



HOW TO ACHIEVE SUCCESS IN

STADIUM AND ARENA RECYCLING

Clearly defined steps for implementing a successful stadium/arena recycling program.

Identifies financial ROI opportunities.

Defines the role of recycling container design and deployment.

Tips from over 25 years' experience working with leading sports facilities.



RECYCLING OPPORTUNITIES AT STADIUMS AND ARENAS.

Stadiums and arenas bring a large number of people to one place at one time. This generates a high volume of waste and recyclable materials. Implementing an effective recycling program at these venues can generate potential **revenue from collected recyclables**.

Implementing effective recycling can also save the administering organization tens of thousands of dollars a year in disposal costs. This makes a big difference to the bottom line. The impact of financial ROI is triggering arena and stadium facility and operations managers to take a more proactive approach to recycling and composting.

- According to the Environmental Protection Agency ([2011 Game Day Challenge](#)), an average college football game produces 50 to 100 tons of waste.
- A study of 25 different venues and events in California by Cal Recycle in 2006 found on average 2.44 pounds of waste is generated per visitor, per day.
- National Association for PET Container Resources (Venue Recycling in the USA, 2008) surveyed outdoor (category 1) and indoor (category 2) venues to determine total numbers of PET bottles, aluminum cans and glass generated by sports facilities:

Venue or Event Category*	Total # Venues or Events	Total Category Attendance (in MM's)	Average PET Bottle Use	Total PET Bottle Use (in MM's)	Average Cup Use	Total Cup Use (in MM's)	Average Aluminum Can Use	Total Aluminum Can Use (in MM's)	Average Glass Use	Total Glass Use (in MM's)
1	723	263	1.72	452.36	1.0	263	0.422	110.99	0.04	10.520
2	61	141	0.9	126.9	1.0	141	0.08	11.28	0.2	28.200

Source: http://www.napcor.com/pdf/NAPCOR_VENUE-Final2.pdf



Image source: <http://www.xcelenergycenter.com/sustainability/initiatives/waste>
Image: CleanRiver TRH Recycling Container

The **Xcel Energy Center** home to the National Hockey League Minnesota Wild, has reduced waste by 1.43 million pounds or over 58 percent, thanks to an aggressive recycling program. In 2015 they recycled 65% of all their waste. Multi-stream recycling containers feature unique openings and high impact graphics to help people make the right choice when tossing their waste.

Watch this video to learn how the Excel Energy Center's sustainability program earned a hatrick with LEED, three Green Globes and APEX/ASTM certification.





HOW TO SUCCESSFULLY TACKLE RECYCLING IN EACH KEY AREA.

It's important to realize stadiums and arenas have distinct areas, each of which pose particular challenges.

1. Outside the stadium or arena
2. Points of Entry
3. Concession stands and concourses.
4. Private boxes.
5. Seating areas.



1. OUTSIDE THE STADIUM OR ARENA

In locations where tailgating is popular, a considerable volume of recyclable and compostable material is generated. In these areas you don't have control of the type of waste people bring with them. However by providing trash and recycling bins in central areas and promoting your program to the fans you can encourage them to make the right decision when disposing their waste.

It's a great idea to have a team made up of volunteers or employees to hand out garbage bags to fans and also to advise people of your recycling program. Tell them where the recycling bins are and what types of recyclables are collected, for example aluminum cans, paper and cardboard.

Food and beverage vendors who operate on streets and sidewalks outside stadiums also generate waste. However a point to note is that collection and recycling may be under municipal jurisdiction and therefore not the responsibility of stadium management.

TIPS

- Provide centrally located containers with high-impact instructional graphics to tell people what's recyclable and/or compostable.
- Have a team of employees or volunteers at the waste stations to help fans dispose of their waste responsibly.
- Communicate your program to fans at the tailgate party using videos or messages on social media and posters or banners.



2. POINTS OF ENTRY

Image: CleanRiver TXZ Recycling Container

To reach waste diversion goals, many stadiums and arenas prohibit fans from bringing in their own food and beverages. Place recycling and waste containers at all points of entry and ask fans to discard their waste into the appropriate waste or recycling container. Highly visible **signage** can help educate fans and better manage this process.

TIPS

- There's a large volume of people moving through the entranceway at one time so ensure the bins are highly visible.
- Use high-impact signage that shows exactly what goes in each bin.



3. CONCESSION STANDS AND CONCOURSES

Concessions generate much of the potentially recyclable and compostable materials. They are also the most crowded areas especially between innings, at halftime and during other breaks in the action.

In these crowded, sometimes cramped quarters fans typically do not take the time to search for **recycling containers** – even if they want to use them. Most stadiums and arenas calculate waste volume and provide an adequate number of trash cans. However, there may not be enough recycling containers and/or these containers may not be positioned in high-traffic areas. If people have to go out of their way to use a **recycling container**, they're more likely to use the nearest trash can instead.

Care must be made in developing and deploying signage. Not only do signs point to the location of recycling containers, **creative graphics** instruct fans as to what can – and cannot – be put into each recycling container.

Venues that adopt fully recyclable cups, napkins and other foodservice items create a tremendous potential for composting. Here, too, effective, impactful signage is integral to the success of the program.

Safeco Field, the home of the Seattle Mariners diverts 80% of their game day waste due to the use of compostable or recyclable food service ware. They divert 900,000lbs of organic waste each season which is sent to a composting facility.

In 2012 the Hartsfield-Jackson Atlanta International Airport created a contract with their vendors to only use compostable or recyclable food service ware to help them meet their diversion rate goals.



Use containers that can be accessed from both sides and have high-impact graphics.

Image: CleanRiver Stadium Bin

TIPS

- Restrict waste coming into your venue.
- Contract your vendors to use recyclable or compostable packaging – this has a big impact on helping you achieve your zero waste goals.
- Use containers that can be accessed from both sides – this makes it easier for fans to use the bins when moving in large crowds.
- Don't place recycling bins against the wall which makes it inaccessible in large crowds.
- Use clear graphics with images of facility-specific waste to help fans make the right choice.
- Having graphics at eye level will greatly increase the chance of someone using the recycling bin correctly.



4. PRIVATE BOXES

The proliferation of private boxes and suites has raised the recycling potential in these areas. Collection however is different in these restricted areas, where crowding is not typically an issue. What may be a concern is aesthetics. Sloppy, overflowing recycling and composting bins are not welcome in private areas. Aesthetically pleasing, unobtrusive recycling containers should be placed in common areas and within individual suites.



Image: CleanRiver IRCT Recycling Container

TIPS

- Have wait staff communicate the recycling policy and how it helps benefit the stadium's overall sustainability goals. Fans want to help their team out whenever they can!
- Contract vendors to only use recyclable and compostable waste.
- Source aesthetically pleasing recycling containers that have clear instructional posters and labels to help people make the right choice.



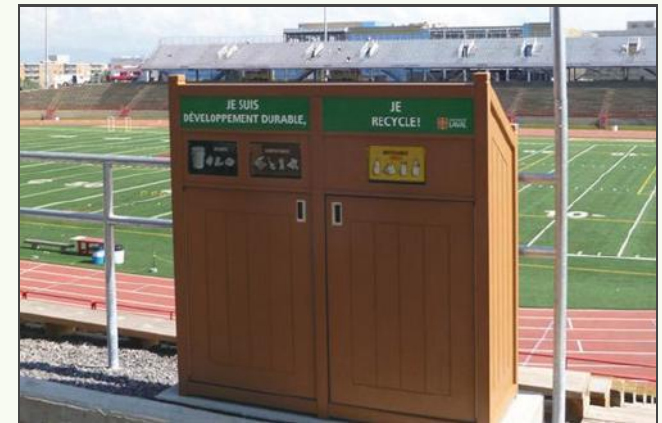


5. SEATING AREAS.

Much of the potentially recyclable and compostable material is generally left behind in seating areas. After each game or event, crews literally sweep through the stands. While some stadiums are trying to recycle these materials, most is sent to the landfill. Locating recycling containers in seating sections is typically not an option due to space considerations. Instead, fans need to be educated to bring recyclable and compostable materials to designated containers that are located in the concession areas. Eye-catching signs and posters are a key component of this educational effort.

TIPS

- Have highly visible containers at the entranceway to the seating areas.
- As fans enter and leave the seating area have employees remind them to dispose of their drink cans and cardboard food trays in the recycling or organics bins provided.
- Remind fans to dispose of their waste responsibly with videos featuring the players during the game breaks.



Université Laval, Quebec, place high-visibility bins at the entranceway to seating areas.

Image: CleanRiver TXZ Recycling Container

USE THE CLEANRIVER 3C PROCESS TO ENSURE RECYCLING PROGRAM SUCCESS.

The CleanRiver 3C Process is a proven set of best practices that help you maximise your recycling program to ensure you meet your sustainability goals.

 [WATCH THE 3C VIDEO](#)



1. CULTURE

For a recycling program to be successful it has to be led from the top down. If senior management are seen to be actively involved in the recycling program and taking it seriously, then everyone else in the organizations is going to take recycling seriously too.

"If senior management takes a position, it makes it easier to execute than when you hand the task off to other stakeholders. Transparency, advocacy and policy can make a huge impact on the success of a recycling program."

- Bruce Buchan, CEO, CleanRiver.

TIPS

- Involve representatives from all functional areas including facilities, custodial, finance, marketing, vendor management and health and safety to name a few. This helps build a better program that works for end users.
- Senior management should lead by example and emphasize the importance of the recycling program so that others are motivated to participate.

The [Langley Events Centre, BC](#), used the 3C process to reach their zero waste goal. To drive culture change they held workshops for key stakeholders who identified areas of improvement during the development of the program. This ensured that all functional areas of the stadium felt included in the plan. They then branded their program the "Zero Waste Challenge" to inspire buy-in from fans and staff.

Watch the video to learn more about how the Township of Langley implemented their successful Zero Waste program.





2. COMMUNICATION

Videos and social interaction.

A video featuring the team is a great way to inspire fans to get on board with the program and to recycle their waste. Videos can be shared on social media and played at the venue before the game. Stanford athletics produced [this video](#) to promote their recycling program, and players from Minnesota United FC [star in a video](#) to inspire fans to recycle their waste.

Reminding fans during the game by posting pictures and videos on your social network channels is a great way to keep the fans engaged in the program. Hold competitions to win fan gear, you can award prizes to the best photo of someone recycling at the game.

During the 2015 [GameDay Recycling Challenge](#), recycling champs Louisiana State University raffled a football autographed by Coach Les Miles to fans who tweeted or posted a recycling selfie.

Train employees.

Make sure that all employees are fully trained so they are able to coach fans on how to use the recycling bins effectively. Also having volunteers posted at the recycling stations to remind fans to make the right choice helps reduce your contamination levels.



Langley Events Centre employees receiving training on their new zero waste program

Brand your program.

Tap into that die-hard fan spirit and brand your program by placing your logo and team messages right on the bins. This demonstrates the team's ownership of the program. Support with social media messages and posters around the facility.



High impact graphics.

People only have **2-3 seconds to make a decision** as they approach a recycling bin. Help them make the right choice by featuring images and text on your bins that help fans make the right choice.



When you control the waste being generated in the facility via foodservice contracts, you can use facility-specific waste images on your graphics. This helps people immediately recognize how to use the bin effectively.



TIPS

- Keep graphics at eye level so that they are immediately noticeable as someone approaches the bin.
- Don't forget to change your graphics as your food service offering changes or your waste collection policies change.



In a pilot study conducted at the University of Toronto the diversion rate increased by 163% after incorporating facility-specific waste images and text in recycling posters.

[**DOWNLOAD FREE EBOOK**](#)

3. COLLECTION



Image: CleanRiver Stadium Bin

Use one bin.

Studies have shown that stream contamination is reduced when one station is used to collect multiple streams rather than having individual bins. Single bins can become separated during cleaning of the facility or can be accidentally moved due to the pressure of large crowds. When bins become separated people will use the most convenient bin rather than the correct bin which will significantly impact your stream contamination and diversion rate.



Image: CleanRiver Stadium Bin

Don't forget back-of-house.

There will be a certain amount of waste generated by the vendors in the stadiums, in the washrooms and by staff. Don't forget to equip these areas with suitable collection methods and have clear signage to help educate them on what goes in each bin.

Ditch the restrictions.

Create a bigger target for people who are dropping waste in the recycling container. Restrictive sized openings are great for certain environments but when there are large crowds of people you don't want to add time to the drop process because it might deter people from even trying to do the right thing. Large openings mean that people can drop and walk while they move with the crowd.

Secure your bins.

If you have an open air stadium you need to make sure your recycling containers are weighted down to prevent them from spilling over in high winds. Most of the larger recycling stations that collect multiple streams in one unit are heavy enough, but if you are using individual plastic containers then weigh them down so they don't blow over.

NEED HELP?

If you'd like more detailed information on how to set up a standardized program in your facility please call us at 1-888-626-4246 or email solutions@cleanriver.com. Our sustainability experts are waiting to help.

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INVENTIVE RECYCLING PRODUCTS

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YEARS