September 2023

Policy report

# Reconciling agricultural and sustainability objectives in the EU-New Zealand FTA

[Subject]

Institute for European Environmental Policy


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Blot, E., Sgarbi, F. and Oger, A. (2023). Reconciling agricultural and sustainability objectives in the EU-New Zealand FTA. Institute for European Environmental Policy.

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ACKNOWLEDGEMENTS

We gratefully acknowledge the contribution of members of the Green Trade Network for their helpful comments and feedback on this report, in addition to the representatives of the New Zealand Ministry for Primary Industries for their time and insights regarding climate and environmental policies relevant to New Zealand's agricultural sector.

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This report was commissioned and financially supported by The Greens/EFA Group in the European Parliament represented by MEPs Sara Matthieu, Saskia Bricmont, and Yannick Jadot.

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# EXECUTIVE SUMMARY

The negotiations of the EU-New Zealand Free Trade Agreement (FTA) officially concluded in June 2022 shortly after the European Commission's communication on the renewed approach to EU trade agreement's Trade and Sustainable Development (TSD) Chapters.

**With this new FTA, the EU has raised the bar regarding sustainability commitments in its FTAs**, in part due to New Zealand's progressive stance on sustainability issues. The EU-New Zealand agreement holds both trade partners accountable to achieve the objectives of the Paris Agreement and to implement the core International Labour Organisation (ILO) conventions. Moreover, the agreement aims to intensify cooperation on fossil fuel subsidy reform and the development of sustainable food systems.

**However, this FTA is not a silver bullet to solve sustainability issues linked to trade**. The TSD Chapter remains largely cooperation based and the enforceability of the Parties' commitment to implementing the Paris Agreement does not encompass accountability of the Parties to refrain from implementing national policies that defeat the purpose of the Paris Agreement, such as the continuation of subsidies for fossil fuel industries. Moreover, the FTA does not feature a strong hierarchy clause to ensure the agreement's economic provisions do not receive total priority over the implementation of measures to further climate and environmental objectives, other than the General Exceptions Article which only applies to some Chapters.

This report concludes that **the impact of the EU-New Zealand FTA on EU production of sensitive agri-food products such as beef, sheep meat, and dairy products will be limited**, with an expected decline of 1.4% of beef and sheep meat production by 2030, and no significant change to the production of dairy products. This estimated production decrease coincides with the expected evolution of EU production for red meat, brought on by factors other than the FTA such as dietary changes, rising costs of production, and climate change effects.

As a result of the estimated decline in beef and sheep meat production in the EU from the FTA**, the expected environmental impacts in the EU are a reduction in GHG emissions and pollutants**. However, due to the interlinkages between the beef meat and the dairy sector and because the latter is expected to remain stable, the emissions will not decrease proportionally with the expected decline in beef production. **Due to the same interlinkages, the decline in employment is also not expected to be significant**. Moreover, no direct link was found

between the FTA and EU food security for these sensitive agri-food products as EU self-sufficiency rates for meat and dairy are expected to remain around 100%.

Considering New Zealand's agricultural model and its sustainability ambitions, **the EU-New Zealand FTA represents an opportunity for the Parties to cooperate, harmonise and recognise sustainability practices and standards in the agricultural sector**, which can also level the playing field for agriculture production. Specifically, the EU-New Zealand FTA provides a framework for bilateral cooperation on matters related to sustainability and agricultural development, such as sustainable food systems which could contribute to improved resilience for farmers against the effects of climate change and environmental degradation.

To further overall sustainability objectives and encourage dialogue between these like-minded trade partners during the implementation phase of the agreement, the following recommendations are proposed:

- Define a set of criteria or guiding principles to be considered essential to achieving the objectives of the Paris Agreement, taken from existing MEAs and frameworks that target environmental issues beyond climate change.
- Facilitate trade and investment in innovative environmental G&S by systematically reviewing the FTA's list of environmental G&S.
- Leverage cooperation provisions in the Sustainable Food Systems and the Animal Welfare Chapters to further policy and knowledge exchange on outcomes for sustainable agricultural practices. E.g., New Zealand's ban on the export of live animals by sea.
- Prepare for a swift establishment of both trade partners' DAGs. In this manner, once the agreement enters into force, the DAGs will be ready to formalise and contribute to putting forward concrete proposals to progress TSD commitments and monitor their implementation.
- Monitor and exchange on the development and implementation of climate and environmental policies for the agricultural sectors of the trade partners considering their significant share of GHG emissions. E.g., New Zealand's He Waka Eke Noa proposal.
- Intensify engagement on fossil fuel subsidy reform at the WTO to accelerate the phase out and elimination of fossil fuel subsidies.
- Pursue dialogue and actions on tackling trade-related transport emissions, including at the WTO.

# 1. INTRODUCTION

The EU-New Zealand Free Trade Agreement (FTA) was concluded on the heels of the European Commission's communication on the renewed approach to trade agreement's Trade and Sustainable Development (TSD) Chapters in June 2022 (European Commission, 2022d). The negotiations for the FTA build on the Parties' existing Partnership Agreement on Relations and Cooperation (PARC) and like-mindedness, most notably in the sustainability space.

Both Parties laud the agreement as being the most ambitious EU FTA to date regarding sustainability. Indeed, the agreement's TSD Chapter has seen improvements compared to its predecessors (Blot & Kettunen, 2021; Blot & Li, 2023), as both the EU and New Zealand continue their collaboration on trade and sustainability issues. Other existing initiatives between the trade partners, among other partners, include the Coalition of Trade Ministers on Climate and the Global Alliance on Circular Economy and Resource Efficiency (GACERE) (Blot & Li, 2023).

The EU-New Zealand FTA ambitiously liberalises market access between the trade partners, with specific concessions for agri-food products. Figures 1 and 2 below present the average share of product trade between the partners from 2018-2021. On one hand, the main EU exports to New Zealand include machinery and appliances, transport equipment, and chemical products, with EU agricultural products making up approximately 10% of exports to New Zealand. On the other hand, the vast majority of New Zealand export to the EU consist of agricultural products.

Figure 1: Average EU exports to New Zealand from 2018-2021

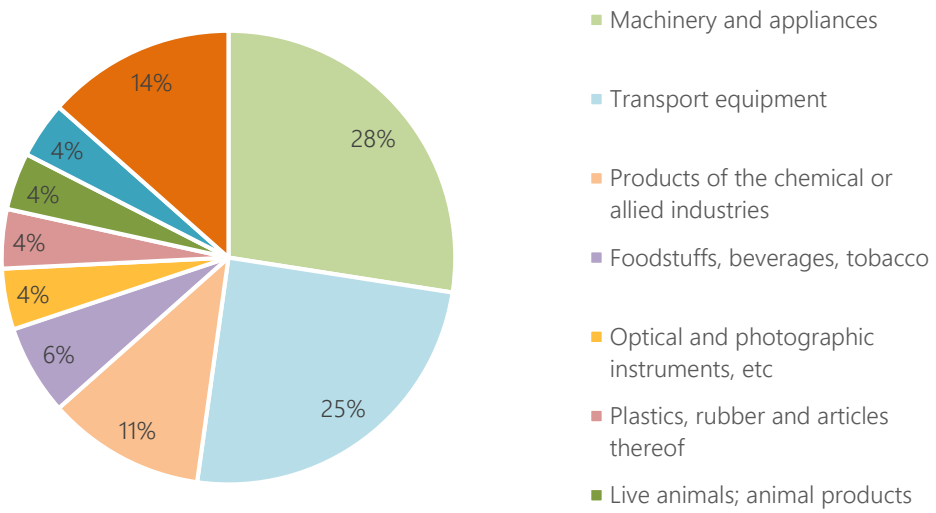
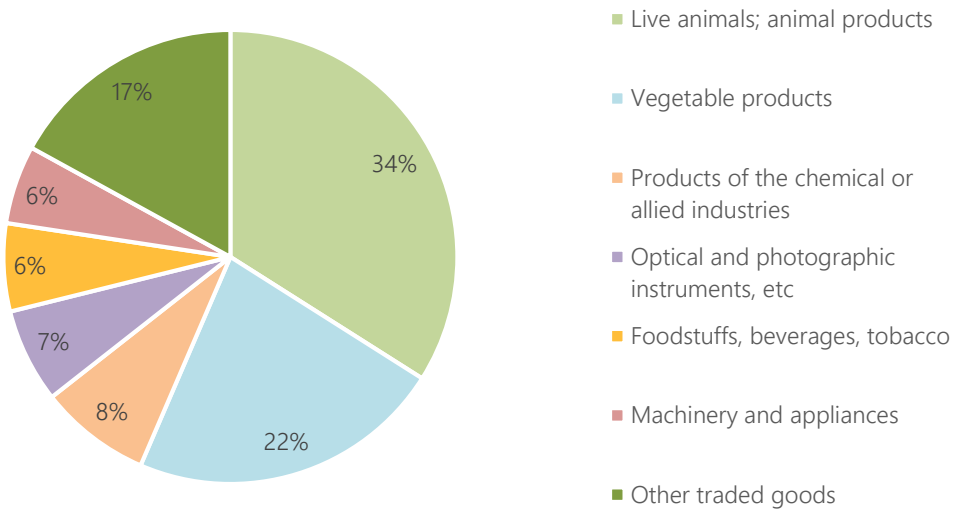


Figure 2: Average EU imports from New Zealand from 2018-2021




Source: Average EU export and imports to/from New Zealand from 2018-2021. Calculations and graphs by the authors using data from (UN Comtrade, 2022b).

In this light, the concessions granted to New Zealand regarding market access for sensitive EU agri-food products such as beef, sheep meat, and dairy product like milk powder, butter and cheese, has EU farmers concerned, to say the least (Farm Europe, 2023; Radio New Zealand, 2022; Voinea, 2022). Moreover, the objectives of the Farm to Fork strategy to reduce greenhouse gas (GHG) emissions-intense consumption from meat and dairy stand in stark contrast with the liberalisation of these agri-food products traded with New Zealand (European Commission, 2020a).

Many questions have surfaced on the potential impact of the FTA on sustainability and agriculture. This report aims to address initial concerns regarding the impact of the EU-New Zealand FTA on sustainability and the European agricultural sector. Section 2 assesses the potential reach of the TSD Chapter to other Chapters of the agreement to further progress on sustainability issues and to ensure environmental protection in the agricultural sector. Section 3 provides an overview of New Zealand's agricultural production system and its environmental impacts. Section 4 considers the potential economic, environmental, and social impacts of the concessions granted to sensitive agri-food products on the EU agricultural sector. Section 5 provides a summary of the previous section and presents a set of recommendations to support the advancement of climate and environmental policies, the implementation of sustainable agricultural practices, and the development of sustainable food systems within the context of the FTA.

# 2. CONTENT OF THE EU-NEW ZEALAND FTA

This section discusses Chapters of the EU-New Zealand FTA relevant to sustainability and agriculture. The first subsection discusses the Chapters on market access for goods, sanitary and phytosanitary measures, sustainable food systems and animal welfare. The second subsection assesses changes to the TSD Chapter, with a special focus on the applicability of provisions to enforce sustainability commitments.

## 2.1 Chapters relevant to agriculture and sustainable food systems

This subsection briefly assesses the contents of, and sustainability commitments made in the Chapters on market access for good, sanitary and phytosanitary measures, sustainable food systems and animal welfare.

**Chapter 2: National treatment and market access for goods**

Together with the FTA's Tariff elimination schedules in Annex 2-A, the Chapter on National treatment and market access for goods sets out the rules surrounding the treatment of goods. This includes the obligation for the Parties to implement the negotiated tariff elimination schedules according to the determined timeline and to not unilaterally increase or adopt new tariffs.

Generally, the principles of this Chapter outline that the Parties must not apply internal taxes or other internal charges, laws, regulations, and requirements affecting imported or domestic products to afford protection for domestic production. Section 4.1 presents and discusses the tariff rate quotas granted for sensitive EU agri-food products.

There are no explicit mentions of "environment" or "climate" in this Chapter, however, there are Articles that stipulate the treatment of repaired and remanufactured goods, which benefit the environment by reducing both waste and resource consumption (Russell & Nasr, 2023). These Articles state that goods temporarily exported for repair or alteration will not be subject to a customs duty upon re-entry, and that remanufactured goods should not face less favourable treatment than the equivalent goods in new condition. However, the Chapter does not address the reuse of goods, which face both regulatory and trade significant barriers (Gharfalkar, Ali, & Hillier, 2016; OECD & RE-CIRCLE, 2018).

**Chapter 6: Sanitary and Phytosanitary Measures**

Such as in existing EU FTAs, the Chapter on Sanitary and Phytosanitary (SPS) Measures reflects international agreements regarding SPS measures to protect human, animal and plant health, to implement international standards and enhance cooperation on international standard-setting, combatting antimicrobial resistance and SPS issues that may affect trade.

The Chapter embeds standards, definitions and principles of international agreements and Institutions such as the WTO SPS Agreement, the Codex Alimentarius Commission, the World Organisation for Animal Health, and the International Plant Protection Convention.

Although the objectives of the SPS measures Chapter include protecting "*human, animal and plant health in the respective territories of the Parties while facilitating trade between them*" there is little other reference to either the environment or the precautionary principle in the Chapter. However, the WTO SPS Agreement clarifies that SPS measures are measures applied to protect human or animal life from risks arising from additives, contaminants, toxins or disease-causing organisms in their food; plant- or animal-carried diseases; and from pests, diseases, or disease-causing organisms. SPS measures can be applied to prevent or limit other damage to a country from the entry, establishment or spread of pests. Moreover, these measures include SPS measures taken to protect the health of fish and wild fauna, as well as of forests and wild flora (WTO, 2023).

However, the WTO clarifies that measures for environmental protection (other than as defined above), for example, to protect consumer interests, or for the welfare of animals are not covered by the SPS Agreement. Yet, these issues, are addressed by other WTO agreements (such as the TBT Agreement or Article XX of GATT (WTO, 2023).

On its own, the SPS Chapter does not adequately address challenges of the EU's current food system as highlighted in the Farm to Fork Strategy such as increasing organic farming, improving animal welfare, reversing biodiversity loss, reducing food waste, and encouraging sustainable practices along the food supply chain (European Commission, 2020a). Rather, most of these topics are addressed in the Chapters on Sustainable Food Systems and Animal Welfare, see below.

**Chapters 7 and 8: Sustainable food systems and animal welfare**

Chapters 7 and 8 are dedicated to sustainable food systems (SFS) and animal welfare, which are newer additions to the EU's FTAs. Each Chapter outlines their respective objectives and means for their achievement, primarily through cooperative efforts to contribute to the development of sustainable, inclusive, healthy and resilient food systems, and to promote the development and implementation of animal welfare standards (Blot & Li, 2023).

The contents of the SFS Chapter apply to other food systems or sustainability Chapters of the FTA, specifically, the SPS Chapter, the TBT Chapter and the TSD Chapter (European Commission, 2022b). While applying the principles of SFS across these Chapters is positive, there are no explicit binding commitments for Parties to implement measures to further the achievement of more sustainable food systems. Even though the objectives of the SFS and animal welfare Chapters are aligned with Farm to Fork Strategy, there are few provisions in each Chapter which could be considered legally binding and thus enforceable, apart from the expectation of the Parties to cooperate on topics related to SFS and animal welfare.

Regarding cooperation, to ensure improved dialogue between the Parties, the Chapters establish, respectively, a Committee on SFS and a Working Group on animal welfare. The former sets the priorities for cooperation and annual work plans with objectives and milestones to implement those priorities and promote cooperation in multilateral fora. Such cooperation includes topics such as regenerative agriculture, reducing the use and risk of chemical pesticides and fertilisers, carbon sinks, efficient use of natural resources, food waste, sustainable diets, food supply chain resilience, and carbon footprint of consumption, among others (European Commission, 2022b).

Moreover, the Animal Welfare chapter specifically mentions, among other topics, cooperation in the field of animal welfare during transport. New Zealand has recently implemented a ban on all exports of livestock (sheep, cattle, deer, and goats) by sea (New Zealand Government, 2023), becoming the first country to do so and providing a concrete example of a cooperation area that would be beneficial to enhance animal welfare in Europe. Though the export of live animals by air is still permitted in New Zealand, in comparison EU has no ban on the export of live animals by sea or air. With the EU is planning to review its Animal Welfare legislation, this process could stand to benefit from the bilateral cooperation on animal welfare standards under the EU-New Zealand FTA.

## 2.2 Evolution of the TSD Chapter and enforceability of sustainability commitments

This subsection assesses the EU-New Zealand TSD Chapter provisions regarding the applicability of the General Exceptions Article for measures to implement MEAs and the potential impact of the Articles on the effective implementation of the Paris Agreement and the fossil fuel subsidy reform.

Compared to existing EU FTAs, the EU-New Zealand's TSD Chapter showcases a positive evolution regarding both the expansion in scope and the use of stronger language (Blot & Li, 2023). For example, the Chapter now includes new Articles on fossil fuel subsidy reform and gender equality and an annex for the liberalisation of environmental goods and services.

Further, more obligatory language to tackle climate change, illegal deforestation, illegal wildlife trade, and the spread of invasive alien species indicates that the link between international trade and these biodiversity-related issues is being taken more seriously. Moreover, the EU-New Zealand TSD Chapter explicitly acknowledges the role of fisheries subsidies in the inadequate management of fisheries and confirms the need to end such subsidies.

A significant part of the TSD Chapter remains based on cooperation between the Parties to address environmental and climate issues (European Commission, 2022b), with specific provisions integrating language that could be enforceable if a dispute were to arise.

One of the main differences between the EU-New Zealand agreement and other existing EU FTAs is that this new agreement subjects the TSD Chapter (Chapter 19) to the agreement's general dispute settlement mechanism (Chapter 26). As a result, TSD provisions with sufficiently strong language (i.e., obligatory) can trigger a dispute settlement process treated similarly to provisions of other Chapters in the FTA, i.e., with the possibility of sanctions as a last resort.

However, not all TSD provisions are subject to the possibility of "temporary remedies"[1], which can be invoked if a Party is found to violate a legally binding provision. The only TSD provisions that can invoke the possibility of temporary remedies include the provisions relating to the multilateral labour standards and agreements under Article 19.3(3), and if that panel, Article 19.6(3) for a Party to effectively implement the Paris Agreement if a Party failed to refrain from any

[1] Temporary remedies can include mutually agreed compensation or a suspension of obligations under the agreement, yet the suspension "shall not exceed the level equivalent to the nullification or impairment caused by the violation." (European Commission, 2022b).

action or omission that materially defeats the object and purpose of the Paris Agreement, as determined by the Expert Panel's final report.

### Impact and enforceability of the commitment to the Paris Agreement

Article 19.6(2) obliges the Parties to effectively implement the UNFCCC and the Paris Agreement, including their respective NDCs, while Article 19.6(3) clarifies that in the effective implementation of the Paris Agreement, the Parties are to refrain from any action or omission that materially defeats the object and purpose of the Paris Agreement.

Similar wording is used in the EU-UK Trade and Cooperation Agreement (TCA), which explicitly makes respecting the Paris Agreement an essential element of the EU-UK partnership (European Commission, 2021), though members of the UK parliament remarked on the high threshold of what could be considered a "serious breach" of the Agreement (House of Lords, 2021). It is likely this wording was added to the EU-UK TCA following the US officially withdrawing from the Paris Agreement in 2019 (Pompeo, 2019), and thus aims to ensure neither Party would withdraw its commitment to the Paris Agreement lest they suspend the TCA.

Though not explicitly stated in the EU-New Zealand FTA text, it is possible that an action that materially defeats the object and purpose of the Paris Agreement would include a withdrawal from the Agreement based on the interpretation of the EU-UK TCA provisions. Moreover, it is likely that failures to submit and implement timely and progressive NDCs, as included in the leaked draft EU-Mercosur Joint Instrument (European Commission, 2023a), may also be considered an omission that materially defeats the object and purpose of the Paris Agreement. However, regressions in domestic policy that put the objectives of the Paris Agreement and respective NDC at risk are not covered by the obligation put forth by Article 19.6.(2-3) (Dupré & Kpenou, 2023).

The EU-New Zealand FTA binds the Parties to effectively implement the Paris Agreement and their respective NDCs. However, with both Parties' NDCs rated as at least "insufficient" (Climate Action Tracker, 2023a, 2023b), more should be done to ensure both Parties achieve the objectives of the Paris Agreement. Research has found that FTA provisions are not sufficient to operationalise the NDCs (Tokas, 2022).

Therefore, a set of criteria or guiding principles for the effective implementation of the Paris Agreement should be included in the drafting of an implementation roadmap for the EU-New Zealand FTA. The implementation roadmap should seek to implement all commitments in the TSD Chapter as the delivery of the Paris

Agreement objectives is inherently interlinked with other commitments such as those on biodiversity and marine ecosystems.

The implementation roadmap criteria could integrate specific targets and timelines for their delivery from existing MEAs and frameworks, such as the Convention on Biological Diversity (CBD), the Kunming-Montreal Global Biodiversity Framework, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), and the Agreement under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction (BBNJ) to complement the Paris Agreement.

The guiding principles in the roadmap could specify actions or omissions materially defeating the purpose of the Paris Agreement and other MEAs such as the obligation to submit in a timely and systematic matter progressive updates to the Parties' NDCs and other progress reports such as the National Biodiversity Strategy and Action Plans (NBSAPs) for the CBD.

These progress reports can facilitate the DAGs in the monitoring of the development and implementation of national frameworks to tackle climate change and biodiversity loss. Moreover, the progress reports can ask as an evaluation tool to enforce the commitment to effectively implement the Paris Agreement. An example of actions materially defeating the purpose of the Paris Agreement could be, for example, if a Party's submitted NDC is considered insufficient (by an independent monitoring actor such as the UNFCCC) to achieve the 1.5-degree target in the Paris Agreement and that Party has not been on track to reach this target for five consecutive years with no indication to break this trend. Lastly, these progress reports should be factored into the FTA ex-post assessment if possible, aligning the assessment with the MEA reporting periods to account for the most recent data available. As an alternative, a lighter "sustainability review" can take place during the implementation phase of the FTA which takes into account the findings of the MEA progress reports.

To conclude, at best, the EU-New Zealand FTA would spur the Parties to continue the effective implementation of the Paris Agreement and their respective NDCs. Moreover, if Article 19.6(3) is violated, dispute settlement can be launched which can be subject to sanctions as a last resort, thereby potentially acting as a backstop for any potential stagnation or regression in actions which would be inconsistent with the Paris Agreement. Yet, more can still be done to clarify what action or omissions would be considered materially defeating the purpose of the Paris Agreement and concrete monitoring practices should be put in place to ensure Parties are making sustained efforts to implement MEAs to which they are Party.

### What about potential inconsistencies between measures for the implementation of MEAs and other Chapters of the FTA?

In trade agreements preceding the EU-New Zealand FTA, such as the EU-Vietnam agreement, Articles on adopting or maintaining measures for the implementation of MEAs state that so long the "*measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between the Parties or a disguised restriction on trade"* that nothing in the agreement shall prevent a Party from adopting measures to implement an MEA.

The same provision in the EU-New Zealand TSD is worded differently with some legal implications. Article 19.5(4) in the EU-New Zealand TSD Chapter states that a Party can adopt or maintain measures to further the objectives of MEAs to which it is a party while recalling that such measures may be justified under Article 25.1 (General exceptions). A comparison of the EU-Vietnam and the EU-New Zealand provisions can be found in Table 1 below.

The EU-New Zealand General Exceptions states that so long a measure is "*not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where like conditions prevail*" and the measure is necessary to protect human, animal or plant life or health; or related to the conservation of living and non-living exhaustible natural resources, then nothing in the listed Chapters shall be construed to prevent the adoption of measures to implement an MEA.

Compared to the EU-Vietnam provision, the wording regarding a "restriction to trade" has been removed. However, the provisions of the General Exceptions Article in the EU-New Zealand FTA risk limiting the regulatory space for the adoption of environmental measures, compared to the EU-Vietnam provision, for the following two reasons:

First, the requirement to show a measure is "necessary" to protect human, animal or plant life, or to find a genuine link between the measure to be implemented and the conservation of living and non-living exhaustible natural resources, raises the burden of proof for the implementing Party. This requirement is not present in the EU-Vietnam provision on the adoption of measures to implement an MEA.

Second, the scope of the General Exceptions Article does not cover the whole EU-New Zealand FTA and is instead limited to certain Chapters. Specifically, Chapter 2 on National treatment and market access for goods, Chapter 4 on Customs and trade facilitation, Section B of Chapter 10 on Investment liberalisation, Chapter 12 on Digital trade, Chapter 13 on Energy and raw materials, and Chapter 17 on State-owned enterprises. Therefore, if an environmental measure is adopted and

found to be inconsistent with the contents of Chapters other than those listed above, such as Chapter 6 on Sanitary and Phytosanitary Measures, then this General Exceptions Article would not apply.

Table 1: EU-Vietnam versus EU-New Zealand TSD provisions relating to the adoption or maintenance of measures to further the objectives of MEAs

| Article on implementing measures for MEAs | **Differences in the articles** |
|---|---|
| **EU-Vietnam Article 13.5(4)**: Nothing in this Agreement shall prevent a Party from adopting or maintaining measures to implement the multilateral environmental agreements to which it is a party, provided that such measures are not applied in a manner which would constitute **a means of arbitrary or unjustifiable discrimination between the Parties or a disguised restriction on trade**. | The EU-Vietnam provision applies a condition under a "trade impact" filter (see bolded text) to ensure a measure is not an arbitrary trade-impacting measure. |
| **EU-New Zealand Article 19.5(4)**: The Parties affirm the right of each Party to adopt or maintain measures to further the objectives of MEAs to which it is a party. The Parties recall that **measures adopted or enforced to implement these MEAs may be justified under Article 25.1 (General exceptions).** | The EU-New Zealand provision does not remove the "trade impact" filter but rather moves it to the General Exceptions article, which includes a similar "trade impact" filter language and the requirement to prove a measure is necessary to protect human, animal or plant life or health. |

Another potential risk of inconsistencies between TSD Chapter commitments and other Chapters is related to the interpretation obligations. For example, the commitment to effectively implement the Paris Agreement and respective NDCs imposes a positive obligation for the Parties to implement measures. In comparison, other Chapters may introduce negative integration such as Parties shall not introduce or increase trade measures, e.g., customs duties or import restrictions. These positive and negative obligations risk contradicting each other and there is no further guidance on how to interpret the potential implementation

of an environmental measure, especially if the General Exceptions Article is not applicable due to scope.

Box 1: The dispute over the Ukraine wood export ban

In 2019, the EU requested consultation with Ukraine under the EU-Ukraine Association Agreement (AA) regarding Ukraine's export ban on unprocessed wood. The EU argued that Ukraine had not shown the ban was necessary to protect plant life or health and that Ukraine had not imposed similar restrictions to limit domestic consumption of unprocessed wood. Moreover, the AA provision on the "right to regulate" could not be invoked as the measures need to be consistent with other provisions of the AA and argued that the right to regulate is "not an unqualified right".

The Expert Panel found that although the export ban was incompatible with the EU-Ukraine agreement's article forbidding export restrictions, it was justified under the General Exceptions Article XX(b) of GATT and the TSD Chapter because it was a measure "*necessary to protect […] plant life*" and ruled that is was therefore not a breach of the article forbidding export restrictions.

However, Ukraine export ban on wood was found to be unjustified under the General Exceptions Article XX(g) of GATT because the ban was not "*relating to the conservation of exhaustible resources […] made effective in conjunction with restrictions on domestic production or consumption*."

As a result, the export ban on unprocessed wood was found to be inconsistent with the AA and the Expert Panel recommended Ukraine to comply with the ruling and "*improve forest law enforcement and governance and promote trade in legal and sustainable forest products."* as per the AA's TSD Chapter provisions on forestry (Arbitration Panel, 2020).

The risk of such potential inconsistencies could be ameliorated by the introduction of a hierarchy clause which would specify that a measure to be adopted or maintained can take priority over the contents of the FTA, given the measure would not constitute a means of arbitrary or unjustifiable discrimination between the Parties. Alternatively, a carve-out could be included which would

exclude the potential conflict between the adoption of a measure to implement an MEA and the Chapters of the FTA.

### Actions for Trade and Fossil Fuel Subsidy Reform

The Article on fossil fuel subsidies reform does not obligate but rather allows the Parties to reaffirm their commitment to meet the overarching objective to reform and reduce their fossil fuel subsidies. It is unlikely that this provision could trigger a substantiated dispute settlement claim if fossil fuel subsidy reduction does not occur (at an adequate pace). Therefore, the Article does not bind the Parties to effectively phase out their fossil fuel subsidies.

Yet, the Article obligates cooperative activities between the Parties and at international fora. The latter includes but is not limited to the WTO, meaning although not explicitly stated under this Article, the Parties could cooperate at other international fora such as the United Nations High-level Political Forum for Sustainable Development, UNEP, UNEA, OECD, G20, G7.

The WTO has seen some positive momentum following the 11$^{th}$ Ministerial Conference (MC11) in 2017, which saw the publication of a Ministerial Statement on Fossil Fuel Subsidies (2021). During MC12, a High-Level work plan (2022) was adopted which aims to take stock of international efforts regarding fossil fuel subsidy reform including preparation to continue discussions during MC13 in February 2024.

New Zealand and the EU have also launched together with Ecuador and Kenya the Coalition of Trade Ministers on Climate to function as a global forum dedicated to trade, climate, and sustainable development issues, including fossil fuel subsidy reform (European Commission, 2023b). This coalition counts more than 50 other trade ministers from WTO members and plans to meet during MC13.

Finally, New Zealand is a strong proponent of fossil fuel subsidy reform and has also pushed forward this agenda with Costa Rica, Fiji, Iceland, Norway and Switzerland, in the form of the Agreement on Climate Change, Trade and Sustainability (ACCTS). The ACCTS initiative aims to further climate and environmental objectives through economic cooperation and trade, including the explicit objective to end fossil fuel subsidies (New Zealand Government, 2022). The EU is not a member of this initiative and is unlikely to join considering its FTA with New Zealand, and existing trade relations with the other members. Though still under negotiation, the objectives of the ACCTS could be a commendable example of a trade and environmental agreement.

# 3. NEW ZEALAND COUNTRY PROFILE

This section discusses the history and current agricultural system in New Zealand, describing its export-oriented model. Afterwards, the section assesses the climate and environmental impact of the New Zealand agricultural system, in addition to the government's climate and environmental objectives targeting the sector.

## 3.1 History of and current-day agricultural systems

**New Zealand agriculture from a historical perspective**

New Zealand's agriculture is known for its high degree of market openness which is related to its high dependency on international trade. These two characteristics are rooted in the history of the country's agriculture, evolution and development. In particular, trading arrangements between Great Britain and the Commonwealth guaranteed access to the UK market for meat and dairy products from New Zealand. The removal of tariffs from Commonwealth products allowed for an increase in production without impacting the market prices, thus generating a relatively high standard of living for New Zealand farmers and creating the basis for the so-called Grassland Revolution between the 1920s and the 1970s (Haggerty, Campbell, & Morris, 2009; Smallfield, 1970; Winder, 2009).

From the 1920s through the 1960s, the first intensification of the national pastoral system took place, largely driven by innovation (fertilisers, re-sowing with better quality grasses, improved livestock, machinery, and irrigation). During this time, more than half of the country's production was exported to the UK, especially sheep meat and butter (Winder, 2009). During the 1970s, New Zealand faced several market disruptions including oil shocks and the UK's accession to the European Economic Community, which lead to New Zealand losing its privileged access to the UK market and plunging its agricultural sector into a severe crisis (Winder, 2009).

This situation led to a change in the approach of New Zealand's government, which introduced massive agricultural support to farmers to encourage them to boost production while countering a collapse in commodity prices (New Zealand Ministry for Primary Industries, 2017b). This period of heavily subsidized agriculture is regarded negatively as a time of low productivity, high inefficiency, and increased government debt (Vitalis, 2007).

However, by the mid-1980s it was clear that the current trend of subsidised production was economically unsustainable, and the government underwent major reforms to transition towards a market-driven agriculture (New Zealand Ministry for Primary Industries, 2017b). Accordingly, the government significantly

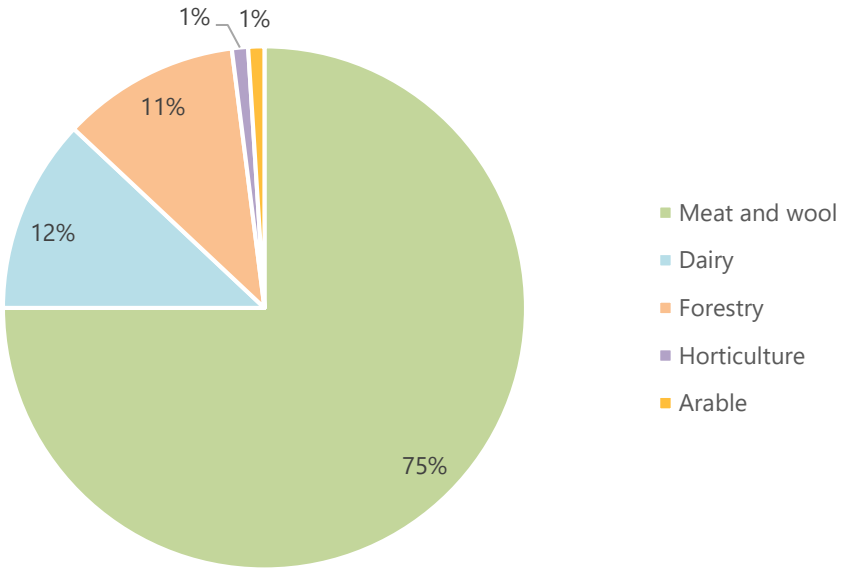
dismantled price support mechanisms and almost all forms of direct aid to farmers. To accompany the liberalisation of the sector, the government launched exit packages and debt restructuring programmes for farmers who had to stop operating, which eventually led to a progressive concentration of the sector.

Trade liberalisation continued throughout the 90s to the present day, making New Zealand's level of support to agricultural producers has been the lowest among OECD countries (OECD, 2022). Since the '80s, support to the sector is mainly driven by knowledge and innovation services and disaster aid. Contrary to the subsidised period in the 70s and early 80s, the shift towards a market-based approach has been largely accepted by the farming community, which has adopted the concept of "good farming" and now thinks of farming as a business (Hunt, Rosin, Campbell, & Fairweather, 2013).

**New Zealand's agriculture and agricultural system today: a focus on animal productions**

The New Zealand agricultural production system encompasses six main sectors: dairy, meat and wool, forestry, horticulture, seafood, and arable. Agriculture accounts for more than 50% of the total land area in New Zealand. Figure 3 presents the share of New Zealand agricultural land use by sector.

Figure 3: New Zealand agricultural land use by sector




Source: (Stats NZ, 2021)

As presented in Figure 3 livestock and dairy farming make up a large majority of New Zealand's agricultural land use. In New Zealand, the animal production systems are closely integrated. For example, in the early 1990s, beef and sheep meat production decreased while dairy production expanded. Pastoral land under dairy increased by 57%, from 1.4 million hectares to 2.2 million hectares (Moot & Davison, 2021). This growth was incentivised by the relatively better rentability of dairy compared to red meat at the end of the subsidised era. Moreover, the expansion required additional land for feeding replacement stock and increased areas of forage crops on which to winter cows.

As a result, from the 1990s to the 2020s, the total number of sheep and beef farms declined by 53%, from 19,600 to 9,165 farms. Over the same period, total beef cattle numbers declined from 4.6 to 3.9 million, whereas the number of dairy cattle increased from 3.4 to 6.1 million. This has resulted in the beef supply from the dairy industry increasing from 18% to 33% of the cattle slaughtered (Moot & Davison, 2021).

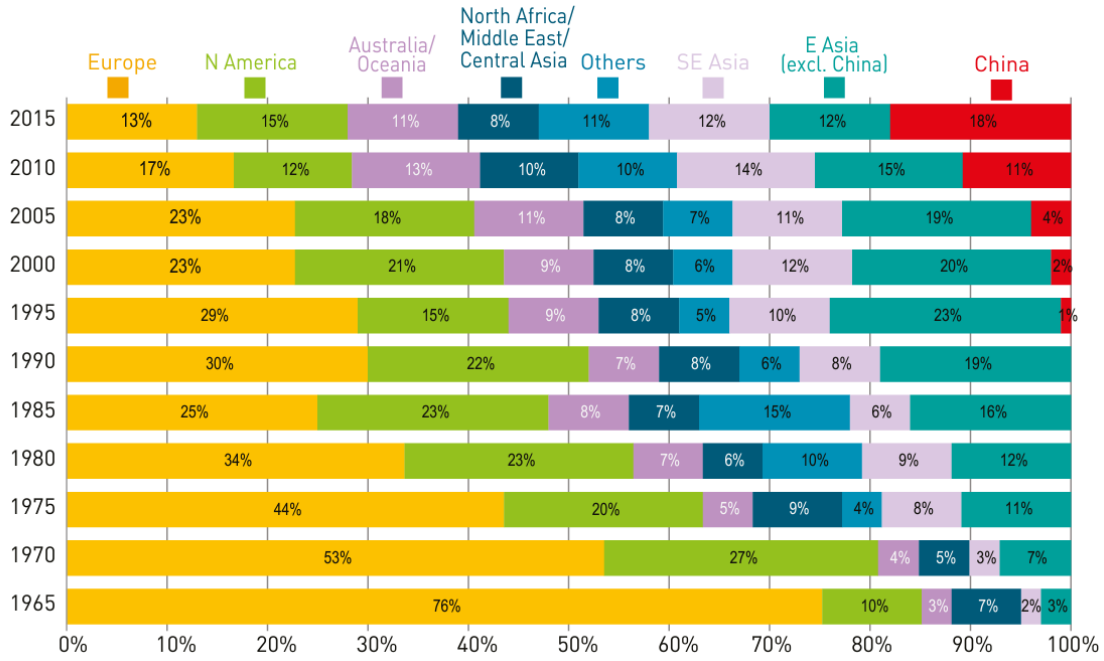
**An export-oriented agricultural system**

New Zealand produces significantly more food than it consumes, exporting 85% of its domestic production. New Zealand is the world's largest exporter of sheep meat and among the largest exporters of dairy products. Beef, fruit and horticultural products also contribute significantly to the country's agri-food exports. However, on a global scale, New Zealand is far from the largest agricultural producer. The country's production accounts for only 5% of world sheep meat production, 3% of milk, and less than 1% of beef (New Zealand Ministry for Primary Industries, 2022). The main export destinations in 2022 were China (35%), the USA (10%), Australia (8%), Europe (6%), Japan (5%), and smaller amounts to other countries (New Zealand Ministry for Primary Industries, 2022).

Trade destinations for New Zealand agri-food products have diversified over the past 30 years. In particular, trade in agri-food with China, East and South-East Asia in general has been steadily increasing since the 80s and it has significantly accelerated in the past 20 years, with a shift in trade value and volumes from once traditional European markets (New Zealand Ministry for Primary Industries, 2017b; Zhang, 2009). This quest for diversification in export destinations was first triggered by the UK joining the EU and was later driven by an important increase in demand from emerging South-East Asia markets coupled with a gain in comparative advantage linked to closer distances from these markets (New Zealand Ministry for Primary Industries, 2017b; New Zealand Ministry of Business, 2022). In particular, exports to China have been increasing since 2008 when a Free Trade Agreement (FTA) between New Zealand and China was signed and China is now the leading market for New Zealand lamb, beef and dairy products and

the second largest for horticulture (New Zealand Ministry for Primary Industries, 2022). Figure 4 shows these evolutions over time.

Figure 4: New Zealand's agricultural export markets over time from 1965–2015




Source: (New Zealand Ministry for Primary Industries, 2017b)

Being a largely net exporter, New Zealand's agri-food sector is dependent on changes in demands and market access requirements from importing countries. An interesting example of the diversification and adaptability needs of New Zealand's exports in animal products is that nearly all of New Zealand's red meat export slaughter premises are certified to undertake slaughter in compliance with halal requirements, giving the country's red meat industry the flexibility to export different cuts from a single carcass to the best-returning markets (Meat Industry Association, (n.d.)). A recent consultation conducted by the Ministry of Primary Industries explores demand opportunities for the food sector by 2050, mainly questioning the balance between New Zealand's traditional markets and those in potential growth markets in South-East Asia and India, as well as New Zealand's value proposal with regards to customers' expectations in emerging markets (New Zealand Ministry for Primary Industries, 2023).

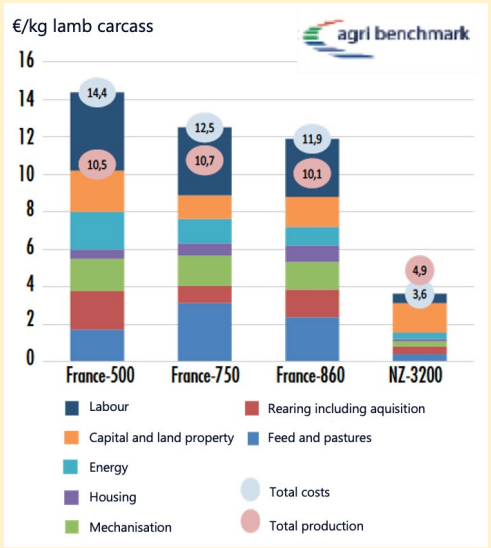
Finally, New Zealand's agriculture is susceptible to volatile international prices, and it depends largely on cost leadership at the farm level to maintain its international competitive advantage. Its export orientation, underlined by the country's low level of producer support, is bolstered by New Zealand's engagement in a large number of FTAs. The government is a long-time advocate

of free trade and liberalisation and a traditionally strong supporter of reducing trade distortive subsidies (New Zealand Foreign Affairs and Trade, (n.d.)-a, (n.d.)-b).

Box 2: Greener pastures: the reason behind lower production prices, but for how long?

One of the keys to the success of the New Zealand export model is the capacity to keep production costs low. For livestock, this is mainly the result of pasture-based production, which is the result of favourable historical and pedoclimatic conditions (Morris, 2013; Shadbolt, 2012, 2016). Such conditions allowed to keep investments low (especially for housing) while increasing labour productivity (Figure 5). The development of highly efficient pastural system did the rest.

**Figure 5:** Comparison of production costs between French and New Zealand lamb production in 2015




**Source:** (Idele, 2017b), translated by IEEP

For dairy, this was achieved for example through grouped calving seasons to maximise grass growth and by developing a new breed adapted to New Zealand pastural conditions, the Kiwi cross (Idele, 2017a, 2017b). Large and surface intensive herds coupled with a strong specialisation keep labour costs down.

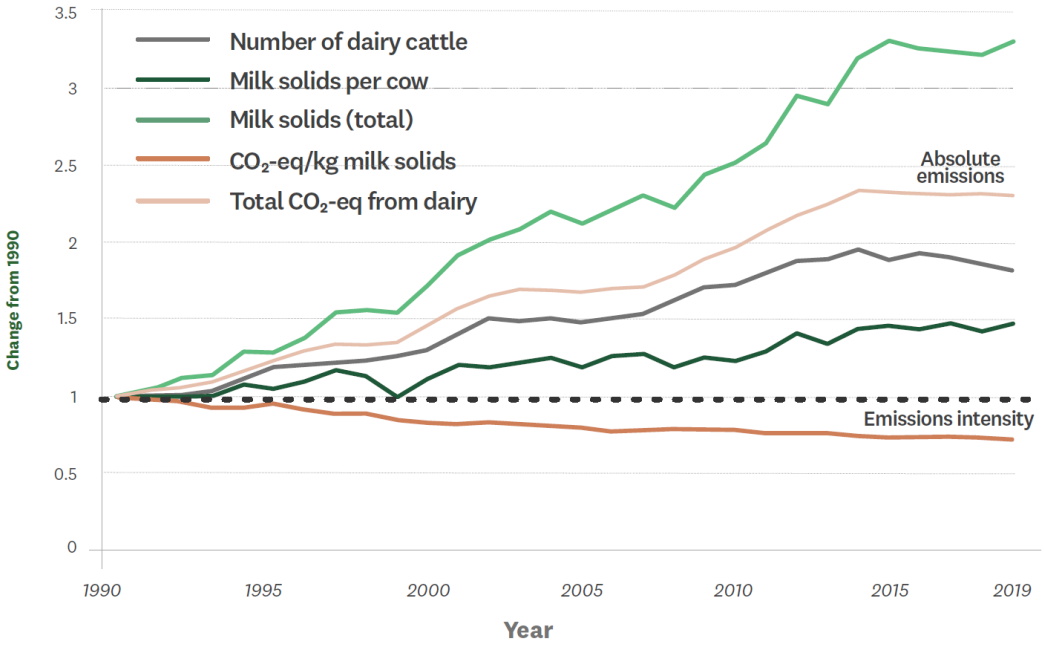
However, climate change has already started to impact the system, with droughts affecting pastures, pushing farmers to resort to complementary animal feeds (mainly palm kernel), also for increased food efficiency (Foote, Joy, & Death, 2015). At the same time, animal welfare and environmental concerns related to manure management have also led to more investments in animal housing especially in the dairy sector (Idele, 2017a).

## 3.2 Agricultural impact on climate and environment

Agriculture accounts for 91% of biogenic methane emissions and 94% of nitrous oxide emissions and the country's primary sector is responsible for 50% of New Zealand's gross GHG emissions (Climate Change Commission, 2023). This is a

significant share compared to other OECD countries, which is due to the prevalence of agriculture, livestock and dairy farming, in the New Zealand economy (New Zealand Ministry for the Environment, 2022c). The main source of agricultural emissions is methane from ruminant livestock and manure management which makes up around three-quarters of agriculture emissions. The second largest source is nitrous oxide from nitrogen added to soils, followed by manure management (New Zealand Ministry for the Environment, 2023).

Figure 6: Changes in dairy greenhouse gas emissions intensity and absolute emissions (1990-2019).




Source: (Journeaux, Leahy, & Kearney, 2022)

Since 1990, New Zealand's estimated $CO_2$eq agricultural emissions have risen by about 17% due to significant production increases (Journeaux et al., 2022). On one hand, the livestock sector has made significant efficiency gains in terms of GHG emissions, achieved through increased reproductive efficiency, higher growth rates and carcass weights. In parallel, the 50% reduction in the number of sheep and a 25% reduction in the number of beef cattle has led to a decrease in emissions of about a third since 1990 (Journeaux et al., 2022). On the other hand, efficiency gains in the dairy sector, whose emissions have more than doubled since 1990, were the result of an increase in milk yield per cow (Journeaux et al., 2022). Figure 6 illustrates these trends and evolutions in GHG emissions for the dairy sector.

Table 2 presents the emissions intensity of production per kilogram of product for the EU and New Zealand. The emissions intensity of production is relatively comparable between both trade partners. However, New Zealand is significantly more efficient in the production of sheep meat compared to the EU, even when emissions from transport are accounted for (see Box 3).

Table 2: Emission intensities of EU and New Zealand agri-food products

| Products | Emissions intensities ($kg CO_2eq/kg$ product) | |
|---|---|---|
| | EU | New Zealand |
| Cattle meat with the bone, fresh or chilled | 17.87 | 17.45 |
| Goat meat, fresh or chilled | 13.47 | 13.25 |
| Sheep meat, fresh or chilled | 23.65 | 19.76 |
| Chicken meat, fresh or chilled | 0.28 | 0.33 |
| Pig meat with the bone, fresh or chilled | 1.83 | 2.29 |
| Raw milk of cattle | 0.60 | 0.85 |

Source (FAOSTAT, 2020a)

Box 3: Comparison of the environmental footprint of sheep meat produced in New Zealand and the EU

Recent studies evaluating the fresh meat lifecycle assessments (LCA) have demonstrated that the carbon footprint of sheep meat produced in New Zealand is among the lowest in the world (Clune, Crossin, & Verghese, 2017; Mazzetto, Falconer, & Ledgard, 2023). LCA for these products may vary in terms of emissions considered.

The most recent study by Mazzetto et al. (2023) on New Zealand's sheep and beef meat LCA considers all GHG emissions (and sequestration when relevant) from the farm and along the supply chain until the product is consumed, including packaging, food waste, shipping and transportation to main export destinations: US, UK, Japan and China. According to the study, the carbon footprint of New Zealand sheep meat excluding shipping amounts to 13.32 kg CO2eq/kg. Shipping and transportation to the main export destinations add another 1.3 to 1.5 kg CO2eq/kg depending on the destination, for a total of 14.8 kg CO2eq/kg on average (Mazzetto et al., 2023).

Another literature review of fresh meat lifecycle assessments concludes that the emissions intensity of New Zealand sheep meat production is among the lowest, equalling 17.63 kg $CO_2$ eq/kg. The study also shows that the median value of EU lamb meat production LCAs was 32.7 kg $CO_2$ eq/kg (ranging from 15 and 57 kg $CO_2$ eq/kg meat depending on the farming system) (Clune et al., 2017). This study doesn't consider shipping emissions.

The emission efficiency of New Zealand's sheep meat is the result of different factors including optimisation of pasture management and seasonality and greater productivity levels (Journeaux et al., 2022). Sheep meat's lower footprint in LCA studies is also partially due to the fact that part of the emissions from sheep production is shared with wool as the co-product (Mazzetto et al., 2023).

In contrast, the production systems in the EU show the highest emissions per kg of meat worldwide since the farms are managed rather extensively (Geß et al., 2020). Although such lifecycle assessments have been criticised as being oversimplistic (Manzano et al., 2023), their results are consistent with the FAO data on emission intensities presented in Table 2 and provide an understanding of differences in emissions intensities due to factors such as production methods and efficiencies.

The intensification of livestock and horticultural operations has also led to increasing environmental pressure from more use of fertilisers, pesticides and water[2], with tensions arising between increasing the economic contribution of the primary production sector and improving environmental quality (OECD, 2017). Key pollutants from the agricultural sector are pathogens from farm animal excreta, sediments from erosion of hill land and along water courses, and nutrients from animal urine and fertilisers. In particular, a clear link has been established between pastoral intensification and declining surface water and groundwater quality (Foote et al., 2015; OECD, 2017).

Pollution hotspots are largely concentrated in regions of dairy farming, such as the Canterbury region, where nitrogen surplus increased at a similar annual rate to that of the national dairy cattle herd (Foote et al., 2015; Joy et al., 2022). Of the estimated nitrate leached from livestock, 65% was from dairy and 15% from sheep

[2] The use of nitrogen fertilisers over 2000-2013 increased by 75%.

in 2017 and 70% of river lengths have been modelled to have nitrogen concentrations above the expected range for natural conditions between 2013 and 2017 (Vannier, Cochrane, Zawar-Reza, & Bellamy, 2022). Phosphorus also shows similar trends (OECD, 2017).

The New Zealand agricultural system also relies on chemical pesticides, with an average per capita and per area use that is significantly higher than the EU average (FAOSTAT, 2020b). While insecticides use is especially linked to horticultural production, herbicides are mainly used for weed control to maximise pasture production (Ghanizadeh & Harrington, 2019; Hageman et al., 2019). As for excessive nutrients, recent studies have shown high concentration of pesticides in agricultural streams close to livestock areas (Hageman et al., 2019). Although New Zealand has programmes in place to regularly monitor pesticides in groundwater, pesticide monitoring in surface waters does not occur resulting in very little knowledge on pesticides distribution and concentrations and, as a consequence, on their impact on freshwater ecosystems (Hageman et al., 2019).

This is even more problematic knowing that New Zealand still allows the use of several pesticides that have been banned in Europe because they were proven to be harmful to human health and the environment. This is the case for example of the herbicide atrazine, the acaricide Diflubenzuron and neonicotinoids. Atrazine was banned in the European Union in 2003, while Diflubenzuron was banned in Europe in 2021. The latter is mainly used in New Zealand as a sheep drench and it's described as toxic for aquatic ecosystems (Fischer & Hall, 1992). Neonicotinoids were banned in the EU in 2018 and are known to be toxic to pollinators and for freshwater organisms.

New Zealand regulations prohibit the spraying of neonicotinoids in the proximity of beehives and on flowering crops in order to limit the damage to non-target insects, including pollinators (New Zealand Parliamentary Commissioner for the Environment, 2022). Other regulations concern mandatory labelling to raise consumer awareness of the dangers linked to the use of these chemicals. A recent report of the Parliamentary Commissioner for the Environment points to the absence of systematic reporting for neonicotinoids imported, manufactured, sold or used in New Zealand (New Zealand Parliamentary Commissioner for the Environment, 2022).

The Environmental Protection Authority (EPA NZ) has recently confirmed the phase out by 2028 and 2024 of three pesticides that are banned in the EU (Enrivonmental Protection Authority, 2022) and a reassessment procedure was launched in 2020 for five neonicotinoid insecticides (imidacloprid, clothianidin, thiamethoxam, thiacloprid and acetamiprid) and is still underway (Environmental Protection Authority, 2021). Yet, a total ban on these substances does not seem

likely to happen in the upcoming years as the legislation covering pesticides use and related risk assessment is not meant to significantly evolve. The recently adopted EU Regulation, lowering the Maximum Residues Levels (MRLs) for two of these neonicotinoids (clothianidin and thiamethoxam) to technically zero, could however have an influence in the process.

**Climate and environmental objectives as constraints for further growth in the New Zealand livestock and dairy sectors**

New Zealand ratified the Paris Agreement in 2016 and has committed to reducing carbon dioxide equivalent emissions to 50% below 2005 levels from 2020 to 2030. The 2019 Climate Change Response (Zero Carbon) Amendment Act establishes long-term targets for reducing New Zealand's greenhouse gas emissions: carbon dioxide and nitrous must reach net-zero by 2050, while methane emissions aim to be reduced to 10% below 2017 levels by 2030, and by 24-47% by 2050 (New Zealand Government, 2019).

To meet the above targets for GHG emissions reduction, in 2019, the New Zealand Government decided to implement a new mechanism by 2025 to price the two largest agricultural emissions, methane and nitrous oxide (New Zealand Ministry for the Environment, 2022b). The Government partnered with the agriculture sector and the Māori under the He Waka Eke Noa – the Primary Sector Climate Action Partnership to develop an alternative pricing system for farm-level agricultural emissions as an alternative to the Emissions Trading System (ETS)[3]. In 2022, the Partnership proposed a farm-level, split-gas levy which was further developed by the Government. The proposed system includes separate levies on biogenic methane from ruminants and nitrous oxide emissions from livestock and fertilisers.

Though a final decision is yet to be made, and a new legislative proposal is expected this year, the New Zealand Government plans to address agricultural emissions regardless (New Zealand Ministry for the Environment, 2022b). If the He Waka Eke Noa proposal is not accepted, there is an alternative plan to introduce a carbon levy on meat processors and fertilizer producers. If both proposals fail, then the backstop will be integrating agriculture into the current New Zealand ETS. The final emissions reduction policy outcome will be likely determined following the elections in October 2023.

[3] Despite being intended to cover all sectors and gases, the existing New Zealand ETS system does not currently include agriculture other than for reporting purposes, meaning carbon dioxide is the only gas with surrender obligations (Journeaux et al., 2022).

In parallel, New Zealand is also reinforcing both its biodiversity and water legislation. Recently, the New Zealand Government put forward the Natural and Built Environment Bill to ensure stronger protection for biodiversity by setting limits and targets for air, soil, indigenous biodiversity, freshwater, estuaries, and coastal waters.

Moreover, to limit excess nutrients (mainly nitrogen and phosphorous) in farming areas, stop further degradation and restore freshwater, New Zealand approved the Essential Freshwater Package. The package introduced a variety of new standards and regulations regarding farming activities and most specifically livestock[4] (New Zealand Government, 2020). New Zealand's (upcoming) environmental and climate policies aimed at tackling methane and nitrous oxide emissions, nitrogen leakage, while improving biodiversity and water quality, are expected to slow the growth of the livestock sector. In particular, the dairy sector will likely be impacted more as it is mainly responsible for nitrogen leakages, fertilisers use and methane emissions (Foote et al., 2015). It is estimated that the emission reduction targets would lead to a 10% reduction in the size of New Zealand cattle and sheep herds by 2030 (Climate Change Commission, 2021). As a result, changes from dairy farming to plant production to grow plant-based milk alternatives are already underway (Donovan, 2021). Though New Zealand environmental legislations on pesticides falls short, the pesticide use in relation to pastures is also not expected to increase.

There are mitigation options that can further increase animal productivity and farm efficiency, with existing studies suggesting that available on-farm practices could reduce emissions by up to 10% while still maintaining profitability (Journeaux et al., 2022). Moreover, New Zealand is actively supporting research and innovation under the Fit for a Better World program for the primary industries to develop new technologies that could significantly reduce GHG emissions to meet binding targets without reducing productivity (or even improving it)[5]. However, most of these technologies such as new low emissions animal breeds, methane vaccines, methane, and nitrogen inhibitors, are not available yet. Most importantly, international markets would have to accept these innovative products, requiring the adoption of new legislations, which are out of New Zealand's control. However, it is more likely that New Zealand would seek to

[4] E.g., controls on the practice of intensive winter grazing and a synthetic nitrogen cap that limits farmers to 190 kg per hectare of synthetic nitrogen fertiliser per year; stock exclusion regulations preventing the grazing of beef and dairy cattle, dairy support cattle, deer, and pigs within a natural wetland or within three metres of any lake or river; the establishment of Mandatory Freshwater Farm Plans (FWFP) mitigating risks to catchment freshwater from farm activities (New Zealand Ministry for the Environment, 2020a, 2020b, 2022a).

[5] A description of the 2020 Sustainable Food and Fibre Futures program can be found here: Link

increase the added value of its agricultural production, thus continuing the tradition of the "Clean, Green" New Zealand (New Zealand Ministry for the Environment, 2001).

# 4. POTENTIAL IMPACTS OF THE TRADE AGREEMENT ON THE EU'S AGRICULTURAL SECTOR AND SUSTAINABILITY OBJECTIVES

The first subsection provides an overview of the expected trends and changes in the EU agricultural sector for sensitive agri-food products. This overview considers several factors that could impact the EU agricultural sector, one of which is the EU-New Zealand FTA. Then, the following subsections discuss the potential environmental and social impacts of the EU-New Zealand FTA on the EU agricultural sector.

## 4.1 Trends and forecast of sensitive EU agri-food sectors

The economic assessment of the EU-New Zealand finds that after entry into force of the FTA, some of the EU's sensitive agri-food sectors will experience a decline in output (European Commission, 2020b). The changes in sectoral output found in the SIA are those expected by 2030, which coincides with the entry into force of the agreement and the progressive expansion of quotas for sensitive agri-food products. With this in mind, the SIA concludes that by 2030, the EU beef and sheep output will decrease by 1.4% and the output of dairy will decrease by 0.1%.

The EU Agricultural Outlook for 2022-2032, which also considers FTAs already in force, finds that the production of sheep and goat meat is expected to increase slightly by 0.2% yearly over the same period. This is a different finding compared to the SIA, most likely due to missing sector sensitivity because the SIA consider the beef and sheep sector together. Moreover, per capita consumption is likely to remain stable thanks to a more diversified meat diet and being driven by religious traditions also affected by migration patterns (European Commission, 2022c).

Yet, when comparing the SIA findings to the findings of the EU Agricultural Outlook for 2022-2032 for beef, on the supply side, the Outlook report confirms a decrease of EU gross beef production by 9% from 2022-2032. This decline in production is driven by a decrease in the European herd, mainly due to low profitability and increasing environmental concerns. On the demand side, domestic consumption of beef is also expected to decrease by almost 8%. Domestic consumption has been lower than production for many consecutive years due to the EU being a net-exporter of beef, in both value and volume (European Commission, 2022c).

Finally, EU production of milk is expected to decline by 0.2% per year by 2032, mainly driven by a decline in the number of animals due to environmental

concerns but partly compensated by an increase in productivity and added value. The reduction in milk solids availability will not equally affect dairy production, which is expected to remain stable due to an improvement in milk content (fats) and an adjustment in the product portfolio. Domestic consumption of milk and dairy is expected to decrease slightly, by 0.3% per year, due to dietary changes (European Commission, 2022c).

Both the SIA and the Agricultural Outlook conclude that by 2030, EU beef and dairy production will decline. However, the Agricultural Outlook links the production decline in these sectors to environmental concerns across all sectors rather than to offsetting by external producers. Moreover, the SIA economic modelling does not consider inter-sectoral linkages, such as in this case the fact that the majority of EU beef is a by-product of dairy production (European Commission, 2020b). These linkages could mitigate the negative effects of the EU-New Zealand FTA on the ruminant meat sector.

The foreseen reduction in domestic consumption, mainly driven by dietary changes, is also consistent with the decrease in production, meaning that the domestic demand could still be met. The case of sheep meat is interesting, as the Outlook report expects an increase in production and a stabilisation of consumption, while the SIA estimates a decline. However, as mentioned, the SIA considers beef and sheep production together, meaning it could be possible that beef production decreases more compared to sheep meat production.

**The potential impact of the EU-New Zealand FTA quotas**

With the 2022 Agricultural Outlook report does not yet account for the EU-New Zealand FTA specifically, it could be assumed that considering the cumulative effect of all existing FTAs, the EU-New Zealand agreement could reinforce the trend in sector output decline for sensitive agri-food products, contributing to overall lower profitability for certain agri-food products, as described in the Outlook report.

Under the EU-New Zealand FTA, certain sensitive agri-food products have not been fully liberalised but instead will receive an increased import quota and more favourable in-quota tariff rates (TRQ). Table 3 provides an overview of which products will see an increase in quota size (from entry into force of the FTA, expanding until six to eight years after entry into force), their respective TRQ, the total volume of New Zealand imports for each product and the share of New Zealand imports per product in total EU imports.

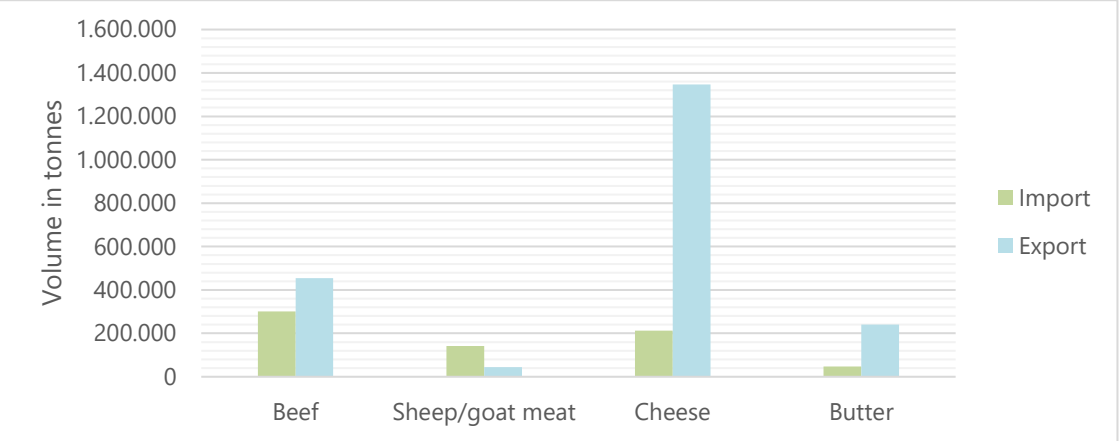
Table 3: Changes in quotas and in-quota rates

| Product | Quota increase | In-quota rate | New Zealand imports | Share of New Zealand imports in total imports |
|---|---|---|---|---|
| **Beef** | 3,333 t → 10,000 t | 7.5% | >61,000 t | 1% |
| **Sheep/goat** | 12,666 t → 38,000 t | Duty-free | >93,000 t | 84% |
| **Milk powder** | 5,000 t → 15,000 t | 20% of MFN rate | >42,000 t | 84% |
| **Dairy PAPs** | 1,167 t → 3,500 t | Duty-free | >614 t | 40% |
| **Butter** | 5,000 t → 15,000 t | 20% of MFN rate | >10,000 t | 74% |
| **Cheese** | 8,333 t → 25,000 t | Duty-free | >909 t | 2% |

Source: quota increase and tariffs from (European Commission, 2022a) and data from (UN Comtrade, 2022c)

Table 3 shows that New Zealand imports of sheep/goat meat, milk powder and butter make up a large portion of total EU imports of these products. However, the EU is a net-exporter of dairy products (European Commission, 2022c), but a net-importer of sheep and goat meat, as visible in Figure 7 below.

Figure 7: EU imports and exports of beef, sheep/goat meat, cheese and dairy in tonnes in 2019




Source: Calculations and graph by the authors using data from (European Commission, 2019).

For **sheep meat**, the duty-free quota will increase from approximately 126,000 tonnes to just under 164,000 tonnes seven years after entry into force of the agreement (Parry, 2022). New Zealand is already a top exporter of sheep and goat meat to the EU, yet, the 2019 trade data confirms that New Zealand exports of sheep meat to the EU did not exceed the quota (UN Comtrade, 2022c)

This can be explained by two factors previously discussed; firstly, the New Zealand sheep herd has been declining since the 90s due to profitability loss over dairy farming and a reverse trend is unlikely also due to New Zealand's domestic climate and environmental constraints (see section 4.1). Secondly, the most

remunerative market for New Zealand remains Asia, particularly China where, thanks to the FTA signed in 2009, the country enjoys duty-free access for its sheep meat (Obadovic, 2018). Therefore, a significant increase in New Zealand exports is not expected in the coming years (Obadovic, 2018) and it is unlikely that New Zealand could satisfy both the Asian and the European markets considering the decline in production, even when accounting for the sector's productivity gains made over the years. However, it is possible that New Zealand exports could be redirected to Europe and the quota could be used as a safety net in case of major clashes with China or to respond to market changes.

While fresh and frozen sheep products imported from New Zealand are produced at lower costs and compete with European sheep meat production where costs are generally higher, the above-mentioned circumstances suggest that the additional duty-free quotas should have a limited impact on current market conditions.

For **beef**, the quota granted amounts to 10,000 carcass equivalent tons taxed at 7.5% and it only concerns high-quality meat with exclusive grazing. Such volume represents, in the high-quality segment, a very small part of the European internal consumption and only 1% of the EU beef imports, which is rather insignificant if compared for example to 58% from Mercosur (UN Comtrade, 2022a). The higher production costs of this segment compared to i.e., beef from feedlots should also reduce its price competitiveness. The reaction of the New Zealand Meat Industry Association (MIA) speaks for itself in qualifying the EU-New Zealand FTA as *"deeply disappointing and of poor quality"* and the specific additional beef quota *"far less than the red meat sector's expectations"* (Meat Industry Association, 2022) However, taken in a broader context, the additional quotas increase the already existing ones from other countries.

For **dairy products**, such as milk powder, butter, cheese, and dairy processed agri-products (PAPs), the quotas are expanded, however, imports of these products from New Zealand are significantly lower than EU domestic production. Imports of dairy products account for about 1% of domestic consumption (Chatellier, 2021). As is the case for beef, China absorbs a large part of New Zealand's dairy exports, with the EU acting more as a substitute market only in case of major disruptions. Limits to an increase in milk production due to environmental concerns have been illustrated in section 3.

Finally, looking at opportunities for EU producers, the liberalisation of agri-food products under this trade agreement liberalises key agri-food EU exports such as pig meat, wine, and chocolate, while providing protections and geographical indications for EU wines, spirits and cheeses. The SIA concludes that the economic impact in the EU will be limited and the overall agri-food trade balance with New

Zealand will likely continue to be negative due to the limited New Zealand internal market capacity of absorbing agri-food imports.

All things considered, it could be argued that the EU- New Zealand FTA will not lead to profound changes in trade flows of animal products and therefore have a limited impact on the EU agri-food sector for sensitive products. However, New Zealand is currently more competitive in terms of prices than the EU on a number of these products including sheep meat, milk powder and butter. Due to the country's weight in the international market, New Zealand has a clear influence on prices, putting pressure on EU farmers. The expansion of quotas and more favourable TRQs for sensitive agri-food products could lead to increased competition with EU producers, which will be discussed further in section 4.3.

## 4.2 Expected environmental impacts on the EU agricultural sector

Agricultural GHG emissions, excluding $CO_2$, consist mainly of methane and nitrous oxide and account for 12% of the EU's total emissions. Approximately 45% of non-$CO_2$ emissions from this sector come from enteric fermentation from livestock causing methane emissions, while around 38% comes from nitrous oxide emissions from agricultural soils caused by synthetic fertilisers, organic fertilizer, crop residues and cultivation of organic soils. Manure management accounts for about 15% of both methane and nitrous oxide emissions (European Environment Agency, 2022)

Livestock production plays a role in environmental degradation. Increasing losses of nitrogen and phosphorus from urine and manure run-off contaminate of the quality of freshwater and coastal waters. Air quality is deteriorated by emissions from ammonia and nitrogen oxides, which contribute to the formation of particulate matter, and have negative effects on vegetation and its capacity to stock carbon. Biodiversity is also affected by livestock production through land use changes, accumulation of ammonia emissions and indirectly from climate change generated by GHG emissions (Leip et al., 2015). Moreover, intensively managed grassland and arable land used to grow livestock feeds typically have a low level of biodiversity (Leip et al., 2015).

As discussed in the previous section, both the SIA and the Agricultural Outlook report estimate a projected decrease in beef and sheep meat production and a stabilisation of dairy sector production. Though this expected change in production levels can partly be attributed to the EU-New Zealand FTA, there are other compounding factors impacting future production levels. The impacts of profitability, environmental requirements, and other existing FTAs are also interlinked and complex to attribute to one factor to explain the estimated decrease in EU beef production.

Nevertheless, a decrease in EU beef production would lead to a decrease in both methane and nitrous oxide emissions, while lowering pressures on biodiversity and water quality. However, because of the aggregated figures of the SIA and because of intersectoral linkages, it is difficult to provide exact estimates of GHG reductions associated with this decrease in production. Estimates at the European level indicate that with existing mitigation measures, agricultural emissions will decline by only 2% in 2030 compared to 2005 levels (European Environment Agency, 2022).

It should be noted that the precise environmental impact of a decline in beef and sheep meat production depends on the method of livestock production. For example, large-scale farmers utilising feedlots may continue to operate, while pasture farms may face higher costs and exit the market. Each method of production has a different environmental impact, and this nuance is difficult to predict. Moreover, if the EU can shift its beef production to adhere to more sustainable production methods, livestock farming could have positive environmental impacts and provides ecosystem services (Teague & Kreuter, 2020). This is particularly true for extensive grazing systems, which are known for helping maintain landscapes of high biodiversity including pollinators, dispersal of seeds, organic matter and nutrients, but also carbon sequestration (Leip et al., 2015).

So far, this section has assessed the potential impacts of the EU-New Zealand FTA on the EU agricultural sector. However, the EU still imports beef, sheep meat and dairy products from around the world. While the production of beef and sheep meat is expected to decrease by 2030, this production is estimated to increase to an extent in New Zealand. The resulting environmental impacts include an increase of methane and nitrous oxide emissions by 0.49 and 0.13 million tonnes $CO_2$-eq. respectively by 2030 (European Commission, 2020b). The impact of livestock on New Zealand's environment has been described in section 3.2.

Moreover, another indirect impact of livestock farming in New Zealand can be linked to land clearing. Although land clearing in association with farming practices is no longer an issue anymore in New Zealand (New Zealand Ministry for the Environment & Stats NZ, 2021) and despite being reliant on pastures for feeding their animals (on average 60% for dairy), a significant increase in complementary feed has been registered since the 1990s both for dairy and for beef and sheep meat (Idele, 2017a, 2017b; New Zealand Ministry for Primary Industries, 2017a, 2018). In particular, over the last 25 years, import volumes of palm kernels have increased significantly, making New Zealand the biggest importer of palm kernel expeller (PKE), which is mainly used as complementary feed in dairy farming (New Zealand Ministry for Primary Industries, 2017a). The

production of palm oil has been linked to deforestation in tropical rainforests in Indonesia, with research showing that even certified PKE still has a negative environmental and social impact (Carlson et al., 2018).

## 4.3 Expected social impacts on the EU agricultural sector

**(Local) farmers and supply chains**

According to the Sustainable Impact Assessment of the EU-New Zealand FTA, there will be almost no noticeable changes in terms of employment levels in the EU due to the agreement. The only pronounced job reduction foreseen (up to 1.5%) is estimated for the ruminant meat sector. This negative employment figure is also valid for small farmers in the EU with a projected loss of 1.4%.

Yet, as mentioned previously, this production (and employment) decline can be traced to environmental concerns rather than offsetting by external producers and does not impact the dairy sector which constitutes the majority of the EU production model in the sector. The figure of 1.5% is therefore likely largely overestimated. Furthermore, the SIA also notes that export opportunities will arise for EU SMEs due to the FTA in various sectors in which they represent major exporters, including meat other than beef and sheep (+29%) and dairy (+27.2%), even though the relatively small New Zealand's market potentials should be considered when looking at these numbers. Small farmers can indeed benefit from product differentiation deriving from a shift towards more sustainable food systems in the EU (based on sustainable production methods and quality) to become the price-setter rather than price-taker on the market and thus are more shielded from an increase in competition.

Nonetheless, the SIA recommends for EU Member States or regions having a high share of non-dairy cattle farming (e.g., in Ireland) to explore appropriate support measures and/or step up efforts supporting the competitiveness of the EU ruminant meat sector. While this could be an option, it remains a support measure toward a high carbon-bearing activity within the EU and is thus not aligned with our climate efforts. Recommendations in the sector should go toward dietary changes and notably the reduction of meat consumption in the EU which could cut down emissions from agriculture production by 8% to 25% by 2050 compared to 2015 (European Commission, 2020b). The territorial concentration and specialisation of some agricultural sectors in the EU, amplifying socio-economic impacts regionally, is an issue that deserves greater attention and cannot be addressed at the level of individual FTAs.

**Food security**

Representatives of the private sector in the EU disputed the EU-New Zealand agreement on the ground that "*at a time where securing food sovereignty is high on the European agenda, such a move forward in the trade agenda and treatment of the agricultural sector will not be understood by the EU agriculture community, and rightly so*" (Farm Europe, 2023).

Apart from sheep meat, New Zealand's main exports to the EU are either sectors/products in which the EU is a net-exporter (of beef and dairy products), or edible fruits and nuts which can hardly be considered strategic commodities for food security in the EU. The 2022 Agricultural Outlook confirms that the EU is expected to be self-sufficient in the supply of meat and dairy products in 2032. Yet, the vulnerabilities of the European food system to external shocks relate more to the EU agricultural production model such as dependencies on inputs from third countries for energy sourcing, fertiliser use and animal feed (European Commission, 2022c).

The case of sheep meat is very specific. The EU is not self-sufficient, meaning that internal supply does not meet internal demand. However, considering both the high seasonality of sheep meat consumption in relation to religious festivities (Idele, 2017b) and the need to reduce agricultural GHG emissions, the need for increasing EU sheep meat production as a reply to food security can be questioned.

This argument of food security is also regularly used in the agricultural policy debate to resist further environmental regulations. However, it has been established that climate change and its various impacts such as temperature increase, absence of pollination or soil degradation, is a key driver of food insecurity globally and in the EU (IEEP, 2022; European Commission, 2023, European Parliament, 2023). Policies and regulations aiming at mitigating and adapting to these changes will be beneficial for the agricultural community and the population as a whole in terms of food security.

# 5. CONCLUSION AND RECOMMENDATIONS

This report assesses the potential sustainability implications of the EU-New Zealand FTA with a focus on agriculture. The assessment includes the evaluation of the sustainability and agriculture-relevant Chapters of the FTA, the New Zealand agricultural production methods and policies, and the potential impacts of the agreement on the EU agricultural sector for sensitive agri-food products.

**Regarding the contents of the trade agreement**, newly included Chapters on sustainable food systems and animal welfare aims to align bilateral cooperation on topics relevant to the EU's Farm to Fork Strategy. The creation of a dedicated channel for dialogue between the two trade partners on sustainable agricultural practices and food systems is a positive step forward. Yet, these Chapters do not establish binding commitments for the Parties to adopt measures to further these objectives, beyond efforts for bilateral cooperation. Conversely, in the traditional FTA Chapters such as those on market access for goods and SPS measures, few sustainability-relevant provisions are taken up in the agreement such as the provisions relating to the temporary export of goods for repairs and remanufacturing. Sustainability provisions related to SPS measures have more to do with the protection and safety of human and animal life and are unlikely to significantly impact the sustainability of EU agricultural policies or practices as ambitioned by the EU's Farm to Fork Strategy.

The TSD Chapter of the EU-New Zealand FTA has evolved compared to its predecessors, the most significant additions being the Article on fossil fuel subsidy reform and the possibility of sanctions in case of actions or omissions that defeat the purpose of the Paris Agreement or breaches to the core ILO conventions. Yet, the scope of enforceability of the commitment to the Paris Agreement is more likely to bind the Parties to not withdraw from the Agreement and to progressively update and implement their respective NDCs. Consequently, the implementation of NDCs deemed "insufficient" to meet the Paris Agreement objectives and failures to implement specific yet significant climate and environmental policies will likely fall outside the scope of sanctions.

There is still a need to operationalise the implementation of the TSD Chapter beyond the Paris Agreement. Therefore, the Parties must negotiate an implementation roadmap featuring targets and timelines for their delivery from existing MEAs such as the CBD, the Kunming-Montreal Global Biodiversity

Framework, the CITES, the BBNJ and the Paris Agreement with a formalised monitoring process to evaluate the Parties' progress to achieving the objectives of these MEAs.

Moreover, the FTA text does not incorporate a hierarchy clause or a carve-out to ensure the adoption of climate and environmental measures is not prevented or disputed due to the text in the agreement. Though, the agreement's General Exceptions Article clarifies that a measure to implement an MEA will not be disputed given the measure does not constitute a means of arbitrary or unjustifiable discrimination between the Parties, and the measure is necessary to protect human, animal or plant life or health; or related to the conservation of living and non-living exhaustible natural resources. If the adoption of such a measure would come under dispute, the requirement for the implementing Party to prove that the measure is necessary to protect human, animal or plant life or health risks or is related to the conservation of exhaustible resources could prove to be a burden. The EU-Ukraine dispute on the export ban of unprocessed wood highlights the need for the Party implementing a measure to act consistently to not discriminate between domestic and foreign actors affected by the measure.

**The potential impact of the EU-New Zealand FTA on the EU agricultural sector is not clear-cut**. Both European and New Zealand farmers are unhappy with the level of market access granted for sensitive EU agri-food products such as beef, sheep meat, and dairy products. For New Zealand farmers, the limited increase in market access for dairy and beef is perceived as a missed opportunity to strengthen their position in an interesting market for high-quality products, while EU farmers and processors fear the cumulative impact on the competitiveness of the FTA on top of others.

On one hand, the quota increases and respective tariff rate reductions, compared to European consumption for these sensitive agri-food products should limit unfair competition from New Zealand competitors, despite their comparative advantage mainly linked to lower production costs. On the other hand, other factors such as dietary changes, environmental costs and competition brought on by other FTAs and on global markets are estimated to contribute to a decrease in EU agricultural production for these agri-food products.

For example, beef from New Zealand currently equals approximately 1% of total EU beef imports and is made up of only high-quality grass-fed beef which faces

higher production costs, thus further limiting competition. In comparison, the EU imports 58% of its beef from Mercosur countries where regulations surrounding production methods and environmental impacts of cattle and livestock feed are less stringent. In the case of dairy products, additional quotas represent 1.3% of European consumption for milk powder and 0.7% for butter. Internal competition of these bulk products mainly used for industrial production will therefore be limited and have limited sectoral impact. Regarding sheep meat, the EU is a net importer and is dependent on imports during seasonal demand peaks. New Zealand sheep meat is more competitive concerning production costs and emissions intensity, however, imports of New Zealand sheep meat have yet to surpass the pre-FTA import quotas for sheep meat and is unlikely to boost production in response to the FTA as their sheep meat production has been declining steadily since the 1990s and their export market diversification.

New Zealand's main export markets include Asia – primarily China due to their bilateral FTA which entered into force in 2008 – and the US specifically for beef meat. The EU could be seen as an alternative and more reliable destination in case of trade disruptions with China, especially in the case of sheep meet. Though, a significant diversion of trade flows to the EU is unlikely as Asian and other emerging countries remain particularly interesting for New Zealand due to the growth potential and the proximity of these markets.

**The agricultural sector, and livestock in particular, is a significant emitter of GHG emissions with major environmental impacts overall**, especially on water quality for both trade partners. Yet, both Parties are committed to reducing GHG emissions and pollutants from the agricultural sector, although New Zealand is more advanced with its proposed targets and mechanisms. The expected decline in EU agricultural production would coincide with a decrease in GHG emissions and other pollutants. However, due to the interlinkages between beef and dairy production, it is likely that GHG emissions will not decrease proportionately, as the dairy sector output is expected to remain stable.

Moreover, due to New Zealand's GHG emissions reduction targets it is unlikely that New Zealand can increase production volumes without putting its environmental and climate objectives at risk. The effects of climate change can already be felt in New Zealand's production capacities and competitive advantage with increased droughts affecting pasture availability and driving up production costs. Therefore, the adoption of the He Waka Eke Noa proposal, or the two

alternative options, is essential to effectively implement New Zealand's NDCs and achieve the objectives of the Paris Agreement.

Still, New Zealand uses some pesticides banned in the EU to treat their pastures with harmful consequences for local biodiversity. The Sustainable Food Systems Chapter and the TSD Chapter respectively include provisions to cooperate on reducing the use and risk of chemical pesticides and to take action to conserve biodiversity when subject to pressures linked to trade. Though the FTA cannot regulate specific legislation in the trade partner country, the "Right to regulate and levels of protection" Article of the TSD Chapter also states that the Parties shall strive to ensure its law and policies provide for high levels of environmental protection. Therefore, at the least, the Parties should aim to cooperate to harmonise legislation on the use and phase out of such harmful pesticides.

**The EU-New Zealand FTA is not expected to have a noticeable social impact in the EU** due to the particularity of the EU import and production landscape for sensitive agri-food products. On the contrary, the FTA could bring in some (albeit limited) export opportunities for small farmers specialised in sustainable food systems in the EU.

Furthermore, the EU-New Zealand FTA is not expected to increase competition in the production of agri-food products, putting at risk EU food security. Only the production of sheep meat could potentially face challenges due to its seasonality and the EU's reliance on imports to meet demand. However, anticipating the further evolution of dietary habits (i.e., reducing meat consumption), the importance of sheep meat production is questionable for food security matters. Climate change and its various impacts remain the main drivers of food insecurity in the EU and should be the target of future policy and regulatory efforts.

The EU-New Zealand FTA is the most ambitious EU FTA regarding sustainability commitments to date with a trade partner whose agricultural model is so different to that of the EU. In part, New Zealand's sustainability ambitions played a role in negotiating this trade agreement which holds both trade partners accountable for achieving the objectives of the Paris Agreement, tackling fossil fuel subsidies and developing sustainable food systems. However, the agreement does not include a hierarchy clause to ensure the implementation of measures to further these objectives will not be disputed under the FTA.

**On its own, the EU-New Zealand FTA is not expected to be a significant contributing factor to the production decline for sensitive agri-food**

**products in the EU**. The production of beef and sheep meat is expected to decline by 1.4% by 2030 due to the FTA. However, in general, beef production in the EU is expected to decline due to a combination of different factors, most of which are outside the scope of the FTA, such as dietary changes, rising costs of production, and climate change effects. The associated environmental impacts in the EU are a non-proportional decline in GHG emissions and pollutants, due to the interlinkages between beef and dairy production, the latter of which remains relatively stable. Moreover, there is no direct link between the FTA and EU food security for these sensitive agri-food products as EU self-sufficiency rates for meat and dairy are expected to remain around 100%.

### Policy recommendations

Though increased competition is of concern to EU farmers, the harmonisation and mutual recognition of sustainability standards for the achievement of climate and environmental objectives in the agricultural sector can also level the playing field for agriculture production. Yet, the development and implementation of such policies remain outside the scope of FTAs. The EU-New Zealand FTA provides a framework for bilateral cooperation on matters related to sustainability and agricultural development, such as sustainable food systems which could contribute to better resilience for farmers against the effects of climate change and environmental degradation.

To further overall sustainability objectives and encourage dialogue between these like-minded trade partners during the implementation phase of the agreement, the following recommendations are proposed:

- Define a set of criteria or guiding principles to be considered essential to achieving the objectives of the Paris Agreement, taken from existing MEAs and frameworks that target environmental issues such as biodiversity loss which are interlinked with the achievement of the Paris Agreement. Non-compliance with these criteria would be considered materially defeating the objective of the Paris Agreement and thus be subject to sanctions.
- Facilitate trade and investment in innovative environmental G&S by systematically reviewing the FTA's list of environmental G&S.
- Leverage cooperation provisions in the Sustainable Food Systems and the Animal Welfare Chapters to further policy and knowledge exchange on outcomes for sustainable agricultural practices. E.g., New Zealand's ban on

the export of live animals by sea and a phase out of harmful chemical pesticide use.

- Prepare for a swift establishment of both trade partners' DAGs. Once the agreement enters into force, the DAGs will be ready to formalise and contribute to putting forward concrete proposals to further commitments and monitor their implementation. The DAGs could contribute to the development of an implementation roadmap with criteria or guiding principles for the achievement of the Paris Agreement objectives.
- Monitor and exchange on the development and implementation of climate and environmental policies for the agricultural sectors of the trade partners considering the significant environmental impacts. E.g., New Zealand's He Waka Eke Noa proposal, and on the use and phase out of pesticides in New Zealand which are banned in the EU
- Intensify engagement on fossil fuel subsidy reform at the WTO to accelerate the phase out and elimination of fossil fuel subsidies.
- Pursue dialogue and actions on tackling trade-related transport emissions, including at the WTO.

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