



OPERATIONAL PLAN

Green Game Plan Pilot Operational Plan

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Overview

This pilot operational plan outlines an overview for athletic stadiums or arenas (“facilities”) and city or county government¹ to pilot Green Game Plan. Green Game Plan is a new program that encourages sports fans to participate in apparel reuse and recycling by collecting any used apparel in any condition at sports stadiums. Cities and sports stadiums should join a Green Game Plan pilot to demonstrate their commitment to enhancing recycling, reuse, and public engagement with climate action. Our three pillars – sustainable communities, social justice, and transformational reuse – underpin our mission and implementation goals.

Because textile recycling is not uniformly available in US cities, this pilot operational plan outlines the general features of how Green Game Plan would work in a city/county–stadium–recycler partnership where textile sorting and recycling industries are widely available.

GREEN GAME PLAN PROGRAM PILLARS

Implementing Pilot Stakeholders

- ▶ **Stadium or other athletic facility:** The stadium or other athletic facility would be the physical base for the recycling program. It would liaise with the recycler about the placement of donation points to drive public engagement and maximize the ease of drop-off/collection. The facility

would provide the staff time needed to get the program up and running. The facility would also be responsible for selecting a recycler and entering into an agreement with that recycler to set up the bins and establish a collection schedule.²

- ▶ **Recycler:** In the pilot, the apparel recycling partner would be responsible for:
 - ▶ Installing the recycling drop-off/collection points;
 - ▶ Covering the costs of collecting the recycled apparel on an agreed-upon timeline with the sports facility; and
 - ▶ Providing requested data to the city (using the template in Appendix A for reporting).

Once apparel is picked up from the stadium, the recycler would be responsible for any costs. Depending on the city, the recycler may be a for-profit recycler or a charity (e.g., a registered 501(c)(3)).³ If a for-profit recycler is the recycling partner, then the apparel would be purchased from the stadium based on weight at an agreed-upon price (e.g., \$0.45 per pound). If a charity 501(c)(3) is used, labor associated with picking up the apparel would be covered by the charity; the charity would not pay for the apparel but may provide a tax rebate to the stadium. The program is intended to cover any and all apparel, in any condition. Apparel that the recycler deems unfit for reuse and/or recycling, (i.e., it must be put into the municipal solid waste stream), would be measured and assessed as one of the key data points. See Appendix A for more detail on data collection.

- ▶ **City or county:** The city/county would determine which agency is most appropriate for collecting data from the recycling partner and compile it into monthly and quarterly reports (using the template in Appendix A for reporting). Which data are collected would depend on the reporting needs of the city and may include total weight/volume of items collected and percentage of total that is reused (secondhand clothing market) or recycled (shredded; chemically recycled; fiber-to-fiber recycled). These data are collected to ensure that any applicable city, state, and/or other reporting requirements are met, while also providing important feedback to the program. The report would be shared with the facility and recycler for input and publicly published on the relevant government website.

If cities are interested, they can also help market the program with their constituents.

- ▶ **Organizing partner:** Pilot participants should work with the organizing partner to develop the program. The organizing partner would host materials on their website; take over day-to-day work associated

with Green Game Plan after any launch events; and oversee and direct expansion plans beyond the pilot.⁴ Appendix B provides other programs the organizing partner could help oversee to improve the recycling of apparel.

Other Partners

- ▶ **Fans and community program participants:** Engagement with sports fans and community members is a key component of the success of the program. They will be able to drop off all apparel in any condition.
- ▶ **Teams and leagues:** Teams and/or leagues associated with the athletic facility (e.g., Miami Heat and the NBA) would participate by championing this program as a part of their community engagement initiatives, including via social media posts.
- ▶ **Event convener:** A convening partner would host a stakeholder event paid for by the stadium and the city, with input from the recycling partner. The event would gather key stakeholders to share successes to date, build relationships, discuss program details, and agree on how short- and long-term goals for the program would be assessed. As a trusted thought leader able to develop broader policy lessons from the program, the Aspen Institute is well positioned to serve as a convening partner. A pilot event could occur in conjunction with the Aspen Ideas Climate Festival in March of 2023.
- ▶ **Local community groups:** Local environmental and social sustainability groups with an interest in zero waste, climate action, and responsible consumption could help get the word out and sustain engagement with the program.

GREEN GAME PLAN PROGRAM PILLARS

Green Game Plan has 3 pillars that underpin the program's mission and implementation: transformational reuse, sustainable communities, and social justice. These pillars are core to how the project operationally achieves its goals.

1. Transform the Future of Apparel Reuse and Recycling

Green Game Plan seeks to transform apparel reuse and recycling. Secondhand clothing sellers, including Goodwill, Salvation Army, and others, play a critical role in diverting waste, extending the life of

apparel, and providing affordable, accessible, high-quality options. However, few of these sellers have innovated beyond established models to incentivize engagement, education, and empowerment. By advocating to increase reuse and recycling options, cities, teams, and sports fans can work to achieve zero waste goals while demonstrating the demand for more apparel brands to adopt improved recyclability practices in their production and consumer engagement.

2. Build Green by Building Community

Sporting events attract people from every walk of life, creating an unparalleled opportunity to combine sportsmanship, entertainment, and education in a neglected area of consumer awareness and environmental sustainability. Green Game Plan educates and empowers community members from all backgrounds to support their city and their team to achieve zero waste while contributing to worthy local causes.

3. Recycling Equity as Social Justice

Overflowing municipal solid waste poses risks to communities, especially those in [low-income areas](#). Simultaneously, from 2015–2020 the secondhand clothing and shoe market [rose from \\$91.1 billion to \\$139.6 billion](#). This trend presents an opportunity to invest funds collected from the diversion of donated clothes into the local community and environmental programs. Green Game Plan combines improving progress toward city zero waste goals, diverting reusable and recyclable apparel from waste streams, and redistributing financial benefits from donated apparel to advance social justice.

Steps for Starting a Green Game Plan Pilot

STEP 1

An athletic facility, a city/county, and a textile recycler commit to joining Green Game Plan.

Together, the athletic facility and city, through the appropriate representative, [agree to join Green Game Plan](#). At the agreement stage, there is no financial commitment. The recycler would arrange the terms of agreement directly with the athletic facility.

Supporting asset

[Sign-on letter of intent](#) from implementing stakeholders and local community groups

STEP 2

Textile collection points are installed at the athletic facility by the recycler, which would collect donated apparel on an agreed-upon basis with the athletic facility.

The recycling partner and athletic facility would agree upon the frequency of collection of goods, e.g., on a weekly or monthly basis depending on the utilization of the drop-off bins. The recycling partner would be responsible for costs associated with loading pickup and liaising with the athletic facility to arrange pickup logistics.

Bins will come equipped with a lock so they may be kept sealed when not in use. The bins would be unlocked by stadium staff on a planned basis (e.g., as fans arrive for games and through the first quarter of the game) and then locked. We recommend that facility staff manage the donation points while the bins are unlocked to keep an eye on the drop-off process and that they distribute unique QR codes to give incentives to fans as they drop off apparel donations.⁵

The locations of the drop-off and collection points would be tailored to the needs of the facility and the recycling partner. Consideration for placement of the bins may include proximity to trash (e.g., to be clear that these bins are only for apparel to reduce any contamination of donated goods).



Example donation bins.⁶

STEP 3

Incentive mechanism(s) are selected.

Working together, the stadium, city/county, and recycler would develop a suite of incentives for participation. For each bag of clothes that is dropped off, a participant would scan a QR code that would link them to the incentive. An incentive, mutually agreed upon by the city/county, stadium, and/or recycler, may then be redeemed for one bag of donations. Examples of incentives include:

- ▶ The city, in order to incentivize participants to use public transit, provides vouchers for public transportation.
- ▶ The recycling partner, in order to drive more traffic to their secondhand clothing store, provides a coupon toward their store.
- ▶ The stadium, in order to encourage people to buy food at halftime, provides a \$2 discount toward a meal or drinks.

One or more of these incentives would be available to the apparel donor via a QR code upon drop-off of their apparel. The use of a QR code would also allow for anonymous data collection (no personal information is collected or requested at any stage) to understand user preferences and to adjust incentives to drive participation.

STEP 4

Stadium hosts initiate public engagement and outreach.

The future success of the program will be tied to advertising and outreach. A promotion plan for after the launch would help reach the largest possible audience for ongoing audience engagement and apparel collection.

Based on the experience of other similar textile recycling programs, partners should [expect a 10% participation rate](#) for all of your outreach efforts: If you tell 100 people about the program, you can expect 10 people to donate about 10 pounds of textiles each.

When developing messaging, partners should remember that substantial research shows that they should focus educational messaging on environmental impact. [Survey results](#) clearly show that this is the biggest motivation for residents to reuse and recycle textiles, well above providing financial support for nonprofits.

When putting together outreach and engagement plans, partners should assign tasks and deadlines for the promotional campaign within teams. Consider the following aspects, based on the [Tree People Textile Waste Reduction and Recycling Guide](#):

Who do you want to reach in the community?

- Identify your audience; who will turn in donations?
- Will materials need to be available in multiple languages?

How will you message Green Game Plan to participants?

- Create promotional materials that are appealing to your audience
- Present information in a way that is easy to understand
- Convey information as concisely as possible, and include the important details (why, when, where, what, who)
- Include appropriate graphics and/or photos
- Focus on a clear message; avoid too much text or busy layouts

Who is your promotion team? The Green Game Plan Pilot will need:

- Copywriter and designer for outreach materials
- Advertisement/press release writer
- Social media post and account manager

What do you want to communicate?

- The reason for the textile collection, such as achieving zero waste, cleaning up your city, helping those in need
- Date, time and location of the pickup; there should be a map to guide participants to the drop-off location
- The cost, i.e., that it is free for all participants
- Any incentives offered to donors, such as being entered into a raffle for free tickets, charity donations made, etc.
- Types of items accepted, such as new, lightly used, and heavily used apparel
- Contact details for more information; bins should have QR code to link to a form

How will you communicate? After creating promotional materials, places to distribute them could include:

- Team/stadium sponsors*
- Ticket sales websites such as Ticketmaster*
- Local newspapers*
- Radio stations*
- Neighborhood/city councils*
- Places of worship including churches, mosques, synagogues, and temples*
- School newsletters*
- Community television channels to announce the event or to run a public service announcement*
- Recreation, community, and senior centers*
- Privately owned markets, coffee shops, and local businesses*
- Malls*
- Digital*

Social media is an important part of your communications strategy. Possible outlets for social media posts, by the stadium, athletes, fans, and other stakeholders, include:

- Facebook events*
- Neighborhood websites, such as Nextdoor.com*
- Craigslist*
- TikTok*
- Twitter, where the athletic facility, sports teams, and sponsors could send out Tweets*
- Instagram*
- Community event calendars*

Face to face is also a useful approach to share the program. Some possible venues include:

- Asking local K–12 schools and universities for help in getting the word out*
- Attending city council meetings and making announcements about the event during public comments*
- Requesting banners or signs from apparel companies and displaying them outside the athletic facility or on busy cross streets*

STEP 5

Partners monitor and evaluate the pilot.

Throughout the program, the partners should collect data, including (1) the number of items collected; (2) the total weight of items collected; and (3) the percentage of reusable, recyclable, or end-stage items. These statistics should be collected on a monthly basis by the recycling partner and shared directly to the city.

This data ideally would be processed into a 2–3 page report by the city entity that is responsible for waste management and recycling. It should then be shared with the athletic facility, the city, and the recycling partner for evaluation and further compiled by the city into a quarterly report for all stakeholders to document trends and share findings.⁷

The results of this data collection may be used to adjust the messaging of the program to increase participation or make other changes to maximize impact. The data would support the team(s) administering and implementing the program to understand why elements of the program are working (or not) and if additional resources are needed. The data would also drive awareness and engagement with the program from the community and program participants.

Supporting asset

Appendix A, Sample recycling data reporting template: This template includes details about the type of information the recycler should provide to the city in the format ready for submission.

STEP 6**Partners plan for long-term program expansion.**

After the pilot program concludes, partners may choose to (1) exit the program; or (2) continue to implement textile recycling with Green Game Plan. If (1), when the pilot concludes, no further action is required. If (2), then the stadium, the city, and the recycler may choose another defined period of time (e.g., 1 year) to extend the program and allow for periodic review. For the extension of the program, a longer-term organizing partner would lead goal setting and strategy for the program; share information and best practices among partners running a Green Game Plan recycling program; build other partnerships (for example, with universities that may want to study recycling behavior and incentive structures); or arrange new funding structures (such as new sponsorship models).

Appendix B provides a product stewardship framework for additional programs the organizing partner could implement in the long term.

Costs and Fundraising

Costs associated with the pilot program are low for stakeholders. As discussed above, the recycler would commit to covering initial costs associated with installing the donation points and managing pickup. Thereafter, fundraising options would be outlined by the long-term organizing partner. Stakeholders – the city, the recycler, and the stadium – would then work with the organizing partner to decide which funding options to pursue based on the needs and goals of the program going forward.

APPENDIX A

Apparel Reuse and Recycling Reporting

Once collected by the recycling partner, the apparel would be sorted by the recycler. Then one of 3 things would happen: (1) the apparel is deemed to be in good enough condition to be reused, and is given to a secondhand clothing reseller such as Goodwill; (2) the apparel is not in good enough condition to be reworn but can be recycled (such as by being shredded and used to fill punching bags); or (3) the apparel item cannot be reworn or recycled (for instance, because it is made from too many mixed materials) and must be sent to the city or county municipal solid waste.

This appendix describes how data should be collected regarding these decisions and provides a sample reporting template.

DATA COLLECTION AND USAGE

Data from each collection will help Green Game Plan track useful information about where apparel donations are going.

Information collected by the recycler from donation bins should include:

- ▶ Total weight of the month's donation;
- ▶ Pounds of reusable apparel sent to charity partner (e.g., Goodwill);
- ▶ Pounds of apparel recycled; and
- ▶ Pounds of apparel sent to municipal solid waste.

Information collected through QR codes: A QR code would be given/activated for each bag of clothing donated to the Green Game Plan bin. Each QR code would give the participant access to a certain selected incentive, discussed in Step 3 above. The QR codes could expire after a defined amount of time, e.g., 2 weeks, to keep the incentives fresh and up to date, and to avoid any surprises for vendors (e.g., an influx of people all trying to redeem the same benefit at once).

The data that the QR codes will provide include:

- ▶ Number of donors (as determined by the number of activated QR codes);
- ▶ Which incentive the person chose (to assess what incentives people like or do not, e.g., everyone uses the concessions discount and no one uses the public transportation vouchers); and
- ▶ Percentage of uptake (e.g., people who receive a QR code and do or do not redeem an incentive within a defined amount of time).

EXAMPLE REPORTING

The below tables provide an example of the types of analysis and data that can ultimately be collected through our proposed data collection plan. Using our approach, Green Game Plan will be able to report the total pounds of clothing that are recycled through this initiative, including what percentage of materials are reused versus fully recycled.

Green Game Plan Collected Data	
Category	Weight (lbs)
Total Collected	100
Reuse	15
Recycle	10
Municipal Solid Waste	5

Key:

- Reuse: Material goes to secondhand reseller
- Recycle: Material goes to be shredded and reused
- Municipal solid waste: Material goes to landfill

Table 1: Sample table of data collected

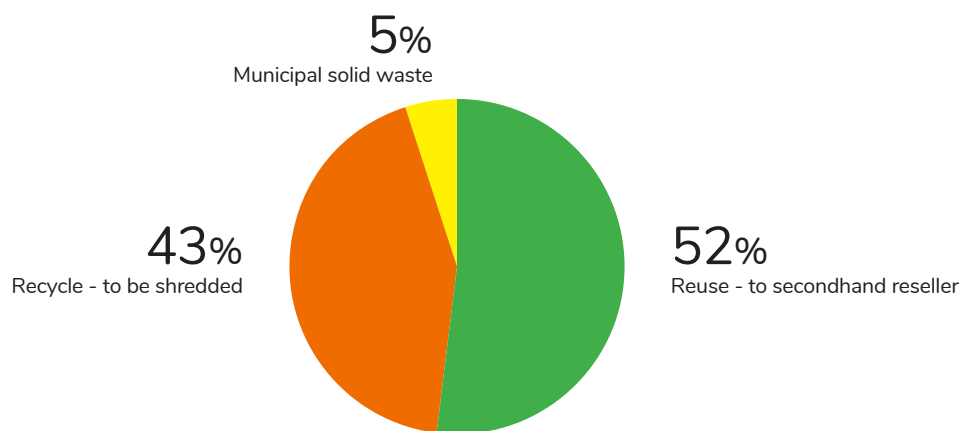


Figure 1: Sample table of data collected

APPENDIX B

Product Stewardship Framework

The product stewardship framework below is for the long-term organizing partner of Green Game Plan. It shows suggested incentives for stakeholders to reduce clothing waste. Product stewardship elements are based on extended producer responsibility — i.e., the idea that the maker of the apparel is in part responsible for its waste management. The organizing partner could use this framework to find incentives to encourage apparel recycling in cities and could propose waste reduction commitments from upstream stakeholders like apparel providers, sports teams, or stadiums.

Stakeholder	Roles	Responsibilities	Product Stewardship
Sports Teams	Procurement of apparel. Teams decide what they will wear and who will make it.	Teams can prioritize the recyclability of the materials made with their name. This means the materials used are easily recyclable or there is a plan in place to deal with the waste produced.	Teams can amplify zero waste messages to the community with players and the overall organization. Teams can host an internal recycling program of team gear and equipment to participate in circularity.
Stadium	Stadiums participate in the procurement of apparel for events.	Stadiums can prioritize the recyclability of the materials made with their name. This means the materials used are easily recyclable or there is a plan in place to deal with the waste produced.	Stadiums can host an internal recycling program of team gear and equipment to participate in circularity.

Stakeholder	Roles	Responsibilities	Product Stewardship
Apparel Provider	Apparel providers decide how apparel will be designed in production.	Apparel providers can prioritize the recyclability of the materials made and the methods used to achieve production. This means the materials used are easily recyclable or there is a plan in place to deal with the waste produced.	Apparel providers can sponsor recycling programs to offset their environmental impact from design and production decisions.
City (government, sports fans, recycling partners)	Cities deal with the waste management of apparel, whether public or private collectors.	Cities can set performance standards of the recycling program, ensure collection transparency, and enforce collection standards.	Cities can incentivize recycling program participation with subsidies, such as free public transportation for participation.

FINANCING

Funding to support the reduction of apparel waste to landfill will vary based on each stakeholder’s impact on the supply chain. Cities should establish standards, policies and procedures for landfill management. They should also incentivize and encourage communities to bring in used clothing for recycling, thus diverting clothing from landfills. Apparel providers with design and production impact should consider the cost of collecting and sorting of their materials for recycling. Modulated fees based on upstream impact would consider the materials and methods used to produce a product.

For apparel providers, fees would be reduced or eliminated based on:

- ▶ Making products with high recyclability;
- ▶ Including recycled content in products;
- ▶ Avoiding unnecessary production waste;
- ▶ Closed loop recycling options; and
- ▶ Fiber-to-fiber recycling.

Finance Management

The long-term organizing partner should work with all stakeholders and manage funds to help with recycling, educating consumers, and meeting net zero targets and goals. This partner will also implement any agreed-upon compliance assurance measures to help stakeholders stay on track.

Incentives for Participation

As part of Green Game Plan, stakeholders should implement programs to support waste management and help a city meet its net zero goals as outlined below:

Apparel Providers

- ▶ **Rebate Program:** Providers could put a label on clothing for product recycling based on material type. Easier-to-recycle materials like organic cotton and mono-polymers would have a lower rebate ticket than multi-material and hard-to-recycle apparel. This rebate program can be modeled after the highly popular glass bottle [deposit refund scheme](#).
- ▶ **Product Discount:** Apparel providers could distribute coupons that can be used for future purchases. This could be modeled after [The North Face's "Clothes the Loop"](#) program. This is especially attractive for apparel providers because it incentivizes the next sale.
- ▶ **Sports and Sustainability Fund:** An agreed-upon amount from apparel production could go to a fund that improves recycling methods, innovation, business development for secondhand sellers, and proper landfill waste. This program is modeled after the Or Foundation, which [extended producer responsibility with SHEIN](#), and the [Clippers Planet Protection Fund](#).

Teams/Stadiums

- ▶ **Internal Recycling Program:** With this program, practice and game apparel worn by players is recycled as part of Green Game Plan.
- ▶ **Team Events and Foundations:** Sustainability should be considered when apparel providers sign contracts to produce apparel for sports teams. All apparel that is not used should get recycled as part of Green Game Plan.
- ▶ **Product/Apparel Discount:** Teams could distribute coupons that can be used for future purchases.

This could be modeled after [The North Face's "Clothes the Loop"](#) program. This is especially attractive for apparel providers because it incentivizes the next sale.

- ▶ **Sports and Sustainability Fund:** An agreed-upon amount of money from apparel production could go to a fund that improves recycling methods, innovation, business development for secondhand sellers, and proper landfill waste. This program is modeled after the Or Foundation, which [extended producer responsibility with SHEIN](#), and the [Clippers Planet Protection Fund](#).

ENDNOTES

- 1 In some instances, stadiums/arenas are owned by the city or county in which they are located. The stadium may be licensed to a private company.
- 2 The Aspen Tech Policy Hub authors can provide a list of vetted recyclers that meet Green Game Plan's high standards for ethics, transparency, and data collection. The stadium may ultimately identify a different recycler in consultation with the city, if needed.
- 3 For-profit recyclers are private companies that collect, sort, and manage apparel for reuse, recycling, or municipal solid waste.
- 4 Based on agreement with Aspen Tech Policy Hub regarding licensing of materials.
- 5 Staff may need to manage unruly behavior from fans who may attempt to place rubbish in the bins and risk damaging otherwise good quality, reusable items.
- 6 Studiovin, *Clothing Bank Isolated on White Background in Different Views*, photograph, Shutterstock, September 2022, <https://www.shutterstock.com/image-illustration/clothing-bank-isolated-on-white-background-1414905677>.
- 7 This report would be shared publicly on the city's recycling/solid waste website.



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