Implications of the European Green Deal for agri-food trade with developing countries



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Executive summary

The European Green Deal has as one of its objectives to build a more sustainable and healthier food system. Implementing the necessary measures to achieve this objective will have a significant impact on the competitiveness of EU producers as well as international trade in food. The EU recognised that this effort includes an important external dimension to also support the global transition to sustainable agri-food systems. The Commission has proposed a broad set of legislative and other initiatives to take greater account of sustainability issues in trade policy and to bring about greater coherence between agriculture, trade and Green Deal policies. The purpose of this report is to examine how measures taken to implement this objective in the agri-food sector might impact on developing countries and especially lowincome developing countries. Our main objective is to suggest ways to avoid any negative impacts for these countries that might undermine or limit their ability to progress towards the UN 2030 Sustainable Development Goals.

One of the priorities for the French Presidency of the EU Council of Ministers in the first half of 2022, set out in its Presidency Programme as part of its work to promote sovereignty and food self-sufficiency in the agricultural sector, was "to encourage Council discussions on reciprocal environmental and health standards for European products and products imported from third countries" (French Government, 2022). The aim is to subject "imported products to certain production requirements applied in the European Union where necessary, to strengthen the protection of health or the environment on the largest possible scale, in keeping with World Trade Organisation rules ("mirror clauses")." This work would prioritise the introduction of sectoral mirror clauses. The Presidency also proposed to launch work on the regulation on deforestation-free imports, which would be a significant step towards greater account being taken of production standards for imported products.

These French Presidency priorities built on similar statements in the EU Trade Policy Review published in February 2021 and statements agreed as part of legislative package for the future Common Agricultural Policy in July 2021.

The objectives of these policies are to safeguard EU production capacity by ensuring EU producers compete with imports on a level playing field, to avoid that EU consumers off-shore the negative environmental consequences of their consumption through existing or increased imports, and to raise global sustainability standards by leveraging access to the EU market to give a stimulus to exporting countries to raise their standards.

Several trade policy measures can be used to pursue these objectives, including multilateral, bilateral and unilateral policies. Mirror clauses are an example of a unilateral measure and are the principal focus of this report. The use of mirror clauses has been discussed to date mainly at a conceptual level. Only for the use of antibiotics in animal production has a specific mirror clause been adopted but to date it has not been enforced. Because of this, the

discussion in this report is also on a conceptual level. To conduct a more specific impact assessment would require a more detailed prescription of how a particular mirror clause would be specified and how it would be enforced.

Each of the potential trade policy measures to pursue sustainability objectives will differ in their effectiveness in achieving those objectives but also in the potential risk of negative consequences. Thus, the choice of the most appropriate trade policy instrument in a specific context should be based on a comparison of the benefit/risk ratios of different measures. For this purpose, at least six considerations are relevant with respect to the future use of mirror clauses:

- Whether the level playing field argument is justified? This will depend on the extent to which a particular sustainability standard increases costs for EU producers that are not offset either by gaining premium prices or through financial compensation and thus has an adverse effect on competitiveness. The effectiveness of the trade policy measure in providing redress is also important and will depend, in part, on the net trade status for a particular commodity in the EU. For example, a multilateral agreement that raises standards both in third countries and the EU will be more effective in ensuring a level playing field than a mirror clause that only has an impact on imports, because it also maintains a level playing field for exports. A trade policy measure introduced solely or mainly to protect production capacity in the EU would be unlikely to be consistent with the EU's WTO obligations, thus opening the door to allow third countries to take retaliatory action against EU agri-food exports.
- How effective is the measure in raising sustainability standards in third countries? The effectiveness of a unilateral intervention such as mirror clauses will depend on the reaction of the exporting country. Countries may raise their domestic standards to comply with the EU requirements and to maintain access to the EU market. Or they may decide to forego supplying the EU market on the grounds that it is not feasible or too costly to meet the EU standards and instead divert supplies to less demanding markets. Because exporting countries will usually seek to comply with the standards of the importing country with the highest standards, stricter EU standards could even be applied to a country's exports to other markets and thus be amplified in their effect. It is also important to take account of the existence of relevant private standards. These are often more demanding that public standards so some of the trade impacts of higher public standards may already be factored into existing trade flows.
- Which sustainability requirements are relevant? EU farmers face a wide range of statutory and policy limitations designed to encourage more sustainable agricultural practices. This raises the question whether all of these standards should also be required of imported products or just a selection of them, and if the latter, which criteria should be used to identify measures for which a mirror clause might be appropriate.
- Are the risks to sustainability evaluated differently in different countries? The UN Sustainable Development Goals include dimensions of economic, social and environmental sustainability. Even if countries accept that all of these are important, the particular weightings they choose to put on these different dimensions may well

differ from the EU's weightings. Differences in these contextual characteristics do not necessarily justify the continued use of these practices if they result in damage to global environmental goods or involve social or working conditions that are seen as unacceptable according to minimum international standards. The EU may still be justified in limiting access to its market for these reasons. Nonetheless, mirror clauses are a blunt instrument that cannot distinguish between countries at different levels of development or with different responsibilities for contributing to the historical damage to global environmental goods. Also, because they are likely to be practicebased rather than outcome-based, it may be difficult to adequately recognise equivalent practices in other countries that may be equally effective in meeting the desired sustainability outcome.

- Who bears the cost of a mirror clause? Because a mirror clause is directed against imports, it may seem as if it is foreign producers that pay. Foreign producers indeed lose out (hence their incentive for retaliation). However, given that for most products EU self-sufficiency rates are high and imports make up only a small share of domestic consumption, the main costs will be borne by EU consumers through higher prices. Higher prices for certain food products (e.g. animal source foods) may also be consistent with the Green Deal ambitions for dietary change but have the further effect of maintaining their production in the EU (albeit in a more sustainable way). However, for other food products where the Green Deal ambition is to increase consumption (e.g. fruits, vegetables, pulses and nuts), mirror clauses could make the achievement of this ambition more difficult.
- What are the risks of retaliation? The risks of retaliation are determined by the WTO consistency of a proposed trade measure. This report does not attempt to evaluate the WTO compatibility of mirror clauses, as the legal arguments and their feasibility will be assessed in a Commission report on these issues to be published in June 2022. The EU insists that the measures it plans to introduce will be consistent with its WTO obligations, but there is the possibility that a dispute panel could side with the complainants and find against the EU. The WTO cannot require the EU to change its regulations. The EU retains the right to set the regulations that it sees fit. However, if the EU were found to be in breach of its WTO commitments to third countries, these countries have the right to exercise retaliation by withdrawing trade concessions equivalent in value to the market access that they have lost. This is not an argument that the EU should not bear this cost in its attempt to raise global sustainability standards. But it is relevant to the argument that higher standards on imports are necessary to protect the competitiveness of EU producers if indeed the opposite turns out to be the case.

The conclusion of this discussion is that mirror clauses may be an appropriate instrument in certain circumstances, but their relevance should be decided on a case-by-case basis taking these six principles into account. A general prohibition on imports that may fail to meet EU standards in one or another dimension is neither feasible nor desirable. The EU should carefully assess the benefits and risks of mirror clauses on an individual basis based on the six principles and following a full impact assessment.

This report also includes an examination of proposed changes in the way the EU sets import tolerances (Maximum Residue Limits, MRLs) for pesticide residues, where several possible steps to further tighten MRLs for imports have been suggested. The Commission has stated that it will review import tolerances for substances banned based on the hazard-based criteria and presenting a high level of risk for human health. It has also committed to evaluate the environmental impacts in third countries when setting MRLs on the basis of import tolerances. The European Parliament and others have called for the application of the mirror clause principle when setting import tolerances. This would imply a more far-reaching change in current legislation as it would, in effect, eliminate any role for import tolerances at least for products whose use is not permitted in the EU. Such an approach has not yet been endorsed by the Commission and even the French Presidency appears to be hesitant in proposing this step. Changes to the way pesticide residue levels are set for imports will likely be the trade policy measure that will have the most immediate impact on developing countries. It is thus relevant to ask what steps should be taken to ensure their interests are considered when proposing changes of this kind.

To ensure policy coherence for development, changes to import standards whether introduced as a mirror clause or not should meet four criteria:

- A sufficient transition period to allow alternatives to be developed, applying the principle of special and differential treatment where health and safety of EU consumers is not the issue.
- The commitment of significant EU resources to help farmers in vulnerable developing countries to adapt their production practices where justified.
- Just transition principles in Europe emphasise that those affected by change should be consulted and have a say in managing that change. This principle should also apply to the external dimension of the Green Deal.
- EU decision-making must include mechanisms where the interests and needs of these countries are explicitly considered. This should include a full impact assessment to which these countries should have the opportunity to contribute.

1. Introduction

The call that imported products should be required to meet the same production standards as EU products has been made in Brussels for several years. However, since the announcement of the European Green Deal by the incoming von der Leyen Commission in December 2019, these calls have intensified and there has been a burst of trade-related legislative activity by the Commission. Many of these legislative proposals have direct relevance to agri-food trade. The French EU Presidency in the first half of 2022 declared that making progress on introducing import standards is one of its priority issues for the AGRIFISH Council. Both the EU Green Deal itself and these EU trade policy initiatives will have implications for agri-food trade and the EU's trading partners. This report provides an overview of these initiatives with a particular focus on import standards implemented through mirror clauses. It highlights their potential impacts particularly on low-income developing countries. It argues that their interests need to be explicitly considered as the EU embarks on these changes.

This report has been completed as concerns mount about the implications for global food security arising from the Russian invasion of Ukraine and the consequent disruption to export supplies of wheat, coarse grains, oilseeds and other products through the Black Sea ports (European Commission, 2022b; European Parliament, 2022). The war has put further upward pressure on key input costs for food production (energy, fertilisers) as well as commodity prices and is contributing to higher inflation, including food price inflation, across the EU. This has led some policy actors to call for the postponement of some of the initiatives in the Green Deal. However, the Commission in the cited Communication made clear that it remains committed to the Green Deal and Fork to Fork (F2F) Strategy to ensure the longer-term sustainability of the food system. Thus, how best to promote coherence between agricultural policy, trade policy and development policy remains a highly relevant issue.

Moving towards a more sustainable system of food production and consumption in the EU will be essential to achieve the objectives of the European Green Deal for a climate-neutral Europe by 2050, zero pollution, the decoupling of economic growth from resource use, the conservation of natural capital, and the protection of the health and well-being of citizens from environment-related risks and impacts. The evidence that food production results in air, water and soil pollution, contributes to the loss of biodiversity and climate change, and consumes excessive amounts of natural resources, is increasingly compelling. At the same time, unhealthy diets contribute to the incidence of obesity and non-communicable diseases.

The agri-food elements of the Green Deal are set out in the F2F and Biodiversity Strategies which are built around three central planks: ensuring the food chain has a neutral or positive environmental impact; ensuring food security, nutrition and public health; and preserving the affordability of food while generating fair returns for the supply chain (European Commission, 2020a, 2020b). They include a range of ambitious targets intended to put the EU food system on a transformative path to greater sustainability. Agriculture is expected to contribute to the

reduction of at least 55% in net GHG emissions by 2030 under the 'Fit for 55' roadmap. The use and risk of chemical pesticides should be reduced by 50% by 2030. Nutrient losses should be reduced by at least 50% and the use of fertilisers by at least 20% by 2030. Sales of antimicrobials for farmed animals and in aquaculture should also be reduced by 50% by 2030. The area of agricultural land under organic farming should increase from a level of 8% in 2018 to 25% by 2030, while a minimum 10% of the agricultural area should be under high diversity landscape features by 2030.

The F2F strategy also underlines the importance of consumer behaviour change in food system transformation and climate change mitigation. Among the measures advocated are empowerment of consumers by better front-of-pack nutrition labelling; strengthening of educational messages in schools around sustainable eating; promotion of food-based dietary guidelines that incorporate sustainability aspects and encouragement to use fiscal policy tools to promote healthy and sustainable diets; an active change in food environments in institutions, including minimum mandatory criteria for sustainable food procurement by schools, hospitals and other public institutions; and setting a legally binding target to reduce food waste.

The Commission's European Green Deal Communication (European Commission, 2019) included a section on the 'EU as a global leader' which recognised that "The global challenges of climate change and environmental degradation require a global response". It included an agenda of actions, covering diplomacy, trade policy, development support and other external policies, to make the EU an effective advocate focused on convincing and supporting others to take on their share of promoting more sustainable development. It proposed to use its economic weight to shape international standards that are in line with EU environmental and climate ambitions.

The F2F strategy also stressed the importance of the external dimension. It proposed to pursue the development of Green Alliances on sustainable food systems with all its partners in bilateral, regional and multilateral fora. It particularly highlighted the importance of using trade policy to support and be part of the EU's ecological transition. Various initiatives under this heading were proposed:

- The EU will seek to ensure that there is an ambitious sustainability chapter in all EU bilateral trade agreements.
- It will ensure full implementation and enforcement of the trade and sustainable development provisions in all trade agreements, including through the EU Chief Trade Enforcement Officer.
- It will obtain ambitious commitments from third countries in key areas such as animal welfare, the use of pesticides and the fight against antimicrobial resistance.
- It will strive to promote international standards in the relevant international bodies and encourage the production of agri-food products complying with high safety and sustainability standards, and will support small-scale farmers in meeting these standards and in accessing markets.

- To reduce the EU's contribution to global deforestation and forest degradation, the Commission will present in 2021 a legislative proposal and other measures to avoid or minimise the placing of products associated with deforestation or forest degradation on the EU market.
- Imported food must continue to comply with relevant EU regulations and standards. The Commission will take into account environmental aspects when assessing requests for import tolerances for pesticide substances no longer approved in the EU while respecting WTO standards and obligations.
- A more sustainable EU food system also requires increasingly sustainable practices by its trading partners. In order to promote a gradual move towards the use of safer plant protection products (PPPs), the EU will consider, in compliance with WTO rules and following a risk assessment, to review import tolerances for substances meeting the "cut-off criteria" and presenting a high level of risk for human health.
- The EU will engage actively with trading partners, especially with developing countries, to accompany the transition towards the more sustainable use of pesticides to avoid disruptions in trade and promote alternative PPPs and methods.
- To address the global threat of antimicrobial resistance, products of animal origin imported into the EU will have to comply with strict requirements on the use of antibiotics in line with the recently agreed veterinary medicinal products Regulation.
- As part of its approach to food information to consumers it will lead the work on international sustainability standards and environmental footprint calculation methods in multilateral fora to promote a higher uptake of sustainability standards.

The relevant sustainability standards for food cover climate, environment, social, and animal welfare impacts. They relate to production practices – the way a product is produced - rather than product characteristics. Implementing these requirements and changes will have a significant impact on the competitiveness of EU producers as well as international trade in food. These changes will have implications not least for developing countries which is recognised in the F2F strategy. The EU has committed to helping these countries reach the UN Sustainable Development Goals, particularly through its commitment to Policy Coherence for Development included in the Treaty of Maastricht (1992) and strengthened in the Treaty of Lisbon (2009). This requires that it considers the impacts of its domestic policy changes on the interests and needs of these countries.

This report focuses particularly on so-called vulnerable developing countries, by which is meant both least developed countries as well as the African, Caribbean and Pacific countries that have a special relationship with the EU – around 87 countries in all, though similar issues will also apply to other low income developing countries (see the full list in Annex 1). Around 70% of their commodity exports consist of four product categories, cocoa, fruits, fish preparations and coffee (Figure 1).



Figure 1. Composition of EU agri-food imports from vulnerable developing countries

Source: Own tabulation based on Eurostat COMEXT trade statistics for HS chapters 1-24. Vulnerable developing countries defined as either/both least developed countries and the African, Caribbean and Pacific countries with which the EU has a special relationship. Import values in 2020 may have been influenced by the consequences of the COVID-19 pandemic. The final column shows the share of extra-EU imports in the different commodities that originate in the 87 vulnerable developing countries identified in this report.

In the context of these commitments, this report has several objectives. First, it reviews the proposals that the Commission has made to follow up on the trade policy commitments in the F2F strategy (Chapter 2). It identifies the direct and indirect ways in which Green Deal sustainability standards can impact on international trade (Chapter 3). The literature on mirror clauses in particular is very underdeveloped with only a few contributions in the literature to date (Baldon *et al.*, 2021; Spiller, Busch and Tangermann, 2021; Rees, 2022; Lamy *et al.*, 2022). The following chapter reviews some arguments for and against the use of mirror clauses (Chapter 4). The next section presents a case study of proposed and possible changes to setting Maximum Residue Limits and Import Tolerates for pesticides (Chapter 5). In the final section, ways to avoid unwanted adverse effects of Green Deal trade policy measures on vulnerable developing countries are discussed (Chapter 6).

2. Green Deal trade policy initiatives

As was shown in the previous chapter, the Green Deal and F2F strategy announced a wide range of trade policy measures intended to improve the sustainability of production and consumption in the EU, including food. The Commission has moved rapidly to follow these announcements with concrete proposals. It published a comprehensive Trade Policy Review in February 2021 that set out its vision for a trade policy based on 'open strategic autonomy'. This emphasises "the EU's ability to make its own choices and shape the world around it through leadership and engagement, reflecting its strategic interests and values" (European Commission, 2021g, p. 4). Strengthening the resilience and sustainability of supply chains was identified as one of the pillars of this strategy. This was followed by several proposals to promote mandatory due diligence of their supply chains by companies, and by commitments to raise sustainability standards for imports. These initiatives are briefly reviewed in this chapter.

Trade Policy Review

The Green Deal trade strategy was first set out in the February 2021 EU Trade Policy Review (European Commission, 2021g). As noted, one of the pilllars of this review was the need to promote responsible and sustainable value chains. It underlined the role of import standards and asserted the legitimacy of applying production requirements to imports based on the need to protect the global environment or to respond to ethical concerns. Several initiatives were highlighted, including improvements in the multilateral trade framework, promoting the sustainability dimension in the EU's trade and investment agreements, the introduction of autonomous measures such as the Carbon Border Adjustment Mechanism, legislation addressing deforestation and forest degradation, and sustainable corporate governance, including mandatory environmental, human and labour rights due diligence.

A specific paragraph highlighted the role of import standards:

Imports must comply with relevant EU regulation and standards. As the examples above show, under certain circumstances as defined by WTO rules, it is appropriate for the EU to require that imported products comply with certain production requirements. Global trade rules aim at securing a predictable and non-discriminatory framework for trade while safeguarding each country's right to regulate in line with their societal preferences. The legitimacy of applying production requirements to imports is based on the need to protect the global environment or to respond to ethical concerns. Whenever the EU considers applying such measures to imported products, this will be done in full respect of WTO rules, notably the principle of non-discrimination and proportionality, aiming at avoiding unnecessary disruption of trade (European Commission, 2021g).

CAP political agreement

This undertaking was pursued in the political agreement on the Common Agricultural Policy (CAP) legislative package in July 2021 which included a statement by the Council and Parliament calling on the Commission to produce a report by June 2022 assessing the rationale and legal feasibility of applying EU health and environmental standards (including animal welfare standards as well as process and production methods) to imported agricultural and agri-food products (Official Journal 2021/C 488/01). This came about following a European Parliament amendment to the Commission's legislative proposal for amendments to the Common Market Organisation Regulation. The Parliament's ENVI Committee originally proposed to add an Article 188a that would have introduced what have come to be called 'reciprocity clauses' or 'mirror clauses' requiring imported products to conform to EU production standards (ENVI Committee, 2019). This amendment was later incorporated into the Parliament's plenary resolution that formed its negotiating mandate in the inter-institutional trilogue negotiations (European Parliament, 2020).

The Parliament's rationale was set out in an additional insertion it proposed to include in the preamble to the Regulation:

(1a) The development of trade agreements will lead, on the one hand, to increased competition between agricultural producers abroad, while at the same time opening up new opportunities for them. In order to maintain fair competition and ensure reciprocity in international trade, the Union should enforce production standards that are consistent with those established for its own producers, in particular in the environmental and health fields, subject to reciprocity (European Parliament, 2020).

The amendment itself would have added the following Article:

Agricultural and agri-food products may be imported from third countries only if they comply with production standards and obligations in line with those adopted, in particular in the fields of environmental and health protection, for the same products harvested in the Union or processed from such products. The Commission may adopt implementing acts laying down the rules of conformity applicable to operators with regard to imports, taking into account reciprocal agreements with third countries. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 229(2)" (European Parliament, 2020).

In the trilogue negotiations on the CAP legislative package, this amendment was withdrawn but the institutions agreed on three statements on international trade attached to the political agreement (Official Journal 2021/C 488/03).

 A joint statement by the European Parliament, the Council and the Commission on proactive engagement at the multilateral level concerning the application of EU health and environmental standards to imported agricultural products endorsed the position in the EU Trade Policy Review that it was appropriate for the EU to require that imported agricultural products comply with certain production requirements so as to ensure the effectiveness of the health, animal welfare and environmental standards that apply to agricultural products in the European Union and to contribute to the full delivery of the European Green Deal and F2F strategy.

- A second joint statement by the Council and Parliament is the one previously discussed that invited the Commission to present, at the latest in June 2022, a report assessing the rationale and legal feasibility of applying EU health and environmental standards to imported agricultural and agri-food products. It should also identify the concrete initiatives to ensure better consistency in their application, in conformity with WTO rules. A public call for evidence to feed into this report closed in March 2022.¹
- A third statement by the Commission on the review of import tolerances and Codex Maximum Residue Limits (MRLs) stated that it would take into account environmental concerns of a global nature in conformity with WTO rules when assessing import tolerance applications or when reviewing import tolerances for active substances no longer approved in the EU.

Trade and sustainable development chapters in FTAs

The Commission has embarked on a review of the trade and sustainable development (TSD) chapters in the EU's free trade agreements (FTAs). These chapters aim to maximise the leverage of increased trade and investment to achieve progress on key sustainability issues, such as the promotion of decent work, environmental protection or the fight against climate change. The first TSD provisions were included in the EU-Cariforum Economic Partnership Agreement (EPA) and the EU-Korea FTA, which entered into force in 2011. Since then, all EU trade agreements include a TSD chapter.

However, the TSD provisions in existing FTAs are seen as weak in terms of their coverage of sustainability issues, the robustness of the dispute settlement and enforcement procedures, and the limited ability of civil society to participate in trade dialogues. In response to these criticisms which came to a head in the negotiation of the EU-Canada FTA, the Commission published a non-paper² in 2017 that took stock of the implementation of TSD chapters in EU trade agreements and undertook to consult with civil society on the issue (European Commission, 2017). Following a description and an assessment of current practice, this paper put forward possible options for discussion on improving implementation.

The EU pursues a policy of what it calls 'assertive enforcement' to promote implementation of trade and sustainable development commitments. It achieved a victory in 2021 in a case brought under the bilateral FTA against South Korea for failing to implement the FTA's labour provisions. Following consultations and the establishment of a dispute settlement panel, the panel found that Korea had not complied with its obligations. Subsequently, Korea has

¹ https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13371-Imports-of-agriculturaland-food-products-applying-EU-health-and-environmental-standards-report-_en.

² A non-paper means that it has been drawn up by the Commission services but has not been politically approved by the Commission as an institution.

amended its domestic legislation and ratified three of the four outstanding ILO Conventions that it had undertaken to do (European Commission, 2021c). Despite this success, the case also demonstrated the limited scope for the EU to put pressure on bilateral trading partners should they be slow or unwilling to come into compliance.

In 2018 the Commission published another non-paper setting out "a set of 15 concrete and practicable actions to be taken to revamp the TSD chapters" (European Commission, 2018). It proposed substantive strengthening in three areas: climate change, the substantive scope for civil society, and the resources available to support the implementation of TSD chapters. It also emphasised the role of more assertive enforcement building on the existing provisions included in these chapters but ruled out moving towards a sanctions-based approach as argued for by some participants in the public debate.

The 2021 Trade Policy Review proposed that "Further actions will be considered in the context of an early review in 2021 of the 15-point action plan on the effective implementation and enforcement of Trade and Sustainable Development Chapters (TSDs) in trade agreements. The review will cover all relevant aspects of TSD implementation and enforcement, including the scope of commitments, monitoring mechanisms, the possibility of sanctions for noncompliance, the essential elements clause as well as the institutional set-up and resources required" (European Commission, 2021g, p. 13). An open public consultation on the review of the TSD chapters closed in November 2021,³ and a Commission response to this consultation should follow.

Additional commitments included a proposal to include a chapter on sustainable food systems in future FTAs; that respect of the Paris Agreement would be considered an essential element in future trade and investment agreements and, for G20 countries, should be based on a common ambition to achieve climate neutrality as soon as possible and be properly reflected in Nationally Determined Contributions (NDCs) submitted under the Paris Agreement; and that the Chief Trade Enforcement Officer would take a more active role in implementing the sustainability dimension of existing agreements. The upcoming review of the Generalised System of Preferences would also be used to promote respect for core human and labour rights.

Due diligence initiatives

EU Voluntary Code of Conduct

The EU Voluntary Code of Conduct on responsible food business and marketing practices that entered into force in July 2021 is one of the first deliverables of the F2F strategy. Seven aspirational objectives are proposed around promoting healthier and more sustainable food consumption patterns, improving the sustainability of internal processes, and improving the

³ Commission, Open public consultation on the Trade and Sustainable Development (TSD) Review, completed 5 November 2021, https://trade.ec.europa.eu/consultations/index.cfm?consul_id=301

sustainability and resilience of the food supply value chain. These are explicitly linked to international goals as formulated by the UN Sustainable Development Goals. The two aspirational targets under the objective of sustainable sourcing in food supply chains refer to (a) securing transformed commodity supply chains which do not contribute to deforestation, forest degradation and destruction of natural habitat and which preserve and protect high value ecosystems and biodiversity as well as (b) improved social performance in (global) food supply chains.

The Code of Conduct identifies several indicative actions that might contribute towards these objectives. They include identifying if these problems exist in a company's supply chain, contributing towards appropriate solutions and strategies to address these problems, and encouraging the uptake of sustainability certification schemes for food in relation to environmental and social performance. Individual companies are invited to sign up to the Code and report annually on their progress, and their performance in relation to the aspirational commitments is monitored. A collaborative platform consisting of interested stakeholders will evaluate the progress/impact of submitted commitments and provide feedback and suggestions based on these annual reports. The first evaluation will take place by the end of 2022 with the active involvement of the collaborative platform and of the Commission.

Regulation on deforestation-free supply chains

The Commission proposed a Regulation on deforestation-free supply chains in November 2021 (COM(2021) 706). The EU already has two pieces of legislation intended to address the problem of illegal deforestation (the harvesting of timber in contravention of the laws of the country of harvest). The EU Timber Regulation (EU) No 995/2010 focuses on preventing the placing of illegally harvested timber and timber products on the EU market and the FLEGT (Forest Law Enforcement Governance and Trade) Regulation (EC) No 2173/2005 focuses on preventing illegally harvested timber from being exported to the EU from producer countries.

The Timber Regulation lays down obligations for operators placing timber on the EU market for the first time. Economic operators that put timber products on the EU market must implement due diligence to verify the legality of their sourced timber. Due diligence covers securing information describing the timber, details of the supplier, and information on compliance with national legislation; assessing the risk of illegal timber based on this information; and where a risk is shown, taking steps to mitigate this risk by requiring additional information and verification from the supplier. Companies either conduct the risk assessment on their own or rely on voluntary schemes that guarantee sourcing legal timber.

The FLEGT Regulation allows for the control of the entry of timber to the EU from countries entering into bilateral FLEGT Voluntary Partnership Agreements (VPAs) with the EU. A country entering a VPA commits to take action to halt trade in illegal timber, notably through a licensing scheme that issues FLEGT licences that certify the legality of timber exported to the EU. It also promotes better enforcement of forest law and the involvement of civil society and the private sector in that country.

The Commission has undertaken a fitness check of both Regulations, the main findings of which are that the general objectives of the two Regulations have not yet been met (European Commission, 2021e). Apart from weaknesses in implementation, both Regulations address illegal logging and associated trade, but do not address deforestation as such. The proposed Regulation will set mandatory due diligence rules for operators which place specific commodities on the EU market that are associated with deforestation and forest degradation – soy, beef, palm oil, wood, cocoa and coffee and some derived products, such as leather, chocolate and furniture. Its purpose is to ensure that only deforestation-free and legal products (according to the laws of the country of origin) are allowed on the EU market. Operators will be required to collect the geographic coordinates of the land where the commodities they place on the market were produced. This strict traceability is meant to ensure that only deforestation-free products enter the EU market – and that enforcement authorities in Member States have the necessary means to control that this is the case. This draft Regulation is currently being discussed in the inter-institutional legislative process.

Corporate Sustainable Due Diligence Directive

A further measure of potential relevance for sustainability standards is the Commission proposal for a Directive on Corporate Sustainability Due Diligence (COM(2022) 71). The initiative aims to introduce a legislative framework requiring, among other things, mandatory environmental and human rights due diligence by companies. The proposal aims to address the concerns of consumers who do not want to buy products that are made with the involvement of forced labour or that destroy the environment and to support business by providing legal certainty about their obligations in the EU single market. This initiative is complementary to another legislative proposal, the proposed Corporate Sustainability Reporting Directive (COM(2021) 189), which would require certain large public-interest companies to disclose sustainability-related matters.

Forced labour

EU Commission President Ursula von der Leyen announced the Commission's intention to introduce a ban on the import of products made with forced labour into the EU market during her 2021 State of the Union Address. In her Address, the Commission President noted that there are "25 million people...who are threatened or coerced into forced labour" and that "doing business around the world...can never be done at the expense of people's dignity and freedom" (von der Leyen, 2021). The Commission President's announcement follows guidance published in July 2021 by the Commission and the European External Action Service (EEAS) on "due diligence for EU businesses to address the risk of forced labour in their operations and supply chains". The non-binding guidance seeks to provide European companies with practical advice on the implementation of effective human rights due diligence practices to address forced labour risks in their supply chains and makes specific recommendations regarding the due diligence process, remediation measures and

responsible disengagement with suppliers or business partners. Of the 25 million people estimated to be victims of forced labour exploitation worldwide, around 11% are estimated to be working in agriculture and fisheries (ILO, 2017). A recent study for the European Parliament looks at the external policy tools to address modern slavery and forced labour (Schwarz *et al.*, 2022).

Mirror clauses

The French EU Presidency in the first semester of 2022 made one of its priorities the reciprocity of trading standards - in other words, ensuring (chiefly by means of 'mirror clauses') that agri-food products imported into Europe abide by the EU's environmental and health standards. It seeks to follow up on the commitments in the 2021 Trade Policy Review and the 2021 CAP political agreement that imports of agri-food products should adhere to the production practices required of EU producers. The AGRIFISH Council held a first exchange of views on ways to strengthen coherence between the Green Deal, the common agricultural policy (CAP) and trade policy in order to support the transition to sustainable food systems at its meeting in February 2022 based on a French Presidency background paper (Council of the European Union, 2022).

The French paper argued that European farmers operating in a global context must be supported, since the transition may incur adaptation costs that are not always covered by the market. It also notes that "EU policies must also take account of the potential undesirable negative effects during this transition – in particular those linked to the phenomena of 'environmental leakage' to third countries – which could undermine its effectiveness." To ensure "that agricultural and food products placed on the EU market, whether from Europe or imported, guarantee European consumers the same level of health and environmental protection, a number of levers can be identified." It went on to list five levers in particular:

- Applying certain European standards to imported products ('mirror' measures);
- Reviewing maximum residue levels (MRLs) and import tolerances (ITs) for plant protection products;
- Increased labelling;
- Taking these challenges into account in bilateral trade agreements;
- Strengthening action and cooperation in international standardisation bodies.

Based on the Council discussion, the French Presidency subsequently wrote to the Commission summarising the Presidency conclusions, insisting that the Council's reflections should be taken into consideration by officials as they draw up the report sought by the Council and Parliament by June 2022 assessing the rationale and legal feasibility of applying EU health and environmental standards to imported food products. According to Commission sources, this report, by providing an assessment of existing tools, will be factual and will not announce any new initiatives or political commitments and will not have any legal effects.

Antibiotics mirror clause

A mirror clause was introduced as part of the Veterinary Medicinal Products Regulation (EU) 2019/6 which entered into force at the end of January 2022. This is an early example of a true mirror clause as it is explicitly intended to address the global problem of growing antimicrobial resistance as well as provide a level playing field for EU producers.⁴ The mirror clause is restricted to two core standards (the prohibition on the use of antibiotics for growth promotion in animal production and the complete exclusion of a reserved list of antibiotics critical for human medicine from any use in animal husbandry) even though the use of antibiotics in animal farming is also restricted in other ways for EU producers. However, key delegated acts necessary to operationalise this mirror clause remain outstanding, particularly the delegated act setting out how the mirror clause will be enforced. The French Presidency paper for the AGRIFISH Council in February 2022 called for the secondary acts to be adopted swiftly so that the ban can be effectively implemented.

Restrictions on pesticide residues

The French Presidency paper also highlighted the review of MRLs and ITs for plant protection products. Food or feed for export to the EU cannot contain pesticide residues that exceed the MRLs decided by the Commission and the Council on the basis of a risk assessment to consumer health by the European Food Safety Authority (EFSA). The Presidency paper noted that EU rules allow operators to apply for an import tolerance (IT), including for active substances not authorised in the EU for reasons other than public health, in order to take account of different agricultural practices and to meet the needs of international trade. It is therefore possible to set or maintain MRLs above the limit of quantification of residues for substances not approved in the Union. As a result, food or feed containing residues of substances prohibited in the EU can be legally placed on the market, as long as the levels of residues remain below the applicable MRLs. The Presidency paper asked that the Commission continue its ongoing review of the MRLs/ITs of banned substances in the EU to bring them into line with the latest scientific data as soon as possible. It also noted that part of this work should involve taking better account of global environmental challenges when defining MRLs/ITs (Council of the European Union, 2022).

In the F2F strategy the Commission indicated its willingness to consider environmental risks when assessing requests for import tolerances for pesticide residues in imported food, as well as to review import tolerances for substances meeting the cut-off (hazard-based) criteria in the Pesticides Regulation. It confirmed its intention to account for environmental concerns of a global nature in conformity with WTO rules when assessing import tolerance applications or when reviewing import tolerances for active substances no longer approved in the EU in a

⁴ An earlier example of the extra-territorial application of EU standards is the requirement that meat exported to the EU comes from animals slaughtered under conditions which offer guarantees of humane treatment at least equivalent to those required in the EU (Directive 93/119/EC, subsequently replaced by Regulation (EC) No 1099/2009. The standard of the World Organisation for Animal Health is taken into account when assessing equivalency between the standards implemented in third countries and the ones of the Union.

political declaration attached to the 2021 CAP reform previously noted (Official Journal 2021/C 488/03). This may require a revision of the Maximum Residue Limits Regulation in order to strengthen its environmental dimension and make relevant alignments with the pesticides approval process. There is a more detailed analysis of the pesticide residues issue in Chapter 5 of this report.

Review of animal welfare legislation

Animal welfare has been highlighted as another area where the use of mirror clauses could be introduced. In the EU, animal welfare is regulated at farm level, during transport, and at slaughter. The Commission plans to propose revised animal welfare legislation in 2023 and has indicated that it will respond to the 'End the Cage' European Citizens' Initiative by including a proposal to phase out and prohibit the use of cage systems for all animal species.

Higher animal welfare standards, such as the ending of cages as well as providing more space and access to the open air, will require the redesign of animal housing and lead to higher production costs. The EU has for several decades pursued an active international strategy through the World Organisation of Animal Health (OIE) and directly with trading partners in an effort to raise international animal welfare standards. It has been successful in promoting the adoption of a range of animal welfare standards at the OIE. However, there is no obligation on countries to transpose these standards into domestic legislation and, unlike animal health and veterinary public health standards, animal welfare standards are not recognised in the WTO Sanitary and Phytosanitary Standards (SPS) Agreement.

In July 2021 the Commission published an inception impact assessment on its proposed revision of animal welfare legislation for public consultation (European Commission, 2021d). Among the options it proposed to assess to address differences in animal welfare standards between domestic production and imports were either (a) similar animal welfare requirements to be applied at import and in particular as regards the use of cages in the EU, or (b) labelling requirements providing EU consumers with information on whether imported products are obtained from animals (not) raised in line with EU animal welfare requirements. It also referred to the need for any measures that the EU might take to be compliant with WTO rules. Even if mirror clauses reflecting animal welfare considerations were introduced, they are still some years away.

Carbon Border Adjustment Mechanism

Another type of mirror clause is where a border levy is imposed to equalise the burden of environmental taxes. In connection with the more ambitious emissions reduction targets included in the European Climate Law, the Commission proposed in November 2021 a Carbon Border Adjustment Mechanism (CBAM) to address the risks of carbon leakage as a result of the increased Union climate ambition (COM(2021) 564). This mechanism is an alternative to the measures that address the risk of carbon leakage in the EU's Emissions Trading System (ETS) and will initially cover six sectors: cement, iron and steel, aluminium, fertilisers and electricity. While some food and drink processing plants are included in the ETS (mainly those

with boilers, dryers, furnaces and heating equipment units with a thermal input of more than 20MW), food and agriculture is not included in the CBAM because most of the activity in this sector is not included in the ETS. Those plants that are included in the ETS are not deemed to be at great risk of moving abroad. Furthermore, direct agricultural emissions are nearly all emissions of methane and nitrous oxide rather than carbon dioxide and are not covered by the ETS.

The European Parliament in its resolution on the EU methane strategy called on the Commission to ensure a level playing field for EU producers by insisting that imports from third countries meet the same high standards as in the EU (European Parliament, 2021). However, as decarbonisation efforts in agriculture in the EU until now have been pursued largely on a voluntary basis through subsidies rather than by regulatory approaches, the case for extending CBAM to agriculture is not a strong one. The CBAM is envisaged as an alternative way to avoid carbon leakage in those sectors that are required to purchase allowances in order to continue to emit carbon dioxide. Such pricing mechanisms have not as yet been adopted in agriculture is heavily dependent on fossil fuel inputs (fertiliser, pesticides, fuel and electricity). These prices will increase as ETS allowance prices increase and the CBAM takes effect. There are fears that these higher input costs could reduce the competitiveness of European agriculture and lead to carbon leakage. On the other hand, higher prices on fossil fuel inputs are needed to encourage the necessary changes in farming practices to reduce greenhouse gas emissions from the agricultural sector.

The Commission has indicated that, following the recommendation by the European Court of Auditors to assess the application of the polluter-pays principle in agriculture, it will by December 2023 carry out a study to assess the potential of applying the polluter-pays principle to GHG emissions from agricultural activities (COM(2021) 800, p. 9). This could lead to agriculture being included in the future in some kind of cap-and-trade scheme to reduce emissions which could open the possibility for discussions on a CBAM for food. The Commission's CBAM proposal provides for a review before the end of 2026 which should also assess the possibilities to further extend its scope to other goods at risk of carbon leakage.

Other initiatives

Regulation for a Sustainable Food System Framework

The Commission has also flagged a proposed Regulation for a Sustainable Food System Framework in Q4 of 2023. It published the inception impact assessment for this proposal in November 2021 (European Commission, 2021e). The purpose of the initiative will be to establish new foundations for future food policies by introducing sustainability objectives and principles on the basis of an integrated food system approach. Its overall aim is to make the Union food system sustainable, whilst ensuring the integrity of the single market and promote a global transition based on common objectives and sustainability criteria. The Commission notes that "The problems have an EU and international dimension as food system actors

operate across borders. Food systems are transnational and failures are systemic." (European Commission, 2021f, p. 4). Thus, its inception impact assessment proposes as a sub-objective for the legislation "to avoid externalisation of unsustainable practices and to raise global standards, while remaining within planetary boundaries". A possible element of the legislation to be examined in the impact assessment is the introduction of "legitimate and proportionate requirements on sustainability for imports of food, in compliance with EU international commitments, particularly in the WTO" (European Commission, 2021f, p. 6).

Sustainable labelling initiative

The F2F strategy included several proposals designed to empower consumers to make sustainable food choices which would also apply to imported products. One proposal is for EU-harmonised mandatory front-of-pack nutrition labelling scheduled to be announced before the end of 2022. The Commission also announced that it will "consider proposing the extension of mandatory origin or provenance indications to certain products, while fully taking into account impacts on the single market" before the end of 2022. It further announced that it will "examine ways to harmonise voluntary green claims and to create a sustainable labelling framework that covers, in synergy with other relevant initiatives, the nutritional, climate, environmental and social aspects of food products". This sustainable labelling initiative is expected to be part of the new legislative framework for Sustainable Food Systems. The F2F strategy also noted that the Commission will consider "options for animal welfare labelling to better transmit value through the food chain" which might also become part of the proposed sustainable labelling framework.

Existing initiatives

Voluntary private standards

In some cases, the Commission proposals for mandatory due diligence build on and extend voluntary sustainability standards that have been introduced by supply chains themselves. Private standards are widely used by actors in supply chains to provide information that is of value to the buyer (Meier *et al.*, 2020). Standards can also be used for product differentiation, giving actors the possibility to garner additional rents from specialised market segments. An early example is GlobalG.A.P which began in 1997 as an initiative by European retailers to develop harmonised standards and procedures initially for food safety and traceability but now covering production methods, worker and animal welfare as well.⁵ Organic certification is also often given as another example of private standards given that it is voluntary, even though there is considerable public involvement in defining and enforcing the standard. Other private sustainability standards for supply chains as a whole have emerged in response to public and NGO pressure, to avoid reputational damage and, possibly, with a view to limiting the extent of mandatory regulation. Examples of private sustainability supply chain standards include those developed by the Roundtable on Sustainable Palm Oil,⁶ the Roundtable on

⁵ https://www.globalgap.org/uk_en/.

⁶ https://rspo.org/.

Responsible Soy,⁷ and the Global Roundtable for Sustainable Beef.⁸ Generally, these associations work by developing a set of sustainability criteria that members can use as a trademark to certify that they comply with these standards. They usually involve maintaining a traceability system and involve certification of compliance by private certification bodies. Other private sustainability standards have been developed by NGOs such as Fairtrade or Rainforest Alliance that private actors are invited to use. The added costs of certification are covered by the premium prices that consumers pay, sometimes supplemented by contributions by supply chain actors themselves or by development agencies which may cover some of the costs of certification by smallholder farmers.

The main criticism of voluntary standards is that, despite some evidence that they have had some impact (Meemken *et al.*, 2021), they have failed in their overall ambition to make supply chains sustainable. For example, deforestation associated with palm oil, soy and beef production continues apace and has even increased in some countries. Several reasons may help to explain this lack of impact. The criteria to be met by the standards may not be sufficiently rigorous (Cazzolla Gatti and Velichevskaya, 2020). The costs associated with meeting the standards may only be covered in some consumer markets, such as the EU, so it is not economic for companies to comply with these standards in exporting to other markets. Enforcement of certification standards may be weak. Whatever the reasons, the apparent failure of voluntary approaches to date explains the Commission's legislative proposals to introduce mandatory due diligence and to explore the rationale and feasibility of applying mirror clauses reflecting EU health, animal welfare, and environmental standards to imported food products.

Biofuel sustainability criteria

The Renewable Energy Directive 2009/28/EC (RED I) required that Member States had to ensure that the share of renewable energy in all forms of transport in 2020 was at least 10% of the energy used for transport in that Member State. At that time, biofuels (either bioethanol or biodiesel) were almost the only available forms of renewable energy in transport. RED I set down that only biofuels certified as sustainable could be taken into account for the achievement of the 10% transport target. The sustainability criteria set out in RED I included:

- that greenhouse gas emission savings from the use of biofuels must be at least 35%, rising to 60% for installations in which production started on or after 1 January 2017;
- that biofuels should not be made from raw material obtained from land with high biodiversity value (i.e. primary forest and other wooded land, nature protected area, highly biodiverse grassland);
- that biofuels should not be made from raw material obtained from land with high carbon stock (i.e. wetland, forested area, peatland);

⁷ https://responsiblesoy.org/.

⁸ https://grsbeef.org/.

 and that agricultural raw materials cultivated in the EU and used for the production of biofuels should respect the minimum requirements for good agricultural and environmental conditions and some statutory management requirements defined by the CAP.

Operators could show that the biofuel they placed on the market was sustainable either by fulfilling the requirements of national control systems or by making use of voluntary schemes recognised by the Commission. As the national control systems also made use of the certificates issued by the voluntary schemes, they effectively certified most of the sustainable biofuel placed on the EU market. A European Court of Auditors report found the assessments carried out by the Commission as the basis for the recognition of voluntary schemes did not adequately cover some important aspects necessary to ensure the sustainability of biofuels. "In particular, the Commission did not require voluntary schemes to verify that the biofuel production they certify does not cause significant risks of negative socioeconomic effects, such as land tenure conflicts, forced/child labour, poor working conditions for farmers and dangers to health and safety. Similarly, the impact of indirect land-use changes (ILUC) on the sustainability of biofuels is not covered by this assessment" (ECA, 2016, p. 8).

The revised Renewable Energy Directive (EU) 2018/2001 (RED II) reinforced the sustainability criteria of bioenergy through different provisions, including the negative impact that the production of biofuels may have due to indirect land use change. RED II sets an EU target for 2030 of at least 32% of renewable energy in total energy consumption, with a sub-target of 14% renewable energy in the transport sector that can be met by biofuels, electricity, or hydrogen. Biofuels produced from food or feed crops are limited in Member States to up to one percentage point higher than their share in final energy consumption in the road and rail transport sectors in 2020, subject to a maximum limit of 7%. Furthermore, limits are set on the extent to which high ILUC-risk biofuels and biomass fuels with a significant expansion in land with high carbon stock can be counted against these targets. These limits consist of a freeze at 2019 levels for the period 2021-2023, which will gradually decrease from the end of 2023 to zero by 2030. Fuels certified as low ILUC-risk are exempted from these limits.

In 2021 the Commission put forward a proposal to further amend the RED II Directive (COM(2021) 557). It would strengthen the current sustainability criteria by applying the existing land criteria (e.g. no-go areas) for agricultural biomass also to forest biomass (including primary, highly diverse forests and peatlands) while also extending them to small-scale biomass-based heat and power installations. This Commission proposal is currently under discussion by the co-legislators.

Other existing initiatives

These initiatives do not exhaust the portfolio of trade and domestic policy instruments available to the EU to achieve the external objectives of the European Green Deal. Additional measures can include trade diplomacy and engagement with trading partners in international institutions. Lessons can also be learned from legislation in place that addressed sustainability

standards prior to the Green Deal announcement. These include Regulation (EC) No 2368/2002 implementing the Kimberley Process certification scheme for the international trade in rough diamonds; and Regulation (EC) No 1005/2008 on illegal, unreported and unregulated fishing under which fisheries products from non-cooperating nations are banned from the EU market. Finally, financial support to compensate producers for the higher costs of higher production standards can be used as another policy option. This can ensure a level playing field for producers and avoid the diversion of consumption to lower-standard imports, though it will not directly contribute to promoting higher global standards.

3. The trade impacts of higher sustainability standards

Competitiveness impacts

Assessing the trade impacts begins by looking at the potential direct consequences of Green Deal standards for agricultural production and trade in the EU. Differences in standards and requirements with respect to the environment, climate and animal welfare can give rise to differences in production costs and thus have an impact on the competitiveness of European producers. Until now, differences in production costs due to differences in production standards between EU producers and their competitors have been relatively modest, at least in comparison with the many other factors that determine international competitiveness. However, producers argue that the change in production practices needed to achieve the Green Deal targets are much more significant and could lead to the emergence of much greater cost differences with producers in other countries if they do not also raise their standards at the same time. As a result, EU producers could face a more serious loss of competitiveness on both the EU and export markets.

Several studies have attempted to quantify the impacts on production and farm income of implementing several of the quantitative targets included in the F2F strategy (Barreiro-Hurle *et al.*, 2021; Beckman *et al.*, 2020; Bremmer *et al.*, 2021; Henning *et al.*, 2021). All predict a significant reduction in production although some project that the offsetting price increases may be sufficiently strong so as to lead to an overall increase in farm income (though not necessarily for all commodities). As a consequence of reduced production, these studies also project that imports from third countries will increase (Table 1).

| Study | Methodology | F2F targets taken into | Market impacts |
|---------------------------------------|-------------|---|--|
| | | account | |
| Beckman <i>et</i> <i>al.,</i> 2020 | CGE model | Landscape, nutrient losses, pesticide use, antimicrobials | 12% reduction in agricultural production with EU-only adoption. Gross farm income falls by 16% |
| Henning <i>et</i> <i>al.,</i> 2021 | PE model | Landscape, nutrient losses, pesticide use, organic area | despite significant price increases. Decreases in production ranging from -20% for beef, -6.3% for milk as well as -21.4% and -20 % for cereals and oilseeds, respectively, throughout the EU. Because of low assumed trade elasticities, price increases are so significant that there would be a significant positive impact on farm incomes. Positive environmental outcomes within the EU are offset by leakage |

Table 1. Market impacts of implementing selected F2F targets

| Study | Methodology | F2F targets taken into | Market impacts |
|----------------------|-----------------------------|--|---|
| | | account | |
| | | | effects in the case of GHG |
| | | | emissions, though changes in diets |
| | | | as foreseen in the F2F Strategy |
| | | | would reduce this leakage effect. |
| Barreiro- | PE model | Landscape, nutrient losses, | Decreases in production of 15% in |
| Hurle <i>et al.,</i> | | pesticide use, organic area | cereals, 12% in vegetables and |
| 2021 | | | permanent crops, 14% in meat |
| | | | supply and 10% in milk supply. |
| | | | Prices would increase significantly |
| | | | with heterogeneous impacts on |
| | | | farm income. Cereal farmers and, |
| | | | to a lesser extent, vegetable |
| | | | growers, would experience income |
| | | | losses while livestock farmers |
| | | | would gain in income, due to |
| | | | assumption of limited import |
| | | | response. Positive environmental |
| | | | impacts within the EU would be |
| | | | partially offset by leakage in the |
| Draman at | Even ant avenues of | Nutriont lossos resticido | case of GHG emissions. |
| Bremmer <i>et</i> | Expert survey of farmers | Nutrient losses, pesticide | Excluding the organic area target, |
| al., 2021 | combined with | use, <i>either</i> landscape or organic area | production declines of between 10% and 20% are projected. |
| | PE model, | organic area | Implementing the organic area |
| | focusing solely | | target on its own would reduce |
| | on crop | | production by less than 10% while |
| | production | | prices would increase by 13%. Farm |
| | | | income loss seen as 'likely' without |
| | | | specific details. |
| | | | specific details. |

Notes: CGE: Computable general equilibrium model. PE: Partial equilibrium model. Landscape refers to a minimum of 10% of UAA devoted to high-diversity landscape features by 2030. Nutrient losses refers to the target to reduce nutrient losses by 50% and fertiliser use by 20% by 2030. Pesticide use refers to the target to reduce pesticide use and risk each by 50% by 2030. Organic area refers to the target to have a minimum 25% of UAA under organic farming by 2030. Antimicrobial use refers to the target to reduce use of antimicrobials by 50% by 2030.

Source: Own tabulation.

The studies have been criticised on several grounds, including that they ignore potential adjustments in demand arising from the food policy measures included in the F2F strategy (shift to more plant-based diets particularly through the greater availability of alternative proteins, introduction of sustainability labelling, reduction in food waste) (European Commission, 2021b). Some dietary changes have the potential to reduce EU consumption and would thus mitigate the increase in imports foreseen in the modelling studies. However, there is scepticism about the effectiveness of the measures proposed to bring about significant dietary changes in a relatively short period. Also, some of the desired dietary changes, e.g. increased consumption of fruits, vegetables and nuts, would likely lead to increased import demand even in the absence of any reduction in EU production due to higher sustainability

standards. Further, none of the studies specifically include targets for reducing agricultural emissions or improving animal welfare that will likely require reductions in animal agriculture that go beyond those simulated in these studies.

These first-round impacts of the Green Deal have the potential to increase the demand for exports from developing countries, particularly for fruits, vegetables and nuts. The potentially positive impacts for third country exporters to the EU market include impacts on employment, incomes, food security and poverty. However, all else equal, lower production in the EU and stronger demand for imports would also push up world market prices and could further intensify problems of undernutrition for low-income households in both food-importing and exporting countries (Beckman *et al.*, 2020; Dekeyser and Woolfrey, 2021). EU imports can also result in environmental degradation or pollution (deforestation, biodiversity loss, competition for water in water-scarce countries, fisheries collapse) or may exacerbate social concerns (animal welfare, working conditions, land expropriation) where poor production conditions are associated with those imports.

Objectives of trade policy measures

These first-round or direct consequences of Green Deal sustainability measures for the competitiveness of EU producers drives the demand to introduce higher import standards. The principal issue of concern is that higher standards associated with the transition to more sustainable food systems will lead to a loss of competitiveness of EU producers, resulting in a reduction in EU production and an increase in imports. Thus, trade measures are intended to address one or more of the following objectives:

- To safeguard EU production capacity by ensuring that EU producers compete with imports on a level playing field, by requiring that imports should meet the same production and process standards as demanded of EU producers. A closely related political argument is to avoid that the potential negative impacts of higher production costs on domestic producers might lead to a watering down or slower implementation of higher sustainability standards within the EU.
- To avoid that EU consumers off-shore the negative environmental consequences of their consumption through existing or increased imports. This argument is especially relevant if higher production standards in the EU intended, for example, to reduce GHG emissions, to improve animal welfare, or to safeguard biodiversity, result in greater production in third countries with lower standards. There is then a risk that globally, GHG emissions could increase, more animals could experience suffering, and biodiversity loss might accelerate despite improvements within the EU.
- To raise global sustainability standards by leveraging access to the EU market to give a stimulus to exporting countries to raise their standards. As exporting countries will often design their production standards to meet the demands of the most stringent export market, in this way EU standards can also become *de facto* standards for exports to other markets as well.

A formal economic analysis of the impact of introducing sustainability standards for domestic producers and import standards for imported food products is presented in Annex 2.

The range of trade policy instruments

The trade policy measures available to ensure greater coherence between trade policy and Green Deal objectives can be classified into multilateral, bilateral and unilateral measures.⁹ These measures differ in their effectiveness in raising global environmental standards, in providing a level playing field for domestic producers, and in lowering the external virtual footprint of EU production and consumption.

Multilateral measures refer to raising international standards in bodies such as the Codex Alimentarius Commission or the World Organisation for Animal Health, or negotiating multilateral environmental agreements such as the Paris Agreement or the Stockholm Convention on Persistent Organic Pollutants.

Bilateral measures refer to introducing sustainability clauses in free trade agreements or supporting the transition to more sustainable practices in third countries through financial and technical assistance.

The EU also has a wide range of unilateral measures at its disposal, of which mandatory due diligence and mirror clauses are seen as the most effective, and as we have seen figure prominently in recent Commission initiatives as well as the French Presidency priorities. Labelling is another example of a unilateral measure, as is financial compensation to affected producers.

The gold standard in terms of providing a level playing field is to reach an international agreement that sets high minimum standards and has a credible enforcement mechanism. This both raises global standards, avoids the risk that EU consumption leads to unwanted environmental pressures in exporting countries, and ensures a level playing field. The EU is a party to many multilateral environmental agreements.¹⁰ The problem with international agreements is that they tend to the lowest common denominator. Few have a credible enforcement mechanism and many rely principally on peer pressure. Very often, EU domestic standards go beyond those agreed at the international level. Other measures will then be necessary to achieve the desired objectives.

Bilateral measures rely on voluntary agreements between two parties. Exporting countries might accept to enforce higher standards on exports to the EU in return for greater preferential access to the EU market (the special tariff rate quota for hormone-free beef, or

⁹ Wojciechowski, J., 2022, ""Improving coherence between the Green Deal, the CAP and EU Trade Policy", presentation to Agriculture and Fisheries Council meeting, Brussels, 21 February 2022.

¹⁰ See the list on this Commission web page 'Multilateral environmental agreements', available at https://ec.europa.eu/environment/international_issues/agreements_en.htm.

the so-called 'Hilton' quota for beef imports reserved for animals exclusively raised on pasture since weaning, are examples). The debate around EU bilateral measures is that, in previous free trade agreements, the EU has offered preferential access without securing sufficiently robust sustainability commitments in return. The criticism is made, in particular, that the sustainability commitments offered by the EU's trading partners have been of a best endeavours nature and are not really enforceable because of the absence of sanctions (Bronckers and Gruni, 2021). Based on bargaining theory, one would expect trading partners to accept a stronger sustainability commitment only if the EU is prepared to pay for this in terms of giving greater market access in return. There is thus an inherent conflict when using bilateral measures between two of the objectives for Green Deal trade measures of protecting EU producers from greater competition and raising sustainability standards in exporting countries.¹¹

Unilateral measures take two main forms: (mandatory) due diligence and mirror clauses (also referred to as reciprocity requirements). Both have the objective of preventing imports that do not meet production standards decided unilaterally by the EU but differ in the way of achieving this. Due diligence rules put the onus on business and national corporate regulators to ensure compliance, while mirror clauses require enforcement at the EU border through customs and other controls, e.g., under the Official Controls Regulation. The pros and cons of which approach to use have been debated when it comes to the human rights issue of preventing imports produced using forced labour. Campaigners want to use trade legislation (with the potential this has to induce retaliatory actions) as opposed to due diligence (where compliance is left to company sourcing policies which are less likely to run foul of WTO rules but are also harder to enforce).¹² The following chapter focuses on mirror clauses as an example of unilateral trade measures.

¹¹ This tension may be one of the reasons for the slow progress being made to conclude free trade agreements between the EU and Australia and New Zealand.

¹² Aarup, S., <u>Ban on Uyghur imports becomes EU's hot potato</u>, Politico.eu October 15, 2021.

4. Considerations around the use of mirror clauses

Chapter 3 discussed the variety of trade policy measures that are available to pursue greater coherence between agricultural policy, trade policy, and Green Deal objectives. The recent political debate within the EU has emphasised greater use of unilateral measures such as mirror clauses. Each type of measure listed in Chapter 3 will differ in their effectiveness in achieving the stated objectives for trade policy measures set out in that chapter and will also be associated with different kinds of risks. For mirror measures to be the appropriate trade policy response, the benefit/risk ratio should be superior to the alternatives. This chapter identifies some of the relevant issues that should feed into that analysis.

Is the level playing field argument justified?

Mirror clauses are justified first as a way of establishing a level playing field with imported products. They are advocated in part on the basis that they are intended to protect production capacity in the EU. This argument can be broken down into a number of elements. Are EU standards indeed higher than those in other countries? Do differences in standards actually lead to a significant competitive disadvantage? Are not EU producers already subsidised and compensated through the CAP to adopt such standards while producers in third countries are not? Will mirror clauses be effective in protecting EU production?

That EU producers must meet higher standards is often taken as self-evident in the EU debate. Indeed, EU standards have been raised significantly in recent decades, including in terms of traceability requirements for food safety, animal welfare legislation, the removal of toxic pesticides, requirements to avoid the pollution of surface and ground water, and requirements to safeguard habitats and biodiversity. EU producers are regulated in terms of agricultural practices, but this does not necessarily translate into high sustainability outcomes. The environmental footprint of EU agriculture remains high, particularly in comparison to African agriculture (Figure 2). The EU greenhouse gas (GHG) emissions footprint has been relatively stable in the past three decades while it has grown in other regions. Nonetheless, the EU has the highest GHG emissions per hectare of agricultural land, the second highest nitrogen use per hectare of cropland, and also relatively high use of pesticides per hectare of cropland. For all three indicators, the footprint of African agriculture remains well below both the EU figures and the global averages.

Figure 2. Sustainability indicators by region



Source: Own construction based on FAOSTAT Sustainability indicators domain.

A second issue is whether, to the extent to which there are higher standards in the EU, they increase the costs of production of EU producers and lead to a loss of competitiveness. A study for DG AGRI based on 2010 data found that compliance costs for EU farmers in the areas of food safety, animal welfare and the environment amounted on average to between 5 and 10% of production costs for pig and poultry farms against an average range of 2-3% for dairy, beef and sheep meat, and between 1-3.5% for arable farms (CRPA, 2014). Yet despite these costs of complying with higher standards, the evidence suggests that, until now, any adverse impact on competitiveness has been limited.

Figures from DG AGRI's annual market outlook report show, on the contrary, that EU agriculture has become more competitive over time (European Commission, 2021a). Exports of cereals have increased from 24.4 million tonnes in 2005 to 42.9 million tonnes in 2020; net exports of fresh dairy products have grown from 184,000 tonnes to 1.0 million tonnes during the same period; exports of cheese have increased from 863,000 tonnes to 1.4 million tonnes; exports of skimmed milk powder from 194,000 tonnes to 831,000 tonnes; net trade in beef has changed from net imports of 38,000 in 2005 to net exports of 285,000 tonnes in 2020; net trade in pigmeat has increased from 2.0 million tonnes; and exports of wine increased from 18 million hectolitres in 2005 to 32 million hectolitres in 2020. While exports of some products – sugar, butter, whole milk powder – have fallen over this period, these figures do not support the view that EU agriculture has been losing competitiveness on world markets despite the gradual raising of standards.

There are several explanations why compliance costs do not necessarily damage the position of EU producers on world markets. Standards raise the quality and attractiveness of EU food products which enable the higher costs to be recouped along the food chain. Similar legislation may be introduced in the EU's trade competitors as awareness increases of the desirability of higher standards. Standards may result in higher costs but they may also (e.g., in the case of animal welfare) be mitigated by gains in productivity. Cost differences in environmental standards may also be outweighed by changes in other factors affecting cost competitiveness, including changes in labour costs, interest rates, exchange rates, trade policies, and technical progress. However, the empirical studies reviewed in Chapter 3 suggest that the further increases in health, environmental, climate, and animal welfare standards proposed under the EU Green Deal will be such that competitiveness effects in the future will be difficult to avoid.

Also relevant to the level playing field argument is whether farmers are financially compensated for the costs of conforming to the higher standards. Compensation is evidently provided in the case of voluntary measures, but even the compliance costs of mandatory measures can be seen as offset through the considerable public support provided to farmers in the EU, both in the form of existing tariff protection as well as public transfers through Pillars 1 and 2 of the CAP. The European Parliament recognised this in its resolution responding to the publication of the Commission Communication *The Future of Food and Farming* in November 2017 that set out its vision for the CAP post 2020. The Parliament noted:

"whereas direct payments provide the first substantial layer of stability and a safety net for farm incomes, as they represent a tangible portion of annual farming incomes, and even as much as 100% of farm revenues in certain regions; whereas these payments should be continued in order to help farmers compete on a level playing field with third countries" (European Parliament, 2018). Third countries might well argue, given this level of public transfers to EU agriculture, there is no case for any further levelling of the playing field through import barriers.

The extent to which mirror clauses can be effective in protecting EU production capacity and avoiding adverse competitiveness effects depends very much on the EU's net trade position in specific commodities. Mirror clauses will be most effective for commodities where the EU is a significant importer with zero or minor exports. This is because they act as a non-tariff barrier against imports. However, for commodities where the EU is a significant exporter (and this is the situation for many of the more important commodities produced in the EU) mirror clauses will hardly have much impact.¹³ The impact of a loss in competitiveness will be reflected in a lower volume of exports and mirror clauses can do nothing to prevent this. Only if the loss in competitiveness was sufficient to turn the EU from a net exporter to a net importer would a mirror clause have traction. Commodities where the EU is a large net importer include protein crops and coarse grains mainly used for animal feed. Here tighter pesticide standards could potentially limit imports and drive up the domestic market price for these commodities. However, any gains to crop farmers in the EU would likely be offset by the loss of competitiveness of livestock farmers due to the higher cost of animal feed.¹⁴ A reduction in animal numbers in the EU is an implicit part of the F2F strategy and this outcome might thus be welcomed as contributing to the broader objectives of the European Green Deal by encouraging a shift from animal to plant-based production in the EU. However, mirror clauses are being promoted to farmers as a way of preventing 'concurrence déloyale' and protecting production within the EU. While a catchy political slogan, their ability to achieve this objective might be more limited than often assumed.¹⁵

¹³ The same criticism has been levied by EU industrial sectors against CBAM which provides protection against imports but, unless the price of carbon allowances is rebated on exports, does nothing to improve the competitiveness of EU products on export markets relative to goods produced in countries with a lower carbon tax rate.

¹⁴ The impact would be similar in economic terms to the inability to import coarse grains and oilseeds from Ukraine following the Russian invasion in February 2022 which has also led to a supply shortage and higher prices for animal feed on the EU market. It is worth observing the subsequent responses. Trade associations pointed out that stricter MRLs in the EU compared to those in third countries or compared to Codex Limits could pose problems to source commodities from other exporters. Member States that face acute shortages can make use of Article 18(4) of the MRL Regulation which enables them to set temporary national MRLs very quickly, subject to certain conditions (European Commission, 2022c). Spain made use of this emergency authorisation to set higher national MRLs for two banned substances, chlorpyrifos and dichlorvos, and higher than those recommended by EFSA on health grounds, in order to safeguard its livestock industry. The Commission subsequently wrote to Spain seeking the rationale for setting these MRLs higher than the recommended level (Galindo, 2022).

¹⁵ While this paragraph sketches out the broad impacts that mirror clauses would have on EU production, simulation modelling would be required in order to determine the likely outcome of these conflicting drivers.

With respect to the levelling up argument, mirror clauses would also apply to imports of products that are not produced in the EU, for example, tropical products, where no concerns about EU competitiveness arise. In this case, EU consumers will face higher prices and more limited supplies without any corresponding benefit to EU producers. EU consumers in their role as citizens may still feel better off if the EU mirror clauses induce changes towards more sustainable production practices in exporting countries, particularly in the case of global environmental goods, which EU citizens also value. However, the absence of any impact on EU production capacity or the intent to avoid the displacement of production nonetheless suggests that the use of mirror clauses in these cases might be evaluated differently. Given that vulnerable developing countries are important exporters of non-competing products that are not produced in the EU, we return to this argument in the final chapter.

How effective will mirror clauses be in raising standards in third countries?

If the objective of mirror clauses is to raise sustainability standards in exporting countries, it is relevant to ask how effective they might be in achieving this objective, particularly given the other trade policy instruments available to the EU to achieve this objective. The argument for resorting to a unilateral measure such as a mirror clause is that multilateral and bilateral efforts have not been sufficiently effective in achieving the level of sustainability standards that the EU deems to be necessary. The attraction of a unilateral measure is that the EU alone can decide on its strictness, but that in itself is not sufficient to ensure that it will be effective.

The effectiveness of a unilateral intervention such as mirror clauses will depend on the reaction of the exporting country. Countries may raise their domestic standards to comply with the EU requirements and to maintain access to the EU market. Or they may decide to forego supplying the EU market on the grounds that it is not feasible or too costly to meet the EU standards and instead divert supplies to less demanding markets. It is also important to take account of the existence of relevant private standards. These are often more demanding that public standards so some of the trade impacts of higher public standards may already be factored into existing trade flows.

Evidence that strict import standards can lead to the raising of standards in exporting countries comes from experience with Maximum Residue Limits (MRLs) in pesticides, where countries are able under WTO rules to apply stricter standards to protect consumer health than those agreed internationally provided the standards are justified by a scientific risk assessment. Canadian grain, oilseed and pulse producers introduced a 'Keep it Clean' campaign given the introduction of low import tolerances for particular pesticides (e.g. glyphosate) in import markets.¹⁶ Because exporting countries will usually seek to comply with the standards of the importing country with the highest standards, stricter EU standards could even be applied to a country's exports to other markets and thus be amplified in their effect.

¹⁶ https://keepitclean.ca/.

Whether an exporting country is willing to conform to EU standards or not will presumably depend on (a) how costly compliance is, and (b) the importance of the EU as an export market for its products. Where compliance is costly and the EU is not a very important market, we are likely to see diversion to markets with less demanding sustainability standards. However, such markets are, by construction, less remunerative (otherwise they would already be an export destination) so the EU mirror clause will result in a loss of export revenue. This loss will be greater, the larger are the absolute value of sales of products affected by the mirror clause. Some countries may be tempted to seek permission to impose retaliatory tariffs to compensate for the loss of export revenue using the dispute settlement procedures of the WTO if the EU measure is seen as illegitimate.

Which sustainability requirements are relevant?

Another issue is which sustainability standards might be addressed through mirror clauses? There are two possible criteria. One criterion would put most weight on the level playing field objective. This would prioritise those standards that have the highest compliance costs for EU producers and thus are likely to have the greatest adverse competitive impact. The drawback here is that the justification requiring imported products to also comply with these practices rests on an overtly protectionist motive to which third countries might reasonably object. As Commissioner Wojciechowski has warned, the objective of mirror clauses cannot be based on economic considerations but must be in full compliance with WTO rules.¹⁷

An alternative criterion would emphasise more that the standards required of imports are intended to raise global environmental standards and particularly standards to protect global environmental goods. The crucial distinction would then become whether the sustainability standards that EU farmers must observe primarily benefit EU citizens (an example might be restrictions on pesticide or fertiliser use designed to safeguard the quality of drinking water, where it is not evident that EU citizens have a legitimate interest to decide if other countries should be obliged to introduce the same standards) or whether they also play a role in protecting a global environmental good (for example, restrictions on the use of antimicrobials in animal husbandry to avoid the build up of antibiotic resistance which has clearly a global significance and is thus also very relevant for EU citizens). The Commission in its declaration attached to the CAP 2023-2037 agreement was careful to state that its intention is "to take into account environmental concerns of a global nature in conformity with WTO rules when assessing import tolerance applications or when reviewing import tolerances for active substances no longer approved in the EU" (bolding added). There is a similar emphasis in other Commission statements and commitments. The presumption is that it will be easier to defend import restrictions based on production practices in the WTO if they are linked to safeguarding global environmental goods rather than either local environmental goods or purely protectionist motives.

¹⁷ Wojciechowski, J., 2022, ""Improving coherence between the Green Deal, the CAP and EU Trade Policy", presentation to Agriculture and Fisheries Council meeting, Brussels, 21 February 2022.
Another relevant distinction is between import standards that seek to address global health and environmental concerns (such as antibiotic resistance, biodiversity loss, or greenhouse gas emissions) and import standards that reflect EU ethical concerns, such as animal welfare standards or labour standards. While both sets of concerns can give legitimate grounds to restrict access to the EU market, the greater role that value judgements play in ethical concerns can make it more difficult to reach an international consensus on what minimum standards should be.¹⁸

Regardless which criterion might be given most weight in selecting sustainability standards that might be reflected in mirror clauses, there is the further issue of deciding on the scope of any mirror clause that might be introduced. EU farmers must observe a wide range of sustainability standards for agricultural practices covering the environment (e.g. protection of groundwater; quality of water, air and soil; conservation of habitats and species), animal welfare (e.g. housing systems; space allowances; minimum roughage levels in feed), and food safety (e.g. identification and registration of animals; implementation of food traceability systems; prohibition of hormones) (examples taken from CPRA, 2014). This study identified a group of 40 EU Directives and Regulations, as well as the standards of Good Agricultural and Environmental Condition (GAECs) that beneficiaries of CAP direct payments must observe, which directly affect farmers in the EU (a complete list is given in Annex 1 of that report).

This wide number of sustainability standards that apply to EU farmers raises the question whether all of these standards should also be required of imported products or only a selection of them. If the latter, which would be the relevant standards? And if countries use different standards to achieve the same objective, how would such differences be evaluated (this issue is known as *equivalence* in the literature on regulatory co-ordination).

Referring to the use of antibiotics, the Veterinary Medical Products Regulation expressly bans the import of products where antibiotics have been used for growth promotion purposes or where antibiotics on a critical list reserved for human medicine have been used in animal production. But EU producers also face other restrictions on the use of antibiotics such as for preventative use that are not included in this mirror clause. In the case where EU animal welfare standards are applied to the slaughtering of animals in third countries, there is express provision to recognise equivalent standards based on the standard of the World Organisation of Animal Health. Similar issues of coverage and definition will arise in setting mirror clauses for other sustainability criteria.

¹⁸ This statement is not meant to deny that value judgements also play an important role in determining the priority that might be given to reducing global health and environmental risks, or to ignore the contribution that animal welfare science makes to determining the needs of the main farm animal species. But value judgements inevitably play a larger role in ethical concerns.

Differing risks and perceptions of risks

Food safety and environmental standards have evolved differently around the world as countries respond to different specific risks and prepare for emerging challenges. Standards may differ because countries interpret the science differently (which in turn may be a function of the strength of vested interests affected by these standards in each country), because of their different exposure to specific risks (pests and diseases in tropical countries are different to those in Europe), or because of differences in the willingness or ability to shoulder risks (risk preferences). All of these factors can account for the different approaches to risk management chosen by countries.

The subjectivity of risk management with respect to food safety is particularly evident in the EU which, since the General Food Law in 2002, has separated the function of risk assessment (a procedure based on science undertaken by EFSA) from that of risk manager (in the form of the Commission assisted by the Member States that undertakes a more political appraisal in deciding on the steps to take to manage the risk). The General Food Law EU legislation recognised that scientific risk assessment alone cannot always provide all the information on which a risk management decision should be based, and that other factors relevant to the matter under consideration should legitimately be taken into account including societal, economic, traditional, ethical and environmental factors and the feasibility of controls. While the universal significance of a particular sustainability standard may seem obvious to us in Europe, other countries will not always see the issue in the same way for these reasons. This may be especially the case for ethical concerns, such as animal welfare and labour standards, where differences in values play a larger role.

Different countries have different agronomic, soil and climate conditions, as well as different pest and disease pressure, and thus specific agricultural practices will differ across regions. Countries have different risk preferences and tolerances and may make the trade-off between production yield (economic livelihoods) and health outcomes differently to the EU simply due to differences in levels of development. The UN Sustainable Development Goals include dimensions of economic, social and environmental sustainability. Even if countries accept that all of these are important, the particular weightings they choose to put on these different dimensions may well differ from the EU's weightings. Differences in these contextual characteristics do not necessarily justify the continued use of these practices if they result in damage to global environmental goods (for example, if the use of neonicotinoids damage bee populations in Europe, it is very likely they cause similar damage in other countries, despite differences in pest or disease pressures) or involve social or working conditions that are seen as unacceptable according to minimum international standards. The EU may still be justified in limiting access to its market for these reasons.

However, two other factors complicate this assessment. The first is that a mirror clause is a blunt instrument that affects all exporting countries equally. But international agreements have long accepted that not all countries have contributed equally to the decline and deterioration of global environmental goods. For example, with respect to the climate stabilisation objective in the Paris Agreement, all signatories have accepted that they should work towards this goal, but it also includes the principle of common but differentiated responsibility that requires greater and faster efforts by more developed countries that historically have contributed more to climate change. The World Trade Organisation (WTO) agreements include the principle of special and differential treatment which also recognises that developing countries may not be able to shoulder the same obligations and responsibilities as developed countries with respect to trade policy commitments. These differentiated approaches are lost when mirror clauses are used.

The other complicating factor is that mirror clauses, by definition, are practice-based rather than outcome-based. Another country may have regulations in place to achieve an objective similar to the EU but may have decided on a different set of measures that may not include the particular practice required of EU producers. International trade law has introduced the concept of *equivalence* in these circumstances. For example, Article 4 of the WTO SPS Agreement on equivalence states that "Members shall accept the sanitary or phytosanitary measures of other Members as equivalent, even if these measures differ from their own or from those used by other Members trading in the same product, if the exporting Member objectively demonstrates to the importing Member that its measures achieve the importing Member's appropriate level of sanitary or phytosanitary protection". Because the debate around mirror clauses in the EU has been conducted at a very conceptual level, questions around how this concept of equivalence might be addressed in implementing mirror clauses have not yet been addressed.

Both the WTO SPS and TBT Agreements recognise that every country has the right to take the measures it deems necessary to ensure the protection of health and the environment, subject to constraints set out in those Agreements. Whether this right refers solely to the protection of the health of a country's own population, plants and animals and its own environment, or whether it also extends to the protection of natural resources globally, has been adjudicated in several high-profile WTO disputes, including the 'shrimp-turtle' case (DS58 and DS61), which dealt with a US import ban on shrimp caught in ways that could hurt endangered sea turtles, and the long-standing row between the US and Mexico over Washington's 'dolphinsafe' tuna labelling practices and their implications for Mexican fishers (<u>DS381</u>). Until now, the EU has set MRLs for pesticide residues to ensure that imported products do not pose a health risk to its own population. Approval of active substances in addition takes account of any impacts they may have on the EU's own environment. But some of the stricter MRL limits proposed in the EU would also regulate pesticides based on their impact on the environment in the exporting country. For example, the EU has banned the use of certain neonicotinoids because they pose risks to bees. Under a mirror clause, exporting countries would also be unable to use these neonicotinoids not because they pose a threat to be populations in the EU but because the EU believes it is also important to protect bee populations in the exporting country.

Exporting countries would be required to adjust their practices to meet these lower EU MRLs in order to protect the health of their bee populations because this is the desire of EU citizens

rather than something that has been decided through their own institutions. This would also be the case even for crops, such as coffee, that are not grown in the EU and where the 'level playing field' argument is not relevant. Many developing countries find this extra-territorial reach of EU legislation problematic.

Incidence of costs

Mirror clauses are politically popular because it appears as if their costs are borne by foreign producers. Foreign producers indeed lose out (hence their incentive for retaliation). However, given that for most products EU self-sufficiency rates are high and imports make up only a small share of domestic consumption, the main costs will be borne by EU consumers. The principal impact of mirror clauses will be to increase the transfer from EU consumers to EU producers because of higher prices. Mirror clauses work because they restrict imports in a situation where EU production is falling (see Annex 2) and thus permit EU producer prices to increase by more than would occur without these clauses (the F2F impact studies cited in Chapter 3 predict substantial price increases would follow achieving the supply-side F2F targets even without considering the use of mirror clauses). This is not in itself an argument against mirror clauses. EU consumers in their role as citizens may be willing to pay this higher price because they value the global environmental benefits. Higher prices for certain food products (e.g. animal source foods) may also be consistent with the Green Deal ambitions for dietary change but have the further effect of maintaining their production in the EU (albeit in a more sustainable way). However, for other food products where the Green Deal ambition is to increase consumption (e.g. fruits, vegetables, pulses and nuts), mirror clauses could make the achievement of this ambition more difficult.

An important objective of the Farm to Fork Strategy in the Green Deal is to bring about a shift towards more sustainable diets. Current dietary intakes in the EU lead to poor health outcomes and are associated with an unsustainable environmental footprint. A major element in the strategy is to increase the consumption of fruits and vegetables. The EU is responsible for around 50% of worldwide imports of fresh fruits and vegetables. It is much more self-sufficient in vegetables than it is in fresh fruit. Vegetable imports from developing countries mainly concern counter-seasonal vegetables such as tomatoes, beans and peppers, and a selection of tropical vegetables. Developing countries play a much more important role in supplying tropical fruits. The EU fruit import from developing countries increased from ϵ 12.8 billion in 2016 to ϵ 16 billion in 2020. The value and growth are significantly larger than the relatively stable ϵ 2.6 billion import from other non-EU countries in the rest of the world.¹⁹ A particular risk from the introduction of more stringent import standards without adequate transition periods is that exporters are no longer in a position to supply the EU market, leading to higher prices both for vegetables but particularly fruits on the EU market. This would run

¹⁹ Netherlands Ministry of Foreign Affairs Centre for Promotion of Imports from Developing Countries (CBI), Exporting fresh fruit and vegetables to Europe, available at https://www.cbi.eu/market-information/fresh-fruit-vegetables/what-demand.

counter to the Green Deal objective to increase the consumption of these products by making their prices more attractive.

Risks of retaliation

The arguments for taking steps to require imported produce to meet the same standards as EU producers or to introduce environmental criteria in setting MRLs are partly to stimulate higher global standards but also to protect EU farmers from competition from imports produced at lower cost due to practices not permitted in the EU or due to easier access to active substances banned in the EU. However, there is a risk that the outcome is the opposite to that intended. If third countries are sufficiently aggrieved by and question the legitimacy of the EU actions, it is open to them to make a complaint to the WTO and ultimately to seek to have that complaint adjudicated through the WTO dispute settlement mechanism. The EU insists that the measures it plans to introduce will be consistent with its WTO obligations, but there is the possibility that a dispute panel could side with the complainants and find against the EU.

The WTO does not have the power to require the EU to change its regulations. The EU retains the right to set the regulations that it sees fit. However, if the EU were found to be in breach of its WTO commitments to third countries, these countries have the right to exercise retaliation by withdrawing trade concessions equivalent in value to the market access that they have lost. This would see the re-imposition of tariffs on EU agri-food exports to these markets. The precedent case in this respect is the WTO beef hormones dispute. The EU prohibited the import of beef produced with the use of growth hormones but a WTO dispute panel found that it had not based this measure on a risk assessment. This gave the complaining countries the right to impose additional tariffs on EU exports to their markets, a situation that was eventually resolved when the EU agreed to open a special quota for nonhormone-treated beef at a preferential tariff rate for the exporting countries. The risk that steps taken to make import standards more stringent could result in a similar outcome need to be factored into EU decision-making. This is not an argument that the EU should not bear this cost in its attempt to raise global sustainability standards. But it is relevant to the argument that higher standards on imports are necessary to protect the competitiveness of EU producers if indeed the opposite turns out to be the case.

Conclusions

The conclusion of this discussion is that mirror clauses may be an appropriate instrument in certain circumstances, but their relevance should be decided on a case-by-case basis taking the six principles set out in this chapter into account. A general prohibition on imports that may fail to meet EU standards in one or another dimension is neither feasible nor desirable. The EU should carefully assess the benefits and risks of mirror clauses on an individual basis based on the six principles and following a full impact assessment.

5. Maximum residue limits (MRLs) and mirror clauses

Previous chapters, in discussing the political debate around the external dimension of the European Green Deal in the agri-food sector, have highlighted the various commitments made to make restrictions on pesticide residues more stringent. The Farm to Fork strategy includes further ambitious targets to reduce the use of pesticides in the EU. Target 1 is to reduce by 50% the use and risk of chemical pesticides by 2030. Target 2 is to reduce by 50% the use of more hazardous pesticides by 2030. This has fuelled the debate whether it is reasonable to allow access to the EU market to products produced with the aid of pesticides that are no longer available to EU producers. From the perspective of low-income developing countries, pesticide regulation will likely be the trade policy intervention that has the greatest impact on their exports, given the composition of those exports shown in Figure 1. This chapter explores the implications of setting stricter pesticide standards for developing countries. To understand these implications, it is necessary to have a full understanding of how pesticide residues are currently regulated in the EU.

The EU now has one of the most stringent regimes for plant protection products (PPPs) in the world. A consequence of this is that the number of active substances approved for use by EU farmers as herbicides, fungicides, pesticides and other PPPs is now much less than in third countries with a similar scale of agricultural production (European Commission, 2020c). Under the predecessor Directive 91/414/EEC to the Pesticides Regulation (EU) 1107/2009 the number of approved active substances decreased by more than 50%. A further 22 active substances were removed between 2011 and 2018 due to decisions not to approve, not to renew the approval, or to withdraw the application for approval because of health- or environment-related concerns (European Commission, 2020c).

Farmers in third countries can continue to use PPPs authorised under their domestic regulations that are not approved in the EU. Products using these PPPs can be exported to the EU provided they satisfy a risk assessment that they pose no threat to consumer health or safety. There is now a strong political momentum to tighten this requirement by introducing a ban on the import of foods treated with pesticides not approved in the EU ('mirror clause'). Pesticides in this context also includes other PPPs such as herbicides and fungicides covered by the Pesticides Regulation.

A related issue is that, in setting 'import tolerances' (see explanation below) the criteria used to establish the Maximum Residue Limits (MRLs) only take into account health concerns but not environmental concerns. Under the Pesticides Regulation, in addition to health grounds, adverse environmental impacts can be a reason to refuse authorisation to use an active substance in the EU. For example, in 2013 the European Commission restricted the use of three neonicotinoids – imidacloprid, clothianidin and thiamethoxam – for most outdoor uses with the exception of winter cereals based on a risk assessment of the European Food Safety

Authority (EFSA) in 2012.²⁰ The applicants of the three substances were obliged to provide further data ('confirmatory information') in order to confirm the safety of the uses still allowed. Following assessment of this confirmatory information as well as evidence collected through an open call, EFSA concluded that the remaining outdoor uses could no longer be considered safe due to identified risks to bees (EFSA, 2018). The Commission Implementing Regulations banning all outdoor uses of these three active substances were published in May 2018. Calls have been made to require that similar environmental considerations should be part of the assessment of 'import tolerances' for neonicotinoids and other active substances in future. The introduction of a mirror clause would in any case imply that environmental impacts assessed in Europe would automatically become standards that applied to imports as well.

PPP regulation in the EU

The F2F strategy commits to reduce the use and risks of chemical pesticides. However, the Commission notes in its REFIT evaluation of pesticides regulation that an EU agriculture entirely without pesticides is not a realistic objective, including in organic farming where a limited number of pesticides may also be used. It sees the use of pesticides as an essential tool to reach the EU's objectives on plant health, food safety and food security. Its view is that the aim of EU legislation on pesticides is therefore "not to eliminate pesticides but rather to minimise their impact on human health and the environment through reduced dependency on pesticides, alternative methods and through increased use of low risk and non-chemical pesticides" (European Commission, 2020c). To ensure this objective, a regulatory framework for the authorisation and use of 'active substances' has been put in place.

Two key EU Regulations set out the EU's legislative framework for PPPs and their residues. Regulation (EU) 1107/2009 (Pesticides Regulation) sets out the framework for placing active substances and PPPs on the EU market. This Regulation specifies that a PPP cannot be authorised in any Member State unless the active substance(s) it contains has been approved at EU level and unless Maximum Residue Limits (MRLs) are set for the relevant crops. Thus pesticides are subject to a two-tiered approval process under the Pesticides Regulation:

- Active substances, i.e. the chemical elements and their compounds as they occur naturally or as produced by manufacturing, are approved at EU level.
- Pesticide products containing these active substances are then authorised separately by Member States.

For example, whether or not to approve an active substance such as glyphosate is decided at the EU level. However, once an active substance is approved by the EU, each Member State must then separately authorise the use of any pesticide containing the approved active substance (e.g., while the EU approves glyphosate, Member States separately authorise the

²⁰²⁰ This decision was challenged by Bayer and Syngenta but confirmed by the European Court of Justice in a 2018 judgement, and was further upheld on appeal by the Court in 2021.

use of Roundup[™], a herbicide containing glyphosate). If a pesticide is not approved for domestic use by a Member State, farmers in that Member State are not legally permitted to use that pesticide. Already as a result of the authorisation process, there is the potential for EU farmers to face different levels of competition.

In order for an active substance to be approved at the EU level, it must be demonstrated that the substance is not harmful to human health, animal health or the environment. While the initial EU legislation on the authorisation of PPPs was based on a risk assessment, Regulation 1107/2009 introduced hazard based criteria, whereby active substances can only be approved if they comply with both the hazard criteria as well as the risk assessment criteria. Substances identified under the hazard criteria include those that are mutagenic, carcinogenic or toxic to reproduction, have endocrine (hormone) disrupting properties that may be harmful to humans, or are substances considered to be persistent organic pollutants (POPs), or with properties that trigger related EU criteria (persistent, bioaccumulative, toxic; or very persistent, very bioaccumulative). The last criteria mean that the EU has incorporated the obligations of the Stockholm Convention on Persistent Organic Pollutants into its legislation on the approval of PPPs.²¹ These are referred to as 'cut-off criteria' as they exclude such substances from approval *a priori.*²²

The initial approval of an active substance is valid for a limited period up to a maximum of 15 years and the approval of an active substance needs to be reviewed periodically. When Directive 91/414/EEC, which introduced uniform regulatory standards in the EU, was enacted, all previously existing active substances were reviewed against the harmonised EU principles established by that legislation. As already noted, this led to a halving of the number of approved active substances. All active substances approved under that earlier legislation are now undergoing a further review to ensure that they are considered against the latest standards and that they meet the criteria set out in the 2009 Pesticides Regulation. The timing of the reviews is set out in successive work programmes and the procedures are set out in Commission Regulations.²³ Revised rules governing the renewal process were introduced in 27 March 2021 when the Transparency Regulation (EU) 2019/1381 came into effect. This Regulation is intended to improve the transparency of EU risk assessment in the food chain, as well as the reliability, objectivity and independence of the studies used by EFSA when arriving at its recommendations.

Regulation 396/2005 (the MRL Regulation) controls pesticide residues and sets out the framework for setting MRLs in food and feed. The key aim of this Regulation was to support intra-community trade in the single market by establishing EU-harmonised MRLs and

²¹ For more information on the Stockholm Convention, see http://chm.pops.int/.

²² Although use of the term 'cut-off criteria' implies a black or white decision, the determination whether a particular substance falls within the hazard-based criteria or not may still be controversial.

²³ Details of the renewal process are provided on the Commission web page <u>Renewal of Approval</u>. The details of the renewal procedure are set out in <u>Commission Implementing Regulation (EU) No 2020/1740</u> that applies as from 27 March 2021 and replaces the previous procedure under <u>Implementing Regulation (EU) No 844/2012</u>.

repealing Member State MRLs. The Regulation sets out the detailed process for setting MRLs, with consumer safety being a key evaluation area.

A feature of the EU's system is the separation between risk assessment and risk management. Regulatory agencies in the Member States and EFSA at the EU level perform the risk assessment, but the final step in the approval of active substances and in setting MRLs involves voting by bodies made up of Member States' representatives, in this case the technical experts on the European Commission's Standing Committee on Plants, Animals, Food, and Feed (PAFF).

The PPP and MRL Regulations are embedded in a wider regulatory and policy context, in particular as set by the Sustainable Use Directive (SUD) 2009/128/EC. The SUD covers the use of pesticides with the aim of reducing the risk and impacts of the use of pesticides on human health and the environment particularly through the encouragement of integrated pest management. To date, this Directive has had limited effect, as available data show that sales of pesticides in the EU have remained more or less stable since 2011 and that there has been a low uptake of non-chemical pesticides. In May 2020, the Commission commenced an evaluation of the SUD and an impact assessment of its possible future revision (European Commission, 2020d).

Setting the MRL level

The MRL Regulation defines the 'maximum residue level' (MRL) as the upper legal level of a concentration for a pesticide residue in or on food or feed based on good agricultural practice, and the lowest consumer exposure necessary to protect vulnerable consumers. Unlike approval for an active substance which requires environmental risks to be considered, MRLs are established solely on health grounds ('to protect vulnerable consumers') and do not consider environmental risks. The Commission points out that MRL levels are intended to facilitate trade and are not toxicological limits. The maximum levels set are those consistent with good agricultural practice in EU Member States and third countries. Any level that exceeds a maximum level is more an indication of an incorrect use of a pesticide than a risk to the consumer (WTO, <u>G/SPS/GEN/557</u>). The health risks are thus evaluated for the highest level of a pesticide residue that is legally tolerated in, or on, food or feed when pesticides are applied correctly rather than establishing a toxicological limit.

It may well be the case that an even higher residue level would not be found to pose a risk to consumer health, but the purpose of an MRL is not to establish a threshold above which a risk to consumers exists. The starting point of an MRL risk assessment is the unavoidable residue level remaining when a pesticide is used according to its instructions and under good agricultural practice in either the EU or an exporting country. This is then the level for which a consumer health risk assessment is undertaken, even if an even higher residue level might also be found not to pose a risk to consumers.

MRLs are proposed by EFSA based on a risk assessment while taking into account international standards as developed in the Codex Alimentarius Commission (CAC). This Commission is an international food standards body established jointly by the Food and Agriculture Organisation (FAO) and the World Health Organisation (WHO) with the objective of protecting consumer's health and ensuring fair practices in food trade. Codex maximum residue levels (CXLs) are internationally agreed food standards covering pesticide residues in or on food and feed. The Joint Meeting on Pesticide Residues (JMPR) of the FAO/WHO evaluates pesticide residues annually. Each year the JMPR recommends MRLs to the Codex Committee on Pesticide Residues (CCPR) for consideration to be adopted as CXLs.

Codex CXLs are guidelines and only become legally binding if they are incorporated into EU legislation. CXLs proposed by the JMPR are assessed by EFSA and the assessment is subsequently published in an EFSA Scientific Report. The assessment forms the basis for the position the EU takes in the annual meeting of the Codex Committee on Pesticides Residues. After adoption of CXLs by the CAC, the Commission drafts a measure at regular intervals (e.g. at the end of each year) to take over in Regulation (EC) No 396/2005 those Codex CXLs for which it did not present a reservation in the CCPR. Further exceptions are made where they relate to products which are not covered in that Regulation or where the CXLs are set at a lower level than the current MRLs.

The starting point for setting MRLs for active substances approved for use in the EU, therefore, is that the EU adopts the Codex MRL unless it has previously adopted a higher MRL or, for new CXLs, the EFSA risk assessment demonstrates that a lower MRL would be appropriate. The same MRLs apply to imported and domestic products. While newly proposed CXLs are assessed in the annual EFSA Scientific Report, 'old' CXLs are implemented during the review procedure for existing MRLs, if found safe to consumers in the EFSA evaluation. The Commission highlights that there is a high level of alignment with CXLs (73%) which is the highest level of alignment compared to other important OECD countries (European Commission, 2020e).

For active substances that are not approved at the EU level, either because they are deemed to have adverse consequences for health or the environment, or because no specific MRL has been set (due, for example, to absence of data (trials) on uses), EU legislation requires that MRLs should be set at a default value at 0.01 mg/kg which is deemed to be the lowest concentration that is detectable in testing. In specific cases where a high risk to consumer health is identified in relation to the default value and analytical methods allow, a lower analytical limit called the Limit of Quantification (LOQ) can be established. Where approval for a PPP has been revoked, the Commission prepares a draft measure to delete the existing MRLs meaning that the values default either to 0.01 mg/kg or to the relevant LOQ. This deletion does not apply to those MRLs corresponding to CXLs based on uses in third countries or MRLs that have been specifically set as import tolerances, provided that they are acceptable with regard to consumer safety as confirmed by a full and recent EFSA risk assessment.

By the end of 2018 MRLs were established for 486 substances approved in the EU and 247 non-approved substances on a broad range of agricultural commodities (European Commission, 2020c). MRLs for particular pesticide/crop combinations can be consulted in the EU Pesticides Residues Database.²⁴ As an example, the Codex CXL for clothianidin, a neonicotinoid insecticide that is banned for outdoor use in the EU, for use on citrus fruits is 0.07 mg/kg, on coffee beans 0.05 mg/kg, on grapes 0.7 mg/kg, and so on (the full list of CXLs is available in the <u>Codex Alimentarius Pesticides Database</u>). In the EU currently, the corresponding MRLs are set at 0.06 mg/kg for citrus fruits, for coffee 0.05 mg/kg, and for grapes 0.7 mg/kg (<u>EU Pesticides Database</u>). In these examples, the EU has chosen a stricter MRL for citrus fruit than countries that have opted to use the Codex CXL. Under a mirror clause, the EU MRLs would be further reduced to the default value of 0.01 mg/kg or an even lower LOQ.

Setting import tolerances

The preamble to the MRL Regulation notes that "For food and feed produced outside the Community, different agricultural practices as regards the use of plant protection products may be legally applied, sometimes resulting in pesticide residues differing from those resulting from uses legally applied in the Community. It is therefore appropriate that MRLs are set for imported products that take these uses and the resulting residues into account provided that the safety of the products can be demonstrated using the same criteria as for domestic produce". (Regulation (EU) 396/2005).

Regulation 396/2005 defines an import tolerance as being "an MRL set for imported products to meet the needs of international trade". Exporters and pesticide manufacturers can apply for an import tolerance if there is no MRL for the specific pesticide/crop combination in the EU or if the existing MRL is lower than that of the exporting market, for example, where it is set at the default level. The conditions where a higher MRL can be granted for imported products are strictly limited by Article 3.2(g) of the MRL Regulation which specifies that an import tolerance can only be granted where:

- The use of the active substance in a plant protection product on a given product is not authorised for reasons other than public health reasons for the specific product and specific use; or
- A different level is appropriate because the existing Community MRL was set for reasons other than public health reasons for the specific product and specific use.

In other words, import tolerances can be granted only where the grounds for the lack of approval in the EU or setting the MRL at a low level are not related to human health (e.g. where other concerns are identified such as environmental risks or insufficient efficacy) or where there has been insufficient data for EFSA to make an assessment. Note that an active

²⁴ EU Pesticides Database, available at https://ec.europa.eu/food/plants/pesticides/eu-pesticides-database_en.

substance may not be approved in the EU either because it has been prohibited on either health or environmental grounds, or because there has been no request from a manufacturer to seek approval or renewal. In some cases, a manufacturer may not seek renewal because it recognises that it is not likely to pass the risk assessment, but in other cases there may simply not be an economic incentive to seek approval in the EU if the relevant crop is not widely grown. Non-authorisation as opposed to prohibition therefore does not necessarily imply that the active substance is unsafe (Rees, 2022). For the substances covered by the hazard-based cut-off criteria, where non-approval in the EU is directly based on health concerns, there is doubt whether a request for an import tolerance can be refused as a matter of principle, or whether it still requires a separate risk assessment by EFSA as the EU's trading partners insist (PAN Europe, 2020). This issue is further discussed below.

Import tolerances are set for pesticide/commodity combinations based on good agricultural practice in the exporting country. The active substance must be approved and MRLs set in the exporting country, and the import tolerance cannot be set higher than the exporting country's own MRL. The data requirements to set import tolerances are the same as for setting MRLs supporting uses in the EU, with the difference that residue data are generated outside the EU and reflect the commercial use of the active substance in the exporting country. As is the case currently in deciding on all MRLs, EFSA does not yet take the cumulative and synergistic effects of pesticides present in food into consideration, meaning that the consumer safety assessment is carried out only for exposure to a single pesticide alone. Where a request for an import tolerance is granted, the Commission updates the relevant MRL in the Annex to the MRL Regulation. This MRL applies to both domestic production as well as imported products, though if a pesticide is not approved in the EU, any residues would be illegal. Between 2008 and 2018, 94 applications for import tolerances were submitted. 80 were assessed positively and 9 received a negative opinion, while the remaining 5 applications are still under assessment (Ecorys, 2018).

The policy debate inside the EU

This process of setting import tolerances for pesticide/commodity combinations which, despite being deemed safe for consumers by a risk assessment undertaken by EFSA, are nonetheless not approved for use in the EU has come under increasing criticism (European Commission, 2020c). This criticism is primarily focused on cases where the EU has banned an active substance not due to public health reasons (where in any case an import tolerance cannot be granted under Article 3(g) of the MRL Regulation), but based on environmental risks. This allows imports of products treated with active substances that are not available to EU farmers, thus negatively affecting the competitiveness of EU agriculture, as well as the environment in third countries. The position of Pesticide Action Network (PAN) Europe is that "if a substance has been banned in the EU due to human health and/or environmental concerns, whether it meets the cut-off criteria or not, it should not be supported for use in third countries. The EU giving its consent to poison human health and the environment elsewhere is unacceptable, against human rights, and also exposes EU farmers to unfair competition" (PAN Europe, 2020). The position of the industry body Croplife Europe is that

"Blocking the setting of such trade standards, when no concerns have been identified by the risk assessors, limits the access of EU farmers to crop protection tools and erodes trade partner confidence in the objectivity and predictability of the EU risk assessment system" (CropLife Europe, 2021).

The European Parliament has consistently advocated that MRL assessments should take greater account of environmental risks, particularly effects on pollinators, including when setting import tolerances. For example, Bayer CropScience AG submitted an application to the competent national authority in Germany to set an import tolerance for the active substance clothianidin, a neonicotinoid insecticide, in potatoes imported from Canada. As noted previously, clothianidin is banned for outdoor use in the EU due to identified risks to bees. EFSA assessed the application and the evaluation report from the national authority and recommended that the MRL should be increased from the default level to the level of 0.3 mg/kg for potatoes imported from Canada on the basis that this level of exposure was acceptable with regard to consumer safety. Following a unanimous favourable opinion by the PAFF, the Commission drafted an Implementing Regulation in 2018 to give legal effect to this MRL. The European Parliament, however, objected to the Implementing Regulation on the grounds that it exceeded the implementing powers granted in the MRL Regulation.²⁵ Specifically, it argued that EFSA's opinion did not consider the cumulative risk to human health and bees, and that effects on pollinators and the environment should be taken into account when evaluating MRLs. The Commission's response to the Parliament's objection noted that the draft measure to which the resolution objected addressed an application for the setting of a new MRL for the import of potatoes into the EU. It found it important to recall "that the EU has no power of its own to interfere with the environmental law and standards established in third countries, including the protection of bees and other pollinators".²⁶

In December 2019 a new Commission took office with the European Green Deal as its flagship strategy. Several commitments included in the Commission's Communication on the Farm to Fork Strategy published in May 2020 indicated a shift in approach (European Commission, 2020a). The two commitments indicated its willingness to now consider environmental risks when assessing requests for import tolerances, as well as to review import tolerances for substances meeting the cut-off criteria in the Pesticides Regulation. However, it specifically declared that this would follow a risk assessment.

²⁵ European Parliament, Objection to an implementing act: Maximum residue levels for several substances including clothianidin, P8_TA(2019)0195, European Parliament resolution of 13 March 2019 on the draft Commission regulation amending Annexes II, III and IV to Regulation (EC) No 396/2005 of the European Parliament and of the Council as regards maximum residue levels for clothianidin, cycloxydim, epoxiconazole, flonicamid, haloxyfop, mandestrobin, mepiquat, Metschnikowia fructicola strain NRRL Y-27328 and prohexadione in or on certain products (D059754/02 – 2019/2520(RPS)), available at https://www.europarl.europa.eu/doceo/document/TA-8-2019-0195_EN.html.

²⁶ Commission response to the Parliament's resolution P8_TA(2019)0195 , available at https://oeil.secure.europarl.europa.eu/oeil/spdoc.do?i=32611&j=0&l=en.

Imported food must continue to comply with relevant EU regulations and standards. The Commission will take into account environmental aspects when assessing requests for import tolerances for pesticide substances no longer approved in the EU while respecting WTO standards and obligations...

A more sustainable EU food system also requires increasingly sustainable practices by our trading partners. In order to promote a gradual move towards the use of safer plant protection products, the EU will consider, in compliance with WTO rules and following a risk assessment, to review import tolerances for substances meeting the "cut-off criteria"(1) and presenting a high level of risk for human health. The EU will engage actively with trading partners, especially with developing countries, to accompany the transition towards the more sustainable use of pesticides to avoid disruptions in trade and promote alternative plant protection products and methods.(European Commission, 2020a)

(1) Note the cut-off criteria specifically mentioned are those relating to health and include substances classified as mutagenic, carcinogenic, toxic for reproduction or having endocrine disrupting properties.

The Commission devoted a section to international trade in its REFIT evaluation of the Pesticides and MRL Regulations (European Commission, 2020c). It noted that the EU's trading partners rely heavily on the use of pesticides for food production, including for export to the EU, and do not necessarily apply the same standards of protection of the environment as the EU (for example when it comes to the impact on bees). Under the heading 'Using green diplomacy to promote our green agenda for pesticides', the Commission for the first time put a revision of the MRL Regulation on the table in order to strengthen its environmental dimension.

... the Commission will reflect on ways to consider environmental aspects when assessing requests for import tolerances for substances no longer approved in the EU while respecting WTO standards and obligations. If found necessary, the Commission will consider a revision of the MRL Regulation in order to strengthen its environmental dimension and make relevant alignments with the pesticides approval process.

It also clarified its stance on MRLs for active substances that have not been approved for use in the EU due to the cut-off criteria. It noted that "...so far no active substance has not been approved based solely on the cut-off criteria, as there have always been other issues identified as well during the risk assessment, and it remains possible to request import tolerances for such substances" (European Commission, 2020e).

As previously noted in Chapter 2, in the negotiations on the CAP Regulations for the post-2020 period, the Parliament put forward an amendment to the Amending CAP Regulation (amendment 188b) to apply mirror clauses to the import of agri-food products from third countries. While the amendment was withdrawn in the subsequent inter-institutional negotiations, various political statements were attached to the final policy agreement on the CAP reform, including a Commission statement on the review of import tolerances and Codex Maximum Residue Limits (MRLs).

The Commission will continue to ensure that, following a thorough assessment of the scientific information available for active substances either in the context of the procedures under Regulation (EC) No 1107/2009 of the European Parliament and of the Council or the procedures under Regulation (EC) No 396/2005 of the European Parliament and of the Council and in conformity with WTO rules, import tolerances and Codex Maximum Residue Limits (CXLs) are assessed and reviewed for active substances that are not, or are no longer, approved in the EU, so that any residues in food or feed do not present any risk for consumers. In addition to health and good agricultural practice aspects currently considered, the Commission will also take into account environmental concerns of a global nature in conformity with WTO rules when assessing import tolerance applications or when reviewing import tolerances for active substances no longer approved in the EU. The presentation by the Commission of the proposal for a legislative framework for sustainable food systems will be a crucial additional step towards the full achievement of this ambition, in coherence with the Green Deal objectives (Official Journal 2021/C 488/03).

As discussed in Chapter 3, effective multilateral agreements are the best way of achieving the multiple goals of avoiding adverse competitive effects on EU producers, avoiding the displacement of environmental and health problem abroad if imports increase, and leveraging an increase in sustainability standards globally. For pesticide residues, the FAO/WHO Codex Alimentarius is the relevant international body that sets international standards. However, Codex risk assessments currently only look at the impact on human, plant and animal health. The EU has proposed to extend the Codex terms of reference to also address the challenges posed by climate change, biodiversity loss, the spread of antimicrobial resistance and the increase in non-communicable diseases. It points out that this approach would be fully consistent with the sustainability commitments taken by Codex Alimentarius members in other international fora or multilateral processes.

The AGRIFISH Council reached conclusions on this initiative at its meeting in February 2022.²⁷ The meeting reaffirmed that the EU strongly supported the fundamental principles underpinning the work of the Codex Alimentarius, including consensus-based decisionmaking to ensure the effective worldwide use and impact of the food standards adopted by the Codex Alimentarius Commission. It agreed that the adoption of Codex Alimentarius standards by consensus should be the primary objective. However, the Council was realistic enough to recognise that situations where there is a major divergence of views due to other legitimate factors and considerations would arise. Its recommended approach was that the Codex Alimentarius Commission should seek a common understanding on available options to allow its members to abstain from the acceptance of a standard. It pointed out that EU legislation already recognised that scientific risk assessment alone cannot always provide all

²⁷ Council of the European Union, <u>Conclusions on the EU's commitment to an ambitious Codex Alimentarius</u> <u>fit for the challenges of today and tomorrow</u>, document 6298/22 21 February 2022.

the information on which a risk management decision should be based, and that other factors relevant to the matter under consideration should legitimately be taken into account including societal, economic, traditional, ethical and environmental factors and the feasibility of controls (quoting from the EU General Food Law guidance for the risk manager).

The feasibility of what the Council is suggesting may be doubted. It appears to suggest that the Codex Commission would seek consensus (note this does not require unanimity) to establish MRLs that reflect sustainability standards in addition to health risks, while allowing countries that disagreed with the decision not to accept the standard. But this is how the Codex currently works. We have discussed previously how EFSA each year, following the publication of MRLs by the Codex Commission, reviews these levels and may often suggest more stringent levels based on a risk assessment. It is also open to the EU to set a higher MRL than that recommended by the Codex. The EU's objective seems to be to find a way to minimise opposition to setting MRLs using sustainability as well as health criteria, knowing that the value of a Codex CXL standard is that it cannot be challenged in a WTO trade dispute. But why an exporting country that took a different view on sustainability standards to the EU would agree to letting Codex set a stricter standard, knowing that this might limit market access for its exports and also remove its ability to apply retaliatory measures under the WTO dispute settlement process, is unclear. One gains the impression that the conclusions adopted by the AGRIFISH Council in February 2022 were intended to demonstrate its openness to seeking multilateral solutions, while preparing anyway to implement autonomous measures.

Summarising the state of play of the political debate in the EU, several possible steps to further tighten MRLs for imports have been suggested. The Commission has stated that it will review import tolerances for substances banned based on the hazard-based criteria and presenting a high level of risk for human health. Once a substance falls into this category, it is automatically banned for use as a pesticide in the EU and no further risk assessment is required (to better understand the implications of this, note that a hazard is something that could potentially cause harm. Risk takes account of the likelihood of exposure to the hazard. It is the probability that a person will be harmed or experience an adverse health effect if exposed to a hazard). However, the Commission continues to assure the EU's trading partners that, in line with its obligations under the WTO SPS Agreement, requests for import tolerances will be handled through a process that includes a full risk assessment.

A second step would require consideration of environmental impacts in third countries to be evaluated when setting MRLs on the basis of import tolerances. Given differences in climate and production conditions in different countries, it is possible that an environmental assessment based on conditions in the exporting country might come to a different conclusion to an assessment undertaken under EU conditions. Even if this step were agreed in principle, it would be necessary to define the scope of the environmental impacts that would be covered. For example, the Commission would limit the scope to environmental concerns of a global nature in the statement it attached to the CAP political agreement. In any event, the process would require a risk assessment that extended to the environmental risk in the exporting country. A third step would be to introduce mirror clauses requiring imported products to meet the same environmental, health and animal welfare standards as set for EU producers. In the case of pesticides this would imply a more far-reaching change in current legislation as it would, in effect, eliminate any role for import tolerances at least for products whose use is banned in the EU. Unlike the first two options, it would do away with the requirement for a risk assessment when setting an MRL as the process would become automatic. It would require third country producers to meet EU environmental standards regardless whether these are appropriate given production conditions in the exporting country. If EU producers cannot use a particular substance, a mirror clause would also ban it for use by producers in third countries, at least for their exports to the EU. To be clear, although this option has been sought by the European Parliament and others, the Commission has never committed to introduce a mirror clause of this kind for pesticides and even the French Presidency appears ambiguous in its support for this mirror clause option.²⁸ The way in which a mirror clause might work in the case of glyphosate is further explored in Box 1.

Box 1. A mirror clause and glyphosate

Glyphosate is a broad-spectrum systemic herbicide and crop desiccant. As a systemic herbicide, when applied to plant foliage, it is absorbed through the tissues to kill broadleaf plants, weeds and grasses. The sodium salt form of glyphosate is used as a desiccant to regulate plant growth and ripen specific crops. In this use it is applied just before harvest in order to improve the uniformity of the crop and improve the efficiency and economics of mechanical harvesting.

Glyphosate was brought to market by Monsanto in 1974 under the tradename Roundup. Following the introduction of glyphosate-resistant crops in 1996 which enabled farmers to kill their weeds without killing their crops it has became one of the most widely-used herbicides globally. Monsanto's patent on glyphosate expired in 2000, making the product available for other companies to sell. Today, there are hundreds of glyphosate herbicides on the market.

Glyphosate has been authorised as an active substance in the EU since 2002. During the renewal process initiated in 2012 the International Agency for Research on Cancer, a branch of the World Health Organisation, classified glyphosate as probably carcinogenic to humans

²⁸ For example, the French Presidency paper to the AGRIFISH Council highlighted that "food or feed containing residues of substances prohibited in the EU can be legally placed on the market, as long as the levels of residues remain below the applicable MRLs. With this in mind, it is imperative that the European Commission continue its ongoing review of the MRLs/ITs of banned substances in the EU to bring them into line with the latest scientific data as soon as possible. Part of this work should involve taking better account of global environmental challenges when defining MRLs/ITs, as proposed by the Commission in its report of 20 May 2020 to the European Parliament and the Council on the evaluation of Regulation (EC) No 1107/2009 on the placing of plant protection products on the market and Regulation (EC) No 396/2005 on maximum residue levels of pesticides" (Council of the European Union, 2022). Thus, the Presidency paper refers to the first two steps outlined in the text but does not endorse the introduction of a full mirror clause (which would effectively eliminate any possibility of ITs for substances banned in the EU).

in 2015. EFSA concluded in the same year following its review of the evidence that it was unlikely to pose a carcinogenic hazard to humans, in line with several national authorities outside the EU. The approval of glyphosate was eventually renewed for five years in December 2017 until 15 December 2022, but only uses as a herbicide are permitted. Glyphosate cannot be used as a desiccant in the EU.

In 2019 an application for further renewal after 2022 was made. The four Member State Assessment Group on Glyphosate published its draft conclusions in July 2021 "that glyphosate does meet the approval criteria set in Regulation (EC) N° 1107/2009".¹ At the time of writing in March 2022, EFSA and ECHA have still to reach their conclusions, following which the Commission must take a decision on whether to recommend renewal.²

In the European Community MRLs for glyphosate were first established in 1993³ and have been amended several times.⁴ In 2008, in the framework of MRL harmonisation, the MRLs established by the previous MRL legislation were added to Regulation 396/2005 after amendment of several of the MRLs. The MRLs established at that time are reproduced in a 2009 EFSA paper (EFSA, 2009). For most products, such as lentils, the MRLs were set at the default level of 0.1 mg/kg but for cereals such as wheat, barley and oats values between 10 and 20 mg/kg were established.

Further modifications to the MRLs have since been made. This includes the case highlighted in Baldon *et al.* (2021) where the MRL for glyphosate on lentils was increased from the default level to an MRL of 10 mg/kg following an application from Monsanto Europe to accommodate the authorised desiccation use of glyphosate on lentils in the United States and Canada. This request was granted (Commission Regulation (EU) No 293/2013) following a positive EFSA Reasoned Opinion (EFSA, 2012). Maximum glyphosate residue levels have also been established as Codex CXLs. For example, the Codex CXL for dry lentils is 5 mg/kg, for beans 2 mg/kg, and for rapeseed 30 mg/kg.⁶

In 2018 EFSA published a further Reasoned Opinion on glyphosate MRLs following a review according to Article 12(2) of the MRL Regulation (EC) No 396/2005. This was further revised the following year to take account of some omitted studies and the recommended MRLs are included in Table 2 of its report for the main residue definition (MRLs for a second residue definition are also included in Table 3 of that report) (EFSA, 2019). For most MRLs set at the default level of 0.1 mg/kg, the EFSA recommendation was to reduce these MRLs to 0.05 mg/kg in line with improved analytical methods. In other cases, EFSA recommended to increase existing MRLs (for example, for wheat from 10 mg/kg to 30 mg/kg, for barley from 20 mg/kg to 30 mg/kg, and for dry peas from 10 to 15 mg/kg). For other commodities, tentative MRLs were proposed based on Good Agricultural Practice at EU level for which no consumer risk was identified, but where further data is needed. Note that there are no Codex CXLs for wheat or barley and the CXL for dry peas is 5mg/kg. These proposals have not yet been endorsed by the Commission and PAFF Standing Committee as risk manager.

EFSA also recommended an import tolerance for soybeans following an application from Corteva in a Reasoned Opinion published in September 2021 (EFSA, 2021). Its recommendation was to maintain the MRL at its existing level of 20 mg/kg based on the existing definition of residues in the MRL Regulation, or alternatively to raise the level to 50 mg/kg if the residue definition as proposed by the MRL review for glyphosate-tolerant

soyabeans is implemented. It noted that the MRL level in the first option also corresponds to the Codex CXL for soybeans and to the existing US MRL level. This recommendation must now be confirmed or otherwise by the Commission and PAFF Standing Committee as risk manager. EFSA is expected to make its recommendation on the renewal of glyphosate in late 2022 following which the Commission and PAFF Committee must decide whether to approve the renewal or not. If approval for the use of glyphosate in the EU is not renewed in December 2022, the fate of the glyphosate MRLs is uncertain. Under current legislation, where approval for a PPP has been revoked, the Commission prepares a draft measure to delete the existing MRLs meaning that the values default either to 0.01 mg/kg or to the relevant LOQ. This deletion does not apply to those MRLs corresponding to CXLs based on uses in third countries or MRLs that have been specifically set as import tolerances, provided that they are acceptable with regard to consumer safety as confirmed by a full and recent EFSA risk assessment (DG SANTE, 2021). As EFSA has recently evaluated the glyphosate import tolerances for several commodities, these would be expected to remain in place under current legislation and practice. However, if a mirror clause were in place, this would no longer be possible. Even in the absence of a full mirror clause, under the Commission proposal there would be an additional requirement to evaluate the environmental effects in the exporting countries as well as any impacts on consumer health. Given that glyphosate is the most widely used herbicide in the world, severe disruption to international trade would be likely if the existing import tolerances were removed.

Footnotes:

¹ European Commission, Procedure and outcome of the draft Renewal Assessment Report on glyphosate, June 2021

https://ec.europa.eu/food/system/files/2021-06/pesticides_aas_agg_report_202106.pdf ² European Commission, Status of glyphosate in the EU, <u>https://ec.europa.eu/food/plants/pesticides/approval-active-substances/renewal-</u> <u>approval/glyphosate_en</u>

³ Directives 93/57/EC and 93/58/EC.

⁴ Directives 96/32/EC, 98/82/EC, 2000/57/EC, 2005/70/EC, 2006/60/EC and 2008/17/EC.

⁵ FAO Codex Pesticides Database, https://www.fao.org/fao-who-codexalimentarius/codex-texts/dbs/pestres/pesticide-detail/en/?p_id=158.

A grey area in the debate about mirror clauses is whether import tolerances could continue to be established for products where the EU has not set a specific MRL but where the active substance has not been banned for specific health or environmental impacts. MRLs for such active substances might still be set based on standards in exporting countries, but the applicant might in future be required to demonstrate that the use of the pesticide did not pose an environmental risk in those countries in addition to the current requirement that they should pose no health risk to EU consumers.²⁹

²⁹ This will be an important issue for low-income developing countries exporting products such as coffee or cocoa that are not produced in the EU. Pesticides may be needed for crops grown in these countries that are not grown in Europe and which therefore are not authorised in Europe. Import tolerances allow this trade to continue while ensuring that residue levels do not pose a threat to consumer health.

Another issue is how mirror clauses will be enforced. Official Controls test products at the border, for example, for residues of pesticides or antibiotics.³⁰ But sustainability standards refer to how products are produced. Even for pesticides or antibiotics, this is not always evident in the product itself, particularly in the case of processed products. Thus, at best, border controls are an end-of-pipe solution which may not be able to determine whether a particular practice was used in the production of the imported product or not. In the case of animal welfare standards, there is likely no discernible difference in the final products.

What might be solutions? Will imports have to be accompanied by an official certificate declaring compliance with EU standards, thus requiring separate supply chains in exporting countries as for hormone-treated beef or organic products? Will enforcement be left to private actors to exercise mandatory due diligence?³¹ Will the EU only import from countries that have brought their legislation into line with EU standards? The failure so far to explain how the antibiotics mirror clause will be enforced at EU level despite the legislation being in place for three years suggests these enforcement issues are not simple.

The policy debate outside the EU

MRLs are a non-tariff barrier and thus can potentially affect the level of trade. WTO Agreements set out rules to ensure that non-tariff measures are not more trade restrictive than necessary while allowing countries to implement their desired levels of health and environmental protection. For health and food safety concerns, the rules are established in the WTO Agreement on Sanitary and Phytosanitary Measures (SPS). For import standards based on other grounds, such as environmental risks, the rules are established in the WTO Agreement on Technical Barriers to Trade (TBT). In all cases, import standards must also meet the requirements of the WTO's General Agreement on Tariffs and Trade (Lamy *et al.*, 2022).

The SPS Agreement recognises that Members have the right to take sanitary and phytosanitary measures necessary for the protection of human, animal or plant life or health.

³⁰ The Official Controls Regulation (OCR) was recently amended to allow testing for antibiotic residues. In its original form, the OCR explicitly did not cover official controls for the verification of compliance with Directive 2001/82/EC (the predecessor of the VMP Regulation (EU) 2019/6 which has now been replaced by the latter) on the use of veterinary medicinal products. In order to ensure the effective implementation of the prohibition of the use of antimicrobials for growth promotion and yield increase and of the use of antimicrobials reserved for treatment of certain infections in humans, the extension of official controls for the verification of compliance of animals and products of animal origin exported to the Union with Article 118(1) of the VMP Regulation, while respecting Union obligations under international agreements, was approved in October 2021 as Regulation (EU) 2021/1756.

³¹ Impatient with the delay in introducing the antibiotics mirror clause at EU level, France announced in February 2022 that it would introduce a national ban on the import of meat from animals treated with growth antibiotics to take effect from April 2022. It will be up to the supply chain to obtain assurance from their suppliers that imported meat does not come from animals where growth antibiotics will be applied. See https://agriculture.gouv.fr/la-france-interdit-limportation-et-la-mise-sur-le-marche-en-france-de-viandes-et-produits-base-des.

Members commit to ensuring that any sanitary or phytosanitary measure is applied only to the extent necessary to protect human, animal or plant life or health, is based on scientific principles including a risk assessment, and is not maintained without sufficient scientific evidence. In cases where relevant scientific evidence is insufficient, a Member may provisionally adopt sanitary or phytosanitary measures on the basis of available pertinent information, while seeking to obtain the additional information necessary for a more objective assessment of risk and to review the sanitary or phytosanitary measure accordingly within a reasonable period of time. Members should, when determining the appropriate level of sanitary or phytosanitary protection, take into account the objective of minimising negative trade effects.

The TBT Agreement recognises that countries have the right to take the measures necessary to protect their environment as well as human, animal, or plant life or health. Countries commit to ensuring that technical regulations are not more trade-restrictive than necessary to fulfil a legitimate objective, taking account of the risks non-fulfilment would create.

WTO Members have the opportunity to raise specific trade concerns about the way other countries are implementing import standards in the relevant WTO Committees. EU PPP rules for authorising active substances and the related MRL legislation have been frequently queried by other WTO Members. Between 2015 and 2017, in the WTO Committees, non-EU countries raised specific trade concerns on pesticides 208 times against the EU. During the same period, the EU raised only two specific trade concerns on pesticides against other countries (European Commission, 2020e).

Several WTO Members outlined their concerns around the setting of MRLs for active substances prohibited due to the hazard-based criteria in a 2019 Communication (WTO G/C/W/767) to the Council on Trade in Goods. The minutes of the relevant meeting give an insight into the concerns raised by the EU's trading partners and why they objected to the incorporation of a hazard-based approach to the approval and renewal of plant protection product authorisations for certain substances (WTO G/C/M/135). Similar arguments were presented by developing countries and importers in responding to the Commission public call for evidence on applying EU health and environmental standards to imported agricultural and agri-food products (European Commission, 2022a).

Among other issues, the proponents argued that the implementation of MRLs for active substances prohibited due to the hazard-based criteria tended to be based on risks for which no conclusive results had been obtained and for which doubts existed as to the validity of toxicological studies and dietary dosage; pointed to the lack of clarity regarding how the EU intended to consider applications for import tolerances for those substances that were being assessed following hazard-based criteria; and underlined the inadequate transition time given to adapt and find viable alternatives. They argued that the EU was unilaterally attempting to impose its own domestic regulatory approach on its trading partners. Agricultural production varied by region and what worked in Europe might not be appropriate in other climates and regions. The EU approach thus effectively prohibited the use of critical tools to manage pests

and resistance, while damaging the livelihood of farmers beyond its borders, especially those in developing countries and LDCs. Crops mentioned as being particularly affected included bananas, tea, coconut, oil seeds, vegetables, rice, cocoa, coffee, cinnamon, citrus fruits, mango, melons, watermelons, papaya, sweet potatoes, tree nuts, cranberries and grapes (WTO G/C/M/135).

Trading partners wanted (i) the EU to reconsider its hazard-based approach and risk assessment so as to ensure that any modification of MRLs is based on an assessment of risks; (ii) the EU to consider longer transition periods for agricultural and export sectors; and (iii) the EU to base its efforts on the coordinated work of the international community, through the Codex Alimentarius.

In responding to these concerns, the EU delegation insisted that all EU SPS measures were fully consistent with SPS Agreement in that they were based on science and the risk assessment necessary to achieve the EU level of health protection, which applied equally to domestic production and imports. As concerned PPPs, the EU explained that there existed a limited group of hazards for which the EU level of health protection required no exposure from their use in the EU as any such exposure could indeed lead to risks that the EU considered unacceptable. However, the EU confirmed that, even for those substances, requests for import tolerances would be handled in a consistent and transparent manner through a process that included a full risk assessment (WTO G/C/M/135).

International trade implications

Stricter pesticide residue regulations would have implications for international trade, not least for developing countries. The study in support of the REFIT evaluation of the Pesticides and MRL Regulations examined the impact of that legislation on international trade (Ecorys, 2018). It considered three ways trade could be affected. The MRL provisions might impose a fixed cost on exporters, thereby affecting the decision to export or not to a given market, arising from the cost of compliance or the cost of testing. They might also impose a variable cost on exporters, as changes in the production process might induce higher costs that are proportional to production, thereby affecting the decision on how much to export. The fixed and variable costs imposed by the MRL provisions might also induce exporters to improve their quality, allowing them to charge higher prices and thereby cover their higher fixed and variable costs. In addition, though not directly highlighted in the Ecorys study, more stringent standards for EU producers that might negatively affect their competitiveness, thus creating a larger market for imports that can meet the more stringent standards on imports also have the potential to influence the relative competitiveness of different exporting countries. Those countries that already meet

the EU standards, or can do so at low cost, are favoured relative to other exporters that face greater difficulties in meeting these standards.³²

The academic literature surveyed in the Ecorys (2018) study does not provide an unambiguous answer to the question how EU MRLs affect trade. Some studies found a positive impact on imports, though this result might reflect the harmonisation of MRLs across EU Member States introduced by the MRL Regulation. Studies of MRLs for individual products have concluded that they have raised costs and restricted trade particularly where the EU has removed approval for certain substances in recent years (see, for example, the commodity studies included in USITC, 2021).

Higher regulatory standards will require a change in crop production practices but can also stimulate the development of less hazardous pesticide alternatives by the global PPP industry. The potential of changes to the rules on market placement to influence the business strategy and research agenda of PPP producers as well as farming methods was recognised in the REFIT evaluation of the PPP and MRL legislation (Ecorys, 2018). In many cases, resistant varieties and alternative practices to control pests and diseases are available but farmers choose not to use these alternatives because of cost implications and the fact that yields may be lower. Farmers prefer to use varieties with the highest yield, even if they are more sensitive to pests. In other cases, it may be possible to breed varieties with pest resistance but companies whose business model is built on selling crop protection products have no incentive to do this. Given this context, regulatory change can be a necessary stimulus to bring about the desired behavioural changes among both farmers and companies.

³² For example, Afruibana is the pan-African association of fruit producers and exporters, including bananas from Cameroon, Côte d'Ivoire and Ghana. It was created in 2017 to federate the interests of the fruit sector in Africa, promote its competitiveness and exports to the European continent, In its submission to the Commission's public call for evidence in connection with its proposed report on applying EU standards to imported products, Afruibana indicated it would welcome this step because "The introduction of such reciprocity in trade agreements with third countries would have the advantage of limiting any distortion of competition faced by European farmers but also by the EU's many partners, such as African banana producers vis-à-vis Dollar banana producers...". The submission went on to note that "Indeed, by increasing oversupply, Latin American producers have levelled prices downwards: between 2015 and 2020, the average price of an 18.5 kg banana box has fallen from €14.15 to €11.63, making it extremely difficult to pursue efforts to create a value chain combining sustainability, profitability and protection of workers and consumers. These clauses could indeed be a good thing provided that significant technical and financial means are made available to Europe's partners to lead this https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13371-Imports-oftransition". agricultural-and-food-products-applying-EU-health-and-environmental-standards-report-/details/F2927858 en.

6. Implications for developing countries

In 2021, UN Secretary-General António Guterres convened a Food Systems Summit as part of the Decade of Action to achieve the Sustainable Development Goals (SDGs) by 2030. The Summit was a recognition that global food systems are in trouble. In his closing summary and statement of action, the Secretary-General noted that many of the world's food systems are fragile and not fulfilling the right to adequate food for all. "Three billion people — almost half of all humanity — could not afford a healthy diet. Malnutrition in all its forms — including obesity — was deeply entrenched, leading to a broad range of negative health, education, gender, and economic impacts. Drivers of food insecurity and malnutrition — including conflict, climate extremes, and economic volatility — are further exacerbated by poverty and high levels of inequality. The COVID-19 pandemic put these worrying trends in overdrive. Up to 811 million people in the world faced hunger in 2020 — a 20 per cent increase in just one year. Over 41 million are on the doorstep of starvation" (Guterres, 2021).

At the same time, the Secretary-General highlighted that the crisis brought on by the pandemic is unfolding against a planetary crisis that threatens food production but to which food production also contributes. "... recent reports have found that food systems are contributing up to one-third of greenhouse gas emissions, up to 80 per cent of biodiversity loss and use up to 70 per cent of freshwater. However, sustainable food production systems should be recognised as an essential solution to these existing challenges" (Guterres, 2021). A deep reform of food systems is essential to achieving the SDGs by 2030.

The EU has embraced this conclusion in its Green Deal vision, in which the vision for the agrifood sector set out in the Farm to Fork Strategy plays an essential role. EU farmers have been meeting more demanding environmental and sustainability standards over time, for example, with respect to nitrate and phosphate run-off into waterways, pesticide use, air quality emissions, habitat protection, and animal welfare. But many agri-environment indicators show limited improvement in recent years and the status of key environmental assets continues to deteriorate (EEA, 2019). The F2F strategy is thus an urgent call for more radical changes both in agricultural practices but also in food consumption practices to deliver more sustainable outcomes.

Implementing the changes set out in the F2F strategy will impact production costs and thus influence the competitiveness of EU agriculture. The evidence shows that the gradual raising of sustainability standards in the EU today has not had an adverse impact on agricultural competitiveness; on the contrary, EU export surpluses have grown across nearly all commodities. But the required pace and scale of change in the coming decade will be greater than what EU agriculture has experienced before. At least in the short run and in the absence of technical change and relevant innovations, greater sustainability implies a lower level of EU agricultural production as the cost of negative environmental externalities currently not considered are increasingly factored into decision-making.

Measures can also be taken to reduce demand for particular commodities. The relative shifts in supply and demand will determine how the demand for imports is affected. Assuming that supply shifts are greater than demand shifts in the short term, the demand for imports will increase. For some products of particular relevance to low-income developing countries, such as fruits, vegetables and nuts, the Green Deal envisages that EU consumption should in any case increase. For both reasons, the Green Deal in Europe can lead to potentially greater demand for developing country exports (see Annex 2).

This also creates the risk that the environmental impacts of agricultural production are simply moved elsewhere and that the environmental consequences of EU consumption are displaced to third countries. This highlights the importance of coherence between agricultural policy, trade policy and Green Deal policies and gives rise to trade policies reflected in the external dimension of the Green Deal. These can be multilateral, bilateral or unilateral. Effective multilateral agreements are the gold standard, but usually reflect the lowest common denominator in terms of ambition and they often lack effective enforcement provisions.

Unilateral actions include labelling, financial assistance, due diligence requirements and mirror clauses. They will vary in their effectiveness and trade impacts. This report has paid particular attention to mirror clauses, in light of their prioritisation by the French Presidency of the EU Council of Ministers in the first half of 2022. Mirror clauses seek to use access to the EU market as a lever to raise sustainability standards in exporting countries. They are also advocated as a way to avoid replacing consumption of high-standard products with low-standard products, and to provide a level playing field for EU producers. Mirror clauses are the most restrictive unilateral measure and the most likely to invite trade retaliation. Because they operate on a 'one size fits all' basis, it is hard to make allowance for any special needs of developing countries or for the different priorities they may have in making progress towards the Sustainable Development Goals.

The trade policy measures discussed in this report are at different stages in the policy process. The antibiotics mirror clause has been enacted but is not yet enforced. The requirement for mandatory due diligence for traders in six agricultural commodities to ensure deforestation-free supply chains is now a legislative proposal but not yet enacted. The proposal to alter MRLs for product/substance combinations where the substance has been banned in the EU is a Commission commitment, but no timeline has been set for the adoption of a formal proposal. A specific deadline may well be an outcome of the discussions under the French Presidency or as a follow up to the Commission report on import standards due before July 2022. There have been proposals to apply mirror clauses to animal welfare standards and to greenhouse gas emissions embedded in food imports, but such measures are unlikely to be implemented in the immediate future.

In any case, the low-income and vulnerable developing countries that are the focus of this paper are not major exporters of animal products. Antibiotics are used in aquaculture which is an important developing country export. Although antibiotics do not appear to be used for growth promotion in aquaculture, the antibiotics that are used are all classified as medically

important (Schar *et al.*, 2020) so exports of fish and fish products could be affected by the antibiotics mirror clause. Low-income developing countries are major exporters of some of the commodities covered by the deforestation-free supply chain Regulation. They would also be affected by any changes in MRLs on exports of fruit and vegetables. Indeed, mirror clauses prohibiting the use of particular active substances could have a much greater impact on production and trade than the deforestation Regulation. They would directly require changes in production practices on farms, whereas the deforestation-free supply chain initiative is primarily a negative prohibition on expanding production areas into areas of tropical forest but otherwise does not require specific changes in production practices. More restrictive MRL levels is therefore the trade policy measure of most immediate relevance and significance for developing countries.

Eliminating the use of pesticides that are deemed to be dangerous to health or to have adverse consequences for the environment also in countries that export to the EU is highly desirable. However, the use of these pesticides contributes to economic production and viable livelihoods on many different types of farms in developing countries. They are often reasonably cheap and effective at controlling pests and thus maintaining yields. The farms that benefit include the large-scale banana plantations of Central America, the well-resourced vineyards of South Africa, but as well smallholder producers of cocoa, coffee and other commodities across Africa and Asia. A particular concern is that tighter regulations on exports to the EU could bear more heavily on farmers in these countries who are less well organised, less involved in the formal agricultural sector, and less well-resourced to meet any new requirements.

To avoid or minimise such negative consequences, the following recommendations are made. These recommendations are cast in the context of more stringent limits on pesticide use, but in principle they will also apply to any unilateral measures taken by the EU to impose higher import standards on exports from vulnerable developing countries.

- Provide a sufficient transition period to allow for adjustment to new trade policy measures. In the case of restricted pesticides, it can take time to develop viable alternatives. Under current rules, exporting countries are given 6 months to adjust to changes in EU MRLs. This time period is too short for the changes required in many exporting countries. Asking low-income developing countries to completely eliminate the use of certain pesticides within a six month period could potentially cause significant economic and social damage to those countries. The adjustment time required will depend on the structural characteristics of the industry, the nature of the pest, in some cases the time needed to breed and develop pest-resistant varieties, and so on. In some cases, it may be that the time required will be measured in several years rather than months. Obviously, milestones and targets would need to be set to ensure the progress was being made.
- Producers in low-income countries will require technical and financial assistance to adapt their production practices to the elimination of certain pesticides. The development of non-toxic pesticide alternatives or pest-resistant varieties will also

require the investment of significant resources. For some commodity supply chains, private sector actors will be in a position to shoulder some of this cost. The EU in the past has recognised that it has a responsibility to help exporting developing countries to adjust to lower MRLs. Assistance to African, Caribbean and Pacific (ACP) countries to achieve compliance with existing standards and regulations is provided by the EU through the Europe-Africa-Caribbean-Pacific Liaison Committee (COLECAP). Some of those cooperation programmes and projects were focused directly on achieving harmonisation with the PPP and MRL Regulations. An example is COLECAP's Pesticides Initiative Programme (PIP and PIP 2). It operated in the period 2001-2015 to ensure that the EU MRL Harmonisation Programme and the PPP Regulation review process did not leave ACP producers of fruit and vegetables without essential PPPs as well as to secure the compliance of exported products with EU Regulations, including in terms of MRLs (Ecorys 2018). The challenges of adjusting to the much reduced MRLs envisaged for some active substances widely used currently in developing countries will be much greater. The EU has a responsibility to complement the introduction of stricter standards with an expanded technical assistance programme to assist developing countries in the adjustment process.

- A third principle is the importance of direct consultation and partnership with the exporting countries. The principles of the just transition in Europe emphasise that those affected by change should be consulted and have a say in managing that change. This principle should also apply to the external dimension of the Green Deal. One could envisage building on the proposal for Green Alliances in which the EU and partners in the exporting countries would jointly agree on the appropriate transition periods, the level of financial and technical resources needed, and how these resources would be allocated to ensure a successful transition to more sustainable agricultural practices. In Africa, as well as liaising with national governments, it will be important to maintain dialogue with the several regional trading arrangements which may play a greater role in setting regulatory standards in the future.
- A fourth requirement is that EU decision-making must have mechanisms where the interests and needs of these countries are explicitly considered when making changes to policies likely to affect trade. Good mechanisms are in place for legislative proposals, but the silo nature of decision-making in the Commission may inhibit a holistic view when more routine decisions with potentially significant effects for developing countries are taken. For example, in setting MRLs for commodity/pesticide combinations, EFSA draws on scientific expertise to assess the health and environmental impacts within the EU. If it is also to assess the global environmental impacts on practices in exporting countries, significant additional expertise and resources will be required. Also the Commission, as risk manager, needs to ensure that the interests of vulnerable developing countries are fully considered in any decisions that it makes. Commission recommendations must be endorsed by the Standing Committee on Plants, Animals, Food and Feed (PAFF Committee). This Committee is made up of Member State experts in 14 different sections including one on phytopharmaceuticals that deals with pesticide residues. Although this Committee is required to consider comments received from WTO Members, it is not evident that it

has particular expertise in assessing the impacts of its decisions on developing countries. There is an urgent need to put appropriate structures in place in parallel with decisions to proceed with the trade policy instruments of the Green Deal.

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Annex 1. List of vulnerable developing countries as defined in this report

List of Least Developed Countries (LLDCs)

https://www.un.org/en/conferences/least-developed-countries

Afghanistan, Angola, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cambodia, Central African Republic, Chad, Comoros, Democratic Republic of the Congo, Djibouti, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Haiti, Kiribati, Lao People's Dem. Republic, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Myanmar, Nepal, Niger, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, Solomon Islands, Somalia, South Sudan, Sudan, Timor-Leste, Togo, Tuvalu, Uganda, United Republic of Tanzania, Yemen, Zambia.

List of ACP Countries

http://www.acp.int/node/7

The Organisation of African, Caribbean and Pacific States (OACPS) consists of 79 Member-States, all of them, save Cuba, signatories to the Cotonou Agreement with the European Union: 48 countries from Sub-Saharan Africa, 16 from the Caribbean and 15 from the Pacific (the Cotonou Agreement signed in 2000 was extended to November 2021. A new post-Cotonou Agreement was signed by EU and ACP negotiators in April 2021 but has yet to be ratified by the parties)

Angola, Antigua and Barbuda, Belize, Cape Verde, Comoros, Bahamas, Barbados, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Congo (Brazzaville), Congo (Kinshasa), Cook Islands, Côte d'Ivoire, Cuba, Djibouti, Dominica, Dominican Republic, Eritrea, Eswatini, Ethiopia, Fiji, Gabon, Gambia, Ghana, Grenada, Republic of Guinea, Guinea-Bissau, Equatorial Guinea, Guyana, Haiti, Jamaica, Kenya, Kiribati, Lesotho, Liberia, Madagascar, Malawi, Mali, Marshall Islands, Mauritania, Mauritius, Micronesia, Mozambique, Namibia, Nauru, Niger, Nigeria, Niue, Palau – Papua New Guinea, Rwanda, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Solomon Islands, Samoa, São Tomé and Príncipe, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, Sudan, Suriname, Tanzania, Timor Leste, Togo, Tonga, Trinidad and Tobago, Tuvalu, Uganda, Vanuatu, Zambia, Zimbabwe.

Annex 2 Market impacts of Farm to Fork Strategy

This annex provides a graphical analysis of the market impacts of the Green Deal measures in the agri-food sector with a particular focus on international trade impacts. The baseline market equilibrium for an illustrative commodity for which the EU is a net importer is shown in Figure 3. We assume that imports are only imperfectly substitutable for domestic production so that the EU market price in the baseline (P_B) is determined by the price that balances total supply and total demand on the EU market. Total supply, in turn, is the sum of (net) imports and domestic production. In the baseline, imports amount to I_B and domestic production to S_B . Total supply Q_B in the baseline is the sum of I_B and S_B .



Figure 3. Baseline EU market situation for an illustrative commodity

Source: Own construction

We next consider the impact of implement the supply-supply measures in the F2F strategy. In line with the impact assessments cited in Chapter 3, this is represented as a leftward shift in the domestic supply curve, which is now represented as the F2F supply curve. This pushes up domestic prices which draws in more imports. In the final equilibrium, market prices are higher (P_F) and total demand has fallen to Q_F . However, imports increase to I_F and partially compensate for the reduction in domestic production.



Figure 4. Market impacts of implementing supply-side measures in the F2F strategy

Source: Own construction

The F2F strategy not only addresses agricultural production but also has measures to influence food consumption. In some cases, these measures are intended to reduce food demand, for example, by reducing food waste or by reducing the demand for animal source foods. The impact on import demand of implementing these demand-reducing measures on top of the supply-side measures is shown in Figure 5. The key change compared to the previous figure is that now the total demand curve also shifts to the left, represented by the F2F total demand curve. Whereas when only the supply-side impacts are taken into account, the EU market price increased to PF, the reduction in demand mitigates this price increase and the new market price only increases to PD. The consequence shown in Figure 5 is that import demand still increases but by less than when only supply-side changes are considered. However, the actual impact on import demand will depend on the size in the relative shifts in the domestic supply curve and the total demand curve resulting from the F2F measures. If the production impacts dominate, imports will increase, but if the changes in consumption patterns dominate, then import demand would fall.

For some commodities, such as fruits, vegetables and nuts, total demand is expected to increase following introduction of F2F measures. In that case (not shown graphically), then there will be an unambiguous increase in import demand as the consumption changes will amplify the impact on import demand arising from the implementation of the supply-side measures.

As noted, these quantitative studies do not take account of the potential impact of complementary demand side measures. Some qualitative indications can be drawn. To the extent that there is an overall drop in EU food demand complementary to the production changes, this will have two effects.

First, it will mitigate some of the price increases that would otherwise be projected in scenarios that do not take demand effects into account. If prices do not rise by the extent projected in these quantitative studies, there will be a further downward pressure on activity levels in EU agriculture. The extent of this will be determined by the size of the relevant supply elasticities with respect to price.

Second, the main impact of a complementary shift in demand will be observed in the level of imports. Different scenarios can be envisaged. The expected scenario is that there will be a reduction in the demand for food (which shifts the demand curve to the left). If the leftward shift in the supply curve is greater than the leftward shift in the demand curve, there will still be an increase in the demand for imports though by a smaller extent. If the shift in the demand curve is greater than the supply curve, the baseline level of imports could even be reduced and EU exports would increase.

The impact of F2F on individual demand categories will be more nuanced. In addition to a reduction in overall consumption (food intake) there will be contrasting shifts in food demand. As noted above, consumption of fruit and vegetables is expected to increase. This will encourage greater domestic production but also potentially greater imports from third countries, given the significant import shares that are already apparent particularly for fruit. For other products, particularly animal-source foods and feed ingredients such as soya, the expected decrease in demand will lead to a decrease in imports.



Figure 5. Market impacts of implementing F2F demand-reducing measures

Source: Own construction

We now simulate the impact of stricter import standards. This is represented as a leftward shift in the import demand curve. We maintain the previous shifts in the domestic supply and total demand curves resulting from the domestic implementation of the F2F strategy.

With fewer imports on the EU market, domestic prices rise by even more than in the supplyside scenario where only domestic production is affected. As a result, domestic production falls by less and farmgate prices increase by more than in that scenario. Farm incomes are thus unambiguously improved with import standards in place relative to the previous scenarios. Whether they are improved relative to the baseline would depend on the magnitude of the supply and demand responses to the various interventions as well as the size of the various elasticities. The counterpart of the higher producer prices is that consumer prices are also unambiguously higher and thus demand falls by even more to QI.

With regard to international trade, Figure 6 shows a situation where the introduction of import standards results in a very significant leftward shift in the import supply curve. As a result, the quantity imported (I_I) is shown as smaller than under the F2F outcomes (either I_F or I_D). However, this is just one possible outcome. If the costs of meeting the import standard is not so high for exporting countries, then the leftward shift in the import supply curve will not be so great, and a possible outcome is that the quantity of imports demanded could still be higher than under the baseline (I_B) case.



Figure 6. Market impacts of Farm to Fork Strategy with import standards in place

Source: Own construction

In summary, the overall impact of Green Deal sustainability policies on the exports of third countries, including developing countries, will depend on:

- The direct impact of higher sustainability standards on production costs and thus domestic supply within the EU.
- The direct impact of shifts in consumer demand arising from the implementation of F2F measures.
- The indirect impacts on import demand if complementary trade policy measures are introduced to also require higher sustainability standards of imports.