

## Sections 42–85 and Schedules 9–15: plastic packaging tax

The Finance Act 2021 (FA 2021) introduces a new plastic packaging tax of £200 per metric tonne of plastic packaging that will come into effect from April 2022.<sup>1</sup> This new excise tax will apply to plastic packaging components, produced in or imported into the UK, that contain less than 30 per cent of recycled plastic, when measured by weight.<sup>2</sup> This note discusses this new tax.

The first part of this note is descriptive: in it the writer explains how the plastic packaging tax will operate in practice by means of a discussion of the tax's main features. The second and third parts provide critical comments on two main aspects of the new plastic packaging tax. In the second part, the writer critically assesses the policy objective of the plastic packaging tax. In the third part, the writer evaluates the legal design of the tax by highlighting that some of its design features seem inconsistent with its policy objective. Finally, in the fourth part the writer concludes.

### (1) Main features

The new plastic packaging tax is designed as an excise tax, which is to be paid by producers and importers of “chargeable plastic packaging components” in the UK.<sup>3</sup> As is common for excise taxes, the plastic packaging tax does not apply to plastic packaging components intended for export.<sup>4</sup> The tax rate is £200 per metric tonne of chargeable plastic packaging components.<sup>5</sup> This amount can be reduced in proportion to the amount of chargeable plastic packaging components when it is less than a tonne.<sup>6</sup> FA 2021 provides for the possibility of secondary or joint and several liability in certain circumstances.<sup>7</sup> Moreover, it provides for penalties in case of evasion, misstatements, or failure to comply with certain requirements.<sup>8</sup>

The application of the plastic packaging tax relies on the definition of several terms, including the terms “plastic”, “packaging component” and “recycled plastic”. These terms help determine the types of plastic packaging components that fall under the scope of the tax. Chargeable plastic packaging components are defined by reference to two criteria: a criterion related to the “finished” character of the packaging and a criterion related to the “proportion of recycled plastic in the component, when measured by weight”.<sup>9</sup> The former criterion relates to whether the packaging component has “undergone its last substantial modification”.<sup>10</sup> The latter criterion is about whether the total amount of plastic in the component contains less than 30 per cent of recycled plastic.<sup>11</sup> It is for the taxpayer to prove that these criteria are not met.<sup>12</sup> The same burden of proof applies to the definition of “plastic packaging component” and the definition of “plastic” and “recycled plastic”.<sup>13</sup> The term “packaging component” is defined as follows:

---

<sup>1</sup> Finance Act 2021 (FA 2021) s.45(1) and s.85(1)(b).

<sup>2</sup> FA 2021 s.43 and s.47(1).

<sup>3</sup> FA 2021 ss.43 and 44. On the time of importation, see FA 2021 s.50.

<sup>4</sup> FA 2021 s.51 and s.53. Note that plastic packaging components used “in the removal of goods from the United Kingdom and that are—(a) transport packaging or tertiary packaging...or, (b) road, rail, ship and air containers” remain subject to the tax (see FA 2021 s.51(6)).

<sup>5</sup> FA 2021 s.45(1).

<sup>6</sup> FA 2021 s.45(2).

<sup>7</sup> FA 2021 s.59 and Sch.9.

<sup>8</sup> FA 2021 ss.77–80. See also FA 2021 Sch.14 (assessment of penalties under FA 2021 s.80).

<sup>9</sup> FA 2021 s.47(1). See also FA 2021 s.60 on “measurement of weight”.

<sup>10</sup> FA 2021 s.47(3)(a). See also FA 2021 s.47(3)(b).

<sup>11</sup> FA 2021 s.47(1).

<sup>12</sup> FA 2021 s.47(2). See also FA 2021 Sch.11 (on reviews and appeals) and s.64 and Sch.12 (on information and evidence).

<sup>13</sup> FA 2021 ss.48(4) and 49(7). See also FA 2021 Sch.11 (on reviews and appeals) and FA 2021 s.64 and Sch.12 (on information and evidence).

“[A] product that is designed to be suitable for use, whether alone or in combination with other products, in the containment, protection, handling, delivery or presentation of goods at any stage in the supply chain of the goods from the producer of the goods to the user or consumer”.<sup>14</sup>

Such a packaging component will qualify as a “*plastic packaging component*” when it “contains more plastic, when measured by weight, than any other single substance...”.<sup>15</sup> The use of the packaging component is in principle irrelevant.<sup>16</sup> For example, it does not matter whether it is used in the supply chain of the goods or by the end consumer.<sup>17</sup> “Plastic” is defined as

“a material consisting of a polymer, other than a cellulose-based polymer that has not been chemically modified, to which additives or other substances may have been added”<sup>18</sup>

whereas “recycled plastic” is

“plastic that has been reprocessed from recovered material by means of a chemical or manufacturing process, other than organic recycling, so that it can be used either for its original purpose or for other purposes”.<sup>19</sup>

In terms of administrative compliance, producers and importers of plastic packaging components will be required to record certain pieces of information (including their name, the sites at which they carry on business and whether they are part of a group) in a register.<sup>20</sup> Moreover, non-resident taxpayers will have to appoint a representative in the UK.<sup>21</sup> Finally, producers and importers who supply chargeable plastic packaging components to business customers will be obliged to include a “plastic packaging tax statement” with their invoice.<sup>22</sup> As the tax applies to filled packaging, this obligation also applies to the supply of plastic packaging components “by virtue of supplying other goods, such as goods that are contained within the component”.<sup>23</sup>

## (2) Policy objective

The UK Government announced its intention to tax plastic packaging in 2018.<sup>24</sup> The main objective of the plastic packaging tax is to incentivise “businesses to use recycled material in the production of plastic packaging”, which should in turn “stimulate increased levels of recycling and collection of plastic waste, diverting it away from landfill or incineration”.<sup>25</sup> Although this objective is being shared by other governments, including in the EU,<sup>26</sup> it is worth highlighting that recycling should not be seen as an end-goal. According to the principles of the “waste management hierarchy”, recycling should come after

---

<sup>14</sup> FA 2021 s.48(1).

<sup>15</sup> FA 2021 s.48(3).

<sup>16</sup> FA 2021 s.48(2). See however FA 2021 s.52.

<sup>17</sup> FA 2021 s.48(2).

<sup>18</sup> FA 2021 s.49(1).

<sup>19</sup> FA 2021 s.49(2). FA 2021 s.49 provides further definitions of the terms “recovered material”, “organic recycling”, “pre-consumer plastic”, “post-consumer plastic”.

<sup>20</sup> FA 2021 ss.54 and 55. See also FA 2021 ss.56–58.

<sup>21</sup> FA 2021 s.69.

<sup>22</sup> FA 2021 s.68.

<sup>23</sup> FA 2021 s.68(2).

<sup>24</sup> HM Treasury, *Budget 2018* (October 2018), HC 1629, pp.48–49. See also Louise Smith, *Plastic waste* (12 May 2021), House of Commons Library, Briefing Paper No.08515, pp.27–30; Alice Pirlot, “Finance Act 2020 Notes: Section 111: preparing for a new tax in respect of certain plastic packaging” [2020] B.T.R. 534.

<sup>25</sup> HMRC, Policy Paper, *Introduction of a new plastic packaging tax* (12 November 2020), <https://www.gov.uk/government/publications/introduction-of-a-new-plastic-packaging-tax/introduction-of-a-new-plastic-packaging-tax> [Accessed 18 August 2021].

<sup>26</sup> See Directive (EU) 2018/852 of the European Parliament and of the Council of 30 May 2018 amending Directive 94/62/EC on packaging and packaging waste [2018] OJ L150/141 (14 June 2018) art.1(5), setting a new recycling minimum target of 55% for plastic packaging waste by 2030. See also Sergio Sastre Sanz, Marta Jofra Sora and Ignasi Puig Ventosa, *Research paper on a European tax on plastics: Report* (6 April 2018); Erika Scuderi, “Towards a plastic-free economy: the Italian plastic tax” [2021] *Diritto Tributario, Pacini Giuridica* 1.

prevention and the re-use of waste.<sup>27</sup> For this reason, the plastic packaging tax should be viewed as part of a broader strategy to tackle plastic waste, which includes a wide range of policy measures. For example, UK packaging producers are already required to minimise the volume and weight of product packaging.<sup>28</sup> Moreover, the UK Government recently introduced a ban on the sale of single-use plastic items, including straws, cotton buds and drink stirrers in England.<sup>29</sup> It has also been consulting on adding other single-use items to the ban<sup>30</sup> and introducing a deposit return scheme for drinks containers.<sup>31</sup>

Given the broad and diverse use of plastic, the UK's approach, based on a mix of instruments, has significant advantages.<sup>32</sup> A ban is a useful way to put an end on the consumption of plastic items that are deemed harmful for the environment, non-essential,<sup>33</sup> and/or can easily be replaced by more environmentally friendly alternatives. In contrast, taxes provide a flexible and efficient approach to tackle plastic items considered to play an essential role in the economy and that cannot be easily replaced by more environmentally friendly alternatives.<sup>34</sup>

The plastic packaging tax should be understood in this context in which a policy mix of instruments is being used to tackle plastic waste. The UK Government's goal is to encourage producers to include a minimum of 30 per cent of recycled plastic in their packaging. Unlike a ban, the UK Government's objective is not to prohibit the sale of plastic packaging made of less than 30 per cent of recycled plastic. The plastic packaging tax gives producers the opportunity to choose between two options: *either* pay the tax and keep producing plastic with no (or too low a level of) recycled plastic, *or* integrate a sufficiently high level of recycled plastic in their plastic packaging components. These two options might not yet be available to all producers: in some instances, recycled plastic is not yet a safe or feasible

---

<sup>27</sup> Defra, *Guidance on applying the Waste Hierarchy* (June 2011), [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/69403/pb13530-waste-hierarchy-guidance.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/69403/pb13530-waste-hierarchy-guidance.pdf) [Accessed 19 August 2021]. On the need to reduce consumption of virgin plastic materials, see Matthew MacLeod, Hans Peter H. Arp, Mine B. Tekman and Annika Jahnke, "The global threat from plastic pollution" (2021) 373 *Science* 61.

<sup>28</sup> The Packaging (Essential Requirements) Regulations 1998 (SI 1998/1165) reg.6(2)(b), which translates the requirements of Directive 94/62/EC art.9. See also the Producer Responsibility Obligations (Packaging Waste) Regulations 2007 (SI 2007/871).

<sup>29</sup> The Environmental Protection (Plastic Straws, Cotton Buds and Stirrers) (England) Regulations 2020 (SI 2020/971). See also the developments and questions in Wales regarding a ban on single-use plastics with a broader scope (Lorna Scurlock, Welsh Parliament, "Plastic-Free July: a new plastic relationship?" (21 July 2021) *Senedd Research*, <https://research.senedd.wales/research-articles/plastic-free-july-a-new-plastic-relationship/> [Accessed 19 August 2021]).

<sup>30</sup> Department for Environment Food & Rural Affairs, *Consultation on the Waste Prevention Programme for England: Towards a Resource-Efficient Economy* (March–June 2021), p.54.

<sup>31</sup> See the consultation held on the topic between March and June 2021: Department for Environment Food & Rural Affairs, *Introducing a Deposit Return Scheme in England, Wales and Northern Ireland* (March–June 2021), <https://consult.defra.gov.uk/environment/consultation-on-introducing-a-drs/> [Accessed 19 August 2021]. On the advantages of deposit-refund systems in comparison to "virgin materials tax", see Don Fullerton, Andrew Leicester and Stephen Smith, "Environmental Taxes" in James Mirrlees, et al (eds) for the Institute for Fiscal Studies, *Dimensions of Tax Design: The Mirrlees Review* (Oxford: OUP, 2010), 502-504.

<sup>32</sup> On the importance of a combination of policy instruments, see Patrick Söderholm, "Taxing virgin natural resources: Lessons from aggregates taxation in Europe" (2011) 55 *Resources, Conservation and Recycling* 911, 920: "[t]his suggests that efficient recycling-promoting policies typically require a combination of policy instruments addressing both upstream and downstream constraints, and the impacts of virgin natural resource taxes should not necessarily be evaluated in isolation". On the use of different instruments to reduce solid waste disposal, see also Karen Palmer and Margaret Walls, "Optimal policies for solid waste disposal. Taxes, subsidies, and standards" (1997) 65 *Journal of Public Economics* 193.

<sup>33</sup> Note the exemption from the ban on single-use plastic for plastic straws and cotton buds used for medical purposes (respectively, the Environmental Protection (Plastic Straws, Cotton Buds and Stirrers) (England) Regulations 2020 (SI 2020/971) Pt 2(7) and Pt 3(11)).

<sup>34</sup> On the trade-offs between plastic packaging and other alternatives, see Hannah Ritchie, "FAQs on Plastics" (2 September 2018) *Our World in Data*, <https://ourworldindata.org/faq-on-plastics#are-plastic-alternatives-better-for-the-environment> [Accessed 19 August 2021], "Are plastic alternatives better for the environment?"

option for some types of plastic packaging.<sup>35</sup> However, even in these cases, the tax might encourage new methods of production to improve the use of recycled plastic in packaging. According to the UK Government, “it is important to include types of plastic packaging even where it may be challenging to increase the level of recycled plastic” as it will “encourage further investment in recycling infrastructure and innovation required to overcome these challenges”.<sup>36</sup>

### (3) Legal design choices

Despite its clear policy objective, some design features of the plastic packaging tax seem inconsistent with the intention of the UK Government. Some of these inconsistencies might be justified by the need to reduce compliance costs but, in some other cases, they appear unjustified.

First, it is not clear why the objective of achieving higher recycling levels has been limited to the sector of plastic packaging.<sup>37</sup> Plastic packaging contributes to the highest share of plastic waste in the UK.<sup>38</sup> However, it is hard to understand why manufacturers of plastic products used in other sectors, such as the construction and agricultural sectors, should not, as well, be incentivised to increase their use of recycled materials. The environmental impact of plastics in general, and the high carbon footprint<sup>39</sup> of virgin plastic in particular, is not sector-specific. Moreover, distinguishing between packaging and other types of products might lead to legal uncertainties. The UK Government has already clarified that “plastic packaging items that could also be characterised as longer-term storage items” (e.g. an “ice cream tub that can be re-used by a consumer as a storage unit”) would fall under the scope of the tax.<sup>40</sup> The same would be true of “packaging-type products that do not fulfil a packaging function until they are used by the end consumer” (e.g. cling-film).<sup>41</sup> Yet, questions remain. For example, many items serve to protect, contain and handle other products and it is not clear when and whether they should be included (e.g. a plastic handbag,<sup>42</sup> a plastic lunch box). The UK Government has indicated that it will clarify the scope of the tax by means of legislation, but it is unlikely that it will be able to anticipate all the potential uncertainties that will arise with the introduction of the plastic packaging tax.<sup>43</sup> As an

---

<sup>35</sup> On the use of virgin and recycled plastic and its relation to food safety, see Chris Matthews, Fintan Moran and Amit K. Jaiswal, “A review on European Union’s strategy for plastics in a circular economy and its impact on food safety” (2021) 283 *Journal of Cleaner Production* 125263.

<sup>36</sup> HMRC, *Plastic Packaging Tax: Consultation Document* (publication date 11 March 2020; closing date for comments 20 May 2020), para.3.19, p.11.

<sup>37</sup> See FA 2021 s.48(1), which defines the term “packaging component”.

<sup>38</sup> N. Voulvoulis and R. Kirkman, *Shaping the Circular Economy: Taxing the Use of Virgin Resources. The case for a plastic packaging tax in the UK* (2019, Imperial College London Report), p.3. See also Smith, *Plastic waste* (2021), House of Commons Library, Briefing Paper No.08515, pp.7–9.

<sup>39</sup> The carbon impact of virgin plastic is mentioned in HMRC, Policy Paper, *Plastic packaging tax* (updated 26 November 2020), <https://www.gov.uk/government/publications/introduction-of-plastic-packaging-tax/plastic-packaging-tax> [Accessed 19 August 2021]. The policy paper states: “[r]ecycled plastic has a carbon footprint that can be up to four times lower than that of virgin plastic”. See also HMRC, Policy Paper, *Introduction of Plastic Packaging Tax from April 2022* (published 3 March 2021; updated 20 July 2021), <https://www.gov.uk/government/publications/introduction-of-plastic-packaging-tax-from-april-2022/introduction-of-plastic-packaging-tax-2021> [Accessed 19 August 2021] (mentioning that the plastic packaging tax could lead to “carbon savings of nearly 200,000 tonnes in 2022 to 2023, based on current carbon factors”).

<sup>40</sup> HMRC, *Plastic Packaging Tax: Summary of Responses to the Policy Design Consultation* (November 2020), paras 2.12 and 2.15, pp.7–8.

<sup>41</sup> HMRC, *Plastic Packaging Tax: Summary of Responses to the Policy Design Consultation* (November 2020), para.2.14, p.7.

<sup>42</sup> This example is mentioned in HMRC, *Plastic Packaging Tax: Summary of Responses to the Policy Design Consultation* (November 2020), para.2.14, p.8.

<sup>43</sup> HMRC, *Plastic Packaging Tax: Summary of Responses to the Policy Design Consultation* (November 2020), para.2.16, p.8. See also HMRC, Guidance, *Further information for businesses* (updated 12 August 2021), <https://www.gov.uk/government/publications/get-your-business-ready-for-the-plastic-packaging-tax/further-information-for-businesses> [Accessed 19 August 2021], para.2.2. The guidance indicates that certain packaging components will not be subject to the plastic packaging tax. For example, toolboxes, earphone cases, first aid boxes, perforated rice bags and sales presentation stands.

alternative, the UK Government might consider broadening the scope of the tax to minimise questions about which items will or will not be subject to it.

Secondly, the plastic packaging tax applies to a “*plastic packaging component*”. As mentioned before, this is defined as “a packaging component that contains more plastic, when measured by weight, than any other single substance listed in regulations (to be drafted by the Commissioners)”.<sup>44</sup> Guidance for businesses on how this definition will apply in practice provides the following example: a 10g item of packaging “made of 4 grams of plastic, 3 grams of aluminium and 3 grams of cardboard” will, for all 10g, be considered plastic packaging for the purposes of the tax whereas a 10g item “made of 3 grams of plastic, 4 grams of aluminium and 3 grams of cardboard” will not be taxable at all.<sup>45</sup> At first sight, the logic behind this design choice might seem consistent with the tax’s policy objective: if a packaging component is not (predominantly) made of plastic but, instead, of glass, metal, cardboard or paper, there is no (or less) reason to subject it to the plastic packaging tax. However, it is hard to see why virgin plastic as part of a packaging should not be subject to the tax for the mere reason that it is part of a packaging that contains a heavier share of one other type of material.<sup>46</sup> More importantly, such a design choice might lead to perverse effects. Producers of packaging components which were originally only (or predominantly) made of plastic might be tempted to increase the share of cardboard, glass, paper or metal in the packaging. Plastic is known for its lightweight properties, which make it more environmentally friendly to transport.<sup>47</sup> Increasing the share of other types of materials in packaging components could lead to higher greenhouse gas emission levels linked to the transportation of products. Moreover, if the tax leads to a higher amount of packaging made of different materials, this could lead to another perverse effect by making it harder to recycle packaging components in the UK. Single material packaging components are easier to recycle than those made of different components. The environmental risks linked to the definition of “plastic packaging” should be assessed and monitored to avoid the plastic packaging tax leading to a change in producers’ behaviour with more adverse effects upon the environment than the effects that are linked to the use of virgin plastic packaging.

Thirdly, plastic packaging components will fall under the scope of the new tax when the proportion of recycled plastic in the component is less than 30 per cent of the total amount of plastic in the component (when measured by weight).<sup>48</sup> Estimates by Voulvoulis and Kirkman suggest that the combination of the 30 per cent recycled plastic requirement and the tax rate of £200 will lead producers to add recycled plastic to their plastic packaging.<sup>49</sup> Since recycled plastic is approximately £500 more expensive per tonne than virgin plastic, replacing 300kg of virgin plastic with recycled plastic would cost £150, which would be lower than paying a tax of £200.<sup>50</sup> From this perspective, the requirement of 30 per cent of recycled plastic seems to make perfect sense. However, it is worth highlighting two main weaknesses linked to this requirement.<sup>51</sup> First, it might encourage producers to integrate no more than 30 per cent of

---

<sup>44</sup> FA 2021 s.48(3) and (7). See also FA 2021 s.60.

<sup>45</sup> HMRC, Guidance, *Further information for businesses* (updated 12 August 2021), <https://www.gov.uk/government/publications/get-your-business-ready-for-the-plastic-packaging-tax/further-information-for-businesses> [Accessed 19 August 2021], para.2.3.

<sup>46</sup> This design choice seems to be linked to the government’s decision to align the design of the plastic packaging tax with the approach of the packaging producer responsibility regulations (HM Treasury, *Plastic packaging tax: consultation* (February 2019), p.15, paras 3.18 and 3.19).

<sup>47</sup> The environmental risks related to the replacement of plastic with other materials, such as glass and metal, are discussed by Thomas Walker, Dieter Gramlich and Adele Dumont-Bergeron, “The case for a plastic tax: a review of its benefits and disadvantages within a circular economy” in David M. Wasieleski and James Weber (eds), *Sustainability* (2020, Emerald Publishing Ltd), pp.185–211.

<sup>48</sup> FA 2021 s.47(1).

<sup>49</sup> Voulvoulis and Kirkman, *Shaping the Circular Economy: Taxing the Use of Virgin Resources. The case for a plastic packaging tax in the UK* (2019, Imperial College London Report), p.3.

<sup>50</sup> Voulvoulis and Kirkman, *Shaping the Circular Economy: Taxing the Use of Virgin Resources. The case for a plastic packaging tax in the UK* (2019, Imperial College London Report), p.3.

<sup>51</sup> See, for a critical discussion of the tax rate, the 30% requirement and the expected impact of the plastic packaging tax, National Audit Office, *Environmental tax measures: HM Treasury and HM Revenue & Customs: Report by the Comptroller and Auditor General, Session 2019–2021* (12 February 2021), HC 1203, pp.18–20.

recycled plastic in their plastic packaging.<sup>52</sup> The design of the new plastic packaging tax does not distinguish between a producer who integrates 31 per cent of recycled plastic in its plastic packaging and a producer who integrates a higher percentage of recycled plastic, up to 100 per cent.<sup>53</sup> Similarly, the tax treats producers who use no recycled plastic at all in their plastic packaging component and those who use up to 29 per cent of recycled plastic in the same way. Such a design choice could have a perverse effect not only because it limits the overall amount of recycled plastic used in packaging but also because it limits the amount of virgin plastic that gets recycled. The mixing of different types of plastics (namely virgin and recycled plastics) reduces the chance that the packaging will be recyclable at all since mixed plastics are harder to recycle.<sup>54</sup> Secondly, the price of recycled plastic might change with the introduction of the tax (or regulations applied in other jurisdictions): higher demands for recycled plastics might lead to a higher price. If the difference in price between a tonne of virgin and a tonne of recycled plastic increases to over £600, it will no longer be beneficial for producers and importers to integrate 30 per cent of recycled plastic in their plastic packaging components. A higher percentage (or a higher tax rate) would then be required. These weaknesses suggest that alternative design options should be considered, including the introduction of a tax that would apply to virgin plastic (measured by weight).

Fourthly, the plastic packaging tax exempts two main types of plastic packaging components based on their use: plastic packaging components “for use in the immediate packaging of a medicinal product” and plastic packaging components “used in the delivery of goods into the UK” either as transport packaging or tertiary packaging or as road, rail, ship and air containers.<sup>55</sup> Neither of these two exemptions can easily be reconciled with the policy objective of the plastic packaging tax: if the goal is to encourage businesses to use recycled plastics in the production of plastic packaging, there is no reason to exclude certain packaging components based on their use. The exemption related to transport packaging in use in relation to imports can nevertheless be justified by the need to avoid burdening businesses disproportionately by requiring them to collect data on all transport packaging used through the importation process.<sup>56</sup> The other exemption related to medical products has been justified by reference to the fact that increasing the level of recycled plastic in packaging of medicinal products could lead to “significant and unavoidable risk to human health”.<sup>57</sup> In the light of the objective of the tax, it is not clear why the pharmaceutical sector should benefit from such an exemption. Even if recycled plastic packaging components are not yet safe enough for medicinal products, the tax could, also in this sector, encourage innovation in the production of safe recycled packaging.

Fifthly, the plastic packaging tax provides for a de minimis threshold that excludes small operators who produce or import less than 10 metric tonnes of finished plastic packaging components within a 12 month period from liability to the tax.<sup>58</sup> This exclusion is inconsistent with the policy objective of the tax but can be explained by the need to avoid disproportionate compliance costs for small operators.<sup>59</sup> It is also worth noting that the proxy used to define the threshold (the weight of plastic packaging components produced or imported) has been preferred by the government because it is more “closely aligned with the environmental rationale of the tax” than other proxies which have been envisaged, such

---

<sup>52</sup> See the critical views expressed on the threshold level in HM Treasury, *Plastic packaging tax: summary of responses to the consultation* (July 2019), p.10.

<sup>53</sup> Note that the government had envisaged the use of multiple tax bands in the consultation it held in 2019 (HM Treasury, *Plastic packaging tax: consultation* (February 2019), pp.19–20).

<sup>54</sup> See Kim Ragaert, Laurens Delva and Kevin Van Geem, “Mechanical and chemical recycling of solid plastic waste” (2017) 69 *Waste Management* 24. See also New Plastics Economy, Ellen Macarthur Foundation, *The New Plastics Economy: Rethinking the Future of Plastics and Catalyzing Action* (2017), p.42.

<sup>55</sup> FA 2021 s.52.

<sup>56</sup> HMRC, *Plastic Packaging Tax: Summary of Responses to the Policy Design Consultation* (November 2020), para.2.20, pp. 8-9.

<sup>57</sup> HMRC, *Plastic Packaging Tax: Consultation Document* (publication date 11 March 2020; closing date for comments 20 May 2020), para.3.19, p.11.

<sup>58</sup> FA 2021 s.55(2).

<sup>59</sup> HMRC, *Plastic Packaging Tax: Consultation Document* (publication date 11 March 2020; closing date for comments 20 May 2020), para.5.1, p.20; HMRC, *Plastic Packaging Tax: Summary of Responses to the Policy Design Consultation* (November 2020), paras 4.8 and 4.9, pp.18–19.

as a threshold based on business turnover.<sup>60</sup> The main risk of any de minimis threshold is the creation of “artificial separation of business activities”<sup>61</sup> to avoid paying the plastic packaging tax. Sections 72 and 73 FA 2021 mitigate that risk by ensuring that connected companies are treated as a single taxable person.<sup>62</sup>

Finally, as mentioned before, the plastic packaging tax will not apply to plastic packaging components intended for export.<sup>63</sup> While this design choice is fully in line with the traditional design of excise taxes, it does not align with the policy objective of the plastic packaging tax. The UK Government justifies the exemption of exports as a way of preventing UK manufacturers from being disadvantaged by the new plastic packaging tax.<sup>64</sup> This justification, based on the competitiveness of UK enterprises, might clash with the environmental objective of the tax.<sup>65</sup> Such exemption could be justified on environmental grounds only if it is necessary to prevent higher levels of plastic pollution, for example, in the hypothetical situation where, due to the new tax, UK manufacturers relocated to jurisdictions where environmental standards are lower. This argument is identical to the “pollution leakage” argument that is regularly brought forward in the debate on climate change policies to justify exemptions in favour of energy-intensive industries. Leaving this argument aside, the exemption in favour of exports will remove the economic incentive provided by the tax as far as UK manufacturers producing plastic packaging, namely those exporting plastic packaging, are concerned. One important risk to note is that of resource reshuffling: the exemption of exports could lead to higher levels of non-recycled plastic packaging being exported to third countries and higher levels of recycled plastic packaging being imported into the UK.<sup>66</sup> This would render the new plastic packaging tax ineffective in encouraging the use of recycled plastic for the production of plastic packaging components in the UK. Moreover, higher levels of imports and exports would be linked to the higher environmental costs associated with the transport of packaging materials between countries.

## Conclusion

As this note has explained, the policy goal of the plastic packaging tax, namely encouraging the use of recycled plastic by UK producers of plastic packaging, should be understood as part of a broader strategy to reduce plastic waste. Although environmental tax measures can be an effective tool in tackling pollution, the case of the plastic packaging tax illustrates that the devil lies in the detail.<sup>67</sup> Some design choices incorporated into the plastic packaging tax seem to reduce its potential impact. For example, the choice of a scope of application limited to packaging components instead of a broader scope will necessarily restrict the impact of the tax to the packaging sector. Some other design choices also seem inconsistent with the policy objectives of the tax. More importantly, the exemption of exports and the definition of plastic by reference to the share of its weight in packaging components might render the tax ineffective or lead to perverse effects by encouraging the production of (even) less environmentally friendly packaging.

---

<sup>60</sup> HMRC, *Plastic Packaging Tax: Consultation Document* (publication date 11 March 2020; closing date for comments 20 May 2020), para.5.1, p.20.

<sup>61</sup> FA 2021 ss.72 and 73.

<sup>62</sup> FA 2021 ss.72 and 73. See also HMRC, *Plastic Packaging Tax: Consultation Document* (publication date 11 March 2020; closing date for comments 20 May 2020), para.5.3, p.20.

<sup>63</sup> FA 2021 s.51.

<sup>64</sup> HMRC, *Plastic Packaging Tax: Consultation Document* (publication date 11 March 2020; closing date for comments 20 May 2020), para.7.1, p.28.

<sup>65</sup> HMRC, *Plastic Packaging Tax: Summary of Responses to the Policy Design Consultation* (November 2020), para.6.2, p.23.

<sup>66</sup> On related issues, see Söderholm, “Taxing virgin natural resources: Lessons from aggregates taxation in Europe” (2011) 55 *Resources, Conservation and Recycling* 911, 920: “...in an international context a tax on virgin raw materials may induce higher imports of recycled materials from other countries”.

<sup>67</sup> On different types of design for plastic taxes, see David Powell, “The Price is Right...Or is it? The case for taxing plastic” (2018) *New Economics Foundation* 14.

**Alice Pirlot\***

---

\* Research Fellow at the Oxford University Centre for Business Taxation. The writer would like to thank the organisers and participants of the *Law and Plastics* roundtable organised by Professor Catherine Redgwell and Eva van der Marel in July 2021. Moreover, the writer would like to thank Eddy Tam and Eva van der Marel for their helpful suggestions. The usual disclaimers apply. This note was finalised in July 2021.