Foreword by the WTO Director-General

Climate change is an existential threat to people's lives and is dramatically reshaping economic activity and trade. This year alone, from the Horn of Africa to China, from Europe to the Americas, we have seen increasing heat and prolonged drought damage crops and reduce electricity production, while low water levels in major rivers have made it difficult to transport industrial and agricultural goods. Severe flooding left a third of Pakistan under water, devastating key export crops and putting the country's food and economic security at risk.

The climate crisis is a problem of the global commons, and one that demands a collective and effective multilateral response. The *World Trade Report 2022: Climate Change and International Trade* reviews the role of trade, trade policy and international trade cooperation in addressing climate change. It discusses how changing temperature and weather – and the low-carbon transition required to contain rising greenhouse gas emissions – are likely to impact the welfare of nations' populations and alter their comparative advantages.

The report argues that trade is a force for good for climate and part of the solution for achieving a low-carbon, resilient and just transition. While trade itself does generate emissions from production and transport, trade and trade policies can accelerate the dissemination of cutting-edge technologies and best practices, and enhance incentives for further innovation while creating the jobs of tomorrow. Trade is instrumental for investments in clean energy to have the greatest reach and impacts, at lowest cost and where they are needed the most. These are returns we would be unwise to forego, especially now that the big green investment push we need will coincide with rising real costs of capital and looming uncertainty about energy security due to geopolitical tensions and war.

Trade and trade policies are also part of any sound strategy for climate change adaptation, helping individual countries, especially vulnerable developing ones such as small-island developing states, least-developed countries and land-locked developing countries, better respond to and protect themselves from extreme weather events, and, in the longer term, to adjust to shifts in agricultural productivity and changes in wider international competitiveness. At the global level, what we call "re-globalization" – more diversified and deconcentrated goods and services production, drawing in formerly marginalized countries and communities with the right business environment – would promote supply resilience and inclusion in a world of ever more frequent climate induced shocks. This would provide better risk management than reshoring, nearshoring or friend-shoring.

In tandem with other public policies, trade has already been playing an important role in the global climate response. For example, the cost of solar panel systems has plummeted in the last three decades, and about 40 per cent of the cost decline has been attributed to scale economies made possible in part by international trade and value chains. The capacity of solar panels traded across borders in 2017 reached almost 80 GW, equivalent to over 9 per cent of global electricity generation.

Further opening up trade in environmental goods and services could do more. The WTO estimates that reducing tariffs and non-tariff measures on energy-related environmental goods could increase total exports of these products by 5 per cent by 2030 and, at the same time, lead to a net reduction in carbon emissions. There are employment benefits, too: the International Energy Agency estimates that the shift to clean energy could generate 14 million new jobs in clean energy sectors and 16 million jobs in related sectors globally by 2030.

Beyond amplifying the impact of climate policies and financing, greater international trade cooperation is key to manage and minimize potential trade frictions associated with climate action. For instance, close to 70 carbon pricing schemes are presently in operation worldwide. Without common approaches for prices and comparing equivalence, there is a significant risk that unilateral measures aiming to prevent carbon leakage and loss of competitiveness could stoke trade tensions and create high administrative costs for firms and governments. Uncoordinated climate actions could also hamper decarbonization efforts by raising uncertainty and discouraging much-needed investment.

The ongoing proliferation of decarbonization initiatives and standards – there are more than 20 different decarbonization standards in the steel sector alone – creates confusion for producers and could potentially lead to trade frictions. In line with its longstanding role of promoting transparency vis-à-vis policy measures affecting trade and encouraging cooperation in the direction of comparability, compatibility and harmonization, the WTO could play a similar role for carbon pricing and standards. The WTO is working with other multilateral agencies – the International Monetary Fund, the Organisation for Economic Co-operation and Development and the World Bank – on bringing in a trade perspective to discussions and research on carbon mitigation approaches.

Clear, predictable and shared understandings about trade-related climate measures would serve the needs and development opportunities of businesses and consumers in developing countries far more effectively than the high transaction costs that would come with a mess of varying rules for different markets. But a just transition to a low-carbon economy demands additional measures, including financial support, to help low-income regions address and overcome the potential adverse effects of carbon pricing. The case for delivering on the US$ 100 billion climate financing pledge remains strong, and a robust response on loss and damage is urgently needed.

The Aid for Trade initiative – which is increasingly about investment for trade – can and should help developing and least-developed countries build climate-friendly critical trade infrastructure. This would support a resilient and inclusive low-carbon transition.

This report is being launched at the same time as the 27th United Nations Climate Change Conference (COP27). What I hope to see emerge there and elsewhere is a trade and investment facilitation pathway in support of a just transition to a low-carbon economy. Finance is one part of the equation – but it is not the only part. A good trade policy framework is necessary to turn climate investment into climate transformation. We must start to talk about trade not as a threat but as a solution to the climate crisis.

Achieving better trade and climate outcomes is possible – but we will need strong political leadership. Our success at the WTO's 12th Ministerial Conference in June 2022 – where members unanimously agreed that trade must be part of the solution to climate change and struck an accord on curbing harmful fisheries subsidies that is the WTO's first agreement with environmental sustainability at its core – shows that this is possible.

Looking ahead, the WTO has an opportunity to use the present moment to strengthen its role as a forum for coordination on trade and climate change, to address trade policy barriers holding back the dissemination and use of low-carbon technologies, and to support structural changes needed to decarbonize the global economy. I hope we will make the most of this opportunity.

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