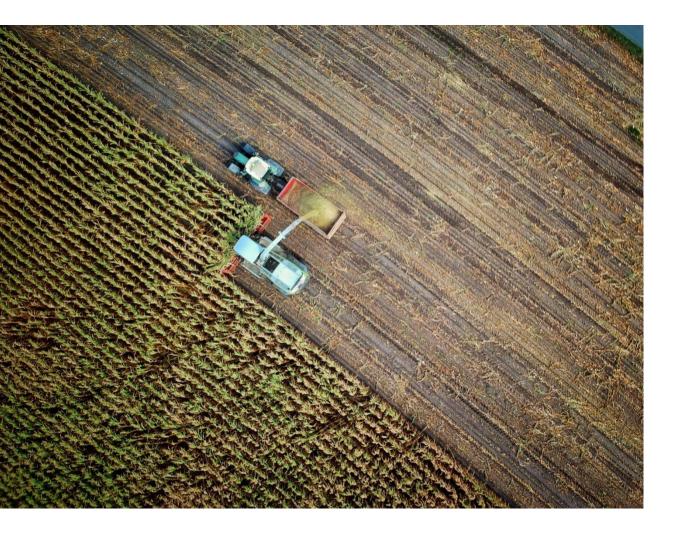
Designing Environmental Regulation of Agricultural Imports:

## Options and Considerations for the UK



A think piece commissioned by WWF UK





# Designing Environmental Regulation of Agricultural Imports:

## Options and Considerations for the UK

Study Commissioned by: The World Wide Fund for Nature – UK (WWF UK)

Authors: TULIP Consulting Institute for European Environmental Policy (IEEP)

7 January 2022 Geneva, Switzerland

This Think Piece is the first deliverable of a small research undertaking commissioned by WWF UK, and implemented by TULIP Consulting and IEEP, which aims to explore policy options to promote environmental standards in UK agri-food trade.

Specifically, the aim of this Think Piece is to provoke discussion and offer an opportunity for feedback and comments, which will inform the final research report, to be published in April 2022.

Cover image: Photo by @ no\_one\_cares on Unsplash: unsplash.com/photos/l\_5MJnbrmrs



## Table of Contents

Introduction	1
Rationale for applying environmental regulatory measures to agri-food imports	3
Establishing environmental regulatory standards for imported agri-food products	5
Core Environmental Standards: an overview	5
Selecting case studies	6
Environmental regulation in agri-food_products and trade policy	12
Conclusion	15
References	16

## Introduction

The decision by the United Kingdom (UK) in 2016 to leave the European Union (EU) has provided the need for and opportunity to rethink and reposition its environmental, agricultural, trade and food policies. The UK government has outlined several strategic objectives which include the UK thriving as a scientific superpower and hub for innovation and research, creating a productive, high skill and high-wage economy with enhanced trade as 'global Britain'.<sup>1</sup> The UK is furthermore committed to being a world leader in the fight against climate change<sup>2</sup> and was one of the first major economies to commit to net zero greenhouse gas (GHG) emission targets (net zero) by 2050.<sup>3</sup> From a policy-making perspective, a major task will be to make these trade and environmental objectives complementary, rather than mutually exclusive.

As the UK is working towards net zero, the transition towards a sustainable agri-food system plays an important role: UK food production and consumption account for about 20% of the country's CO<sup>2</sup> emissions, half of which can be attributed to imports.<sup>4</sup> Since exiting the EU, the UK has been in the process of defining a new legislative basis for agriculture and the environment.<sup>5</sup> These matters are decentralised, hence each devolved nation will devise their own regulations with due reference to ensuring the integrity of the UK internal market. While relevant legislative frameworks for agriculture and environment in Wales, Scotland and Northern Ireland are still being developed, English legislation is now in place under the Agriculture<sup>6</sup> and Environment<sup>7</sup> Acts. Specifically, under the Environment Act, England is set to deliver "the most ambitious environmental programme of any country on earth"<sup>8</sup> and to "improve air and water quality, tackle waste, increase recycling, halt the decline of species and improve the natural environment".<sup>9</sup>

Meanwhile, the UK re-joined the World Trade Organisation (WTO) as an independent trading nation and is, in parallel, in the process of negotiating regional trade agreements (RTAs) with some of its key trading partners, several of which are significant agricultural exporters. The UK's negotiations with Australia, New Zealand, and the United States (US) will provide an important indication of the Government's commitment to sustainable agriculture. Whilst promises have been made "not to compromise on the UK's high environmental protection, animal welfare and food standards"<sup>10</sup> in its trade negotiations, concerns have been raised over the implications of trade liberalization of agri-food products that are subject to less-stringent product and production standards compared to the UK.<sup>11</sup>

Spurred by these concerns in July 2020, the UK government established the Trade and Agriculture Commission (TAC) to advise the UK government on how to best incorporate the interests of the British public, farmers, and domestic producers in future trade agreements.<sup>12</sup> Among others, the Review recommends for the UK government to develop an ambitious agrifood strategy based on "a liberalised approach to trade policy, [...], tempered with safeguarding important standards", both internationally and at the national level.<sup>13</sup>

At the same time, an independent review by an advisory board comprising of DEFRA officials and food sector experts resulted in the publication of the *National Food Strategy Independent Review* in July 2021.<sup>14</sup> The Review underscores the recommendations raised in the TAC report and emphasises the need to ensure that trading partners demonstrate equivalence through core standards.<sup>15</sup> The interdependence between trade, environment and the agri-food sector has been further explained by the Global Resource Initiative (GRI), mandated by the UK's Government's 25 Year Plan to leave a smaller footprint on the global environment.<sup>16</sup> The GRI offers a strategic approach towards addressing environmental leakage effects in the global agri-food trade with a focus on deforestation-related commodities.

The UK Government has repeatedly affirmed its commitment to upholding its environmental protection, animal welfare and food safety standards, and the appointment of the GRI indicates the government's commitment to accounting for the country's trade-related global footprint. However, its selective response to the TAC recommendations<sup>17</sup> and the progress to date in securing trade agreements with major trading partners without comprehensively addressing the environmental issues raised, demonstrate a reluctance to engage in policy and regulatory options that may add to the complexity of its trade liberalisation agenda. While the government has responded positively towards the recommendation of pursuing international policy action with the goal of advancing trade-related environmental standards in a general way, it has not specifically addressed the Commission's recommendation for national-level policy action, or the domestic policy dimension of its trade-policy strategy.<sup>18</sup>

Given the long timeframes and uncertain outcomes of international policy-cooperation, interest groups and civil society have remained concerned over the potential downward spiral-effect of trade policy on UK agri-food standards.

One of the aims of this research is to offer new impetus and some practical ideas to bring environmental standards into trade policy for the agri-food trade. The project will examine the potential for designing *Core Environmental Standards* (CES) not only to agri-food products produced in the UK, but also to imported UK agri-food products. It will seek to address questions such as, can CES be expressed as a trade policy tool? What are the implications of policy design options on issues of concern, such as the UK's compliance with international trade policy commitments? And could potential adverse effects of CES on developing countries arise? The study aims to develop case studies to make the debate on CES as a trade policy tool more tangible. It is hoped that this research can help clarify the potential of CES to support alignment between the UK's trade and environmental policy ambitions and facilitate the transition to sustainable agri-food systems in the UK and beyond.

# Rationale for applying environmental regulatory measures to agri-food imports

In its response to the TAC, the UK government has highlighted that tackling climate change and biodiversity loss is the "government's number one international priority", and that "trade can be part of the solution."<sup>19</sup> However, while an array of environmental standards already apply to the UK's agriculture and farming sector, which can be expected to become more numerous and stringent over time, very few environmental requirements are currently imposed on agri-food trade. Given the relevance of agri-food imports to the UK food sector, this asymmetry is noteworthy: despite its sizeable agricultural sector, the UK still imports 48% of its food and feed consumption.<sup>20</sup> This demonstrates that a comprehensive approach to mitigating the environmental impacts of the UK food system must also consider the environmental impact of agri-food imports.

Indeed, as highlighted by Baldock (2020)<sup>21</sup>, there is a tension in seeking to apply high environmental standards in one country while allowing trade to occur in the absence of environmental filters or restraints. This relates, among others, to the risk of trade circumventing the very purpose of domestic regulation. In the absence of a level playing field, higher costs of compliance with domestic environmental standards may lead UK producers to become less competitive vis-a-vis foreign producers not subjected to the same, or comparable standards. This will likely reduce the market share of domestic producers over time. At the same time, producers enjoying cost advantages due to low environmental standards in their country may expand production, which could exacerbate the environmental effects of food production, including by contributing to carbon-leakage.<sup>22</sup>

In seeking to avoid loss of market share, domestic producers might resort to lobbying regulators to lower domestic standards, and thus to 'levelling-down' the playing field. In either case, environmental impacts of the UK food sector will rise, with environmental costs of production increasing either in the UK itself or being exported to its trading partners. These concerns are particularly pertinent now, as the UK government is designing a new trade policy framework. With an increasing share of agricultural imports expected to originate from countries outside the EU that tend to impose lower environmental standards on their agrifood producers, the 'standards gap' between UK and imported products can be expected to increase.

The UK government is aware of these concerns. The measures it has proposed to examine include labelling and better consumer information, voluntary animal welfare assurance schemes, and government-backed labelling. The UK government has furthermore proposed to advocate for high animal welfare and environmental standards in the WTO and the World Organisation for Animal Health.<sup>23</sup> In addition, the UK government is in the process of developing environmental land management schemes to incentivise sustainable farming in the UK.

The UK's commitment to multilateral action is undoubtedly positive, however the long timeframes and uncertainty of multilateral processes also mean that an international approach in and of itself will not allow the UK to secure its high domestic standards in the short-to-medium-term. Other initiatives are likewise inadequate: while strengthened labelling and certification schemes can represent important tools to foster supply chains sustainability, such an approach is not a sufficient substitute or replacement for agri-food quality standards, as they depend upon consumer choice. As a result, at best they will raise environmental standards for a subset of the market and are thus not a suitable instrument to 'level-up' producers at the lower end of the sustainability-spectrum.

Above and beyond the case for safeguarding UK agri-food standards, the UK's commitment to environmental sustainability also provides a motivation for promoting higher environmental standards among those goods exclusively produced outside the UK and imported for domestic consumption. In this sense, environmental quality requirements applicable to imports can help to foster better environmental outcomes as a global public good. This is particularly pertinent given the environmental footprint of some exclusively imported agri-food products, such as soy, coffee, sugar, or palm oil, all of which may contribute to tropical deforestation.<sup>24</sup> In the context of the increasing relevance of the agrifood sector as a driver of global environmental degradation, a transition to sustainable agrifood trade is also imperative in order to test and develop blueprints of sustainable policy models that can subsequently be adopted and upscaled globally. In contrast, while support payments to UK agricultural producers may help environmental quality domestically, such payments are not suitable to foster higher environmental standards for imported agri-food, in particular those products exclusively imported to the UK.

In summary, policy options proposed by the government thus far do not offer a comprehensive approach to guarantee that UK environmental standards in agri-food trade are upheld, and that the environmental impact of UK food consumption is reduced. Regulatory requirements for imported agri-food products, referred to in our study as *Core Environmental Standards* or *CES*, may represent an alternative trade policy tool to achieve these objectives. How to define these standards is explored in section 3 and options for embracing them in trade policy is discussed in section 4.

# Establishing environmental regulatory standards for imported agri-food products

### Core Environmental Standards: an overview

The question discussed here is how to express the options for codifying and making binding a set of agreed upon environmental standards for the UK which will be applicable to both domestic and imported agri-food products. The development of a uniform set of CES that apply to a particular category of goods however poses certain challenges as "environmentally safe limits are often based on emerging knowledge (e.g., chemicals) on which there is no consensus."<sup>25</sup> Also because there are important interactions between environmental media and ecosystem functions, for example between climate, hydrology, soil and biodiversity, and great variation in biological functioning, this dynamism and variability can lead to differing interpretations of "safe limits" which complicates the establishment of internationally agreed standards. Lack of scientific consensus on safe limits and contention around discoveries of pollutants/contaminants such as the herbicide glyphosate whose status as a carcinogen is not agreed upon, indicates the need for wider cross-sectoral agreement on the health and environmental impacts of certain commodities and products.

The relationship between trade and environmental considerations is compounded by the presence of different actors with differing vested interests. Consequently, objectives for public health and environmental protection may be compromised in areas where consensus is not achieved. The discussion on "reasonable thresholds of risk"<sup>26</sup> for public objectives, such as environmental protection and health and safety, is contentious and often decision-making in this area does not fully account for all interested parties.

It is critical to understand the impact of CES on different stakeholder groups both in and outside the UK. An important stakeholder group that often lacks appropriate representation are agri-food exporters from developing and least-developed countries. In the absence of agreed-upon global standards, the proliferation of private voluntary sustainability standards has already represented a significant challenge for small-scale producers in the global South, which have traditionally been "standard takers" in global supply chains. Therefore, the "economy of qualities"<sup>27</sup> has created further inequities as these producers are often faced with the challenge of complying with multiple production standards simultaneously. As such, the heterogeneity of markets in importing countries means that producers need to satisfy different requirements to UK retail markets, continental Europe, as well as other non-European markets–above and beyond the multitude of labels and standards adopted by different retail brands.

There are ample opportunities to improve quality and environmental standards in food

production in the global South, but high compliance costs and the technical complexity of standards is an issue of ongoing concern. For this reason, developing countries have long warned that the multiplicity of standards creates potential non-tariff barriers to trade<sup>28</sup> In developing CES, understanding and mitigating potential negative impacts on underrepresented stakeholder groups is therefore important, and will therefore represent a key consideration in our study.

### Selecting case studies

The core work of the study will be to examine case studies where different standards in the UK and in exporting countries may give rise to the issues discussed above. A first step is to identify for which environmental issues and for which trade flows there might be the greatest potential benefit from establishing CES. The intention is to find areas where failure to impose similar standards on domestic products and imports means we miss the greatest opportunity to raise environmental standards associated with UK food consumption. Four suggested criteria to do this are listed below. To begin with, analysis will focus on products grown in the UK. The study will later deal with imported products not grown domestically:

- **Criterion 1:** Important Environmental Issues: The standard to be applied to imports should relate to an important environmental issue for which it could be most useful to establish a core environmental standard.
- **Criterion 2: Environmental issues of global importance**: The issue should concern global environmental issues and not solely UK environmental issues.
- **Criterion 3:** Regulatory gap between UK and exporters: There should be regulatory requirements or well-established practices in place (or proposed) in the UK that are different to the standards in agricultural exporting countries that trade with the UK.
- Criterion 4: Implications for environmental improvement and domestic competitiveness: The application of the standard in the UK is likely to involve measurable environmental impacts and have implications which affect domestic competitiveness, and the affected crops or products should be widely traded internationally.

The intention is that these criteria, which are further elaborated upon below, provide the required information to decide which areas to explore further in case studies. Each study will examine options to ensure domestic and like foreign agri-food products are subject to the same regulatory requirements. The studies will spell out the legal and technical feasibility, and advantages as well as disadvantages of available options. Finally, at some point in the study, the *political feasibility* of devising and implementing a particular option needs to be reviewed. The intention in applying these criteria, is to identify those environmental issues for which the application of standards as a (domestic) trade policy instrument is *most useful*, i.e. offers the greatest environmental benefits.

**Criterion 1: Important Environmental Issues:** This criterion is suggested to maximize impact with respect to minimizing environmental implications associated with food production. The broad environmental areas impacted by food production are biodiversity degradation/habitat

destruction, water quality and management, soil health, air quality and climate change.

**Criterion 2: Environmental issues of global importance:** This criterion is suggested because there will be most to gain and least dispute about the appropriateness for the issues which are acknowledged to be global concerns. Clearly, this includes climate change. Global climate instability occurs regardless of the location of GHG emissions. Biodiversity depletion is also recognised as a global concern. Ecosystems interact spatially through many natural and human-induced mechanisms and citizens everywhere can place intrinsic value on habitats and species found in other parts of the world. For an island country such as the UK, criterion 2 poses the question whether it might be wise to not in the first instance select case studies concerned with water and air quality, and soil health. While water quality and soil management can impact biodiversity, for an island state such as the UK they do not have major international transboundary effects.<sup>29</sup> This could also have implications with respect to the WTO.

For these local environmental issues, it can be argued that the corresponding UK standards would be considered part of the UK's resource endowment including its natural, social, and human capital. Differences in resource endowments fundamentally determine the comparative advantage a country possesses and thus influences the trade patterns it will develop.<sup>30</sup> While this may deserve further discussion, the suggestion is that different UK environmental standards on these 'local' environmental issues should therefore be treated in the same way as, for example, workforce educational levels or infrastructure. Applying criterion 2 therefore suggests that the most fruitful case selection should start with examples concerning biodiversity / habitat and climate change.

**Criterion 3: Regulatory gap between UK and exporters:** If identical or equivalent standards are applied by the UK's trading partners, as is currently the case for the EU, then no trade distortion issue arises. However, identifying and establishing gaps between countries' environmental standards applicable to agri-food products will, in many cases, require considerable research and scientific evidence. The most straightforward differences will appear as the presence or absence of a regulation, for example permitting or prohibiting certain processes, production methods or inputs (e.g., different types of fertilizer or certain contaminants). In some areas a quantitative target may be set, so differences in the targets can give rise to trade-related concerns.<sup>31</sup> Cases which involve such on/off or transparent quantitative differences in standards are likely to be more tractable and therefore the most fruitful to consider as early examples.

Applying this criterion raises different questions depending on the environmental issue that is being addressed. For example, applying it to **biodiversity and habitats** would start by considering the relevant UK regulatory standards in this area. Until England takes advantage of the scope under the new Environment Act (and corresponding decisions are made in the other devolved nations), UK environmental standards for biodiversity derive from the EU environmental directives and regulations and the standards they embrace which have been transposed to UK law. For biodiversity and habitat protection, the relevant laws are the Nature Directives, the Birds and Habitats Directives, Pesticides Regulation, and the Nitrates and Water Framework Directives. There are few operational measures in place to give effect to the objectives of the Birds and Habitats directives that display 'on/off' or quantitative targets. Many of the operational policy measures relating to biodiversity protection are found under the Common Agricultural Policy, notably as conditions applied to direct support payments to farmers, or payments for environmental services. The participation in these schemes is *voluntary*, and farmers are either paid or compensated for their participation. As these schemes cannot be considered mandatory regulation, it will be difficult to establish that a regulatory gap exists between the UK and its trading partners.<sup>32</sup> Given these features, and until it becomes clearer where the UK territories are setting the post-Brexit regulatory floor, it is questionable if this arena will provide insightful case studies where environmental standards or UK competitiveness are most at risk from trade agreements.

However, pesticide regulation does offer a useful area to investigate. The EU approval procedures and criteria for pesticides to be placed on the market are regarded as amongst the most stringent in the world<sup>33</sup>, and these are currently transposed into UK legislation. These regulations have much more of an 'on/off' character.<sup>34</sup> Certain active substances are not allowed on the UK market which can be, and are, widely used in other countries. Use of such inputs is certainly expected to show environmental impacts and to have economic impacts at farm level and on sector competitiveness. With a suitable choice of pesticide this can relate to the crops with the largest share of the arable land area and for which there are substantial international trade flows. Box 1 below spells out in a little more detail a case study looking at the neonicotinoid systemic insecticides. A similar case can be made to examine the systemic herbicide glyphosate.

The transposed **Nitrates and Water Framework Directives**, and the operational measures in each of the devolved territories should, in principle, have a positive impact on UK biodiversity. These directives are primarily concerned with water quality protection for ground waters, rivers, lakes, and seas. However, it has become clear that the build-up over many years of excess nitrogen and phosphorus in water courses and ground water is a major threat to the ecological health in both the aquatic and the terrestrial environment. The key instruments for control of Nitrates have been to designate Nitrate Vulnerable Zones and to set maximum allowable application rates of nitrogenous fertiliser per hectare based on soil type and crop needs. Following Baldock<sup>35</sup>, it is possible that the quantitative limit on nitrate application set for the UK may well differ from nutrient control regulation in other countries with implications for environmental protection of biodiversity and trade competitiveness. This potentially may impact a wide range of traded crop and animal products.

Regarding **Climate Change,** the UK government and its devolved administrations have positioned themselves as policy leaders, as evident in their objective to achieve net zero emissions by 2050.<sup>36</sup> This suggests the UK might be ahead of other countries in policies to reduce domestic emissions creating the possibility of an uneven playing field for UK production sectors which might lead to carbon-leakage.<sup>37</sup> This is also an area where market standards, set for example by food retailers as part of their sustainability goals, may contribute to managing the climate performance of both domestically sourced and imported foodstuffs. As far as government regulation is concerned, the UK's devolved administrations

are in the process of setting emission targets and devising specific climate measures for the agriculture and land use (LULUCF<sup>38</sup>) sectors. To date, these have been set in broad terms of emission reductions and additional sequestration in biomass and soil by target dates. They have not been couched in terms of emissions per tonne of product, which could lend itself to relatively straightforward international comparisons. The climate policy measures for these sectors, for example in England, will be embraced under the Environmental Land Management Scheme (ELMS) and Farming Innovation Programme under the Agriculture Act, with new environmental goals set under the Environment Act. To date, the main approaches announced involve using public payments to induce voluntary changes in farming practices, and a mix of public and private (offsetting) payments to influence change in land use e.g., towards forestry or peat restoration.<sup>39</sup> Such approaches do not constitute mandatory regulation within the UK, and are, in any case less likely to give rise to trade concerns.

An area in which UK standards could differ from its trading partners, are the use of carbon or other environmental taxes in agriculture. Obvious candidates for this approach relate to pesticides and nitrogenous fertilisers. The latter are doubly culpable for GHG emissions; first, they are notoriously energy intensive in their manufacture relying on natural gas as the source of hydrogen as well as energy. Second, the use of nitrogenous fertilisers is associated with emissions of the powerful GHG nitrous oxide. A UK carbon tax on fertilisers would satisfy the criteria for study. It would contribute to biodiversity as well as climate goals, be transparent and quantitative, have a measurable impact on farm business economics, and it would affect most crops and animal products. If such taxes are differentially applied across countries, they could be expected to have some trade impacts. The logic of a carbon tax is to apply it across the whole economy, but apart from political reluctance, the practicalities of doing so across all sectors, and particularly for agriculture, where the metrics have not been agreed, seem to deter it being pursued. However, a carbon border adjustment mechanism (CBAM) is under active consideration. The CBAM would focus on the largest emitting sectors, which could include fertilisers. Discussion on the border-adjustment approach for the agri-food sector suggest that other environmental impacts beyond carbon emissions should also be considered. However, thus far little groundwork has been done to understand how to operationalise this in practise, including which metrics to apply. It seems, therefore, that this approach is not likely to be fruitful for the agri-food sector, for the time being.

In addition to policy measures to change farming practices and land allocation, another arm of climate policy in the food chain is to influence consumption behaviour. A range of measures is under debate from education, information campaigns, public procurement, regulating food formulation by the food industry, portion sizes in the food service sector, through to meat taxes.<sup>40</sup>

The trade policy repercussions of such interventions for climate protection will depend partly on the balance between policies which discourage production versus those impacting on consumption. If, for example, the net effect of UK climate measures was to reduce agricultural production more than consumption, and thus perhaps draw in more imports from countries imposing less demanding climate actions, then UK farmers may have a legitimate claim for action on imports. If the opposite was true, and contraction of consumption exceeded that of production, there might still be an argument to be made, that the resulting UK export surplus had been rendered less competitive as a result of domestic climate measures.

So how does climate measure up on the proposed criteria? It clearly satisfies criteria 1 and 2, involving important environmental standards which concern global environmental goods. It is possible that criterion 3 could be satisfied through a well-defined target couched in terms of the net emission reductions per tonne of product. This should, in principle, be capable of international comparison. However, the multitude of actions which lie behind the achievement of the climate target, some of which are paid from public funds, may cloud the analysis. Likewise, demonstrating costs imposed on domestic producers resulting from a complex combination of measures on production and consumption, may not be straightforward. Perhaps the most tractable specific climate measure which could potentially serve as a case study would be a direct nitrogen tax on fertilisers, or a carbon tax which embraced fertilisers, however neither of these instruments is currently deployed or under active consideration.

Before moving on to the next criterion, mention should be made of trade in products associated with deforestation. Current rates of deforestation in many parts of the world are responsible for considerable environmental damage: depletion of biodiversity, climate destabilisation, as well as deleterious impacts on soil and hydrology. Much of the deforested land has been deployed to agricultural production. It could be useful to take up case studies of products associated with deforestation which have interestingly different characteristics in the UK agri-food markets. The first is beef which is produced in the UK as well as imported. Imports constitute about 20% of UK consumption<sup>41</sup> but account for a significant portion of the overseas land footprint of UK food consumption.<sup>42</sup> A second product which might be considered is soy, which is used widely as a source of protein for animal feed as well as in many culinary products. While soybeans themselves are not grown in the UK, substitute oilseeds (rape, sunflower) are domestically grown. This poses an interesting question: can a case be made for establishing comparable regulatory gaps, or perhaps environmental impact gaps, between a domestically produced product and its imported substitute? A third possible product is palm oil which has many food and non-food uses. As the case for soy, palm oil is not grown in the UK, but it too has substitutes, some home grown, in food (and other) manufacturing applications.

**Criterion 4**: **Implications for domestic competitiveness**: This criterion is suggested to make the point that the case for CES to be applied to agri-food imports will be much more persuasive if it is built on a firm evidence base. It will have to be possible to make the case in terms of the poorer environmental performance associated with lower standards. To make a case that a competitive disadvantage exists because of the difference in environmental standards applied to domestic production and imports, producers in the importing country will also have to evidence the additional costs incurred from compliance with higher standards. Ideally, applying this criterion will allow it to be clearly demonstrated that the higher environmental standards applied to imports lead to better environmental performance. In summary, based on these criteria it is suggested for discussion that the environmental standards for which case studies could most usefully be developed are:

- Biodiversity protection through pesticides approval regulations for example the cases of neonicotinoids or glyphosate.
- Biodiversity protection through the regulation of crop nutrient management, especially nitrates.
- Climate protection through a targeted contribution to Net Zero by the agriculture and LULUCF sectors using a combination of measures impacting both consumption and production perhaps focusing on livestock products.
- Protecting climate and biodiversity by exploring the possibilities and effects of establishing a 'not associated with deforestation' standard for beef, and perhaps for soy products and palm oil.

#### CASE STUDY: NEONICOTINOIDS

#### The environmental protection case and why it is a trade policy issue too.

Since 2018 three neonicotinoid insecticides (clothianidin, imidacloprid and thiamethoxam) have been removed from the list of approved pesticide substances in the EU and UK. The reason is the suspected serious impacts on non-target insect populations especially pollinators and because of their indirect impacts on birds and other populations for which the insects were an important food source.

The effective banning of neonicotinoids can thus be considered as establishing a core environmental standard regarding biodiversity protection, especially pollinators. It applies to domestic UK production, although because the UK regulation derives from the EU pesticide approval Regulation 1107/2009, it also applies to EU arable crop products which are imported into the UK.

Whilst representations are being made to Federal and State governments in other countries about the environmentally harmful effects of this class of insecticides, these 'neonics' are still in widespread use in the USA, Canada, Australia and Brazil.

#### **Reason to act on imports**

- It may undermine the competitiveness of UK arable production.
- The unlevel playing field may undermine UK nature protection as illustrated by the continued use of emergency authorisation of banned substances.
- It means that UK consumption of imported cereals and oilseeds is supporting destruction of pollinator and other insect populations around the world, with further knock-on impacts on birds and other creatures.

#### Why this could be an important case to pursue

- It concerns a core part of biodiversity protection, which is acknowledged as an issue of the global commons, so it is justified as a CES.
- As it involves pollinators, often shortened to bees, this is easy for the lay public to understand, and likely to get favourable public attention and reaction.
- The evidence on the harmful environmental effects is well established (in Europe) and formed the basis of EU decisions not to approve for placing on the market.
- It is clearly the case that environmental standards are different around the world with different approval criteria used for pesticides safety with respect to the environment.
- It involves the agricultural crops occupying the largest share of the arable agricultural area therefore action on these holds out the promise of wide, global environmental benefit.
- These, and other pesticides, are used as they are strongly perceived by farmers to help them achieve high and consistent yields and higher returns from crop production. The argument of competitive disadvantage is therefore real.
- The affected crops are amongst the largest agricultural crops traded internationally. This case therefore offers a highly relevant, though of course challenging, test case.
- The issue of pesticide use in UK domestic farming is a totemic issue in moving towards a sustainable food system allaying fears that high environmental standards will result in an unlevel playing field could remove one of the greatest obstacles to such transition.
- Internationally, harmonisation of criteria for pesticide approval must be a long-term goal which can be helped through establishing experience with the neonic case.

# Environmental regulation in agri-food products and trade policy

In the pursuit of applying CES to imported agri-food products, it is important to analyse how this can be done consistently with international trade frameworks the UK has subscribed to, most notably the WTO. In this regard, there are several different approaches that the UK can adopt with different implications for international trade. Mandatory environmental requirements could be imposed on imported agri-food products. These can take the form of product-based requirements that establish the acceptable characteristics of an individual product, such as establishing limits on the presence of petrol or heavy metals in organic fertilisers<sup>43</sup>, or establishing maximum limits for chemical residue in food products. Most of these relate to protecting human health and safety.

Mandatory environmental requirements can also relate to types of production, known in WTO parlance as process and production methods (PPMs). In establishing CES applicable to agri-food imports, PPMs-related requirements will play an important role. Indeed, common environmental requirements for agri-food products focus on the way they are produced, for example by limiting the amounts of nutrients that can be applied to land or by restricting or even prohibiting the use of certain insecticides. A current example of the latter being applied to PPMs-related requirements, would be to ban the usage of neonicotinoids in imported agrifood products, as explored in <u>Box 1</u> above. This would reflect on the *production* of an agrifood product to prevent harm to non-target insect populations.

Treating products differently based on their PPMs could raise WTO-consistency questions. Specifically, whether mandatory environmental regulations in the form of PPMs (i) violate the WTO rules because of discriminatory treatment; and (ii) can be justified under the exceptions clause in GATT Article XX, depends on how the measure is designed and applied. Important considerations in this respect include the degree to which the regulation contributes to the stated environmental objective; the regulation's trade-restrictiveness; and the extent to which alternative measures exist to achieve the desired objectives.<sup>44</sup> With respect to banning neonicotinoids in a WTO-consistent manner, it would thus be important to examine the link between the ban and the objective of protecting non-target insect populations and birds; examine the trade-restrictiveness of the measure; and analyse whether less-trade restrictive measures exist that could achieve the objective.

The US Marine Mammal Protection ACT (MMPA)<sup>45</sup> is an interesting example to better understand how to apply a country's environmental regulatory requirements to imported agri-products consistently with WTO rules. In 2016, the US issued new regulations under the MMPA, requiring that foreign companies that export certain types of seafood to the US that are at risk of harming marine mammals, must demonstrate that the seafood comes from fisheries governed by marine mammal protection that is, "comparable in effectiveness" to the US standards.<sup>46</sup> This new regulation has been designed based on the lessons learned from

the WTO case that challenged an earlier 'dolphin-safe' US fishing regulation. The Appellate Body found that the US had acted within its right to establish import measures to protect sea turtles but considered the measure to be WTO-inconsistent as it had been structured in a discriminatory way. In this regard, the new MMPA moves away from requiring replication of an exact US standard, and instead focuses on analysing whether "comparable effectiveness" is achieved.<sup>47</sup>

An ongoing WTO case between Indonesia and the EU might shed further light on how to design PPMs-related requirements, to minimise the environmental implications on agri-food products. The dispute concerns a claim brought by Indonesia against an EU regulation that restricts palm oil imports unless it can be certified as low Indirect Land-Use Change (ILUC) risk. The claim includes a challenge against the EU's criteria for determining high-ILUC risk biofuels. According to the definition applied by the EU, these oils are produced from crops with a significant global expansion into land with high carbon stocks, including forests, wetlands, and peatlands.<sup>48</sup> Indonesia alleges that the criteria used to determine high and low ILUC-risk are discriminatory.<sup>49</sup> The panel decision in this case will be important to better understand the application of WTO principles with respect to environmental PPMs applied to agricultural imports.

In sum, in requiring that imported agri-food products comply with UK environmental regulation, the following factors have implications for WTO consistency, and must therefore be carefully considered:

- Whether the regulation concerns product standards or PPMs;
- Whether the regulation discriminates either de jure or de facto. One way to minimise risk of discrimination is to focus on levels of protection achieved as opposed to the way the measure operates/is designed. This, of course, raises important questions on implementation, enforcement, and effectiveness of the applied environmental regulation;
- The extent to which the regulation contributes to the environmental objectives it seeks to advance;
- The extent to which alternative measures exist with less trade-restrictive effects that achieve the same environmental objective.

The UK can also consider less ambitious approaches that would minimise negative environmental impact on imported agri-food products. These approaches would not render compliance with core environmental regulations mandatory but would focus on developing incentives to privilege trade in sustainably produced agri-food products. For example, the UK could apply, through its Regional Trade Agreements (RTAs), differential import tariffs based on a product's PPM. An example of this approach is the EFTA-Indonesia Free Trade Agreement (FTA), which entered into force in November 2021. This FTA renders access to preferential tariffs for palm oil conditional upon compliance with sustainability objectives. The FTA itself does not specify how to demonstrate compliance, but Parties to the FTA have sought to fill this gap. For example, Switzerland requires that imported palm oil is certified with a recognised sustainable palm oil certification scheme.<sup>50</sup> Similarly, with respect to

neonicotinoids, RTAs could refer to certification and standards that exist to verify that the product has been produced free of neonicotinoids. Legally, conditioning tariff preferences on sustainability certification could raise WTO-consistency issues, again, depending on the specific design of the measure.

In sum, while the WTO limits the ways in which UK environmental requirements can be applied to agri-imported food products, it provides for numerous possibilities to apply environmental requirements to agri-food imports in a WTO-consistent manner.

This Think Piece has sought to explore various considerations relevant to upholding and promoting environmental standards in agri-food trade in the UK. It is suggested that the opportunity presented by the UK's new policy environment offers space for considering new, more ambitious policy tools to foster alignment between the country's trade and environmental sustainability objectives. It is in this context that this Think Piece proposes to consider regulatory requirements, or *Core Environmental Standards* (CES) as a trade policy measure, which may allow the UK to help establishing a level playing field in in agri-food trade in the UK, in the absence of relevant international environmental standards in agri-food trade.

Furthermore, several criteria have been proposed to identify those issues that would be most relevant and most suitable to be covered by CES, and for which case studies could be usefully devised during this project. Based on these criteria, this *Think Piece* proposed that case studies should focus on four regulatory areas: biodiversity protection through pesticide approval regulation; biodiversity protection through the regulation of crop nutrient management, especially nitrates; climate protection through targeted contributions to Net Zero; and regulatory measures to protect climate and biodiversity by exploring the possibilities and effects of establishing a 'not associated with deforestation' standard for some agricultural products, such as beef.

This Think Piece also briefly discussed the implications of CES in the context of the WTO. In this regard, to minimise the risk that CES run counter to the provisions of the WTO, it is important to consider, inter alia, whether the regulation is a PPM; whether the regulation discriminates; the extent to which the regulation contributes to the environmental objectives it seeks to advance; and the extent to which alternative measures exist that are less trade restrictive while achieving the same environmental objective.

The preliminary analysis and ideas presented in this Think Piece seek to generate discussion with respect to CES and trade. The analysis, however, will be further developed and deepened in subsequent deliverables commissioned by WWF. The ongoing research will likewise need to respond to many remaining questions, including potential regulatory disconnect between the different UK nations; the detailed design of the measure; and ensuring that potential negative effects of measures vis-à-vis trade with vulnerable producers and developing countries are understood and minimized.

## Endnotes

<sup>1</sup>PM Statement to the House of Commons on the Integrated Review, 16 March 2021, https://www.gov.uk/government/speeches/pm-statement-to-the-house-of-commons-on-the-integrated-review-16march-2021.

<sup>2</sup>UN Climate Change Conference UK 2021, "UK Climate Leadership", Accessed on: 29 December 2021, https://ukcop26.org/uk-presidency/uk-climate-leadership/.

<sup>3</sup> Global Resources Initiative, Final Recommendations Paper, 2021; House of Lords Library, Climate Change targets: the road to net zero?, 24 May 2021, <u>https://lordslibrary.parliament.uk/climate-change-targets-the-road-to-net-zero/</u>.

<sup>4</sup> UK Health Alliance on Climate Change. "All Consuming: Building a healthier food system for people and planet". 2020, http://www.ukhealthalliance.org/wp-content/uploads/2020/11/UKHACC-ALL-Consuming-Building-a-Healthier-Food-System-for-People-Planet.pdf; WWF UK. "How low can we go? An assessment of greenhouse gas emissions from the UK Food System and the scope to reduce them by 2050", 2009.

<sup>5</sup> UK Parliament, Brexit: Farming, fishing, and animal welfare, Accessed on 29 December 2021, https://www.parliament.uk/business/publications/research/eu-referendum/farming-fishing-and-animal-welfare/.

<sup>6</sup> House of Commons Library, Agriculture Act, 2020, <u>https://commonslibrary.parliament.uk/research-briefings/cbp-8702/</u>.

<sup>7</sup> The National Archives, Environment Act, 2021, <u>https://www.legislation.gov.uk/ukpga/2021/30/contents/enacted</u>.

<sup>8</sup>DEFRA, "World leading environment act becomes law", 10 November 2021, <u>https://www.gov.uk/government/news/world-leading-environment-act-becomes-law</u>.

<sup>9</sup> ibid

<sup>10</sup> Defra Press Office, Protecting our high food standards, 8 October 2020,

https://deframedia.blog.gov.uk/2020/10/08/protecting-our-high-food-standards/.

<sup>11</sup>"UK concerns over lower food standards in CPTPP trading bloc", Farming UK, 13 April 2021, <u>https://www.farminguk.com/news/uk-concerns-over-lower-food-standards-in-cptpp-trading-bloc\_57984.html</u>.

<sup>12</sup> Department of International Trade, Trade and Agriculture Commission, "Final Report", 2021.

<sup>13</sup>ibid

<sup>14</sup> National Food Strategy, An independent review for Government, 2021, <u>https://www.nationalfoodstrategy.org/.</u>

<sup>15</sup> ibid

<sup>16</sup> Global Resources Initiative, Final Recommendations Report, 2021.

<sup>17</sup> Department of International Trade, Government response to the final Trade and Agriculture Commission report, 2021, <u>https://www.gov.uk/government/publications/government-response-to-the-final-trade-and-agriculture-commission-report</u>.

### <sup>18</sup> ibid

<sup>19</sup>Department of International Trade, Government response to the final Trade and Agriculture Commission report, 2021, <u>https://www.gov.uk/government/publications/government-response-to-the-final-trade-and-agriculture-commission-report</u>.

<sup>20</sup>"The Challenge - UK Threat", Global Food Security, Accessed on: 29 December 2021, https://www.foodsecurity.ac.uk/challenge/uk-threat/ ; DEFRA, United Kingdom Food Security Report, 2021.

<sup>21</sup> David Baldock, Environmental standards for UK agriculture in a new trade policy framework, 2020.

<sup>22</sup> OECD, Trade and Environment Interactions: Governance Issues, 2017; Allan Matthews, Trinity College Dublin, Impact of food trade on climate. Trade Unwrapped. Food, Framing & Countryside Commission, 28 Sept 2020, <a href="https://tradeunwrapped.uk/read/impact-of-food-trade-on-climate">https://tradeunwrapped.uk/read/impact-of-food-trade-on-climate</a>.

#### <sup>23</sup> ibid

<sup>24</sup> Goldman, Elizabeth Dow, Mikaela Weisse, Nancy Harris, and Martina Schneider, "Estimating the Role of Seven Commodities in Agriculture-Linked Deforestation: Oil Palm, Soy, Cattle, Wood Fiber, Cocoa, Coffee, and Rubber", 2020.

<sup>25</sup> Shula Goulden et al., Implications of standards in setting environmental policy, Environmental Science & Policy, 2019, vol. 98, p. 39-46.

#### <sup>26</sup> ibid

<sup>27</sup> Stefan Ouma, Global standards, local realities: private agri-food governance and the restructuring of the Kenyan horticulture industry, Economic Geography, 2010, vol. 86, no 2, p. 197-222.

### <sup>28</sup>ibid

<sup>29</sup> Of course, there are transboundary impacts between the devolved territories in Great Britain, i.e., England, Scotland, and Wales, and between N Ireland and the Republic of Ireland. Also, regulation primarily directed to water, air and soil also may well have climate and biodiversity impacts – see the discussion below on nutrients. The question is whether these complications invalidate the judgement about the areas where there is greatest prospect of progressing to agreed and effective CES?

<sup>30</sup> This argument follows Spiller, Busch and Tangermann (2021) p. 4. These authors argue that "A society's preferences for local environmental goods and their standards are among the "natural" competitive factors as well as different levels of wages, different labour productivity or different quality and provision of infrastructure". Some may find this persuasive, but others may be unconvinced. As pointed out below, there can be complex interactions and overlaps between environmental concerns and their regulation e.g., between water quality and biodiversity. The question to consider is whether it would be wise to select a case based on what can be argued is a local and not global environmental concern.

<sup>31</sup> A further consideration, which is highly likely to arise in discussions about differential environmental standards and their effects is the degree and effectiveness of enforcement. If achieved environmental performance is at variance with the legislative standard, which is the relevant one for the purposes of trade measures?

<sup>32</sup> These certainly invite considerable discussion. Cross compliance conditions attached to CAP payments will not survive beyond 2027 in England, although there is uncertainty of their future in the other DAs. The payments for environmental services (generally referred to as public goods) themselves provoke considerable debate about their eligibility under the Agreement on Agriculture. These issues will be taken up in the main report.

<sup>33</sup> This was a conclusion of a study by Ecorys (2018) Study supporting the Refit evaluation of the EU legislation on plant protection products and pesticide residues (Regulation (EC) 1107/2009 and Regulation (EC) 396/2005) Final Report.

<sup>34</sup> This must be qualified because it has been common practice that active substances whose authorisation ends are sometimes granted temporary or emergency exemption following farmers' representations that there is no alternative to the product, and they face a real threat which must be managed. Note withdrawal of approval of an active substance either occurs because the review process deems it unsafe to human health or environment or, more commonly, because

<sup>35</sup> David Baldock, Environmental standards for UK agriculture in a new trade policy framework, 2020.

<sup>36</sup> Global Resources Initiative, Final Recommendations Report, 2021.

<sup>37</sup> Of course, the relevant consideration for this paper goes beyond the UNFCCC accounting framework based on territorial emissions, to focus on total emissions associated with domestic food consumption including embedded emissions in imports.

<sup>38</sup> LULUCF refers to Land Use, Land Use Change and Forestry. It is the sector which can be a source of GHG emissions or, uniquely, a carbon sink by sequestration in biomass and soil. This construction is used in UNFCCC GHG inventory accounting and in the way, countries couch their targets for net emissions to reach zero.

<sup>39</sup> An exception to this 'paid inducement' approach is a proposed ban on peat for use in commercial horticulture and domestic use.

<sup>40</sup> See the 2021 National Food Strategy, Independent Review, The Plan, for discussion and recommendations on these actions.

<sup>41</sup> Steve Jennings, Richard Sheane and Catherine McCosker, Deforestation and Social Risks in the UK's Commodity Supply Chains, 2017.

<sup>42</sup> World Wildlife Fund-UK, Riskier Business: The UK's Overseas Land Footprint, 2020, <u>https://www.wwf.org.uk/sites/default/files/2020-07/RiskierBusiness\_July2020\_V7\_0.pdf</u>

<sup>43</sup>David Baldock, Environmental standards for UK agriculture in a new trade policy framework, 2020.

<sup>44</sup> Similar considerations apply when the measure is being addressed as part of the Technical Barriers to Trade (TBT) Agreement. PPM are covered under this Agreement, but NPR PPMS likely fall outside the scope.

<sup>45</sup>National Oceanic and Atmospheric Administration, Marine Mammal Protection Act, 1972, https://www.mmc.gov/wp-content/uploads/MMPA\_March2019.pdf.

<sup>46</sup>"US import protections show how the UK can set high , WTO compliant food standards", Green Alliance Blog, 8 March 2021, <u>https://greenallianceblog.org.uk/2021/03/08/us-import-protections-show-how-the-uk-can-set-high-food-trade-standards-via-the-wto/</u>.

<sup>47</sup> ibid

<sup>48</sup> Try Ananto Wicaksono, "Indonesia's Fight against the EU Palm Oil Ban", Geopolitical Monitor, February 17, 2021, <u>https://www.geopoliticalmonitor.com/indonesias-fight-against-the-eu-palm-oil-ban/</u>.

<sup>49</sup> World Trade Organization, European Union–Certain measures concerning palm oil and oil palm crop-based biofuels, 12 November 2020, <u>https://www.wto.org/english/tratop\_e/dispu\_e/cases\_e/ds593\_e.htm</u>.

<sup>50</sup> Anand Chandrasekhar ,"Are the sustainability criteria in the Swiss trade deal with Indonesia toothless?", Swiss Info, February 13 2021, <u>https://www.swissinfo.ch/eng/are-the-sustainability-criteria-in-the-swiss-trade-deal-with-indonesia-toothless-/46383574</u>.