

Practice to be assessed and included in the Guidelines

Number/code: OM/E18

Title: REUSABLE CUPS FOR DRINKS

Guidelines section:

<input type="checkbox"/>	Governance	<input checked="" type="checkbox"/>	Operational management		
		<input type="checkbox"/>	<i>Context of the event</i>	<input type="checkbox"/>	<i>Procurement</i>
		<input checked="" type="checkbox"/>	<i>Event</i>	<input type="checkbox"/>	<i>Mobility and logistics</i>
		<input type="checkbox"/>	<i>Stadium management</i>	<input type="checkbox"/>	

Description:

A key waste-avoiding measure is the implementation of a reusable cup system. The key areas are the drinks counters in public viewing areas. The advantages of a reusable cup system are plain for all to see. Provided there is an adequate collection and cleaning system, one cup can be used several times at one tournament. The use of reusable cups is also an important environmental signal to fans.

Example:

1) Danish experience

As part Copenhagen's current Resource and Waste Management Plan (2013-2018), the city administration has partnered with event organizers to test reusable cups to replace single-use plastic cups. The concept has been tested at a few small events and one large two-day festival in Copenhagen in 2018.

The concept is adding an extra step of logistics to the event-management since reusable cups must be returned washed after use. However, it adds several benefits including lower CO₂-emissions, higher user satisfaction, less cleaning and a potential economic benefit.

A user evaluation conducted at the two-day festival in Copenhagen shows that 98% of the participants would like festivals in general to replace single-use cups with reusable cups.

So far, the use of reusable cups is not widely implemented in Copenhagen or Denmark. The national stadium located in Copenhagen has rejected the possibility due to lack of space and resources to replace single-use cups with reusable cups. However, on December 17, 2018 the City Council discussed banning single-use plastic cups at events in city streets and parks. The Council was generally positive towards a ban, but the decision was postponed in order to make time for a deeper investigation into consequences for smaller venues and a public hearing. The final decision is expected in the summer of 2019. No matter the outcome, stadiums and private venues are *not* affected by this but will still be encouraged to use reusable cups and minimize single-use plastics. Outside locations next to private venues, such as the park next to the national stadium, *will* be affected by the expected ban. Further, procurement at the city's own events will also be affected.

Roland Garros: Spectators are given *Ecocup* reusable cups to cut out single-use cups, a simple strategy that has also led to economic savings. The objective of this study is therefore to propose a decision support tool to select the best mode of packaging to serve drinks according to the environmental, economic and logistical constraints of each event organizer or to understand the conditions to be met to reduce environmental impacts. It will also be necessary to check if sufficiently strong arguments can be developed to support the prohibition to use disposable crockery within some or all of the events.

2) Fédération Française de Rugby: Set up of cups for the Tour de France November 2013 at the Stades de France and Océane 4.5 m³ of waste avoided.

3) Women Football World Cup Germany 2011: as part of Green Goal 2011, all alcoholic drinks were served in entirely **unbranded cups**. These cups had already been used at other events and can be used again at future events. From an environmental point of view, this was an important step forward with regard to avoiding waste and recycling. Additionally, around 300,000 branded cups were produced for the FIFA Women's World Cup. Eleven percent of those were taken home by fans as souvenirs. The remaining cups were bought up by the beverage sponsors and donated to amateur football clubs. Reusable cups were also used for the catering of volunteers and in the media and VIP areas.

4) Less Glass: Less Glass is a project led by the municipality of Genova that concerns the re-use of plastic glasses for all the businesses and consumers that are willing to be involved, in order to reduce the amount of non-biodegradable waste produced in the economy. The requirement is just 1€ of deposit for consumers who can decide both to return the glass or keep it for themselves. The initiative started with local businesses (such as bars) but it can be extended even to sports events as football matches both inside and outside the stadium.

Environmental benefits:

A life cycle assessment (LCA) was conducted in Denmark in the frame of FORCE project to compare a number of scenarios with either reusable cups or single-use cups. The overall conclusion from using reusable cups instead of single-use cups based on experiences from a festival in Copenhagen shows that reusable cups need only three use-cycles before becoming an environmental benefit. The study compares single-use cups made of PET at a weight of 12,5g. The reusable cups are made of PP and weigh 41g. Former studies confirm this conclusion. Our results show that if an event with 50.000 servings replaces single-use plastic cups with reusable cups it can save 2.000 kg CO₂. Overall, the LCA shows that the environmental footprint is 60% lower with reusable cups compared to single-use cups.

Economic benefits:

There are potential costs and profits from introducing reusable cups. The experiences from Copenhagen shows that large events can generate profit but smaller events (less than 2,000 servings) are more likely to experience increased cost.

Profits can be generated from securing collection of cups during the event or by nudging participants to donate cups to the event or to charity. The market for reusable cups and washing solutions is expected to increase with a ban on single-use cups.

Applicability and replicability potential

The measure could be replicated in every stadium.

Case studies: results from LIFE TACKLE pilot tests

➤ **The use of reusable cups for drinks by SPAL at Paolo Mazza stadium in Ferrara**

During the match SPAL-Perugia that took place on November 1st, 2021 at the Paolo Mazza stadium, single-use plastic cups and glasses for delivering beverages to fans were replaced by reusable cups. The first 2,000 reusable cups made with eco-sustainable materials were supplied by “Amico Bicchiere” and distributed at the stadium bars against a deposit fee: in this way, fans were incentivized to return the used glass (which will then be washed and reused) reclaiming the deposited sum, or to buy more drinks using the same glass without paying the deposit fee again.

The environmental benefits of this practice are linked to the avoidance of single-use. The environmental benefit of reusable cups is also linked with the avoidance of that material consumption and the avoidance of the impacts derived by the end of life of single use cups (recovery or disposal).

A single use plastic cup is 3.4 grams of virgin polypropylene. In terms of carbon and water footprint, **this allows a reduction of 0.019 kg of CO₂ eq (carbon footprint) and of 0.004 m³ of water eq (water footprint) per cup.** Through the introduction of these first 2000 reusable cups, the stadium saved 39 kg of CO₂ equivalent and 8 m³ of water equivalent in a match. Moreover, this practice promoted environmental awareness among fans on the need to get rid of single-use plastics in daily life. Small steps that they make a difference in the stadium's environmental management system and that can easily be replicated in the next matches.

With regard to costs, “Amico Bicchiere” is a company specialized in the production of personalized, reusable and recyclable cups. The cost of each reusable cup was € 0,68. This cost is amortized by the fact that each cup is used several times, which avoids the cost of single-use glasses and cups. Moreover, this practice promotes the choice of suppliers that incentivize ecological solutions.

➤ **The AVIVA stadium, Ireland**

A total of 65,000 reusable cups were distributed during the rugby match Ireland-Scotland at the AVIVA stadium of Dublin. Customers had very positive feedback and appreciated the efforts the stadium was making to eliminate single use plastics.

In economic terms, the model was designed to be cost neutral. Fans paid an extra €1 when buying the first drink. This extra fee, if the cups were not returned, was not refunded and is used to wash the cups and reinvested to replace any unreturned cup.

At the end of the Ireland – Scotland rugby game, 52,360 reusable cups were returned to the washing facility. In environmental terms, if these 52,360 cups were single-use plastic cups, they would amount up to 418.88 kg. In terms of CO₂, this pilot test achieved a saving of above 2 tonnes of CO₂-eq. This includes savings in terms of avoiding incineration and manufacturing new single use cups.

Moreover, the success of this pilot test is reflected in two different, yet very much interlinked, ways. In terms of waste management, while the decrease in the collected amount of mixed packaging waste is caused by eliminating single use cups and replacing them with reusable ones, the dry mixed recycling rate increases as the quality of that waste is improved by preventing dirty and wet plastic from being a part of the waste.

Sources

Life Tackle Pilot tests

Life cycle assessment of reusable cups in Tivoli, Force Technology, 2011

[FIFA WOMEN WORLD CUP GERMANY 2011](#) (pag. 36 -37)

[LESS GLASS - FB page](#)

[LESS GLASS - News](#)

[NRDC Report - Game Changer](#)

[French Ministry of Sport](#) (p.11)

[Strategie De Development Durable and Responsable](#) (p.12)