**The Future of Trade in a Net Zero World**

**Executive Summary**

The trade and climate nexus

Over the course of the past year, the European Climate Foundation (ECF) conducted a comprehensive strategic foresight process exploring what trade could and should look like in a world that seeks to reach net zero greenhouse gas emissions by mid-century to curb climate change. This was motivated by the lack of a clear vision for the role of trade in climate action.

International trade has been an essential element of global economic expansion and remains a critical precondition for many commercial activities worldwide. It is by no means dissociated from efforts to address the climate emergency. International transport of traded goods emits greenhouse gases; trade facilitates the production and consumption of carbon-intensive products, while also allowing more countries to access low-carbon technologies. Trade rules were originally meant to facilitate trade, at a time when climate change was not a public policy priority, and they now need to evolve. Equally, the effects of climate change on trade – which are already being felt today – are likely to escalate. Aligning trade policy with the climate emergency is becoming increasingly urgent.

In partnership with the consultancy Foresight Intelligence, this project explored alternative futures for trade in a changing climate. Most importantly, it proposes a vision for an international trade regime aligned with the global climate goal of the Paris Agreement, reaffirmed by the Glasgow Climate Pact as the imperative to reach net zero emissions by mid-century. The results of the foresight process suggest how Europe could play its part in reaching this vision, while recognising the need for robust international partnerships, particularly with developing countries.¹

¹ The strategic options are aimed at contributing to a sustainable future for everyone and we invite other regions’ policymakers and experts to consider them, as well.
Executive Summary

How the project unfolded (in 30 seconds)

This work builds on a dozen workshops that brought together a total of 50 experts from diverse disciplines to engage in strategic foresight. After having identified key uncertainties with high impact on the future of trade and climate, participants elaborated plausible, explorative scenarios and their underlying policy narratives to 2040. A normative track then developed a vision to align trade and climate, and a set of robust strategic options to support it.

Strategic foresight was adopted as a methodology that provides a robust, rigorous framework for imagining a highly uncertain future by telling us where to look and allowing to plan for and shape the path ahead. This process has entailed countless hours of debate, deliberation, voting and validation among group members, resulting in only the scenarios and options that have passed the crucible. Accordingly, the ideal vision presented, along with strategic options, offer one trajectory to mutually reinforce the priorities of the trade and climate communities. Together with the three alternative scenarios, we hope you will find ample food for thought on the possibilities as we seek to navigate towards a net zero world.

A vision for a climate-aligned trade regime

The vision describes a world committed to tackling the climate emergency cooperatively. Many countries have developed new eco-social contracts by including all sectors of society in participatory deliberations on economic and ecological development models. Support for multilateralism and easing of geopolitical tensions have unlocked fundamental reforms to align three distinct areas with climate goals in: taxes, public goods, and trade.

International tax agreements on minimum corporate and capital gains taxes dry out tax havens. New taxes on the emissions of luxury consumption, such as yachts and jets, on shipping and aviation discourage emissions and bolster public funds for green transitions. Development banks receive expanded funding and mandates to become drivers of decarbonisation. They implement a 1.5°C compatibility criterion for all funded projects, which they monitor rigorously.

Countries agree on emissions accounting methodologies, collect and share data on green technologies and their inputs. They also become more active in key transformation sectors, establishing “people’s public-private-partnerships” to guarantee human rights, social and ecological standards along supply chains. Producer responsibility is extended to achieve greater circularity, and many businesses and local governments streamline their sustainability efforts, which are audited by independent third parties.

International trade rules are also brought in line with climate goals. Recognising the need to be able to distinguish products based on their carbon content, WTO members abstain from challenging one another over measures that encourage lower emissions in production. Bolstered by agreement on common methods of emissions accounting, this permits a form of positive, carbon-based discrimination between “like” products, without which a ton of steel, for instance, could not be distinguished from another on the basis of
the emissions of their respective production methods. The WTO facilitates accelerated technology and innovation transfer; it upends the dichotomy of developed and developing countries, to specify their rights and obligations; and members revise the Agreement on Subsidies and Countervailing Measures to minimise frictions on climate-related subsidies. Under its auspices, 85 countries ratify a “Green Free Trade Agreement”. Outside of the WTO, international investment agreements are reformed to scrap protections for fossil fuel projects and energy and mining companies are barred from litigation over “stranded assets”.

Strategic options

Taking account of the vision developed by the normative track, as well as the challenges identified in the explorative scenarios, the following ideas for strategic action are meant to help European actors to start shaping developments towards the vision. The first three initiatives have been honed by the group as the most easily deployed options on a short timeframe, with the best prospects to contribute to the vision developed by the normative track, while the remainder have been shown to be robust against the widest range of uncertainties in the explorative scenarios.

1. Motivated by civil society pressure, the EU ensures that its trade agreements contribute to achieving its Nationally Determined Contributions (NDC) as well as its trading partners’ throughout their implementation. An expanded sustainability assessment and continuous review process ensure alignment of trade agreements with NDCs.

2. This option advocates for European stakeholders to coalesce around a consensus carbon measuring methodology. Eurostat could open a statistical observatory to monitor the flow of carbon between EU member states trading partners. On this basis, the EU could advocate for global agreement on measuring embedded carbon as precondition for functioning carbon trade.

3. The EU Carbon Border Adjustment Mechanism (CBAM) has generated much debate, including in WTO circles. To ensure the mechanism’s efficiency and its WTO compatibility of the CBAM, and address questions arising from its implementation, the European Commission and trading partners institutionalise a continuous discussion and feedback process on issues arising during implementation, which later informs the CBAM’s review process.

4. To secure sustainable and resilient supply chains, the EU could reinvent and reframe its trade relations into Trade+ (Strategic) Alliances. By focusing on local value retention, it could become an attractive alternative to more extractive investments and contribute to green production capacities and green transitions in partner countries.

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2 Measures necessary to mitigate the effects of climate change are added to the exceptions to the General Exceptions in Article XX of the GATT.
3 For example, through a renegotiation of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) and creating avenues for compulsory licensing.
4 The foresight methodology requires a focus on a discrete actor, whereas the global nature of the challenge and agency of governments and stakeholders outside of Europe is fully recognised.
5. For technology inputs in particular, the EU could focus on long-term relationships with critical raw materials (CRM) exporting countries. **CRM-with-(mutual)-benefits** agreements would focus on environmental and social sustainability, local industry development and value retention, e.g., via technology licensing mechanisms in exchange for stable and affordable CRM supply.

6. To create faster and more equitable diffusion of mitigation and adaptation know-how and technology, the EU could propose establishing **Cooperatives for International Climate Action**. These would include support for smart climate policy making (in mitigation and adaptation), technology transfer and investment, in addition to existing mechanisms such as public procurement, contracts for difference (beyond the energy sector), or carbon trading under Article 6 of the Paris Agreement.

7. To improve maritime trade infrastructure’s resilience to weather- and climate-related damages, the EU could launch a **Climate Resilience & Adaptation Fund for Trade Infrastructure**, relying on its financial institutions and via public private partnerships. The fund would offer (1) risk assessments and anticipatory climate vulnerability mappings; (2) loans for improving the climate resilience of infrastructure; and (3) disaster relief grants for sustainable reconstruction.

What the future may hold for trade and climate: explorative scenarios

The below three scenarios were developed to explore a future for trade that is both very unpredictable and unlikely to be a linear continuation of the past, as recent geopolitical events made clear. Each is a plausible, even if unlikely scenario for the evolution of trade and climate to 2040. Somewhere between them can be found what will likely play out over the next 17 years or so.

Anticipating the challenges which may lay ahead as geopolitical headwinds combine with worsening climate impacts is difficult but essential work. By doing so the scenarios help us to transcend the many short-term considerations which weigh down policymaking, and provide some agency in averting worst-case scenarios and adapting to the challenges that will inevitably remain. They were also used to stress-test the above strategic options.

**Politics, politics, politics! National interests fragment trade** (blue scenario)

In 2040, trade is contentious, regional, and expensive. The world is divided into fuzzy Northwestern and Southeastern trade spheres, imposing diverging standards and redirecting supply chains. The WTO remains ineffective as disputes rise. Ambitious standards on carbon emissions, diffusion of green technologies, and shorter supply chains have reduced trade’s carbon-intensity. Some countries in the Global South have monetised natural carbon sinks and ecosystem services, adding to their CRM-fuelled growth. National adaptation efforts are partly successful, but failure to cooperate diminishes their overall effect. Driven by supply shocks and “green populism”, Europe becomes an island of sufficiency. As material consumption grows elsewhere, the world heads towards 2.7°C warming by 2100.
From competition to cooperation to disintegration. The water trigger (red scenario)

In 2040, trade is highly restricted, deglobalised and disrupted by extreme climatic and weather events. A broken hydrological cycle has brought global water scarcity, disrupting food supplies, energy production, trade and transport infrastructure. Agricultural products and (commodified) water are the only freely traded goods in a contested geopolitical context. The WTO remains paralysed and China has turned inward. Countries and businesses alike regionalise supply chains. Adaptation efforts are partially successful, but the diffusion of green technologies remains highly insufficient. The world is heading towards 4.4°C warming by 2100 and turns to geo-engineering as the last attempt to halt global climate change.

Coming together, but missing the Paris Goals (yellow scenario)

In 2040, trade is booming and mostly decarbonised – net zero goods and services are default options. Green energy, inputs, products, and services constitute a growing share of global trade. Global CRM value chains link Africa and South America to the rest of the world via ASEAN processing and refinement facilities. Supply chains suffer from occasional disruptions, but are diversified and resilient. Sino-American rapprochement unlocks WTO reform that aligns trade and climate goals. Liberalisation efforts are soon joined by many post-default countries in the Global South, culminating in the 2035 United Nations Transformation Summit. It overcomes key challenges of climate cooperation, but comes too late to address deteriorating climatic conditions, environmental degradation and increasingly frequent extreme weather events. While economic activity and trade are decarbonising rapidly, material consumption continues to grow. This blocks the path towards limiting global warming to 2°C by 2100.

What next?

The ECF’s commitment to shed a light on the future of trade and climate does not end with this report. By presenting the vision, strategic options, and future uncertainties articulated by the expert group convened through this process, our ultimate goal is to have the engagement of readers, policymakers and stakeholders, in the EU and beyond, who will help shape the future of trade in a net zero world.

Your reactions, ideas, and inspirations arising from this report - in any form - are welcome through the contact page of the Future of Trade website, where we will periodically post updated information about events and complementary research as part of this initiative.

www.netzerotrade.org