



# ANNUAL SUSTAINABILITY SUMMARY

JULY 2015-JUNE 2016





As leaders in sustainability, Saint Paul RiverCentre and Xcel Energy Center are committed to being a top destination in the events industry.

This is our seventh annual sustainability summary, in which we highlight the events, achievements, and overall progress of the past year at Saint Paul RiverCentre and Xcel Energy Center. The facilities made notable progress this year, from the installation of hundreds more high-efficiency LED lights, to an exceptional jump in the annual recycling rate, to recertification at a higher level with APEX/ASTM. This third-party standard provides an events-specific roadmap toward more environmentally responsible operation; by achieving Level 2 certification, we are only the fourth venue in the world to exceed their Level 1 standard. We have and will continue to engage our community and the events industry to help define what it means to host environmentally responsible events.

“We are always looking for ways to continue building on our results. This can’t be done without the support of our ownership and executive team who understand the importance of this endeavor. It’s essential to the environment and positively impacts our bottom line, but it also means a great deal to our employees who have great passion for bettering our campus and the community in which we all live.”

— Jim Ibister  
*General Manager, Saint Paul RiverCentre  
 VP Facility Administration, Minnesota Wild*

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# WASTE



## ARENA SEAT REPLACEMENT PROJECT

Over the past year, nearly all of the 18,000 seats inside Xcel Energy Center were replaced with new and improved seating. Instead of throwing all the old seats away, building staff and multiple partners worked together to donate, sell and recycle the old seats as much as possible. The result: over **200 tons** of material was diverted from the landfill.

## FOOD SHOW COMPOSTING & DONATIONS

Each August, SuperValu brings its national conference to Saint Paul RiverCentre. In 2015, this show donated over **170,000 lbs** of leftover food to a local food shelf. Items that couldn't be donated were composted – equating to another 8,000 lbs of diverted material that was collected by staff in under three hours.



## ANOTHER GREEN TEAM

This past year we began a partnership with the University of Minnesota's Sports Management Green Team. A group of about 40 student volunteers came to a Minnesota Wild game to help educate hockey fans on proper sorting of recycling and compost. The event was such a success that they plan to return in the 2016-17 season - for as many as 10 more games.



## QUICK FACTS

2015-16  
recycling rate: **68%**  
*(up from 61% last year)*



This year we composted  
a record  
**348 TONS**  
of material.  
*(that's almost 700,000 lbs)*



Waste costs are  
down for the second  
year in a row –  
now almost **35% LESS**  
annually than two years ago.



**5** – the number  
of events that  
participated in  
event-specific waste  
reporting this year.



# ENERGY

## LED TECHNOLOGY

This was the year of LED lighting at Saint Paul RiverCentre. A total of 570 lights were upgraded from inefficient HID to LED in the past 12 months – in the Exhibition Halls, Roy Wilkins Auditorium, and the lower level of RiverCentre. These improvements have resulted in better, brighter lighting – as well as over \$47,000 per year in energy savings.



In addition, the RiverCentre Skyway exterior sign was changed from neon to LED this year. The new sign will save an estimated \$3,400 per year in energy costs and use 96 percent less energy than the old one!

Both the Exhibition Hall lights and the skyway signage were funded through Trillion BTU, the Saint Paul Port Authority's low-interest financing program that helps local businesses fund energy efficiency upgrades.

## CARBON REDUCTION

This season we also successfully reached a long-standing energy goal at Saint Paul RiverCentre & Xcel Energy Center: to reduce our carbon footprint by 80 percent from our benchmark levels in 2007-08. This has been achieved through a combination of energy efficiency, waste reduction, and the integration of both on-site and off-site renewable energy resources. These numbers also got a boost from the fact that grid energy contains less CO<sub>2</sub> than it did eight years ago - which is great news for the community. As a result, our operational carbon footprint is now 83 percent less than it was in 2007-08.



## QUICK FACTS

**2,678** – total number of lights that have been upgraded since 2010.



**\$300,000** – utility rebates received for energy upgrades.



**3** – number of years we have been a Top Five purchaser of Windsorce electricity in Minnesota.





# WATER

## RESTROOM UPGRADES

The majority of restroom faucets in Saint Paul RiverCentre were upgraded this year. Not only are these faucets an aesthetic improvement, they are more user friendly and high-efficiency.



## WATER QUALITY PROTECTION

As part of APEX Level 2 certification, Saint Paul RiverCentre and Xcel Energy Center made strides this year to protect outdoor water quality and rainwater runoff from the property. Using best practices from the MPCA's Winter Sidewalk Maintenance Manual, we integrated multiple new practices to improve the effectiveness of snow and ice removal on the property - while using only as much ice-melting chemical as needed to get the job done.

## QUICK FACTS

Annual water use per visitor in 2015-16:  
**6.98 GALLONS**



**1,500 GALLONS**

of water is saved every day that our irrigation system doesn't run because of its rain sensing technology.



# COMMUNITY

## STAFF AWARENESS

As part of APEX Level 2 certification, we surveyed building staff to find out how well they understand the building's sustainability program. The result: nearly all Saint Paul RiverCentre and Xcel Energy Center staff are familiar with the program and related practices, and over two-thirds of respondents actively participate in efforts like composting, waste reduction, and energy efficiency within the building.



## NHL GREEN WEEK

This year Xcel Energy Center participated in the first ever NHL Green Week. We hosted a Minnesota Wild "green game" that week, joining arenas across the country to showcase sustainability initiatives that help raise awareness and reduce environmental impact.



## QUICK FACTS

**24** staff volunteers collected



**350 LBS** of discarded waste along the Mississippi River during this year's Adopt-A-River cleanup.

For the **4TH YEAR**

in a row, we joined millions worldwide to shut off lights for one hour this past March in celebration of Earth Hour.



Saint Paul RiverCentre & Xcel Energy Center received the Sustainable Saint Paul –



**SUSTAINABLE PARTNERSHIP AWARD**

this year, for being a founding member of the Saint Paul EcoDistrict.

# PURCHASING

## ARENA SEATING

In addition to recycling the old arena seats this year, Xcel Energy Center management made sure that the new seats would be environmentally friendly as well. For example, the foam padding within them is made with 10 percent bio-based content and they are glued using low-VOC water based adhesives. In addition, manufacturer Irwin Seating Company has a comprehensive sustainability program of its own, with goals around waste reduction, air quality, energy efficiency, and the use of renewable energy.



## QUICK FACTS

**85%** of office product purchases this year met green standards.



**95%** of building operations purchases (cleaners/papers) were green, with **75%** of all cleaning purchases building-wide.



# CONCLUSION

Through seven years of diligent effort, sustainability has become a way of life at Saint Paul RiverCentre and Xcel Energy Center. We've had challenges along the way, and there is always more to do – but we continue to push forward and try to set an example for our community and the events industry. We have seen that the longer we work at it, the more options become available that allow us to keep making progress. For example, LED lighting has made tremendous leaps in technology since we started this program. Composting has become almost commonplace in the Twin Cities, though only in its infancy when we started in 2009. We are thrilled to see the progress around us, and will continue making our best effort to stay at the forefront of what is possible in hosting sustainable events.

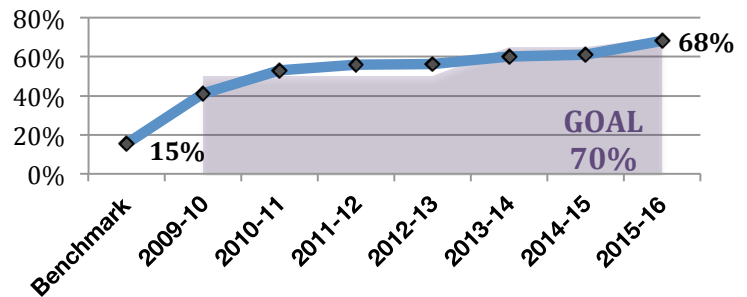




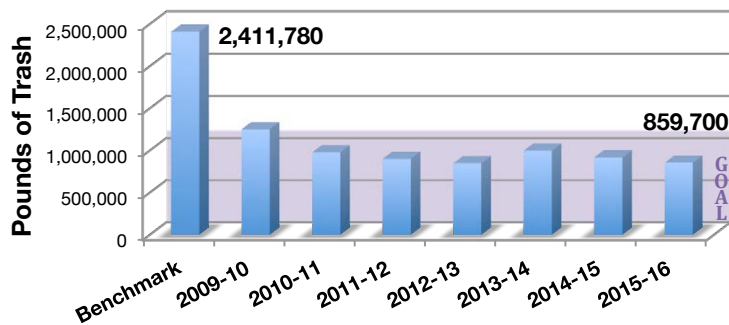
# APPENDIX

## WASTE DATA - Saint Paul RiverCentre & Xcel Energy Center

### Annual Recycling Rate



### Annual Trash Volume

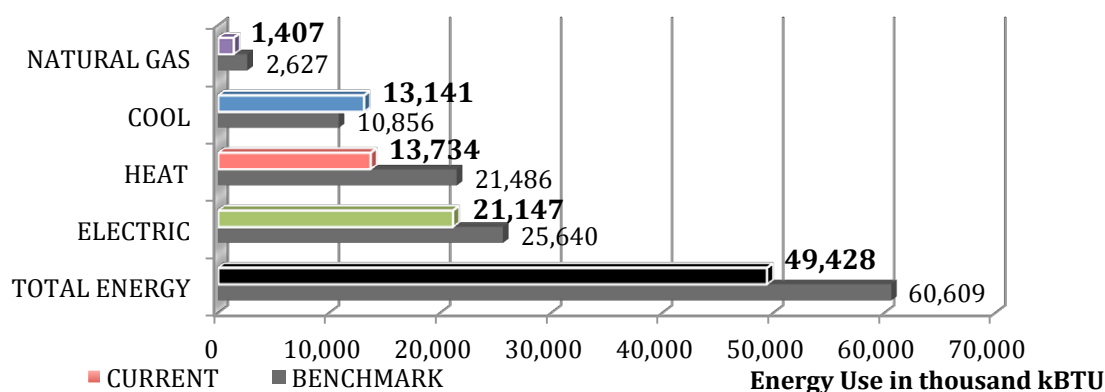


The recycling rate made another sizeable jump this year, and trash volumes continue to gradually decline. The biggest overall change, however, has been the substantial cost reduction since negotiating a new waste hauling contract in early 2015. Total costs are 35% less than two years ago.

### Cost Breakdown Table

	Benchmark Jul07 - Jun08	Jul12 - Jun13	Jul13 - Jun14	Jul14 - Jun15	Current Jul15 - Jun16
Trash Disposal & P/U	\$79,902	\$47,159	\$56,440	\$46,150	\$36,907
Recycle Disposal & P/U	\$3,521	\$50,328	\$60,389	\$59,266	\$52,883
Total Taxes	\$70,356	\$48,449	\$57,587	\$44,465	\$32,858
Total Extra Fees	\$16,319	\$33,150	\$40,453	\$27,261	\$9,309
Total Rental/Lease	\$4,725	\$17,347	\$14,712	\$17,845	\$19,229
Total Penalties	\$75	\$1,088	\$1,173	\$435	\$70
Total Trash Credits	\$0	\$3,286	\$2,476	\$0	\$0
Total Recycling Rebates	\$9,724	\$10,299	\$8,669	\$8,822	\$8,825
<b>Net Trash Costs</b>	<b>\$171,552</b>	<b>\$113,801</b>	<b>\$136,515</b>	<b>\$108,449</b>	<b>\$77,959</b>
<b>Net Recycling Costs</b>	<b>(\$6,186)</b>	<b>\$70,136</b>	<b>\$83,093</b>	<b>\$78,151</b>	<b>\$64,472</b>
<b>Total Waste Costs</b>	<b>\$165,366</b>	<b>\$183,937</b>	<b>\$219,609</b>	<b>\$186,600</b>	<b>\$142,431</b>
Tons of Recycling	218	550	733	726	925
RECYCLING Cost Per Ton ->	<b>(\$28)</b>	<b>\$128</b>	<b>\$107</b>	<b>\$108</b>	<b>\$70</b>
Tons of Trash	1,206	426	500	461	430
TRASH Cost Per Ton ->	<b>\$142</b>	<b>\$267</b>	<b>\$217</b>	<b>\$235</b>	<b>\$181</b>
Total Waste Generated (tons)	<b>1,424</b>	<b>976</b>	<b>1,234</b>	<b>1,187</b>	<b>1,355</b>
Recycling Rate (annual)	<b>15%</b>	<b>56%</b>	<b>60%</b>	<b>61%</b>	<b>68%</b>

## ENERGY DATA - Saint Paul RiverCentre



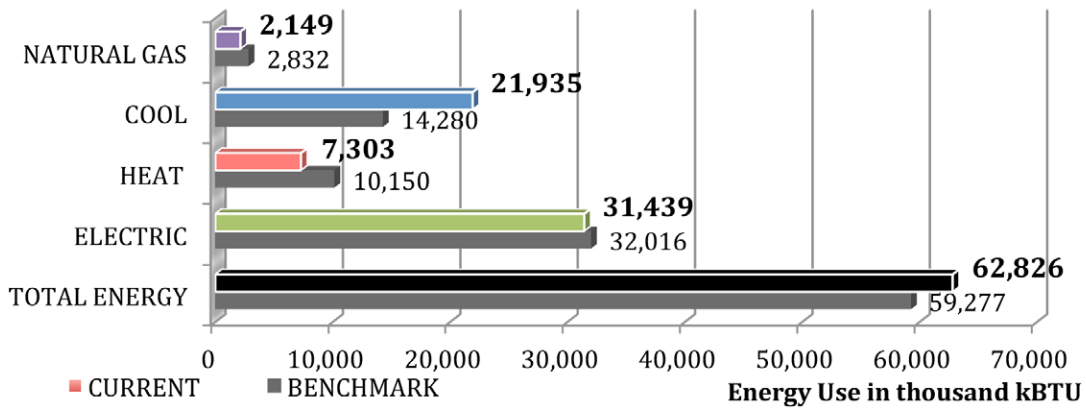
Energy use continues to decline in Saint Paul RiverCentre; total usage is now 18% less than in the benchmark period. While heating and cooling use fluctuate based on each year's weather patterns, electric use is consistently down year over year. Extensive HVAC and lighting retrofits have made this possible, the largest of which was LED lights in the exhibit halls this year.

### Saint Paul RiverCentre Cost Table

	Benchmark Jul07-Jun08	Jul12-Jun13	Jul13-Jun14	Jul 14-Jun 15	Current Jul 15-Jun 16
<b>ELECTRIC COSTS</b>	<b>\$599,005</b>	<b>\$613,454</b>	<b>\$667,005</b>	<b>\$639,253</b>	<b>\$613,624</b>
Usage Costs	\$356,080	\$341,910	\$385,035	\$352,715	\$335,096
Demand Charges	\$141,862	\$147,191	\$176,452	\$171,003	\$171,884
Taxes/Fees	\$101,063	\$124,354	\$105,518	\$115,535	\$106,644
<b>NATURAL GAS COSTS</b>	<b>\$29,076</b>	<b>\$14,424</b>	<b>\$23,393</b>	<b>\$15,639</b>	<b>\$9,381</b>
Usage Costs	\$24,753	\$11,354	\$18,978	\$12,446	\$6,721
Taxes/Fees	\$4,323	\$3,071	\$4,415	\$3,193	\$2,660
<b>HEATING COSTS</b>	<b>\$409,621</b>	<b>\$345,451</b>	<b>\$369,824</b>	<b>\$353,903</b>	<b>\$301,963</b>
Usage Costs	\$165,554	\$126,721	\$152,028	\$139,557	\$87,371
Demand Charges	\$188,283	\$170,637	\$178,281	\$186,020	\$190,424
Taxes/Fees	\$55,784	\$48,092	\$39,515	\$28,325	\$24,168
<b>TOTAL COOLING COSTS</b>	<b>\$699,577</b>	<b>\$756,870</b>	<b>\$719,399</b>	<b>\$704,788</b>	<b>\$709,339</b>
Usage Costs	\$70,412	\$83,845	\$83,970	\$94,089	\$98,469
Demand Charges	\$560,976	\$600,285	\$586,753	\$586,753	\$586,753
Taxes/Fees	\$68,189	\$72,740	\$48,676	\$23,947	\$24,117
<b>TOTAL COSTS</b>	<b>\$1,737,279</b>	<b>\$1,730,199</b>	<b>\$1,779,621</b>	<b>\$1,713,582</b>	<b>\$1,634,307</b>
<b>TOTAL ENERGY USAGE (in kBTU)</b>	<b>60,609,000</b>	<b>53,634,139</b>	<b>55,435,003</b>	<b>53,208,659</b>	<b>49,428,304</b>
<b>Cost/kBTU</b>	<b>\$0.0287</b>				<b>\$0.0331</b>
					Current Cost per Unit @ Benchmark Use
					\$2,003,987
					Current 12-Month Cost Avoidance From Benchmark
					<b>\$369,681</b>



## ENERGY DATA – Xcel Energy Center



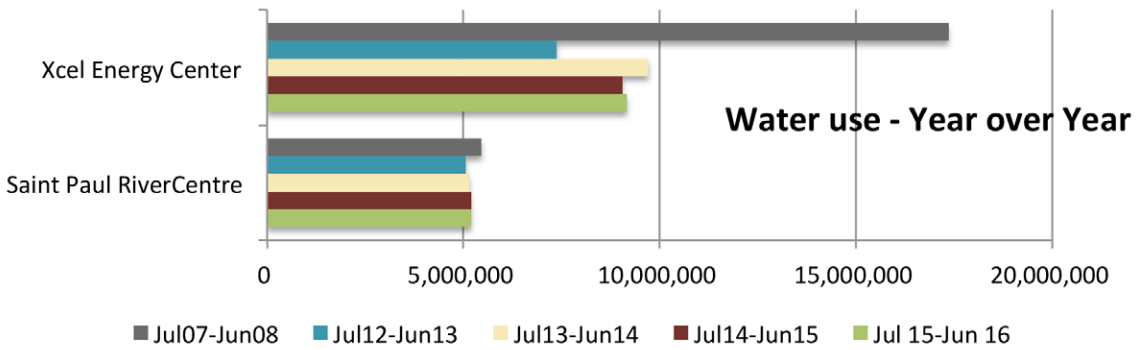
Total energy use is actually up slightly from the benchmark period, primarily because of cooling use. Xcel Energy Center used much more cooling than normal last summer, due to the area seat replacement project; people were working in the seating bowl almost every day, which meant the building was cooled much more consistently to keep them comfortable.

### Xcel Energy Center

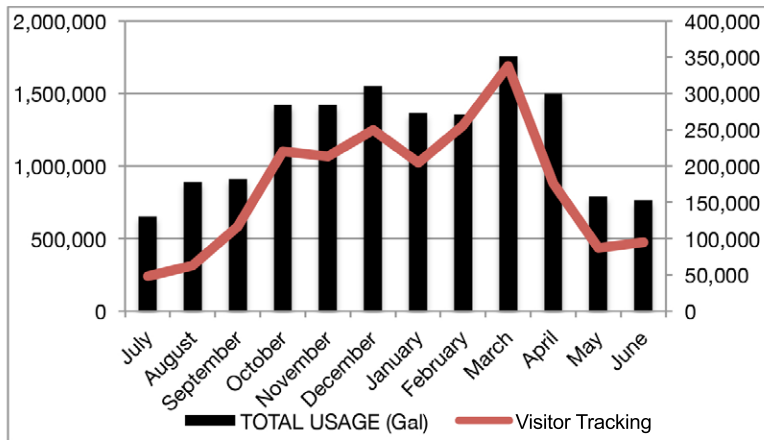
#### Cost Table

	Benchmark Jul07-Jun08	Jul12-Jun13	Jul13-Jun14	Jul 14-Jun 15	Current Jul 15-Jun 16
<b>ELECTRIC COSTS</b>	<b>\$739,761</b>	<b>\$746,012</b>	<b>\$923,288</b>	<b>\$900,053</b>	<b>\$919,402</b>
Usage Costs	\$437,208	\$416,751	\$535,940	\$500,319	\$504,606
Demand Charges	\$176,316	\$179,827	\$242,057	\$238,257	\$256,072
Taxes/Fees	\$126,236	\$149,434	\$145,291	\$161,476	\$158,724
<b>NATURAL GAS COSTS</b>	<b>\$30,700</b>	<b>\$19,241</b>	<b>\$23,465</b>	<b>\$18,361</b>	<b>\$14,126</b>
Usage Costs	\$26,918	\$15,250	\$18,926	\$14,557	\$10,302
Taxes/Fees	\$3,782	\$3,991	\$4,538	\$3,804	\$3,824
<b>HEATING COSTS</b>	<b>\$207,711</b>	<b>\$194,809</b>	<b>\$226,383</b>	<b>\$214,056</b>	<b>\$175,103</b>
Usage Costs	\$77,939	\$65,178	\$94,067	\$71,511	\$46,057
Demand Charges	\$100,646	\$101,342	\$99,224	\$111,461	\$103,619
Taxes/Fees	\$29,126	\$28,289	\$33,093	\$31,084	\$25,427
<b>TOTAL COOLING COSTS</b>	<b>\$647,624</b>	<b>\$696,446</b>	<b>\$739,389</b>	<b>\$765,152</b>	<b>\$779,954</b>
Usage Costs	\$92,633	\$87,151	\$125,702	\$148,819	\$161,986
Demand Charges	\$492,156	\$538,070	\$538,070	\$538,070	\$538,070
Taxes/Fees	\$62,836	\$71,224	\$75,616	\$78,263	\$79,898
<b>TOTAL COSTS</b>	<b>\$1,625,796</b>	<b>\$1,656,508</b>	<b>\$1,912,524</b>	<b>\$1,897,621</b>	<b>\$1,888,586</b>
<b>TOTAL ENERGY USAGE (in kBTU)</b>	<b>59,277,047</b>	<b>50,960,845</b>	<b>62,362,874</b>	<b>60,472,117</b>	<b>62,826,315</b>
Cost/kBTU	\$0.0274				\$0.0301
Current Cost/Unit @ Benchmark Use					\$1,781,893
Current 6-Month Cost Avoidance					<b>-\$106,692</b>

# WATER DATA - Saint Paul RiverCentre & Xcel Energy Center



## Gallons to Visitors (July 15-June 16)



Water use is up slightly in both Saint Paul RiverCentre and Xcel Energy Center, approximately equivalent to an increase in total visitors. Total costs are also up slightly as a result. Thus far, conservation efforts in the past year are only showing minor impact on total water use.

	Benchmark Jul07-Jun08	Jul13-Jun14	Jul13-Jun14	Jul14-Jun15	Current Jul15-Jun16
<b>Saint Paul RiverCentre</b>					
Water Cost	\$13,489	\$16,322	\$16,325	\$17,405	\$17,859
Sewer Cost	\$20,427	\$24,092	\$24,802	\$25,855	\$26,769
Taxes & Fees	\$112	\$2,217	\$2,675	\$3,745	\$4,704
<b>Total Cost:</b>	<b>\$34,027</b>	<b>\$42,631</b>	<b>\$43,802</b>	<b>\$47,005</b>	<b>\$49,332</b>
<b>Total Gallons:</b>	<b>5,463,392</b>	<b>5,057,976</b>	<b>5,152,972</b>	<b>5,195,608</b>	<b>5,200,096</b>
<b>Xcel Energy Center</b>					
Water Cost	\$42,699	\$22,027	\$30,616	\$30,190	\$31,284
Sewer Cost	\$64,784	\$33,527	\$46,797	\$45,094	\$47,226
Taxes & Fees	\$3,077	\$5,686	\$7,907	\$10,524	\$12,941
<b>Total Cost:</b>	<b>\$110,559</b>	<b>\$61,240</b>	<b>\$85,321</b>	<b>\$85,808</b>	<b>\$91,451</b>
<b>Total Gallons:</b>	<b>17,355,096</b>	<b>7,374,532</b>	<b>9,713,528</b>	<b>9,047,060</b>	<b>9,168,236</b>