

Written evidence submitted by Frugalpac (PW0021)

Response:

1. What measures should the UK Government take to reduce the production and disposal of single-use plastics in England? Are the measures announced so far, including a ban on certain single-use plastics and a plastic packaging tax, sufficient?

The government is absolutely right to be clamping down on the production and use of single use plastics and Frugalpac has welcomed all of the measures that have been announced so far.

There is no doubt that there is much more that could be done if the political will to make difficult decisions is there and there is a willingness to regulate to secure the desired changes.

It is important to remember that single-use plastics are not just creating a huge disposal issue, they are also significantly contributing to our carbon emissions too. Every bit as ambitious as the 2042 plastic deadline is the 2050 net zero target and getting the right measures in place now can help the UK to achieve both of those goals.

With those twin targets in mind, we would like to see the following policies put in place to reduce the manufacture and use of single-use plastics in the UK:

1. Government assistance to build up a domestic UK recycling centre for plastics. Currently, there is little or no domestic recycling in the UK and recycled plastic products are simply not available for manufacturers to use
2. Tougher moves on greenwashing by firms to stop claims that they are recycling materials or using recycled materials when for the large part of their businesses this is clearly not the case
3. Levies on non-recycled products and content will help make a difference to recycling as if properly designed they will allow for the establishment of a domestic recycling industry as detailed above.

2. How should alternatives to plastic consumption be identified and supported, without resorting to more environmentally damaging options?

There are a couple of specific considerations that we at Frugalpac believe the Government should have front and centre of their thoughts when designing and implementing measures both now and in the near future. These relate to products:

- which are non-recyclable because of an integral plastic element; and,
- the environmental impact of alternative products.

Non-recyclable products

Firstly, when considering restrictions on single-use plastics, ensure that commonly used products that are non-recyclable as a result of a plastic elements they contain are included as well as products made entirely or primarily of single-use plastic materials.

Disposable coffee cups are an example of this. An independent Life Cycle Assessment (LCA) analysis conducted by Intertek, one of the world's leading Total Quality Assurance providers measured the environmental impact of producing, using and disposing of all types of single use coffee cups.

It found that the carbon footprint of the 2.5 billion cups that go to landfill in the UK is therefore over 152,000 tonnes of CO₂e, the equivalent of up to 33,300 cars being driven for a year. Globally for the 500 billion cups, that's over 30.4 million tonnes, the CO₂ equivalent of providing electricity to 5,155,366 households – a city the size of Paris.

Our product, the Frugal Cup the world's first recyclable coffee cup made from recycled paper. It has a carbon footprint up to 60% lower and a water footprint up to 74% lower than conventional and compostable cups. The LCA found that if Frugal Cups replaced the more than 2.5 billion coffee cups used in the UK every year, the carbon saving would be approximately 90,315 tonnes of CO₂e. That's the equivalent of driving more than 224 million miles in an average car - around the world 8,996 times.

If the 500 billion paper cups consumed globally were replaced with Frugal Cup, we could save more than 18 million tonnes of CO₂e, which would be the carbon equivalent of 42 million barrels of oil, driving around the world 1.8 million times.

This type of quantifiable consideration should be at the forefront of identifying suitable alternatives. The data is not always readily available but it can be obtained as our LCA proves. (We have included a copy of this study with this submission).

Environmental impact of alternatives

Secondly, when promoting a shift to recyclable or compostable alternatives, the Government must consider the different environmental impact of these alternatives and also whether they are able to be recycled in conventional domestic recycling methods, or whether something more specialist is required.

Data on this is not easily available but the independent LCA that we commissioned looked closely at it.

Compostable coffee cups are often flagged as an environmentally-friendly alternative to disposable ones, but most cannot be composted anywhere apart from industrial composting sites. There are only 53 of these in the UK and their CO2 emissions are high.

In 2017, the House of Commons Environmental Audit Committee 'Disposable Packaging Coffee Cups' report found that only one in 400 cups actually get recycled with the vast majority of the more than 2.5 billion coffee cups consumed each year in the country going straight to landfill.

The LCA examined this and found that:

- Conventional cups had the highest carbon footprint when sent to landfill or incinerated
- Compostable cups had both the highest carbon footprint if recycled and the highest water footprint to make each cup.
- The Frugal Cup had the lowest carbon and water footprints across all categories.

It looked at a number of different scenarios and found the following:

- If all cups are sent to landfill – as the vast majority are - the conventional cup has the highest carbon footprint of 60.9 grams of CO2e followed by 51.6 for compostable, 51.1 for coated and just 24.7 for the Frugal Cup.

That means the Frugal Cup has a carbon footprint up to 60% lower than conventional cups, 52% lower than compostable and 51% lower than coated.

- If all the cups are recycled – and there is only one dedicated plant in the UK that can process them and two other sites that can recycle in a controlled environment – the compostable cup has the highest carbon footprint with 31.7 grams of CO2e followed by conventional with 31.5, coated with 31.0 and the Frugal Cup the lowest with 22.4.

That means the Frugal Cup has a carbon footprint 30% lower than compostable and conventional and 27% lower than coated.

- If all the cups are incinerated, the conventional cup has the highest carbon footprint with 33.1 grams of CO2e compared to 31.9 for coated, 31.5 for compostable and just 26.2 for the Frugal Cup.

That means the Frugal Cup has a carbon footprint 21% lower than conventional cups, 18% lower than coated and 17% lower than compostable.

In other words, specifying a shift to recyclable or compostable materials is not specific enough to make a quantifiable difference. Instead, the Government should look at the LCA we had independently conducted and commission its own studies before issuing specific recommendations and guidelines on the changes that businesses and producers are required to make.

The Environmental Audit Committee recommended that the Government set a target that all single use coffee cups disposed of in recycling bins should be recycled by 2023 and the industry should agree on the design of a disposable cup which can be easily recycled. This was a sensible recommendation, and the Frugal Cup is ready to go. But this target has not been implemented and certainly will not be achieved as things stand.

3. [Is the UK Government's target of eliminating avoidable plastic waste by 2042 ambitious enough?](#)

Given the position that the UK is currently in, it is a very ambitious target and one that we will struggle to achieve without significant further changes. The current legislation to ban certain single use plastics like straws is welcome but really is the tip of the iceberg.

Our concern at Frugalpac is the deliverability of the target and the unintended consequences some measures are already causing. The Government needs to look holistically at the effects which changes create in the market and at the full range of consequences.

Too much of present environment policy relies on out-of-sight out-of-mind overseas “recycling” which sometimes can be very far from what the initiators of legislation envisaged.

4. Will the UK Government be able to achieve its shorter-term ambition of working towards all plastic packaging placed on the market being recyclable, reusable or compostable by 2025?

Not unless it changes the way it implements the legislation as we have highlighted above. There needs to be a domestic UK industry established.

5. Does the UK Government need to do more to ensure that plastic waste is not exported and then managed unsustainably? If so, what steps should it take?

Yes, absolutely. The Government needs to act holistically to ensure that there is a local UK based recycling industry capable of both recycling UK waste and providing feed stock to industry. By the very nature of the process, exported waste is outside the jurisdiction of UK authorities and there is little that UK Government or firms can do to control what happens to it once it leaves these shores. To borrow a phrase from the environmental movement, the government needs to act locally and think globally.

Using the Frugal Cup and Frugal Bottle as examples as we have detailed above. These can be recycled at existing facilities rather and do not require specialist waste management such as industrial composting.

However, the problem that Frugalpac faces, like many others, in the sector is that it currently has to obtain its feedstock from abroad. An example being there is no manufacturer of recycled paper of the type used in the Frugal Cup or Frugal Bottle in the UK.

The Government needs to close the recycling loop with its interventions. Only a robust and successful domestic recycling industry can hope to lower CO2 emissions in the long run.

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