Fibre-composite Cups De-minimis Data Review

Defra

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Contents

1 Introduction 3
1.1 Background 3
1.2 Methodology 3
2 Analysis of Key Industry Stakeholder Responses 5
2.1 Introduction 5
2.2 Responses from Key Industry Stakeholders 5
3 Review of Options for Setting a De-minimis 10
4 Options for Setting a De-minimis Levels 12
4.1 Introduction 12
4.2 Number of Full-time Employees Per Business 12
4.3 Turnover 13
5 Conclusion 14

1 Introduction

1.1 Background

The purpose of this document is to provide evidence to help inform Defra of the options for setting a de-minimis level should they implement a potential new regulation requiring mandatory in-store fibre-composite cup recycling (supported by a recycling target).

1.2 Methodology

Based on the WRAP 'Single-use Cups and On-the-Go Fibre-composite Food Packaging' report it is estimated that the total number of fibre-composite cups placed on the UK market in 2019 was 3.2 billion with an estimated weight of 35.3k tonnes. To identify options on where to set a de-minimis, if one was to be introduced, several ways to break down the industry and size of businesses (which could or could not offer a cup recycling service for their customers) were investigated. They include:

- Turnover
- Number of staff
- Number of businesses
- Floor space
- Turnover
- Gross Value Added (GVA)

To investigate these, the project used two methodologies:

- Secondary Research
- Primary Research

Secondary Research

This involved a desktop research exercise to identify and review all available data relevant to helping break down industries/businesses that place composite-fibre cups onto the UK market.

An initial review identified that due to the nature of the research and potential for there to be gaps in the data required, secondary research was also used to identify key stakeholders that could be engaged to provide expert knowledge/data/opinion.

Primary Research

The primary research involved engaging relevant key industry stakeholders to get their views on:

- Whether they or their members could offer mandatory takeback in store
- Would they or their members welcome offering mandatory takeback in store
- If there are any of their or their members premises that have limitations or restrictions that could prevent them being able to offer a mandatory takeback, and if so, what percentage of the total quantity of fibre-composite cups they place on the market are sold by the premises that have limitations/restrictions

- Whether they think this percentage would be the same for the sector overall
- What type of limitation/restriction is this based on:
    - Lack of floor space
    - Quantity of staff
    - Financial
    - Other
- What is the cut-off level below which they think they or their members could not offer a mandatory takeback service?

The project team attempted to contact key industry stakeholders for interview, a small sample of these is included below:

- National Cup Recycling Scheme (NCRS) members:
    - Costa Coffee
    - McDonald's
    - Caffè Nero
    - Lavazza Professional
    - Pret A Manger
    - Greggs
    - Burger King
    - Pure
- Starbucks
- WRAP
- The British Sandwich & Food to Go Association
- British Independent Retailer's Association
- Automatic Vending Association
- The Nationwide Caterers Association
- The Federation of Small Businesses
- UKHospitality
- The Paper Cup Alliance
- Keep Scotland Beautiful
- British Coffee Association
- Hubbub
- British Sandwich and Food to Go Association
- Scottish Grocers Federation
- Foodservice Packaging Association
- Coffee machine suppliers
- Independent cafes
- Cup manufacturers

2 Analysis of Key Industry Stakeholder Responses

2.1 Introduction

The purpose of engaging key industry stakeholders was to ascertain whether they welcomed a mandatory takeback scheme for cups and to get their views on whether or not it should have a de-minimis level, and if so, at what level should it be implemented.

The responses were broken down by the type of organisation they represent:

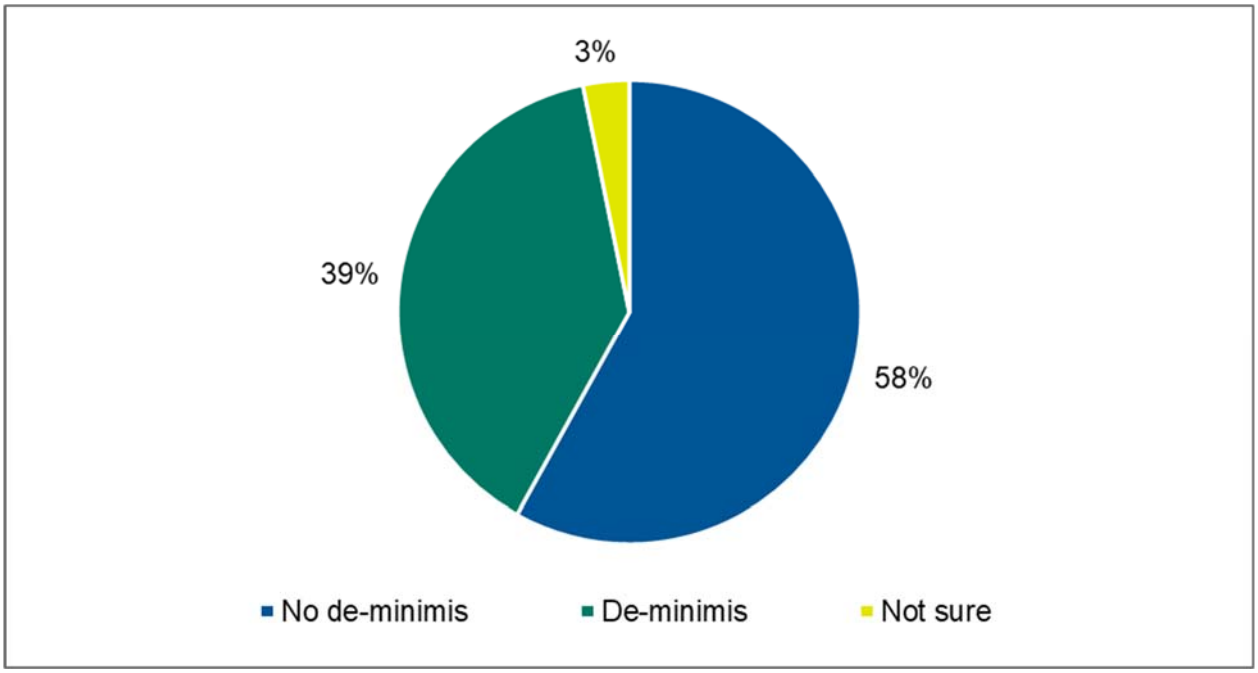
- Large Quick Service Restaurant Chain
- Independent Quick Service Restaurant
- Large Vending Machine Provider
- Industry Representative Association
- Cup Manufacturer
- Charity
- The British Sandwich & Food to Go Association Members

Responses were anonymised due to concerns raised by some interviewees, which encouraged them to respond more freely.

2.2 Responses from Key Industry Stakeholders

In total, 31 different businesses and organisations were surveyed as part of this project. Figure 1 shows that the majority (58%) of people spoken to expressed a preference towards there not being a de-minimis for the mandatory takeback of cups. This was made up of a mixture of four larger businesses, three trade associations (one of which represents small businesses), and six smaller businesses. Out of the remaining 42%, 39% thought that there should be a de-minimis, and 3% were not sure.

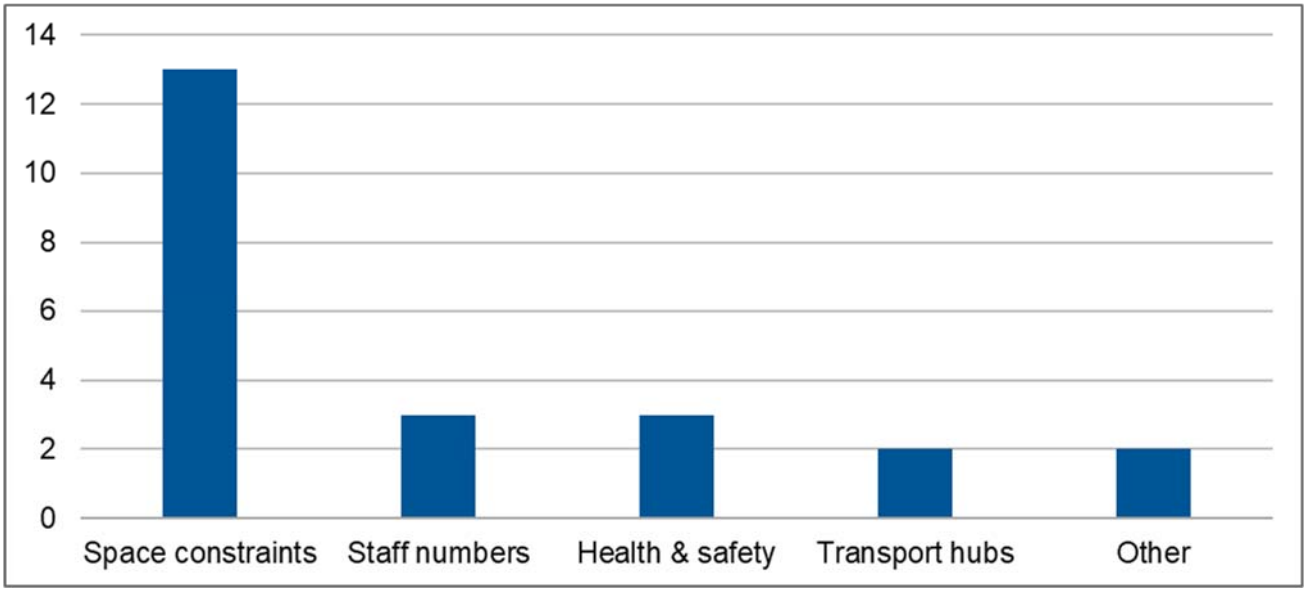
Figure 1 – Preference of respondents (%)



Space constraints in store were highlighted by those surveyed as being one of the biggest challenges with the mandatory takeback of cups, as can be seen in Figure 2. Whilst 7 out of the 13 respondents recognised that premises with limited space may find it more difficult to collect and store cups, they felt that there should not be a de-minimis. However, this was not the case for the rest of the respondents who raised space as an issue, with this being one of the main reasons for their support of a de-minimis.

The number of employees in store, health and safety issues relating to the handling and storage of returned cups[1], and safety requirements at transport hubs were also mentioned in the survey responses as being possible issues that may impact a site's ability to takeback cups. The other aspects raised were the financial burden on small businesses and where the takeback obligation would lie.

Figure 2 – Challenges Highlighted with Mandatory Takeback (No. of Responses)



[1] One industry representative association said that the possible hygiene and pest issues associated with the storage of dirty cups was their main health and safety concern. The other two responses did not specify what health and safety concerns had.

Figure 3 – Key Considerations for Not Having a De-minimis & Possible Opportunities

Considerations & Opportunities	
	Loop-holes in the de-minimis threshold may mean that part of the market is not captured, particularly certain imported products.
	The ability to utlise the network of collection points in other areas and / or the use of effective space saving collection points could mitigate space constraints.
	Not having a de-minimis could provide consistent and simple messaging for the consumer.
	A supported transition to a mandatory takeback without a de-minimis could encourage more reuse options.
	The possibility of having a scheme where businesses could register and declare the volume of cups that they sell.

Several businesses and organisations provided reasons for their preference to not have a de-minimis for the takeback of cups, and these are summarised in Figure 3. For example, not having a de-minimis would mean that messaging is kept simple for the consumer, as it reduces possible confusion about which stores do or do not have a takeback system in place.

Figure 4 provides an overview of the key points raised within the survey responses, broken down by the type of organisation. Further detail on individual responses can be found in Appendix I.

Figure 4 – Overview of Survey Responses

Type of Organisation	Responses	Notes / Comments

Large Quick Service Restaurant Chains	5 – no de-minimis
	3 – de-minimis
		• Space constraints in store were the main reason for three chains supporting having a de-minimis
		  o One respondent stated anything under 500sqft
		  o Two respondents said issues would be likely in 10% of stores
		• Four out of the five chains in favour of not having a de-minimis recognised space as the main issue relating to takeback. In addition:
		  o One chain stated that roughly 7% of their stores would have limitations due to lack of space
		  o One chain said they would support an exemption for those who don't have enough space, adding that health and safety risks are greater in smaller premises
		  o One chain felt that the number of cups being returned to store and the frequency that they are then collected is likely to be more of a limiting factor than floor space itself
		• Two chains mentioned transport hubs as being areas where takeback may be challenging, with one respondent saying further clarity is required on how that would work, whilst the other assumed that takeback would be exempt in these premises. Neither chain mentioned that the separate collection of cups already occurs in some locations

		• Two chains stated that flexibility is needed in terms of how stores can takeback cups, with one chain preferring a hand to barista model on the basis that a front of house collection unit (or similar) would be "hugely problematic in terms of aesthetic, space and contamination issues"
Independent Quick Service Restaurants	1 – de-minimis 1 – not sure	• One restaurant said space constraints in store, the quantity of staff were the main reasons for the restaurant supporting having a de-minimis, due to the anticipated financial implications o They felt that the de-minimis should be 15 staff • One restaurant was unsure whether there should be a de-minimis, but that they would need two staff in total present at the end of each shift to implement it
Large Vending Machine Provider	1 – de-minimis	• The provider would prefer to be exempt if they are the ones obligated but be involved with a scheme to help engage customers, raise awareness and demonstrate that they are helping toward cup challenges
Industry Representative Associations	5 – no de-minimis 2 – de-minimis	• Two associations support having a de-minimis due to space constraints in premises o One association estimated that 30-40% of premises in the sandwich/food-to-go sector would not be suitable for takeback • One association felt that any business with <10 staff should be under the de-minimis threshold due to the financial burden, adding that some businesses with more than 10 staff may still be limited by space • Two out of the five associations in favour of not having a de-minimis recognised space as an issue. However, they said this could be mitigated by the use of effective space saving collection points and/or utilising the network of bins at other premises • One association said that mandatory in-store takeback is already in place for many vending machine locations as they are typically in business and industry environments with waste collection schemes already in place, adding that cup collections should be the responsibility of the client as opposed to the vending operator • One association said there should not be a de-minimis due to the potential for loopholes (particularly around imported products), which could result in a "significant part of the market" not being captured. No further clarification was provided
Cup Manufacturer	1 – no de-minimis	• The cup manufacturer felt there should not be a de-minimis in order to keep messaging simple and consistent for the consumer
Charity	1 – no de-minimis	• The charity said that they would be in favour of a supported transition so that their members can explore their options, such as encouraging more reuse options

The British Sandwich & Food to Go Association Members	6 – no de-minimis 5 – de-minimis	• One member in support of a de-minimis said it should be based on floor space, with consideration to building opening times and access • Two members said they would be happy to register with a scheme administrator and declare number of cups sold

3 Review of Options for Setting a De-minimis

Following the secondary and primary research for the project a review of each option for setting a de-minimis was analysed to identify if it could be a viable way to assess the impact of setting a de-minimis at various levels and the impact that would have on the quantity of cups that would be in and out of scope. Figure 5 presents an overview of the analysis for each option.

Figure 5 – Analysis of Options for Setting a De-minimis

	Options for Setting a De-minimis	
	Pros	**Cons**
Number of Employees	Data available regarding: • Types of organisations potentially selling products in cups • Number of businesses by size (staff bands) • Assuming the staff required by each business will represent the number of items sold, the total number of staff in each size band of businesses can be used to apportion the number of cups placed on the market by each size band	Using the number of staff does not allow for the effectiveness of the staff in terms of how many products are served in small businesses compared to larger ones. Several key industry stakeholders indicated staffing levels could be a way to implement a de-minimis level with one stating any organisations with less than 15 staff should be exempt from offering mandatory takeback. However other levels suggested this could be less than 10 staff or having at least two staff at the end of each shift to manage it.
Turnover	Data available regarding: • Types of organisations potentially selling products in cups • Turnover size bands (£000s) • Assuming the turnover is in part a reflection of the number of items sold, the total turnover in each turnover band can be used to apportion the number of cups placed on the market by each turnover band	Using the turnover does not focus solely on the sale of products sold using fibre-composite cups, but rather it will be the total turnover of all the projects/services businesses sell.
Size of Organisation Based on Cups Sold (Exponential Decay and Integration)	A key industry stakeholder suggested that the number of cups sold per day could be a way to implement a de-minimis level. The analysis shows that the distribution is likely to have an enormous 'tail' of businesses that provide very small numbers of cups onto the market each year, and the number of businesses for which	This analysis was inconclusive in terms of estimating the profile of the provision for cups onto the UK market. The analysis is provided in Appendix II (not available in the published version of the report due to it containing commercially sensitive information).

	provision of drinks in these types of cups is likely to be a major part of their business is a very small proportion of the total number that use them in some way over the course of a year. The analysis is provided in Appendix II (not available in the published version of the report due to it containing commercially sensitive information).	
Number of Businesses	Data available regarding: • Types of organisations potentially selling products in cups • Number of businesses by size (staff bands)	The number of businesses does not allow for the effectiveness of the businesses. Also, because there are so many small businesses it skews the data towards an unrealistic proportion for smaller businesses compared to larger businesses.
Floor Space	Several key industry stakeholders indicated floor space could be a way to implement a de-minimis level with one stating anything under 500sqft should be exempt from offering mandatory takeback.	Data coverage for this was limited, no data of value was found. Respondents indicated that between 7-40% of organisations could have issues offering mandatory takeback due to space constraints.
Gross Value Added (GVA)	Data available regarding: • Types of organisations potentially selling products in cups	Only high-level data was available for GVA, and it was not possible to refine the data down to sectors that would be more likely to handle cups. Only the total GVA for each sector was available. Because GVA was not divided into bands, it was not possible to apportion the number of cups placed on the market by each GVA band.
Valpak EPIC and NCRS Data		Customer data from cup wholesalers and manufacturers was investigated but coverage was limited.

Based on the analysis above and the available data the following options were deemed viable to explore for potential de-minimis levels:

- Number of employees
- Turnover

4 Options for Setting a De-minimis Levels

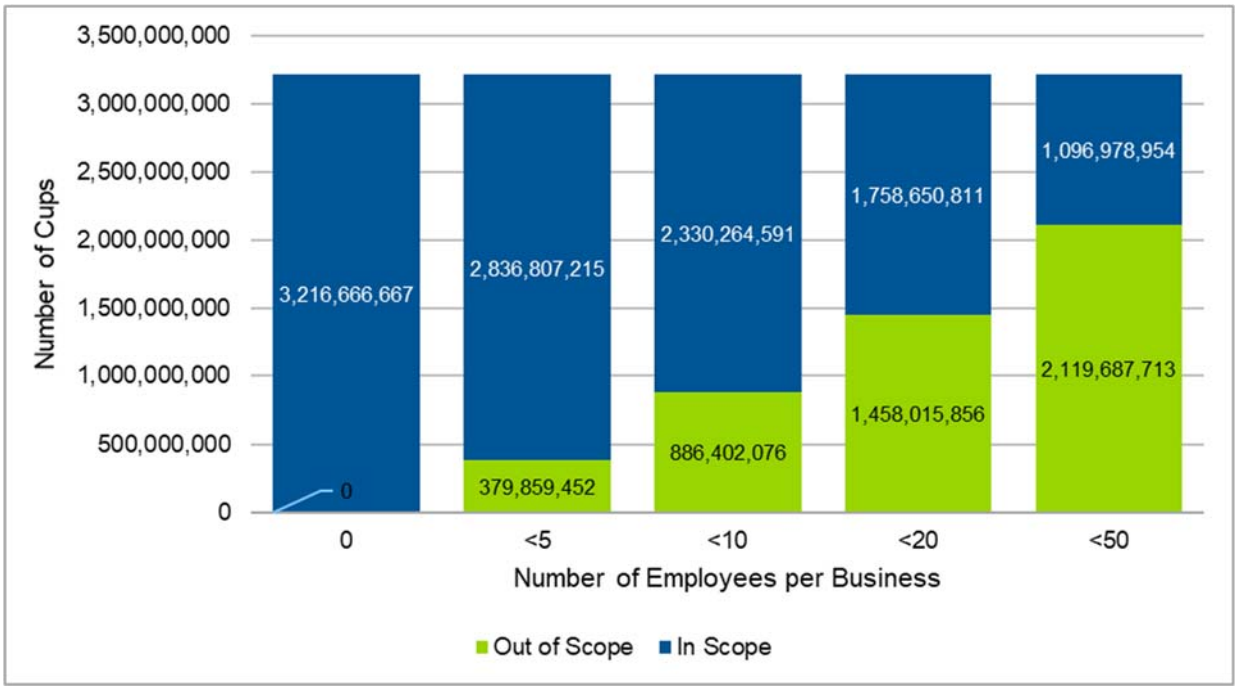
4.1 Introduction

Based on the analysis of the findings from the secondary and primary research this section will present the findings and potential de-minimis levels for each viable option. Each option is presented with a baseline of no de-minimis to show the impact any potential de-minimis levels have on the number of cups in and out of scope within each option.

4.2 Number of Full-time Employees Per Business

The figure below shows the quantity of cups in and out of scope at varying levels based on data regarding the number of employees in a business from the ONS. The Standard Industrial Classification (SIC) codes were used to select the types of business that were thought to be more likely to use single-use fibre-composite cups. A full list of the SIC codes included can be found in Appendix III. This uses staff as a proxy for cups sold by assuming the number of staff reflects the number of products sold using fibre-composite cups. Based on the estimated total number of staff, it equates to just less than 1,300 cups per staff member per year.

Figure 6 – Potential De-minimis Levels Based on Employees Per Business



Data was not available to break the levels by number of employees further. At the lowest potential cut-off (excluding having no de-minimis) of fewer than five staff (four or fewer) would mean 380M cups would be out of scope and would leave 150k businesses unaffected by a potential takeback scheme. If the de-minimis was set at the next banding of businesses with fewer than 10 staff (nine or fewer), it would leave 207k businesses out of scope. Setting the cut-off point at businesses with fewer than 20 employees (19 or fewer) would leave 237k businesses out of scope of mandatory takeback. For businesses with fewer than 50 (49 or fewer) employees 2,120M cups would be out of scope leaving 252k businesses out of scope (from a maximum 258k businesses).

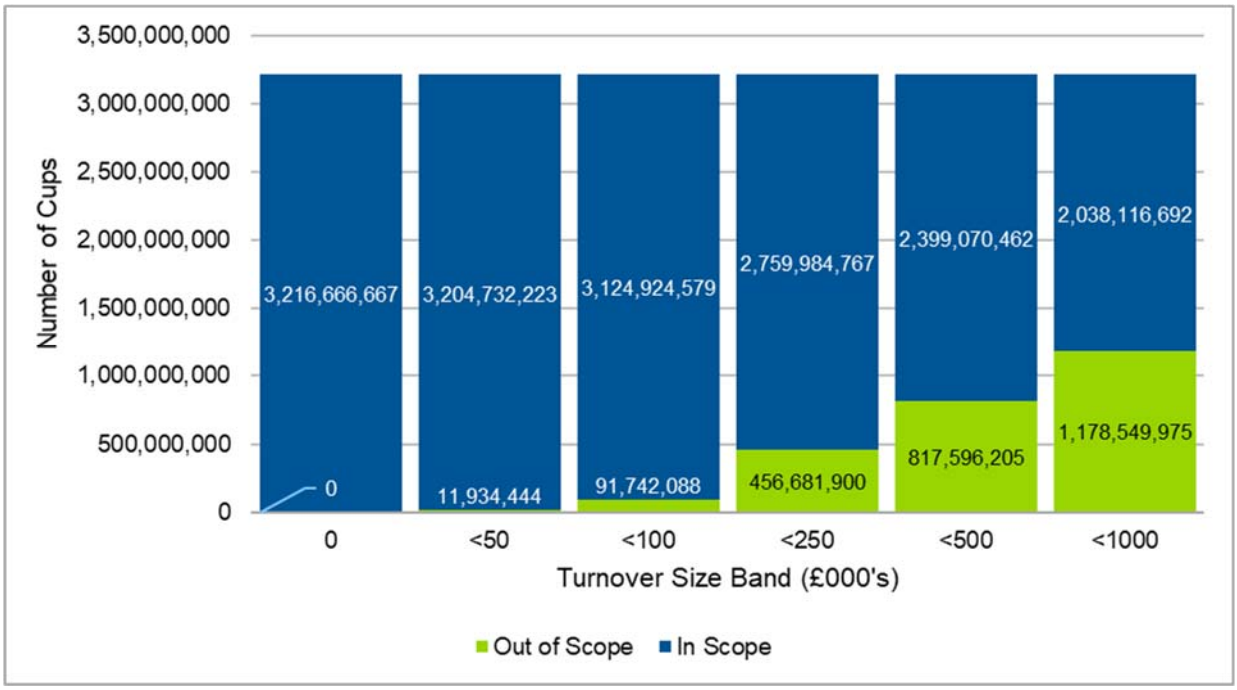
In this scenario, the total number of businesses (roughly 258k) that would be required to take back cups if there was no de-minimis in place is based on the businesses included within the SIC code

groups (as described in Appendix III). ONS were unable to provide the employee data at a more granular SIC level than what was used for this project, and therefore there may be businesses that are included which use very few or even no cups. For example, some restaurants, sports centres and garden centres will sell drinks which may be in single-use fibre-composite cups, however there will be a proportion that do not.

4.3 Turnover

The figure below shows the quantity of cups in and out of scope at varying levels based on data regarding the turnover achieved by businesses from the ONS. A breakdown of the business categories based on their SIC code is included within Appendix III. This approach uses turnover as a proxy for cups sold by assuming the turnover reflects the number of products sold using fibre-composite cups. Based on the estimated total turnover, it equates to roughly £0.05 turnover per cup.

Figure 7 – Potential De-minimis Levels Based on Turnover Per Business



The breakdown shown above has a more gradual impact compared to the levels using employees per business. At the lowest potential cut-off (excluding having no de-minimis) of less than a £50k turnover would mean 12M cups (23k businesses) would be out of scope, rising to 73k businesses if the cut-off was less than a £100k turnover. If the de-minimis threshold was set at the next banding, 172k businesses with a turnover below £250k would be out of scope. This would rise to 218k businesses being out of scope if the cut-off was a turnover below £500k. The highest banding of businesses with a turnover of less than £1M would leave 2,042M cups (256k businesses) out of scope.

5 Conclusion

Based on the available information/data available at the time of writing, this research identified two options for breaking down the business sectors that are likely to place fibre-composite cups onto the UK market.

Based on data from the WRAP 'Single-use Cups and On-the-Go Fibre-composite Food Packaging' report and the Office of National Statistics, the two options are:

- Number of Employees Per Business
- Turnover

Using these options allowed for the total quantity of cups placed on the market to be broken down into varying levels / sizes of businesses. Although these appear to be the best options of those investigated, they assume that the productivity of employees or turnover of organisations are equal between differing sizes of organisation, however in practice this may differ.

As the fibre-composite cup recycling market continues to develop and grow, more data and insight into the structure of the sector(s) will be become available, which may help further refine the options above or enable other options investigated within this work for setting a de-minimis level but not taken forward to be revisited.

Appendix I

Analysis of Key Industry Stakeholder Engagement

Figure 8 – Responses from Large Quick Service Restaurant Chains

Type of Organisation	No De-minimis	De-minimis	Notes / Comments
Large Quick Service Restaurant Chain 1	No De-minimis		**There needs to be flexibility in how it can be implemented i.e., in-store containers, hand to staff over counter, post-back etc.** Need **clarity around transport hubs** where bins are not permitted for safety reasons. If there is to be a de minimis, suggestion would be to look at **number of cups sold per day**.
Large Quick Service Restaurant Chain 2	No De-minimis		"**Restrictions will relate less to individual space (as cups can be well compacted / stacked so take up minimal space) but more to the actual number of cups being collected** (take-up rate) and the collection frequency. If there is a process for regular collection of cups (to prevent environmental health issues, due to waste collection / storage in small footprint sites) then there should not be any significant restrictions. This will also be true of the wider sector".
Large Quick Service Restaurant Chain 3		De-minimis	**Anything under 500sqft.** "**Our working assumption is that we would operate a hand to barista model for any compulsory takeback.** A front of house collection unit (or even DRS machine) would be hugely problematic in terms of aesthetic, space and contamination issues. We have historically trialled front of house collection units with a high level of contamination and varying levels of useable product returned. In the event of a mandatory take back scheme, we would expect the number of cups collected to increase, resulting in an increased number of stores".

Large Quick Service Restaurant Chain 4		De-minimis	**Likely issues in 10% of stores due to space constraints.**
Large Quick Service Restaurant Chain 5		De-minimis	**Likely issues in 10% of stores due to space constraints.**
Large Quick Service Restaurant Chain 6	No De-minimis		"**Back of house floor space is the main issue, in terms of storage and pest control for longer storage periods**.
Large Quick Service Restaurant Chain 7	No De-minimis		"We would welcome mandatory take-back with no de-minimis, assuming that there is a **clear exemption process** for those who do not have the space to operate take-back, such as independents at train stations and other travel locations. Some smaller premises will also have **health and safety risks** associated with storage of cups."
Large Quick Service Restaurant Chain 8	No De-minimis		"We would **welcome offering takeback until kerbside collections are in place**, around **7% of our locations would have limitations. This is based on a lack of floor space** in these locations, and where the unit is part of a food court with a shared seating area where the takeback would be governed by the landlord's facilities and staffing. There would be only a handful of stores falling outside the criteria which we would need to look at individually".

This shows that respondents were evenly split in terms of whether they felt they could offer mandatory takeback. Respondents indicated that if there is flexibility in terms of how cups are collected then a lot of the barriers could be overcome.

They indicated that if a de-minimis level was to be set it could be done on a cups sold or space basis with 500sqft given as a potential level. Others indicated that 10% of their stores would not be able to offer mandatory takeback.

Figure 9 – Responses from Independent Quick Service Restaurant Chains

Type of Organisation	No De-minimis	De-minimis	Notes / Comments
Independent Quick Service Restaurant 1	Not sure	Not sure	**Would need two staff present at the end of each shift to implement it**.
Independent Quick Service Restaurant 2		De-minimis	Lack of floor space (only ~80 square metres), quantity of staff (only 9 staff) and financial considerations could make mandatory takeback difficult. They **believe the de-minimis level should be 15 staff**, based on financial implications.

Figure 10 – Responses from Large Vending Machine Provider

Type of Organisation	No De-minimis	De-minimis	Notes / Comments
Large Vending Machine Provider 1		De-minimis	**They would prefer to be exempt if they are the ones obligated but be involved with a scheme to help engage customers, raise awareness and demonstrate that they are helping toward cup challenges.**

Figure 11 – Responses from Industry Representative Associations

Type of Organisation	No De-minimis	De-minimis	Notes / Comments
Industry Representative Association 1		De-minimis	"**Some units will have problems in doing this as they do not have the space**. The other major question is how they can deal with this in a safe/hygienic way and how do you incentivise if only a few consumers respond, and collection points have dirty cups lying around for weeks before the collection box is filled – has any work been done to assess the hygiene/pest issues around this? Also, do outlets accept cups from other retail outlets, particularly if there is a cost involved in returning them? **Provided that the risks, costs, and logistical implications are fully assessed and viable we would consider this, but we do not think at this stage it is necessary to mandate** this and would like to see more information about the commercial/eco viability of such a scheme. **We would guess that 30-40% of premises in the sandwich/food-to-go sector would not be suitable for this**".
Industry Representative Association 2	No De-minimis		This **depends on the floor space of the company**, as the challenge is that an extra bin at front-of-house will take up the space of a table, and storage at back-of-house will take the space of products that could be sold, and therefore have a direct impact on turnover. **The best solution here without a de-minimis is to utilise the network of bins at other premises, or space-efficient solutions like cup tubes**. No de-minimis is necessary if smart collections are implemented, a network like the DRS could be more effective but potentially should be paid for by largest contributors. If implemented, it should be based on floor space.
Industry Representative Association 3	No De-minimis		
Industry Representative Association 4	No De-minimis		"**Mandatory in-store take back is already in place for many vending machine locations as they are typically in business and industry**

			environments with waste collection schemes already in place. Cup collections should be the responsibility of the client as opposed to the food vending operator. It is not environmentally friendly for a cup scheme to be anything other than a part of the existing waste collection as a separate vehicle picking up small volumes of cups would be used. Would enthusiastically welcome mandatory take-back. No de-minimis should be in place".
Industry Representative Association 5	No De-minimis		"Although 75% of our members would be likely to have limitations (based on floor space and the fact that many of them are mobile e.g., festival vans), they would be able to make take-back work with the use of **effective space-saving collection points**, meaning that there is no need for a de-minimis. We are wholly behind any initiative that will help our members be more sustainable".
Industry Representative Association 6	No De-minimis		"We believe there should not be a de-minimis as there is huge **potential for loopholes in the de-minimis threshold, meaning a significant part of the market would not be captured**, particularly certain imported products. We believe it is crucial to preserve a level playing field across the industry."
Industry Representative Association 7		De-minimis	"**We also represent small businesses and would be opposed to this being applied to smaller organisations as a result of the financial burden on small businesses, many of whom are in debt after covid (approximately 2/5 of members). Any business with fewer than 10 staff should be under the threshold, but businesses with more than 10 staff might still be limited due to space constraints**".
Industry Representative Association 8		De-minimis	"Requiring convenience retailers to provide takeback would exacerbate existing challenges. What **limited sales space** is currently available would be further reduced and also result in additional costs to retailers in terms of having to **allocate extra staff** to monitor and manage in-store takeback."

Figure 12 – Responses from Cup Manufacturers

Type of Organisation	No De-minimis	De-minimis	Notes / Comments
Cup Manufacturer 1	No De-minimis		"No de-minimis should be in place. From a consumer perspective, **how will they know where they can or can't take a cup for recycling if there is a de-minimis**. Contents are often consumed on the move, which may promote littering, defeating object of exercise. Expectation of the take-back service should become part of the act of drinking a coffee. **It must be as brutally simple and easy as possible – single message; you put it back where it came from**".

Figure 13 – Responses from Charities

Type of Organisation	No De-minimis	De-minimis	Notes / Comments
Charity 1	No De-minimis		"We would be in **favour of a supported transition** to allow our members to explore their options. Some challenges could help incentivise a transition towards offering and encouraging more reuse options"

Figure 14 – Responses from a member survey by the British Sandwich Association

Type of Organisation	No De-minimis	De-minimis	Notes / Comments
Survey Respondent 1 – Unknown Organisation		De-minimis	Would not welcome or be able to implement take-back.
Survey Respondent 2 – Tourism company	No De-minimis		Would welcome and be able to implement take-back.
Survey Respondent 3 - Unknown Organisation		De-minimis	Would not welcome or be able to implement take-back.
Survey Respondent 4 – Unknown Organisation		De-minimis	Wouldn't be able to implement take-back themselves but support take-back in general**. If a de-minimis were in place it should be based on floor space, with consideration to building opening times and access**.
Survey Respondent 5 – Unknown Organisation		De-minimis	Would not welcome or be able to implement take-back.
Survey Respondent 6 – Unknown Organisation	No De-minimis		Would welcome and be able to implement take-back.
Survey Respondent 7 – Sandwich Bar	No De-minimis		Would welcome and be able to implement take-back.
Survey Respondent 8 – Unknown Organisation		De-minimis	Would not welcome or be able to implement take-back.
Survey Respondent 9 – Tea Rooms	No De-minimis		Would welcome and be able to implement take-back. Would be **happy to register with a scheme administrator and declare number of cups sold**.
Survey Respondent 10 – Unknown Organisation	No De-minimis		Would welcome and be able to implement take-back. Would be **happy to register with a scheme administrator and declare number of cups sold**.
Survey Respondent 11 – Unknown Organisation	No De-minimis		Would welcome and be able to implement take-back.

Appendix II

Size of Organisation Based on Cups Placed on the Market (Exponential Decay and Integration)

This section has been removed from the published version of the report due to it containing commercially sensitive information.

Appendix III

Standard Industry Classification (SIC) Codes Used in Modelling

Before analysing the ONS data, the main sales channels where fibre-composite cups may arise were identified. These were:

- Restaurants
- Hotels
- Pubs/bars
- Bakeries & sandwich shops
- Workplaces & education
- Leisure
- Multiples
- High street
- Symbols & independents
- Forecourts & travel
- Vending

The Standard Industrial Classification (SIC) codes were assessed to find business groups that provided the best coverage of the above channels. The following SIC codes were selected:

- 47.11: Retail sale in non-specialised stores with food; beverages or tobacco predominating
- 47.19: Other retail sale in non-specialised stores
- 47.24: Retail sale of bread; cakes; flour confectionery and sugar confectionery in specialised stores
- 47.25: Retail sale of beverages in specialised stores
- 47.29: Other retail sale of food in specialised stores
- 47.76: Retail sale of flowers; plants; seeds; fertilisers; pet animals and pet food in specialised stores
- 47.81: Retail sale via stalls and markets of food; beverages and tobacco products
- 47.99: Other retail sale not in stores; stalls or markets
- 55.10: Hotels and similar accommodation
- 55.20: Holiday and other short-stay accommodation
- 55.30: Camping grounds; recreational vehicle parks and trailer parks
- 55.90: Other accommodation
- 56.10: Restaurants and mobile food service activities
- 56.21: Event catering activities
- 56.29: Other food service activities
- 56.30: Beverage serving activities
- 93.11: Operation of sports facilities
- 93.12: Activities of sport clubs
- 93.13: Fitness facilities
- 93.19: Other sports activities
- 93.21: Activities of amusement parks and theme parks
- 93.29: Other amusement and recreation activities

ONS data corresponding to these SIC code groups were then used within modelling.