

# Banning the supply of single-use food and beverage containers made from expanded, or extruded, polystyrene in England

<b>Lead department</b>	Department for Environment, Food and Rural Affairs
<b>Summary of proposal</b>	The proposed policy will introduce a ban on the sale of single-use expanded and extruded polystyrene (EPS) food and beverage containers in England to promote the use of less environmentally damaging materials.
<b>Submission type</b>	Impact assessment (IA) – 16 February 2023
<b>Legislation type</b>	Secondary legislation
<b>Implementation date</b>	23 May 2023
<b>Policy stage</b>	Final
<b>RPC reference</b>	RPC-DEFRA-5118(2)
<b>Opinion type</b>	Formal
<b>Date of issue</b>	22 May 2023

## RPC opinion

<b>Rating<sup>1</sup></b>	<b>RPC opinion</b>
<b>Fit for purpose</b>	The IA identifies a good range of impacts and has provided an appropriate level of analysis to support the quantification of the impacts. The Department has considered the impacts upon small and micro businesses (SMBs), determining that their presence in affected sectors is too high to allow for any exemption. The rationale for intervention needs to be strengthened, particularly in light of the ongoing decline in the usage of single-use EPS containers. The wider impacts should be strengthened by considering the full implications of being reliant on imports to meet market demand in light of the ban. While the IA discusses a broad programme to evaluate the impact of single-use plastic (SUP) bans and policy, it must provide more detail on how this specific ban will be evaluated.

<sup>1</sup> The RPC opinion rating is based only on the robustness of the EANDCB and quality of the SaMBA, as set out in the [Better Regulation Framework](#). RPC ratings are fit for purpose or not fit for purpose.

## Business impact target assessment

	<b>Department assessment</b>	<b>RPC validated</b>
<b>Classification</b>	Qualifying regulatory provision	Qualifying regulatory provision
<b>Equivalent annual net direct cost to business (EANDCB)</b>	£10.2 million	£10.2 million <i>(2019 prices, 2020 pv)</i>
<b>Business impact target (BIT) score</b>	£51.0 million	£51.0 million
<b>Business net present value</b>	£-87.9 million	
<b>Overall net present value</b>	£-76.7 million	

## RPC summary

<b>Category</b>	<b>Quality<sup>2</sup></b>	<b>RPC comments</b>
EANDCB	<b>Green</b>	The Department has included a range of impacts, across society and business, and correctly identified those which are direct upon business. The analysis is supported by appropriate evidence (including through bespoke commissioned research) and assumptions have been tested through consultation.
Small and micro business assessment (SaMBA)	<b>Green</b>	The IA clearly identifies that SMBs account for almost all businesses affected by the ban and therefore cannot be exempt from the policy, without undermining the potential benefits. The Department discuss various potential forms of mitigation, including their relative merits and drawbacks.
Rationale and options	<b>Weak</b>	The IA establishes that the current usage of SUP EPS containers is falling, but does not provide a clear case for why regulatory intervention is necessary. The IA only includes the preferred option of introducing the ban, in addition to do-nothing. The Department should have considered a non-legislative alternative.
Cost-benefit analysis	<b>Satisfactory</b>	The Department make use of a good range of evidence sources, including prior consultation. The IA would be improved through a more clear and concise explanation of the analysis and steps taken.
Wider impacts	<b>Satisfactory</b>	A consideration of the emissions and environmental impact form a substantial element of the Department's main appraisal of the impact of the policy. Furthermore, the IA includes some discussion on the effect upon competition and trade. However, the latter should be significantly strengthened given it is noted that the UK will become reliant on imports once the ban is in force.
Monitoring and evaluation plan	<b>Weak</b>	While the IA references the Department's commitment to reviewing all significant policies and discussing the broad programme currently in track looking at the impact of various SUP policies (including the bans to be introduced at this time), it does not include specific detail of how the effectiveness of this ban on EPS containers will be assessed.

<sup>2</sup> The RPC quality ratings are used to indicate the quality and robustness of the evidence used to support different analytical areas. Please find the definitions of the RPC quality ratings [here](#).

## Overview of single-use plastic bans

The proposal covered by this IA, is part of a package of three IAs covering various single-use plastic (SUP) bans, that the Department has submitted to the RPC for scrutiny at this time. The other policies relate to a ban on single-use plastic plates and cutlery (in England), and a ban on single-use balloon sticks. This package of SUP IAs is also linked to the Department's 25-year Environment plan and its Resources and Waste Strategy, which includes the ambition to eliminate avoidable plastic waste by the end of 2042.

In addition, while the bans are covered in separate IAs, it is the RPC's understanding that all three bans are to be introduced through a single statutory instrument (SI).

## Summary of proposal

The proposal would introduce a ban on the supply of single-use EPS food and beverage containers in England. This would cover items such as EPS boxes, cups, pots, trays and cones sold to end-consumers. The objective of this proposal is to ensure that single-use EPS food and beverage containers are made from less environmentally harmful materials and reduce the impact of plastic waste on marine environments.

The IA only discusses two options in detail: the do-nothing baseline and the preferred option of introducing the ban on the supply of EPS containers.

The IA identifies the main monetised costs to be the familiarisation costs for business, the cost of switching from EPS to alternative materials such as paper, transitional capital investment costs, additional disposal and waste management costs, fuel and associated emissions cost, and the cost of enforcing the ban. In addition, the IA discusses public sector familiarisation and lost revenue to producers as non-monetised costs. Furthermore, it identifies the main benefits to be emission savings, reduction in incineration emissions, reduction in the cost of coastal plastic clean-up and the positive impact on the public's wellbeing.

The businesses that are identified as most likely to be impacted by the proposed measures are retail businesses, camping grounds and other recreational vehicle sites, as well as the food and drink hospitality sector.

The IA includes an EANDCB<sup>3</sup> figure of £10.2 million for the proposed ban.

## Response to initial review

As originally submitted, the IA was not fit for purpose as the Department had failed to support the counterfactual scenario of no ban being introduced with appropriate evidence, had not considered the potential cost of familiarisation upon SUP producers, had not supported some of their key assumptions with suitable

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<sup>3</sup> The EANDCB presented for validation in this IA, also captures the familiarisation costs to business for the ban of single-use plastic plates and cutlery. This is due to the way in which the Department consulted on these impacts, and this impact is identified as a non-monetised impact in the corresponding IA for the other ban.

appropriate evidence, and had failed to take into consideration the overlap in impacts (specifically those for businesses who feature are affected by more than one ban being introduced at this time).

The Department, in the revised IA (post-initial review), has provided additional discussion to support its position regarding the plateauing seen in the assumed counterfactual, considered all potential familiarisation costs, ensured assumptions made were supported by appropriate evidence and suitably accounted for overlapping impacts.

## **EANDCB**

### **Identification of impacts**

The Department identify a good range of impacts across various affected parties, including SUP producers, SUP consumers (both business and the public), as well as local authorities. Additionally, the IA does well to cover the impacts to society more broadly including the emissions and environmental impacts.

Whilst the IA discusses intelligence-based enforcement visits, through reactive engagement from trading standards officers, the IA could still be improved by considering any potential disproportionate impacts of regular enforcement visits on larger premises which are visited more regularly (for both the business itself and the enforcement body).

The IA would be improved by discussing whether volumes of products (both current plastic and future alternatives) sold may change. For example, will the plastic-free alternatives still be utilised, or when sold intended to be a single-use item, and would this ultimately lead to a reduction in the number of individual items.

### **Counterfactual/baseline**

The Department has set out the current trend in the usage of SUP EPS containers. Additionally, the Department has engaged with external experts to establish a forecasted trend for both the absence and the introduction of the ban, providing justification for why the modelled plateauing in the counterfactual (i.e., no ban scenario) is appropriate. The IA should be improved by ensuring the counterfactual and the elements contributing towards its establishment are all clearly explained.

## **SaMBA**

### **Scope of impacts upon SMBs**

The Department clearly sets out what proportion of the sectors likely to be affected by the ban are comprised of SMBs, with the IA apportioning shares of the costs estimated to these businesses. The IA notes, that larger businesses are more likely to have already made the switch away from SUP EPS containers and therefore may avoid some costs associated with the ban.

The SaMBA primarily focusses on the impacts to SMB firms selling SUP EPS containers. While the IA does include an apportioning of costs to SMB producers (albeit caveated due to evidence concerns), the Department has not provided further commentary on the specific impacts faced by this subset of SMBs. The IA should include a clearer discussion of the impacts faced by SMB producers, including their ability to switch from the plastic products banned to alternatives.

### **Consideration of exemption and mitigation**

The IA states that given the high presence of SMBs in the sectors targeted, exempting SMBs would not achieve the policy objective. The Department include a sufficient level of discussion covering the range of possible mitigating actions that could be taken to support any SMBs disproportionately impacted, while addressing the downsides of these.

The Department does suggest that guidance will be produced to support the introduction of the ban, however states that "...this is unlikely to be tailored specifically to small and micro businesses...". Given the Department identify that SMBs account for c. 98% of all affected businesses and who are most likely to struggle with implementing the new requirements, it may be appropriate to tailor the guidance towards SMBs.

### **Medium-sized business exemption**

The Department has provided an estimate of the likely number of medium-sized businesses (MSBs) across the sectors affected by the ban. The IA notes that as they are unable to exempt SMBs without the policy objectives being undermined, the same case can be made for not exempting businesses with up to 500 employees (i.e., MSBs). However, the Department should improve the clarity of their messaging in this section, as while the text makes clear that MSBs would not be exempt, the headings contained in table 18 suggest that some businesses would in fact be exempt.

## **Rationale and options**

### **Rationale**

The IA discusses how the ban links to the Government's 25 Year Environment Plan and its Resources and Waste Strategy. However, it fails to make a clear case for what the precise problem to be addressed is in relation to SUP EPS containers specifically. Furthermore, the Department note in the IA that bans have previously been introduced for other forms of SUP, such as carrier bags, straws and cotton buds, using the banning of these items as justification for why those covered by this policy should also be banned. Despite referencing these policies, the Department does not discuss what lessons have been learned from the introduction of these bans (whether in terms of policy development, implementation or the resulting impacts).

Additionally, the Department does not make a strong enough case for why regulatory intervention is necessary, highlighting that alternative options to EPS containers already exist, and indicating that the rate of use of SUP EPS containers is falling (and modelled to continue to fall in the no-ban scenario). The IA needs to explain why the current market-based approach, and voluntary action, is not sufficient in achieving the desired policy objectives.

### **Options**

The IA briefly mentions alternative options such as taxes/charges, subsidies and information campaigns. However, the Department ruled out these at an earlier stage carrying forward only the preferred option of introducing a ban on EPS containers for further discussion and analysis. The IA should have included non-regulatory alternatives to the ban, such as an information campaign, which could also be implemented to meet the policy objectives.

## **Cost-benefit analysis**

### **Evidence and data**

The Department has used an appropriate range of evidence sources to inform the analysis and resulting estimates. The counterfactual/baseline and ban scenarios are informed by engagement with external industry experts, with the Department having used the prior consultation to test both the approach and assumptions.

The IA would have benefited from considering any international evidence, from countries where similar plastic products either have already been banned or are due to be banned, to support the assessment of the impacts.

### **Methodology**

The IA could be improved by explaining the approach to how cost and benefit estimates have been made, more clearly. As currently presented, there are some figures where it is not immediately clear how they arise, based on the information and explanation provided by the Department, such as the discussion of the figures in table 3 on the profile of market shares.

### **Assumptions, risk and sensitivity**

The IA includes assumptions relating to the monetisation of fuel costs, where the Department note that the figure gathered from evidence has been doubled due to uncertainty surrounding the inputs to it. However, the IA does not explain what these inputs are, or the degree of uncertainty that they present. Furthermore, it is not clear why a doubling of a piece of evidence from a robust source is appropriate, without further justification and explanation.

The Department has sought to include some sensitivity analysis in the IA, exploring the effect of businesses potentially passing on costs to end consumers. This analysis uses a central estimate where consumers would face 60 per cent of the cost (and



business absorbing the remaining 40), however the basis for this central assumption is not explained. The IA would benefit from explaining the source of this position.

The IA notes that “Although the final NPV is negative, the ban remains the preferred option due to the non-monetised factors excluded from the NPV estimates”, however based on the information presented, it remains unclear as to how the non-monetised factors discussed would offset the quantified costs. The IA should provide more detail as to why this statement is true, and supports the position that if all aspects were to be quantified the policy would have a positive NPV.

## **Wider impacts**

### **Innovation**

While the IA does note that alternatives to EPS containers exist and that there is an aim to ultimately reduce the reliance on single-use containers, the IA should provide more discussion of the potential innovation and expansion of the food and drink container market.

### **International trade and investment**

The Department include a very brief assessment of the impacts to trade in the IA, including a very brief statement that the ban “would increase reliance on imports”. In addition, the Department reference a hypothetical scenario of where if the UK were to have a comparative advantage in the manufacturing of alternatives, then this would be beneficial to the UK. However, the Department does not discuss whether this is at all likely, or whether in fact it is more likely for overseas producers to have a comparative advantage and the UK then becomes even more reliant on imports.

Additionally, the Department earlier in the IA, during the consideration of impacts to wholesalers note the potential for a greater proportion of their stock to be imported from overseas and the impact this may have on lead times for customers (which the RPC takes to be the time between order and fulfilment but should be clarified). The IA has not considered the implications of this potential increased reliance on imports, and the resulting effect on the supply chain, in any great detail.

### **Competition**

The IA includes a brief section on the impact to competition from the introduction of the ban. The Department note the potential improvements to competition (both within the market, and between businesses in different home nations as bans on EPS containers align), while also highlighting the potential for the shift to alternatives placing a higher barrier to entry for certain businesses.

Similar to the discussion of the trade impacts above, the IA should also consider the impact on the domestic alternatives production market. Given the reliance on imports that is forecast, there may be the potential for a first mover advantage to establish a strong position in any domestic production.



## Equity/distributional

The Department state that an equality impact assessment has been undertaken for this policy, in line with the public sector equality duty (PSED), as well as their efforts to carry out further engagement on understanding the impacts on groups with protected characteristics. The IA notes how only a small percentage of those responding to the consultation raised concerns over the potential for the ban to negatively impact those with protected characteristics, however the Department does not clearly identify the views of those in the affected groups of people or those who represent them.

The Department should also have also considered whether the profile of businesses identified as most likely to be impacted (such as takeaways), may be more likely to be owned by, or employ, people of specific characteristics (beyond those necessarily covered by the PSED). Moreover, the IA should discuss whether there may be an increased reliance on these businesses by certain groups within the wider population, who then as final consumers are more exposed to any increase in costs passed through.

## Monitoring and evaluation plan

Despite the Department's commitment to reviewing the policy and discussion of the broader programme of work being carried out to support the Resources & Waste Strategy, including contracting Ipsos to conduct an evaluation of the strategy and cost-benefit analysis of each of the policies, the IA does not include any detailed discussion of how this specific policy will be monitored or evaluated.

The IA does note that the package of bans to be introduced at this time (as noted also covering plastic plates and cutlery, as well as plastic balloon sticks) is one of the key policies for which a policy evaluation will be undertaken as part of the Ipsos work, but does not address whether the individual impacts of these policies will be evaluated. It is not clear whether the policy is being reviewed separately from the other bans introduced at this time, or together. If the policies were to be assessed as a collective, then it may be difficult to disaggregate the impact of each respective ban, as well as attribute any success towards delivering policy objectives to any specific intervention.

Furthermore, while the IA describes the work that is being carried out with Ipsos, it does not include any information of how the monitoring and evaluation (M&E) will fully take shape.

The Department has included a table setting out that some elements of the M&E plan have already taken place (e.g., the development of a theory of change and a data collection plan) but the outputs which are noted as having already been completed have not been included. The Department needs to explain what framework they will be using to establish whether the ban has been successful or not in achieving its objectives, including what evidence they will be seeking to use to determine this.

## **Regulatory Policy Committee**

For further information, please contact [regulatoryenquiries@rpc.gov.uk](mailto:regulatoryenquiries@rpc.gov.uk). Follow us on Twitter [@RPC\\_Gov\\_UK](https://twitter.com/RPC_Gov_UK), [LinkedIn](#) or consult our website [www.gov.uk/rpc](http://www.gov.uk/rpc). To keep informed and hear our views on live regulatory issues, subscribe to our [blog](#).