

Plastic Packaging Tax - chemical recycling and adoption of a mass balance approach

Consultation response submission form

Publication date: 18 July 2023

Closing date for comments: 10 October 2023

Consultation response form

This response form is to be used for responding to HMRC's consultation on the adoption of mass balance approach for the purposes of the Plastic Packaging Tax. If you need to expand on any of the responses you have provided in the text boxes, please continue on a separate word document and attach it in your consultation response email, along with any supporting evidence.

Subject of this consultation

This consultation explores the application of a mass balance approach to determine the amount of chemically recycled plastic in a plastic packaging component for the purposes of the Plastic Packaging Tax (PPT). It seeks views on whether a mass balance approach should be accepted as a way of allocating recycled plastic content to packaging, and, if so, the controls and standards that should be adopted to ensure the integrity of the tax.

Scope of this consultation

HM Revenue and Customs (HMRC) is consulting on the impacts of chemical recycling for plastics and the potential use of a mass balance approach to account for chemically recycled content for PPT.

Who should read this?

Businesses (including those in the plastics value chain such as petrochemical businesses and mechanical recyclers), individuals, tax advisers, NGOs, academia/research, certification, trade and professional bodies and other interested parties.

Duration

12 weeks from 18 July 2023 to 10 October 2023.

Lead official

HMRC - Mark Palmer

How to respond or enquire about this consultation

Responses or enquiries should be sent by 10 October 2023, by e-mail to indirecttaxdesign.team@hmrc.gov.uk or by post to: Mark Palmer, Plastic Packaging Tax Policy Team, HMRC, 4TH Floor Trinity Bridge House, 2 Dearmans Place, Salford M3 5BS

Additional ways to be involved

To engage with groups who would be affected by the proposals and issues under discussion in this consultation, the government will be consulting key stakeholders and interested parties who specialise in this policy area on the proposals during the consultation process. If you would like to be included in a consultative meeting, please contact us via the email above as soon as possible.

After the consultation

The government will aim to analyse responses and publish a formal response document as soon as possible after the end of the consultation period.

Getting to this stage

PPT was introduced on 1 April 2022 and was informed by two policy consultations in 2019 and 2020. Chemical recycling is a recognised method of recycling plastic waste for the purposes of PPT. However, following constructive engagement with stakeholders from across the plastics value chain, the government understands that it is sometimes not currently possible for businesses to use chemically recycled plastic in packaging and not pay the tax. This is because in some cases it is impossible to distinguish between plastic from virgin and recycled sources when this type of recycling is used.

HMRC engaged with various key stakeholders during Summer 2022 to gather evidence and improve knowledge about mass balance and chemical recycling. Aspects of chemical recycling were also discussed during HMRC's regular industry engagements, which focussed on the implementation of the tax.

Confidentiality

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Information provided in response to this consultation, including personal information, may be published, or disclosed in accordance with the access to information regimes.

These are primarily the Freedom of Information Act 2000 (FOIA), the Data Protection Act 2018, UK General Data Protection Regulation (UK GDPR) and the Environmental Information Regulations 2004.

If you want the information that you provide to be treated as confidential, please be aware that, under the Freedom of Information Act 2000, there is a statutory Code of Practice with which public authorities must comply and which deals with, amongst other things, obligations of confidence. In view of this it would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information we will take full account of your explanation, but we cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded as binding on HM Revenue and Customs.

Consultation Privacy Notice

This notice sets out how we will use your personal data, and your rights. It is made under Articles 13 and/or 14 of the UK General Data Protection Regulation.

Your data

The data

We will process the following personal data:

Name Email address Postal address Phone number Job title

Purpose

The purpose(s) for which we are processing your personal data is: Plastic Packaging Tax - chemical recycling and adoption of a mass balance approach

Legal basis of processing

The legal basis for processing your personal data is that the processing is necessary for the exercise of a function of a government department.

Recipients

Your personal data will be shared by us with HM Treasury.

Retention

Your personal data will be kept by us for 6 years and will then be deleted.

Your rights

- You have the right to request information about how your personal data are processed, and to request a copy of that personal data.
- You have the right to request that any inaccuracies in your personal data are rectified without delay.
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If you consider that your personal data has been misused or mishandled, you may make a complaint to the Information Commissioner, who is an independent regulator. The Information Commissioner can be contacted at:

Information Commissioner's Office

Wycliffe House

Water Lane

Wilmslow

Cheshire

SK9 5AF

0303 123 1113

casework@ico.org.uk

Any complaint to the Information Commissioner is without prejudice to your right to seek redress through the courts.

Contact details

The data controller for your personal data is HM Revenue and Customs. The contact details for the data controller are:
HMRC
100 Parliament Street Westminster London SW1A 2BQ
The contact details for HMRC's Data Protection Officer are:
The Data Protection Officer HM Revenue and Customs 14 Westfield Avenue Stratford, London E20 1HZ advice.dpa@hmrc.gov.uk
About you
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Phone number
07836 705610
Job title
Plastics Recycling Industry Representative on the DEFRA Advisory Committee on Packaging
Who are you submitting this response on behalf Of (Please only tick one)
⊠Business representative organisation/Trade body
Chemical recycler
□ Mechanical recycler
□ Petrochemical company
□ Waste management company □ Packaging manufacturer/convertor
□ Packaging manufacturer/converter

□ Product manufacturer/pack filler
□Brand Owner
□ Retailer
□ Plastic packaging exporter
□ Plastic packaging importer
Distributor
Certification scheme owner
Certification Bodies
Local Government
Non-governmental organisations
Charities or social enterprise
Academic or research
Consultancy
□ Individual □
□Other
Please provide the name of the organisation/business you represent (if applicable)
DEFRA Expert Advisory Committee on Packaging
If you are in business, where if your business established?
UK
□ Isle of Man
Other (please provide futher details below)
Market and in broading and the commence of the commence of the LIVO
If you are in business, how many staff fo you employ across the UK?
□ Fewer than 10
□10-49
□50–249
☐More than 249
□ Prefer not to say
Please provide any further infortmation about you organisation or business activities
that you think might help us put your answers in context.
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Organisations
The DEFRA ACP has representatives from each of the material sectors, together with representatives from the Retailers, Brand Owners, and Compliance Organisations

Would you like your response to be confidential? If so, why? (please note the information on confidentiality on page 3)

NO
Mass balance approach – chapter 3
Question 1: Do you agree that it is possible to determine actual recycled content in products using the outputs of chemical recycling processes which produce a polyr such as depolymerisation and dissolution? Please give reasons for your answer.
□Yes □No ⊠Don't know
There are a number of separate chemical recycling processes including Depolymerisation, this process is the most likely to develop new and increased recycling capacity in the medium/short term, this process produces a monomer which will need to undergo further polymerisation to produce a usable polymer. Polymer final processing will mostly be undertaken in a 'steam cracker', it is not possible to establish individual batch traceability using this process, thus the need for a mass balance reconciliation process for chain of custody.
There other developing ACR processes, thus the agreed mass balance model must be technology neutral
Question 2: How should chemical recycling be defined for the purpose of using a mass balance approach for PPT? Chemical recycling encompasses a range of different technologies which converts (mostly) used plastic packaging into a new polymer which can be re-used to manufacture new plastic packaging including 'contact sensitive' plastic packaging where, currently, conventional mechanical recycling is not allowed for reasons of
health and hygiene
Any chemical recycling definitions used for the purpose of determining mass balance must be technology neutral
Question 3: Do you agree that the production of a recycled substitute for virgin feedstock to a cracker is the correct test for when calculations using a mass baland approach should be accepted for the purposes of PPT? If not, what test should be used?
□Yes ⊠No □Don't know

As technologies for chemical recycling continues to expand alongside capacity increases, it is essential mass balance determinations must be technology neutral.

Definitions for chemical recycling must be technology neutral

Question 4: Are there other chemical recycling methods or processes for which a mass balance approach is required to account for the recycled content in the outputs? Please provide details and examples.

As stated above, mass balance should be technology neutral to cover any products where recycled and virgin feedstocks are blended

Question 5: What evidence are you aware of regarding the overall environmental impact of chemical recycling and use of the mass balance approach?

There are at least 10 publicly available studies which evaluate the overall environmental impacts of chemical recycling, we are happy to supply these documents if you consider these to be relevant. The key issue surrounds where chemically recycled plastic can be used – currently in the UK at least 50% of all plastic packaging is for contact sensitive/food grade applications where mechanically recycled plastic cannot be used, thus the environmental impact increased availability of chemically recycled plastic, using mass balance, will be a commensurate reduction in the amount of virgin plastics consumed

Question 6: How does the carbon impact of chemical recycling compare with the impact of using virgin material to produce plastic, and with disposing of waste plastic through landfill or energy from waste?

As stated in Q5.Plus in addition, as collection rates for used plastic packaging increase, especially for kerbside, chemical recycling is the only realistic recycling option for co-mingle kerbside plastic packaging

Question 7: What is the current and planned UK capacity for processing plastic waste through chemical recycling of your business or the supply chains that include your business?

Chemical recycling capacities are slowly increasing in both the UK and Europe, however, for the UK alone current and planned capacity increases are modest (See below Q8)

Question 8: How would the adoption of a mass balance approach for chemically recycled content for PPT purposes impact on investment in chemical recycling in the UK?

New and improved chemical recycling processes are now widely available. However, whilst the technology is available, without an agreed mass balance approach which encompasses recyclate produced being offset able against the PPT, businesses are unlikely to invest.

Question 9: To what extent is any potential investment in chemical recycling in the UK dependent on the specific details of how a mass balance approach may be implemented?

See answer above to Q8, without agreement on mass balance protocols, further investment is unlikely to take place in the short/medium term

Question 10: Are you aware of any other factors or policies that could also impact on inwards investment into UK chemical recycling infrastructure?

UK retailers and brand holders want to access greater volumes of chemically recycled material for contact sensitive applications (50% of the market for all plastic packaging), not just as an off-set for the PPT, but also for CSR reasons, the demand is there, however this cannot be realised without an agreed mass balance protocol

Question 11: Do you agree that increased use of chemical recycling of plastic waste
would complement the existing mechanical recycling sector, and not disincentivise
further investment in mechanical recycling? Please give reasons for your answer.

⊠Yes L	∃No	□Don't	know
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The costs of running a mechanical plastic recycling factory are significantly less, when compared to a chemical recycling equivalent, this in most unlikely to change.

Chemical recycling allows for the re-use of mixed plastics e.g. films & bags which are difficult to recycle and where markets for the recyclate generated are difficult to find!

Question 12: What controls need to be put in place to ensure material which is suitable for mechanical recycling continues to be recycled in that way, if a mass balance approach for chemically recycled plastic is adopted for the purposes of PPT?

See above Q 11, the market for polythene films and bags which can be mechanically recycled and for which the markets exist for the recyclate generated will not be impacted by availability of increased chemical recycling, thus no controls are needed.

Question 13: Do you agree that pre-consumer waste should be phased out as being classed as recycled material for PPT if chemically recycled plastic using a mass balance approach is permitted? Please supply information and comparative costs of recycling to support your answer.

□Yes	□No	⊠Don't know
phasing taking p to 18 m	g out. In the ore-consu- onths we	question to answer without knowing what is the time scale for the longer term for example a 4 year time scale we could support timer out of scope for the PPT, alternatively if the time scale was 12 could not, the reason being industry will need time to re-adjust if taken out of scope
approac		you agree that chemically recycled plastic using a mass balance y to meet the regulatory requirements for the immediate packaging of s?
□Yes	□No	⊠Don't know
		w can businesses communicate the recycled content to consumers in not undermine confidence in claims about recycled content?
practise which u this – e basis fo	e. There a se Mass ven if the or a stater	ch possibly expanding (on) and using OPRL as an example of best are already a number of product types widely available on the market Balance, however, the consumer may not necessarily understand y now e.g. Palm Oil. If a product is using Mass Balance ACR as the ment of recycled content, the key is to ensure the message is nicated and backed up by verifiable chain of custody evidence.
agree th	at chemi oe treated	en the issues discussed and questions raised in this chapter, do you cally recycled plastic allocated using a mass balance approach d as recycled plastic for the purpose of the PPT? Please provide porting evidence for your response.
⊠Yes	□No	□Don't know
See ab	ove answ	vers to prevuious questions
Mass ba	lance mo	odels – chapter 4
busines	ses to us	you agree with the government's suggested approach to not allow se the group level calculation? Please provide reasons and supporting r response.
□Yes	⊠No	□Don't know

The key fact here is that petrochemical plants are operated on a huge scale, annual outputs of 500,000 to 1,000,000 tonnages p.a. are not uncommon, the gropu level calculation method provides the most workable solution for the attribution of chemically recycled content. Given the UK Pet Chem infrastructure it would not be realistic to use site, or batch level calculations. There must be fully auditable procedures in place using an accredited third party audit which eliminates the risk of fraud.

Question 18: Do you foresee any practical barriers or risks to using the batch or site balance calculations? Please provide details of what those barriers or risks are.

Given the scale of ACR recycling incorporating Pet Chems, it is not realistic to expect industry to accommodate batch or site level calculations

Question 19: To what extent do the batch and site levels of mass balance support the objectives of PPT and incentivise investment in chemical recycling in the UK? Please provide reasons and supporting evidence for your response.

Batch and/or site level batch requirements would act as a real disincentive to new investments in ACR capacities

Question 20: Do you agree with the government's suggested approach to not allow businesses to use the free allocation method? Please provide reasons and supporting evidence for your response.

⊠Yes	□No	□Don't know	
Fuel e	• •	r fuel excluded as	s sometimes referred to, is the most pragmatic

Question 21: To what extent do the proportional balance, fuel exempt or polymer only allocation methods, support the objectives of PPT and incentivise investment in chemical recycling in the UK? Please provide reasons and supporting evidence for your response.

Fuel exempt is the most realistic and practical option. Creating additional administrative and/or hurdles with proposals for allocation methods will merely act as a further barrier to investment which, in turn will impact on greater availability of chemically recycled polymers. It must be borne in mind that 50% of all plastic packaging used in the UK is for contact sensitive applications. The use of recycled raw materials for these applications (as a packaging material) can only be achieved through ACR polymer.

Question 22: What are the relative advantages with the proportional balance, fuel exempt and polymer only allocation methods? Please provide details of what those

See above Q21	
	s or practical challenges do you envisage with the proportion of polymer only allocation methods? Please provide details callenges are.
circular economy the us should be under no deli investments that will be	Exempt is the most pragmatic option. To enlarge the UK se of chemically recycled plastics will be a key 'driver'. We usions of the massive challenges, and thus multi million £ required, keeping things as simple as realistically possible ential need for a fuel exempt strategy.
	xtent would the requirements and standards need to be tailor risks associated with proportional balance, fuel exempt and methods.
o address the different	risks associated with proportional balance, fuel exempt and
o address the different colymer only allocation See above Q23 Question 25: If a mass mpact it may have on the returns, what would be amount of recycled fee	risks associated with proportional balance, fuel exempt and methods. balance approach was adopted and taking into account the he amount of PPT chargeable on businesses' quarterly tax a reasonable balancing period for businesses to equate the dstock received, to the claims made around recycled content
o address the different colymer only allocation See above Q23 Question 25: If a mass mpact it may have on the returns, what would be amount of recycled fee output products? Pleas	balance approach was adopted and taking into account the he amount of PPT chargeable on businesses' quarterly tax a reasonable balancing period for businesses to equate the dstock received, to the claims made around recycled content se provide reasons for your response.
o address the different colymer only allocation. See above Q23 Question 25: If a mass mpact it may have on the turns, what would be amount of recycled fee output products? Pleas A 3 month mass balance seem the most appropriately appropriately allowed a grant of the polymer of the polymer of the polymer of the most appropriately allowed a grant of the polymer of t	balance approach was adopted and taking into account the he amount of PPT chargeable on businesses' quarterly tax a reasonable balancing period for businesses to equate the dstock received, to the claims made around recycled content se provide reasons for your response.

Question 27: What are the benefits and disadvantages of the different measurement units for a mass balance calculation if it is adopted for PPT purposes?

Mass provides a verifiable figure for calculating the weight of output. A certificate of conformity/validation can be raised for purposes of the PPT. Molecular units will be very complicated for producers and users to calculate outputs

Question 28: Which measurement unit best supports the environmental aims of the tax? Mass can be clearly demonstrated – through chain of custody/auditing – for verification for the PPT Question 29: Should the government exclude any of the measurement units from being used in a mass balance approach calculation which is allowable under PPT? If so, please state which measurement units should be excluded, provide reasons, and supporting evidence for your response. ⊠Yes \square No ☐ Don't know Existing verification schemes can easily be adopted to provide suitable verification for off set against the PPT Question 30: Do you think businesses should be required to deduct process losses from a mass balance approach calculation which is allowable under PPT? Please provide reasons and supporting evidence for your response.

How certification would operate – chapter 5

□Don't know

⊠Yes

 \square No

Question 31: Do you foresee any barriers or risks with introducing a requirement for certification schemes to verify compliance with a mass balance approach if it is adopted for PPT purposes? If so, please provide details and supporting evidence.

Process losses are already excluded Pfrom mechanical plastic recycling tonnages,

prior to the issue of a PRN, chemical recycling should be no different.

The prevention of fraud within the PPT is essential, not just for UK recyclers but equally important for imports. Certification schemes are widely used throughout the packaging sector, these must be included in any new Regulations surrounding mass balance/PPT.

Question 32: In what circumstances and at what frequency should a certification scheme check the quality of audits completed by certification bodies? Please provide reasons for your response.

Certification schemes determine their own frequencies of audit to ensure compliance, certification schems are themselves audited to ensure compliance with international standards. ISO 17065 Conformity Assessment – Requirements for bodies certifying products, processes and services – is good example of best practise.

Question 33: Do you agree with the government's suggested approach of introducing a minimum requirement for the frequency and nature of audits? Please provide reasons and supporting evidence for your response.

⊠Yes	□No	□Don't know
		rd for audit requirements will ensure a level playing field, however, given to how this could be maintained for importers!
have an	y sugges	mass balance approach was adopted for the purposes of PPT, do you stions for minimising the administrative burdens on business while ance with the minimum requirements.
packagi	ng manu	ould all businesses in a supply chain from the recycler to the facturer be certified under the same scheme to enable the recycled ken into account for the purposes of PPT?
□Yes	⊠No	□Don't know
accredi	itation boo	at all parts of the supply must be certified by a recognised dy, however, specifying a single accreditation scheme would be difficult and potentially increase costs.
certifica	tion bod	you agree with the proposed accreditation requirement for ies who complete the certification scheme audits? Please provide porting evidence for your response
⊠Yes	□No	□Don't know
		to be delayed by administrative delays with compliance schemes or
Underst	anding c	ommercial practices – chapter 6
docume	nt, pleas	ess already covered in your responses to other questions within this e tell us how you think your business would be impacted by being chemically recycled plastic accounted for using a mass balance

As previously stated, the speedy implementation of Regulations to permit the use of mass balance for chemical recycling will be an essential ingredient in achieving

approach as recycled for the PPT, including additional administrative burdens?

greater circularity for packaging

Assessment of impacts – chapter 7

Question 38: Do you have any comments on the assessment of equality and other impacts in the Tax Impact Assessment?



Submitting your respond

Your response should be sent by 10 October 2023, by e-mail to indirecttaxdesign.team@hmrc.gov.uk or by post to: Mark Palmer, Trinity Bridge House, 2 Dearmans Place, Salford M3 5BS.

Please do not send consultation responses to the Consultation Coordinator.

Paper copies of this document in Welsh may be obtained free of charge from the above address. This document can also be accessed from HMRC's GOV.UK pages. All responses will be acknowledged, but it will not be possible to give substantive replies to individual representations.

When responding please say if you are a business, individual or representative body. In the case of representative bodies please provide information on the number and nature of people you represent.