprint than normal due to the purchase of heating and cooling through District Energy Saint Paul. Xcel Energy Center and Saint Paul RiverCentre, however, wanted to further this achievement.

Over the last three years, Saint Paul RiverCentre and Xcel Energy Center have reduced carbon emissions by a total of over **7,100 metric tons**. Even though this falls short of an ambitious 80% reduction target, both facilities have made great strides in reducing direct and indirect emissions. Since these emissions are so closely linked to energy consumption, reducing energy use has been the most successful way to reduce our carbon footprint - accounting for 70% of the reduction to date.

Renewable energy has also contributed to reducing our carbon emissions. On-site, these facilities are now home to a 1 MW solar thermal installation and an 82 kW solar photovoltaic system. Off-site, renewable energy is regularly purchased through the Windsource for Events program. Combined, on-site and off-site renewable energy account for 30% of the emissions reduction.

Annual Energy Use Compared to Benchmark



Saint Paul RiverCentre made the most of a mild winter and realized a major reduction in heating consumption. Likewise, energy use in every other category has gone down since the benchmark period as well. The facility reached its peak efficiency when it hit 27% better than average buildings during the first quarter of 2012.



Energy Reduced 23% or 13,806,223kBtus (would power 368 homes)

Total Cost of Energy \$1,721,264 (down 1% from benchmark)

Total Cost Avoided \$507,751 this year (cost/kBtu up 28% over 4yrs)

26% More Efficient than Average



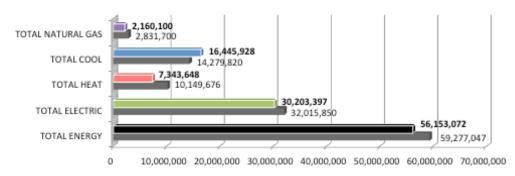
Energy Reduced 5.3% or 3,123,975kBtus (would power 83 homes)

Total Cost of Energy \$1,731,360 (up 7% from benchmark)

Total Cost Avoided \$96,321 this year (cost/kBtu up 12% over 4yrs)

16% More Efficient than Average

Annual Energy Use Compared to Benchmark



Usage has gone down since the benchmark period in electric, heating, and natural gas. However, a mild winter is not necessarily a good thing for an ice arena. On St. Patrick's Day alone, for example, two hockey games and record heat required as much cooling in one day as RiverCentre used in the entire month of April. Overall, the warmer winter required 15% more cooling energy than the benchmark period.





Success Stories...

Opportunities have been found across campus to reduce carbon and improve energy efficiency. Below are a few highlights of the changes that have been made this past year.





Saint Paul RiverCentre Parking Ramp Solar Installation

In January of 2012, an 82 kW solar array began producing power on the south wall of RiverCentre Parking Ramp. The project was completed in partnership with the City of Saint Paul with funding from a Federal Stimulus grant by the US Department of Energy and the Minnesota Department of Commerce. It is expected to generate 100,000 kWh of power annually, reducing carbon emissions by 83 metric tons per year and producing about 10% of the ramp's total electric needs.

Saint Paul RiverCentre High Speed Roll Up Doors

Since Saint Paul RiverCentre opened in 1998, building staff has struggled with loading dock doors being often left open during event load in and out. Comparable to leaving a refrigerator door open, heating and cooling was continually escaping to the exterior. To save both energy and associated costs, the building installed two high speed doors in place of the old metal ones. Because the new doors roll up in three seconds, have multiple settings and open and close automatically, energy is saved plus the doors are also more convenient for exhibitors and staff.





Xcel Energy Center Energy Management and Lighting Controls

Lighting controls at Xcel Energy Center presented a great opportunity to improve building energy management. Over the spring, a group of employees from multiple departments came together to review and adjust existing controls and procedures for using lights. One result of this Energy Management Task Force has been to add additional light settings to the control panel, allowing reduced load for events that do not require as much light. In addition, a new process was created to improve communication and allow lights in major areas to be turned off more consistently.

Windsource for Events through Xcel Energy Partnership

This year showed huge growth in the facilities' Windsource program, which allows customers to offset their carbon footprint by purchasing renewable energy from Minnesota wind farms through Xcel Energy. Over 50 event days were offset by Windsource purchases this year, including all Minnesota Wild home games, Minnesota RollerGirls bouts, and the annual Great River Gathering. Combined, these events offset over 2.3 million kWh – enough energy to power 210 homes!





Lighting Retrofits and Rebates

In the spring of 2012, 291 high-pressure sodium lights in Saint Paul RiverCentre and Xcel Energy Center loading docks were replaced with fluorescent lamps. The project received rebate funding through Xcel Energy's Joint Energy Efficiency Program. Not only will the retrofit save 163,000 kWh and \$12,300 per year, it has also improved the light quality on the loading dock. The new lights provide three times the light level of the old sodium lamps.





Reducing Trash...Increasing Recycling

In the past year, our facilities have moved beyond the original "50-50 in 2" goal and continued the push to recycle, compost, and otherwise divert as much of the waste stream as possible. There continues to be great improvement on multiple fronts.

Some of the success this year has been facilitated by improvements in Twin Cities recycling services. As of January 2012, for example, businesses and residents can now recycle many more plastic items than before. This means that everything from beer cups to popcorn tubs and kitchen packaging can now be added to what was previously only "bottle and can" recycling.

The complex has also added and improved several on-site recycling processes. Vinyl tablecloths from trade shows are now recycled alongside plastic wrap. A semi-permanent construction recycling dumpster now sits at our facility to collect various items that are no longer usable.

Meanwhile, on-site foodservice providers MHC Culinary Group and Levy Restaurants continue to show leadership by expanding their use of compostable service ware.

Did you know...

Saint Paul RiverCentre and Xcel Energy Center collected their MILLIONTH pound of compost this past March!

Over 40 tons more compost was collected this year than last, now exceeding annual cardboard collection by over 90 tons.

Over the Last 12 Months:

Annual Recycling Rate: 56%

Compost: 240 tons
Cardboard: 147 tons
Cans, Bottles, Cups: 102 tons
Construction Materials: 32 tons
Pallets: 23 tons

Kitchen Grease: 10 tons
Plastic Wrap/Vinyl: 1.5 tons
Miscellaneous: 10 tons

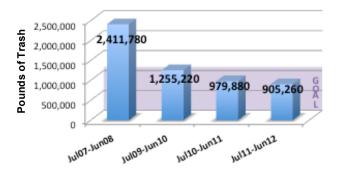






By the Numbers...

It has now been a year since the successful completion of "50-50 in 2." However, we continue to track our effort based on those metrics, and the data below shows that our results continue to improve.



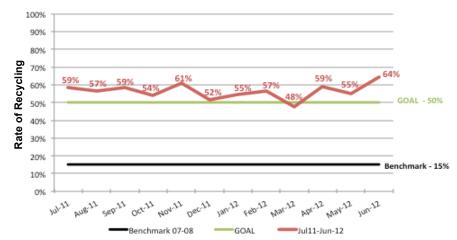
Trash Reduction - Year by Year

Trash volumes have continued to decrease in 2011-2012, partly due to increases in recycling. The total waste stream has also gone down by over 50,000 lbs this year - during a period when visitor numbers have held relatively steady.

Recycling Rate – Month by Month

Historically, the monthly recycling rate has varied predictably with event loads, as the busiest months are typically the biggest challenge for the program.

This year, each month's numbers were slightly better than last year. This March, which is the busiest month of the year, showed the biggest improvement over previous years.



Success Stories...

The waste program continues to expand and grow because of great partnerships in the community and the exceptionally hard work of our building staff. Below are a few examples from this year.





Filtering Fryer Oil with Filta®

This year, Levy Restaurants began a new partnership with Filta®, a company that provides filtration for concession stand fryer oil. Filtering this oil on-site has reduced oil purchases by over 2,500 gallons in one season alone, saving about \$8,000 in oil and labor for cleaning the fryers. Using less oil also has the added environmental benefits of reducing transport fuel and packaging, as well as water, fertilizer and energy to grow and process the soybeans into oil.

Composting for Events: Minnesota Wild Games and Minnesota RollerGirls

Both Saint Paul RiverCentre and Xcel Energy Center have stepped up their composting efforts this season. Operations staff has started doing an extra "sweep" of arena seating areas after Minnesota Wild games, specifically picking up items that can be composted. The Minnesota RollerGirls helped push the envelope by being the first to participate in composting at Roy Wilkins Auditorium. They also worked with building staff to provide in-bout announcements to educate fans on composting.









Reduce Usage...Increase Conservation

This year, we continued monitoring water usage in the buildings and began to take a closer look at equipment and practices related to water efficiency.

An extensive water-fixture survey was completed this spring at Saint Paul RiverCentre and Roy Wilkins Auditorium to more closely identify how the buildings' water use compares to common green building standards. While many fixtures were found to be already water efficient, others have room for improvement.

Although some of the older fixtures in Roy Wilkins Auditorium would be difficult to upgrade, some simple improvements can be made there and in other areas to increase water efficiency. For example, fitting the existing faucets in RiverCentre and Roy Wilkins restrooms with moderate flow restrictors would save about 80,000 gallons of water per year with only a minimal capital investment.

At Xcel Energy Center, a similar audit is underway. Most fixtures are already equally or more efficient than those in Saint Paul RiverCentre. However, there are limitations to further improvement due to the pressure required to service restrooms on all levels during a single intermission.

Did you know...

This past season the Minnesota Wild participated in an NHL league-wide campaign called Gallons for Goals. For each goal the Wild scored during the 2011-2012 season, 1,000 gallons of water was restored to a stressed watershed.

Over the Last 12 Months:

Water Reduced from Benchmark 40% or 9,087,000 gallons (equal to 1,000 tanker trucks)

> Total Cost of Water \$111,779 (down \$32,807 from benchmark)

Average Gallons per Visitor 7.7







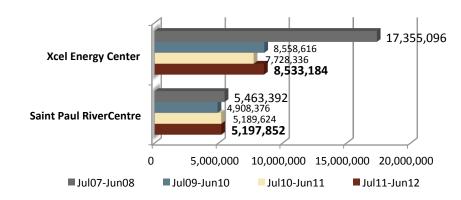
By the Numbers...

Although we have yet to set a specific water-reduction goal, both facilities track water consumption closely and seek out opportunities for improvement.

Water consumption is down overall compared to the benchmark period – with an almost 50% reduction at Xcel Energy Center. However, water usage was up at both buildings since last year. This increase is partly due to higher attendance as well as a known issue related to pressure in the buildings' faucets.

As part of an increased focus on water moving forward, we plan to test new equipment that compensates for this pressure issue and allows us to reduce water use in these buildings even further.

Facility Water Use - Year by Year





USA Gymnastics VISA Championships

The August 2011 VISA Championships had a goal to create the 'greenest' event in USA Gymnastics history. As part of this effort, they were the first participants in a new program offering event-specific tracking of water, energy and recycling at Xcel Energy Center and Saint Paul RiverCentre. For that event, water usage averaged just 4.0 gallons per visitor – which is significantly less than the facilities' annual average of 7.7 gallons per person. This tracking program and the existing initiatives at the facilities allowed USA Gymnastics to both meet and exceed their goals for the event.

In Conclusion...

"The Annual Sustainability Summary showcases the accomplishments that support our goal of becoming a regional leader in sustainability. While it's encouraging to look back on the achievements of the past year, it is even more inspiring to elevate our goals as we strive for continued success of our sustainability initiatives."

 Karolyn Kirchgesler
 President & CEO of Visit Saint Paul and the RiverCentre Authority

