

Making international trade work for sustainable development: toward a new WTO framework for subsidies

Elena Cima* and Daniel C. Esty†

ABSTRACT

Government subsidies for fossil fuels, agricultural production, and fisheries amount to trillions of dollars per year. This funding harms economic efficiency, disrupts trade, and actively exacerbates the global environmental and climate crises. Moreover, the scale of these subsidies far exceeds the support provided to industries and activities that contribute to the transition towards a low-carbon and sustainable future economy. In seeking to discipline such subsidies, trade law has traditionally focused on whether the funding distorts trade without regard to the rationale or purpose of the subsidies. In this article, we argue that this approach to subsidies is at once incompatible with (i) the original vision of multilateral trade law, (ii) what is needed to manage international economic interdependence in today's world, and (iii) the present moment's urgent need to take seriously sustainable development as the ultimate objective of the trading system. The reform package we present in this article calls for a reframing of WTO subsidies rules on a foundation that gauges alignment with *sustainable development* alongside *trade distortions*, with sustainability becoming the first and foremost test of whether subsidies should be permitted—consistent with the sustainable development mandate in the Marrakesh Agreement that established the WTO.

INTRODUCTION

Governments are spending more than 7 trillion US Dollars (USD) on explicit and implicit subsidies for fossil fuels, agriculture, and fisheries according to a recent World Bank report.¹ Much of this support is economically inefficient, trade distorting, and environmentally damaging. Analyses by the World Bank, Organization for Economic Cooperation and Development (OECD), and World Trade Organization (WTO) suggest that government subsidies actively

* Elena Cima, Lecturer in International Law, University of Geneva.

† Daniel C. Esty, Hillhouse Professor of Environmental Law and Policy, Yale School of the Environment and Yale Law School. The authors would like to thank the anonymous reviewers for their insightful comments and suggestions and the participants in the Remaking Global Trade for a Sustainable Future Project for a series of conversations that sharpened the arguments presented in the article.

¹ Richard Damania and others, *Detox Development: Repurposing Environmentally Harmful Subsidies* (World Bank, Washington DC 2023) xxii. See also Simon Black and others, *IMF Fossil Fuel Subsidies Data: 2023 Update*, WP/23/169 (2023), 16.

exacerbate global environmental and climate crises by increasing greenhouse gas (GHG) emissions, deforestation, and air and water pollution as well as causing the depletion of fisheries and other natural resources.² These inefficient and unsustainable subsidies far exceed, moreover, the support provided to industries and sectors that contribute to the transition towards a low-carbon and sustainable future economy. In the energy sector, for instance, there is a significant discrepancy between the amount of government expenditures directed at fossil fuels compared to those available for renewable energy.³ But ironically, it is renewable energy subsidies that have been challenged at the WTO, generally because of local content requirements, and it is government support for the renewable energy sector that has triggered a rising number of countervailing duty claims.⁴

The WTO Agreement on Subsidies and Countervailing Measures (SCM Agreement)⁵ lumps all subsidies together without taking into account their purpose or policy rationales.⁶ Similarly, the subsidies rules of the Agreement on Agriculture (AoA)⁷ apply to all agricultural subsidies, as long as they distort trade and according to the degree of trade distortion, regardless of their underlying purpose.⁸ Simply put, existing WTO subsidies disciplines do not distinguish between government expenditures that increase GHG emissions and other sources of pollution and ultimately undermine the world community's efforts to achieve the UN-ratified Sustainable Development Goals (SDGs) from those that contribute to climate change mitigation, pollution-free production, sustainable agriculture, or other SDGs. Moreover, because pollution impacts and other environmental harms associated with fossil fuel use and agricultural production are not internalized, *implicit* fossil fuel and agricultural subsidies exist almost everywhere without being subject to the WTO subsidies rules.⁹

In contradistinction to these existing trading system practices, the WTO's founding document, the 1994 Marrakesh Agreement,¹⁰ suggests that trade should be conducted in accordance with the objective of *sustainable development*, providing an over-arching mandate that has long been given little attention. But the need for a sustainability-enhancing international trade system has come into sharper focus as the public across the globe demands movement towards a clean

² Damania and others (n 1) xvii–xix. See also OECD, *Taxing Energy Use for Sustainable Development. Opportunities for Energy Tax and Subsidy Reform in Selected Developing and Emerging Economies* (2021); WTO, *World Trade Report 2022. Climate Change and International Trade* (2022).

³ According to a recent report published by the International Renewable Energy Agency (IRENA), 'in 2017, the costs of unpriced externalities and the direct subsidies for fossil fuels ... exceeded subsidies for renewable energy by a factor of 19'. Michael Taylor, 'Energy Subsidies. Evolution in the Global Energy Transformation to 2050' IRENA Technical Paper 1/2020 (2020), 9.

⁴ WTO disputes on renewable energy support measures include: *Canada—Renewable Energy/Canada—FIT* (DS412 and DS426); *China—Wind Power Equipment* (DS419), *US—Countervailing Measures (China)* (DS437); *EU and Certain Member States—Renewable Energy* (DS452); *India—Solar Cells* (DS456) *EU and Certain Member States—Biodiesel* (DS459); *US—Renewable Energy (India)* (DS510); and *US—Renewable Energy (China)* (DS563). See Henok Asmelash, 'The First Ten Years of WTO Jurisprudence on Renewable Energy Support Measures: Has the Dust Settled Yet?' (2022) 21 *World Trade Review* 455; Mark Wu and James Salzman, 'The Next Generation of Trade and Environment Conflicts: The Rise of Green Industrial Policy' (2014) 108 *Northwestern University Law Review* 401. See Kim Kampel, 'Options for Disciplining the Use of Trade Remedies in Clean Energy Technologies' *ICTSD* (May 2017).

⁵ Agreement on Subsidies and Countervailing Measures, 15 April 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1869 UNTS 14 (SCM Agreement).

⁶ See eg Robert Howse, 'Climate mitigation Subsidies and the WTO Legal Framework: A Policy Analysis' (May 2019) *IISD* 5; Aaron Cosbey and Petros Mavroidis, 'A Turquoise Mess: Green Subsidies, Blue Industrial Policy and Renewable Energy: The Case for Redrafting the Subsidies Agreement of the WTO' (2014) 17 *Journal of International Economic Law* 11.

⁷ Agreement on Agriculture, 15 April 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 UNTS 410 (AoA).

⁸ See eg Joseph A McMahon and Melaku Geboye Desta (eds), *Research Handbook on the WTO Agriculture Agreement: New and Emerging Issues in International Agricultural Trade Law* (Edward Elgar, Northampton 2012).

⁹ IRENA has published a report in 2019 providing estimates of these unpriced externalities until 2050. As an example, 'in 2017, the costs of outdoor air pollution from fossil fuels were estimated to be in the order of USD 2.3 trillion, with climate change costs adding around USD 370 billion'. IRENA, *Global Energy Transformation 2019: A Roadmap to 2050* (2019). On a new framework to 'end externalities', see E Donald Elliott and Daniel C Esty, 'The End Environmental Externalities Manifesto: A Rights-Based Foundation For Environmental Law' (2021) 29 *NYU Environmental Law Journal* 505. See also Daniel C Esty, 'Mastering the Labyrinth of Sustainability: Toward a New Foundation for the Market Economy' (2022) 4 *Revue Européenne du Droit* 119.

¹⁰ Marrakesh Agreement Establishing the World Trade Organization, 15 April 1994, 1867 UNTS 154 (Marrakesh Agreement).

energy economy, nature positive agriculture, and other dimensions of a sustainable future.¹¹ This *sustainability imperative*¹² has now reached the WTO itself with momentum building for significant reforms leading to more sustainability-minded multilateral trade rules and procedures.¹³ While amending current subsidy rules has long been considered controversial, difficult, time-consuming, and even highly unlikely,¹⁴ we believe the time is ripe for reform. Indeed, overdue.

The structural reforms that we envision would not be limited to small tweaks here and there but would rather require fundamentally changing the conceptual framework of the WTO approach to subsidies with the goal of positioning the trading system to step up to its core sustainable development objective.¹⁵ Indeed, in this article, we lay out the foundations for transformative subsidy reforms that could provide a logic for repurposing many economically inefficient, trade-disruptive, and unsustainable government expenditures—potentially unlocking substantial financing for the SDGs and opening up export opportunities in many sectors for developing countries. In this regard, just as the end of textile support in key countries was the centerpiece of the *grand bargain* of the Uruguay Round, we envision the possibility that a sustainability-oriented subsidy reform could be a galvanizing force for a new global agreement that would strengthen the WTO and deliver widespread benefits.

The reform package we present in this article calls for a reframing of WTO subsidies rules on a foundation of *sustainability* rather than *trade distortions*. To this end, in the following sections, we challenge the prevailing framework, which has traditionally been based on trade distortion as the only parameter to distinguish between groups of subsidies and on limiting countries' freedom to support their own industry (even when they pursue legitimate policy objectives). As an alternative, we propose a reconceptualization of the framework of analysis based on the purpose of the subsidy, making sustainability the first and foremost test of whether subsidies should be permitted—with trade distortion remaining as a second factor.

In Section 'Back to the Roots of the Multilateral Trading System', we explain the philosophical underpinnings for our sustainability-based approach by describing the need to go back to the original values that inspired the creation of the multilateral trading system and that were lost over the course of time, particularly during the 1980s and 90s. By doing so, we highlight that our proposal is deeply anchored in the thought of those who originally conceived the need for international cooperation on trade matters and in the Bretton Woods era tradition of multilateral trade rule-making. In Section 'The Sustainability Imperative', we discuss the need to regear the trading system more broadly and the rules on subsidies more specifically towards sustainability. In doing so, we aim to bring back the original design of the multilateral trade project and to put a priority on the WTO's overarching sustainable development objective. In Section 'Remaking Subsidies for a Sustainable Future', we spell out the core elements of our new framework for analysis, while in Section 'A Framework for Subsidies Reform', we illustrate how our revised approach to subsidies may work in practice, by presenting a two-by-two matrix that could guide

¹¹ The fact that the 2023 WTO Public Forum examines how trade can contribute to a greener and more sustainable future reflects the priorities of the Members as well as of civil society at large.

¹² David Lubin and Daniel C Esty, 'The Sustainability Imperative' (2010) 88 *Harvard Business Review* 42, 50.

¹³ Examples of such momentum include the recent negotiation of an agreement on fisheries subsidies, the launch of the Trade and Environmental Sustainability Structured Discussions (TESSD), and the Informal Dialogues on Plastics Pollution and Sustainable Plastics Trade (IDP) as well as the Fossil Fuel Subsidy Reform (FFSR). See also the 2022 WTO World Trade Report, which stated that 'trade is a force for good for climate and part of the solution for achieving a low-carbon, resilient and just transition'. WTO (n 2) 6.

¹⁴ See Luca Borlini and Claudio Dordi, 'Deepening International Systems of Subsidy Control: The (Different) Legal Regimes of Subsidies in the EU Bilateral Preferential Trade Agreements' (2018) 23 *Columbia Journal of European Law* 551, 647–50.

¹⁵ On the need to reframe the trading system to step up to its core sustainable development objective, see the *Villars Framework for a Sustainable Global Trade System* (7 September 2023), prepared in the context of the *Remaking Trade for a Sustainable Future* Project: <<https://remakingtradeproject.org/>> accessed 10 February 2024.

future subsidies negotiations. Finally, the ‘Conclusions’ section offers some concluding thoughts on the way forward and the broader sustainability agenda within the multilateral trading system.

BACK TO THE ROOTS OF THE MULTILATERAL TRADING SYSTEM

The vision that undergirded the negotiations of the 1947 General Agreement on Tariffs and Trade (GATT)¹⁶ and the first years of multilateral trade cooperation centred on the coexistence of reciprocal trade liberalization alongside domestic regulation and market interventions. More precisely, the former was supposed to be ‘embedded’ in the latter. Subsidies were barely disciplined under the original text of the GATT, nor were many other elements of domestic policy, largely because of the recognition that governments needed to be able to regulate the marketplace to pursue a wide variety of critical policy objectives above and beyond their commitment to trade liberalization.

This initial vision for the trade system gradually gave way to a sharper focus on market opening and *deep* economic integration. During the 1970s and the 1980s, trade policy—in alignment with deregulatory agendas in many nations—began to advance a new set of rules that sought to establish disciplines on non-tariff barriers in a manner that significantly reduced countries’ domestic policy space. While the original vision of the 1940s did not contemplate sustainable development as one of the core policy objectives countries might want to pursue, today there can be no doubt about the desire of many governments to advance the sustainability agenda.¹⁷ In this section, we explain the importance of going *back to the roots* of the multilateral trading system, namely to those values and approaches that characterized the original vision that emerged at the creation of the Bretton Woods system.

From the original multilateral trade project to deep integration

It is unusual for a single individual to influence an entire area of international law and cooperation as much as Cordell Hull did with regard to the multilateral trading system that emerged in the 1940s. As America’s longest serving Secretary of State, Hull exerted enormous influence not only over the shape of US post-war policy vision but also over the early years of international cooperation on trade matters. Simply put, he made it his lifetime mission to reduce trade barriers through multilateral negotiations and to bring countries together around a common sense of economic destiny and potential shared prosperity.¹⁸ In fact, although he retired as Secretary of State in 1944 and was not directly involved in the GATT negotiations, his ideas deeply inspired the genesis of the multilateral trading system.

Hull embraced the philosophy that trade had a fundamental international dimension and could provide an important logic for peace.¹⁹ The fact that the Smoot–Hawley Tariff Act of 1930 was soon associated in the public eye with the Great Depression and with World War II contributed to discrediting isolationist and protectionist sentiment and to promoting Hull’s vision of international cooperation and free trade.²⁰ In Hull’s vision—which was grounded in the earlier works of philosophers and thinkers such as Montesquieu, John Stuart Mill, and Richard Cobden²¹—the centerpiece of a new multilateral trading system should have been countries’ mutual commitments to reduce tariffs.

¹⁶ General Agreement on Tariffs and Trade, 30 October 1947, 61 Stat A-11, 55 UNTS 194 (GATT).

¹⁷ Jonas Meckling and others, ‘Busting the Myths Around Public Investment in Clean Energy’ (2022) 7 *Nature Energy* 563.

¹⁸ Douglas A Irwin, *Clashing Over Commerce* (The University of Chicago Press 2017) 420; Douglas A. Irwin, Petros C. Mavroidis and Alan O. Sykes, *The Genesis of the GATT* (CUP, Cambridge 2008) 27.

¹⁹ Cordell Hull, *The Memoirs of Cordell Hull* (Macmillan 1948) 81. See also Elena Cima, *From Exception to Promotion. Re-Thinking the Relationship between International Trade and Environmental Law* (Brill 2021) 40.

²⁰ Alfred E Jr Eckes, *Opening America’s Market: U.S. Foreign Trade Policy Since 1776* (University of North Carolina Press 2000) 138.

²¹ Montesquieu, *De l’esprit de lois* (1748); John S Mill, *Principles of Political Economy* (Longman Green 1909); Richard Cobden, *The Political Writings of Richard Cobden* (T. Fisher Unwin, London 1903).

Hull's vision influenced a number of the 1947 GATT negotiators, which included, on the British side, Oxford economics professor James Meade, whose works were built on Hull's ideas and served as the starting point for the GATT negotiations.²² Simply put, non-economic concerns undergirded post-war trade negotiations. International cooperation on economic matters, including trade, was seen as fundamental to banish dangerous unilateral and non-cooperative economic policies and thus to facilitate the chances of a collaborative world, national security, and peace. As a result, the focus was placed on the reciprocal commitments towards tariff reductions and on the avoidance of discriminatory practices, both of which were seen as leading to inter-state hostilities.

The *charter* the GATT founders had in mind was supposed to be limited to a few key principles, leaving States free to regulate within their territory and to pursue a wide variety of domestic policy objectives. It was also clear that these objectives may well change and evolve over time and that multilateral trade rules should in no way undermine countries' regulatory sovereignty and flexibility. As early as 1943, James Meade had stated very clearly that, because circumstances may change and States may introduce new methods of trading, an *international trade charter* should not have defined 'very rigidly and precisely exactly what any member may or may not do in all possible circumstances',²³ as such an approach could have ended up precluding certain State practices. Rather, the *charter* should have been limited to indicating in general terms 'the types of protective device which it is intended to forbid and the general maximum degree of protection which it is intended to allow', leaving States free within these boundaries.²⁴

This vision of the multilateral trading system was perfectly in line with the new economic philosophy for the world economy (which came to be known as the Bretton Woods model) based on a delicate compromise between the creation of international rules aimed at trade liberalization and global economic cooperation on one side, and the recognition of every government's need to respond to domestic economic and non-economic priorities on the other.²⁵ The underlying idea was for international economic policy to be 'subserving to domestic policy objectives – full employment, economic growth, equity, social insurance, and the welfare state – and not the other way around.'²⁶ This model was embraced by the GATT founders, who saw the market as *embedded* in a broader social fabric and multilateralism as predicated upon domestic interventionism.²⁷ This approach is also reflected in the final text of the GATT which, while affirming the principles of multilateralism and tariffs reduction, contains safeguards and exceptions designed to protect a variety of social objectives.²⁸

The 1970s marked a profound transformation of the trading system, which became more formalized and technical as well as motivated by economic and ideological concerns rather than the political ones that had inspired the founders of the regime.²⁹ The political and economic landscape had also changed: the 1980s were the decade of the Reagan–Thatcher revolutions, of the Washington consensus, market fundamentalism, and neoliberalism.³⁰

Embedded liberalism and the Bretton Woods model gave way to neoliberal thoughts and to a push for broad-based trade liberalization (now caricatured by many as *hyper-globalization*). This shift has been described by Harvard Professor Robert Lawrence in 1991 as one from 'shallow'

²² James E. Meade, *The Economic Basis of a Durable Peace* (Allen & Unwin, London 1940) and *Proposal for a Commercial Union* (1943).

²³ Meade, *Proposal* (ibid, para 12).

²⁴ ibid.

²⁵ Dani Rodrik, *The Globalization Paradox* (Norton & Company Inc., London 2011) 69.

²⁶ ibid 70.

²⁷ John G Ruggie, 'International Regimes, Transactions and Change: Embedded Liberalism in the Postwar Economic Order' (1986) 36 *International Organization* 379, 415.

²⁸ ibid 396.

²⁹ Cima (n 19) 19.

³⁰ ibid.

to 'deep' integration.³¹ *Shallow integration* characterized international trade rules during the first decades after the adoption of the GATT, as negotiators focused on the reduction of tariffs and elimination of intentionally discriminatory policies, without requiring much of domestic policy. Starting with the Tokyo Round (1973–9), multilateral trade negotiations and, subsequently, multilateral trade rules began to reflect what Lawrence called *deep integration* which goes beyond the removal of formal trade barriers and seeks to reconcile or even harmonize divergent national regulations.³² Under deep integration, industrial policy tools (including government subsidies) are seen as threatening free trade, and 'any discretionary use of domestic regulations can be construed as posing an impediment to – a transaction cost on – international trade.'³³ As a result, governments, rather than being complementary to international economic collaboration and indispensable for the correct functioning of the market, started being perceived as a cumbersome presence standing in the way of a global marketplace. The definition of *free trade* changed as well: it went from *trade free from discrimination* to the much broader *trade free of burdens*.³⁴

The first six rounds of multilateral trade negotiations succeeded in substantially reducing tariffs in many countries and with respect to many sectors.³⁵ For several decades, many areas of domestic policy—such as agriculture, insurance, banking, construction, and the textile industry—were kept out of GATT negotiations. As quotas were phased out and tariffs came down, the Tokyo Round agenda and with even more vigor the Uruguay Round goals began to target a range of government policies that were perceived to be imposing transaction costs that burdened international commerce, including differences in national regulations and standards as well as subsidies to a wide variety of domestic industries.³⁶ As a result, during the Uruguay Round, GATT Members pushed integration even deeper, introducing a broad set of disciplines for subsidies, dumping and safeguards, the harmonization of domestic technical regulations and standards, as well as agricultural support programmes.³⁷

The subsidies disciplines as an example of deep integration

The subsidies disciplines that emerged from the Uruguay Round perfectly exemplify the shift from shallow to deep integration. Under the original text of the GATT, subsidies were barely covered. In addition to Article III.8(b), which exempted pure production subsidies from the national treatment obligations, the entire regulation of subsidies was contained in Article XVI. The latter, however, barely regulated subsidies, as it merely provided that the GATT Contracting Parties should notify subsidies that have an effect on trade and should be prepared to discuss limiting such subsidies if they cause serious damage to the interests of other Contracting Parties. With respect to export subsidies, Article XVI provided that Contracting Parties were to 'seek to avoid' using subsidies on exports of primary products. In addition, Article VI allowed for the adoption of countervailing measures in case of material injury caused by the subsidies granted to imported products. Overall, these disciplines did not provide for clear and comprehensive rules. Indeed, they did not even define what constituted a subsidy under the GATT.

³¹ Robert Z Lawrence, 'Scenarios for the World Trading System and Their Implications for Developing Countries', *Working Paper No 47*, OECD (November 1991), at 13.

³² *ibid.*

³³ Rodrik (n 25) 83.

³⁴ Andrew Lang, *World Trade after Neoliberalism. Re-Imagining the Global Economic Order* (OUP, Oxford 2013) 238.

³⁵ The first five rounds of GATT negotiations (1947 in Geneva, 1949 in Annecy, 1951 in Torquay, 1956 and 1960–61 in Geneva) focused exclusively on tariffs.

³⁶ There are, of course, exceptions. See eg the GATT *Belgian Family Allowances* dispute from 1952. It should also be noted that the provision on nullification or impairment has been in the GATT since 1947.

³⁷ The result was the adoption of a broad set of new agreements, including the Agreement on Agriculture, on sanitary and Phytosanitary Measures, on Textile and Clothing (terminated in 2005), on Technical Barriers to Trade, on Anti-Dumping, on Customs Valuation, on Preshipment Inspection, Rules of Origin, Imports Licensing, Subsidies and Countervailing Measures, Safeguards, Trade in Services and Trade-Related Aspects of Intellectual Property Rights. For an overview of the Uruguay Round and its impact on the trading system, see John Croome, *Reshaping the World Trading System: A History of the Uruguay Round* (Springer, Netherlands 1999).

After a few not-so-successful attempts in the 1960s,³⁸ it was during the Tokyo Round of the 1970s that a concrete effort was made to introduce a comprehensive regulation of government subsidies, reflecting the shift described in the previous Section. The Tokyo Round Subsidies Code, however, fell short of providing a precise definition of what constituted a subsidy, did not elaborate the rules applicable to subsidies with sufficient clarity, and was ultimately only accepted by 25 Contracting Parties as a plurilateral agreement.³⁹ Instead, it was the Uruguay Round that succeeded in delivering the comprehensive, all-encompassing, and complex set of rules that have been disciplining subsidies since 1995.⁴⁰

Two multilateral subsidies agreements emerged from the Uruguay Round: the SCM Agreement which regulates industrial subsidies and the AoA which covers agricultural subsidies. Both agreements are multilateral and are part of the so-called *single undertaking*, which means that all countries that are original WTO Members or that decide to accede later on are required to accept these disciplines. In addition, the Uruguay Round led to the establishment of a robust new dispute resolution system that would be used by the WTO Members to ensure the implementation of these agreements.

Article 1 of the SCM Agreement defines what constitutes a ‘subsidy’ for the purposes of this agreement as a financial contribution that confers a benefit to the recipient. This definition is extremely broad, as a wide range of transactions end up falling under its scope.⁴¹ Once a subsidy is shown to exist and to be ‘specific’ to a certain economic sector or industry, it is either prohibited (Article 3—when contingent on export or on the use of domestic inputs) or actionable (Articles 5 and 6—when it causes adverse effects to the interests of other Members).⁴² While a detailed analysis of these provisions is beyond the scope and purpose of this article, it will suffice to note that the distinction between prohibited and actionable subsidies, as well as the overall discipline provided for in the SCM Agreement, is based on the existence and degree of trade distortion: subsidies that are considered especially trade-distortive per se (subsidies contingent on export and on the use of domestic inputs) are prohibited, while those that are less trade-distortive but nevertheless susceptible to have adverse impacts on another WTO Member are actionable. Similarly, the AoA, whose goal is to progressively reduce ‘agricultural support and protection’, classifies domestic support subsidies into three Boxes (Amber, Blue, and Green) depending on their impacts on production and trade.⁴³

Re-evaluating government intervention

It is clear from the brief overview of existing multilateral subsidies disciplines that as long as a government support measure is seen as even inadvertently undermining the smooth flow of international trade, the current subsidy framework and disciplines are structured to suggest that such government funding should be ended or restructured to ensure that the trade distortions caused are minimized. The rationale for the subsidies, and whether they may advance legitimate policy objectives or may have other positive spillovers for society, are in no way taken into

³⁸ These attempts include the 1960 draft Declaration Giving Effect to the Provisions of art XVI:4, which contained a non-exhaustive list of measures considered to be prohibited export subsidies pursuant to art XVI:4, and which was accepted only by 17 Contracting Parties. See Peter Van den Bossche and Werner Zdouc, *The Law and Policy of the World Trade Organization* (5th edn CUP, Cambridge 2022) 841–2.

³⁹ *ibid* 842.

⁴⁰ For a comprehensive analysis of the WTO subsidies disciplines, see Dominic Coppens, *WTO Disciplines on Subsidies and Countervailing Measures. Balancing Policy Space and Legal Constraints* (CUP, Cambridge 2014).

⁴¹ Appellate Body Report, *United States—Final Countervailing Duty Determination with Respect to Certain Softwood Lumber from Canada*, WT/DS257/AB/R, adopted 17 February 2004, para 52.

⁴² There used to be a third category (non-actionable subsidies) at art 8 which however elapsed in 2000 and was never renewed by WTO Members.

⁴³ McMahon and Desta (n 8) 7. The Amber Box includes subsidies that are most directly linked to production levels; the Blue Box contains production-limiting programmes that still distort trade; and the Green Box covers measures that cause not more than minimal distortion of trade or production.

account.⁴⁴ This approach is perfectly in line with the idea of deep integration, which sees almost every form of government intervention as potentially threatening open markets and unfettered global commerce.

In this article, we make the argument that such an approach towards subsidies is not entirely in line with the original vision of multilateral trade law and international economic cooperation (which we find compelling). In fact, the original multilateral trade project viewed trade liberalization and cooperation as embedded in a broader social fabric and recognized the importance of domestic interventionism in a variety of sectors and in pursuit of a variety of objectives. And it took seriously the need for this balance.

Whenever the market fails to address negative or positive externalities linked to specific economic sectors or industries, government intervention, including in the form of a subsidy, can be warranted. Climate change is a particularly good example as it has been defined as the ‘greatest example of market failure we have ever seen.’⁴⁵ To contribute to climate change mitigation and facilitate the transition towards a low-carbon economy, increasing reliance on renewable energy sources rather than fossil fuels is critical, as it has been made abundantly clear by both the scientific and the policymaking communities.⁴⁶ Because, however, the negative environmental externalities of fossil fuels and the positive externalities of renewable energy are not fully captured by the market, government intervention aimed at internalizing those costs and benefits is necessary to ensure: (i) economic efficiency, (ii) alignment of the trade regime with the global sustainability commitments outlined further, and (iii) a swift, smooth, and just transition from a high-carbon to a low- and ultimately zero-GHG economy. With its narrow focus on whether a subsidy called into question is trade-distorting, the existing WTO subsidies framework is dramatically out of step.

THE SUSTAINABILITY IMPERATIVE

The existing approach towards subsidies is not only at odds with the original vision of multilateral trade law and international economic cooperation. It is also incompatible with the present moment’s urgent need to take seriously sustainable development as the ultimate objective of the trading system. Recall in this regard that, in establishing the WTO, negotiators expressly recognized that trade relations should be conducted ‘in accordance with the objective of sustainable development, seeking both to protect and preserve the environment.’⁴⁷

In opting for this language, the drafters of the Marrakesh Agreement were clearly influenced by the events of those years, which included the publication of the Report of the Brundtland Commission titled *Our Common Future* in 1987⁴⁸ and the adoption of the UN Declaration on Environment and Development (Rio Declaration) in 1992.⁴⁹ In particular, *Our Common Future* introduced the concept of sustainable development, which integrated economic progress and environmental protection.⁵⁰ This new dimension of *sustainability* recognizes that economic growth and development must ‘adhere to the physical constraints imposed by ecosystems’ and requires environmental considerations to be embedded in all sectors and policy areas.⁵¹

⁴⁴ See eg Cosbey and Mavroidis (n 6).

⁴⁵ Nicholas Stern, *The Economics of Climate Change: Stern Review* (CUP, Cambridge 2007) 1.

⁴⁶ The latest Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) expressly states that ‘global modelled mitigation pathways reaching net zero CO₂ and GHG emissions include transitioning from fossil fuels ... to very low- or zero-carbon energy sources, such as renewables...’ IPCC, *Climate Change 2023. Synthesis Report* (2023) para B.6.3. See also the 2030 Agenda for Sustainable Development (‘Transforming Our World’, A/RES/70/1, 2015) (2030 Agenda), Goal 7; Glasgow Climate Pact (Decision /CP.26), para 20.

⁴⁷ Marrakesh Agreement, Preamble.

⁴⁸ World Commission on Environment and Development, *Our Common Future* (OUP, Oxford 1987).

⁴⁹ United Nations Conference on Environment and Development, Rio de Janeiro, Brazil, 3–14 June 1992, *Rio Declaration on Environment and Development*, UN Doc A/CONF.151/26/Rev.1 (Vol 1), Annex I (12 August 1992) (Rio Declaration).

⁵⁰ David Pearce and others, *Blueprint for a Green Economy* (Earthscan, London 1990) xii.

⁵¹ *ibid* 212. Cima (n 19) 153.

Thus, the economic growth and development traditionally promoted by the trade regime would have to be *sustainable*, and trade rules themselves should not undermine domestic and international efforts towards securing the environmental pillar of sustainable development.⁵²

Over the years after the establishment of the WTO, there have been several efforts towards *greening* the trading system.⁵³ The Appellate Body has relied on the reference to the objective of sustainable development in the preamble of the Marrakesh Agreement to adopt an evolutionary interpretation of several GATT provisions based on environmental law principles and instruments.⁵⁴ Trade negotiators began to pay more attention to the environment, leading for example, to significant environmental provisions embedded in the North American Free Trade Agreement (NAFTA)⁵⁵ and conclusion of an Environmental Side Agreement by the parties—with many trade agreements since having an environmental chapter.⁵⁶ Similarly, a number of jurisdictions now undertake Environmental Impact Assessments in advance to trade negotiations.⁵⁷ Inside the WTO, the Members launched a Committee on Trade and Environment and the Secretariat set up a Trade and Environment Division.

These developments led Director General Pascal Lamy to declare in a 2007 speech that the ‘greening of the WTO’ was under way.⁵⁸ But in other regards, rather little has been done to implement the Marrakesh Declaration’s sustainable development mandate in any serious fashion. This modest result can perhaps be traced to the fact that those seeking to bring the sustainability agenda into the trading system have faced powerful forces advancing the Washington Consensus and policies of market fundamentalism that left little room for concerns about climate change or other environmental challenges.

More importantly, the *greening* of the trading system that has occurred so far has been grounded in a narrative which prevented sustainable development goals from standing on equal footing with trade liberalization. In fact, international trade law continued to provide the framework of reference and to represent the official language of the debate, which ultimately boils down to whether existing trade norms are adequate to strike a balance between trade liberalization and environmental protection. Even the debate around the (in)adequacy of WTO disciplines—including subsidies disciplines—has revolved around the long-standing question of the WTO’s role in preventing or allowing Members to pursue environmental objectives⁵⁹: *do existing trade rules provide countries with sufficient policy space to pursue a number of non-trade objectives, including contributing to sustainable development?* This is the question that has been at the heart of the ‘trade and environment’⁶⁰ debate since the very first clashes between trade

⁵² Cima, *ibid* 154.

⁵³ Daniel C Esty, *Greening the GATT: Trade, Environment, and the Future* (Institute for International Economics, Washington DC 1994); C Ford Runge, *Freer Trade, Protected Environment: Balancing Trade Liberalization and Environmental Interests* (Council on Foreign Relations 1994); Steve Charnovitz, ‘The WTO’s Environmental Progress’ (2007) 10 *Journal of International Economic Law* 685, 686.

⁵⁴ Appellate Body Report, *United States—Import Prohibition of Certain Shrimp and Shrimp Products*, WT/DS58/AB/R, adopted 6 November 1998, paras 129 and 131.

⁵⁵ North American Free Trade Agreement, US–Can–Mex, 17 December 1992, 32 ILM 289 (1993). On NAFTA’s environmental provisions, see Daniel C Esty, ‘Making Trade and Environmental Policies Work Together: Lessons from NAFTA’ *Aussenwirtschaft (Swiss Review of International Economic Relations)* 49 (April 1994); Gary Clyde Hufbauer (ed), *NAFTA and the Environment: Seven Years Later* (Institute for International Economics, Washington DC 2000).

⁵⁶ See eg Elena Cima, ‘Promoting Renewable Energy through FTAs? The Legal Implications of a New Generation of Trade Agreements’ (2018) 52 *Journal of World Trade* 663.

⁵⁷ Daniel C Esty, ‘Toward a Sustainable Global Economy: An Initiative for G20 Leadership’ (2016) 5 *Journal of Self-Governance and Management Economics* 46.

⁵⁸ Pascal Lamy, ‘The “greening” of the WTO has started,’ speech at Yale University (2007).

⁵⁹ See eg Howse (n 6); Luca Rubini, ‘Ain’t Wastin’ Time No More: Subsidies for Renewable Energy, The SCM Agreement, Policy Space, and Law Reform’ (2012) 15 *Journal of International Economic Law* 525. Cosbey and Mavroidis (n 6); Steven Charnovitz and Carolyn Fischer, ‘Canada–Renewable Energy: Implications for WTO Law on Green and Not-So-Green Subsidies’ (2015) 14 *World Trade Review* 177.

⁶⁰ The ‘trade and environment’ debate is part of the broader ‘trade and...’ debate, which addresses the question of how the trade regime should best deal with a variety of *non-trade* objectives, including environmental protection.

and environmental values—notably, the tuna–dolphin GATT dispute of the 1990s.⁶¹ And this is the very same question that echoed, for many years, whenever the subject of WTO rules and sustainable development came up.

In this article, we argue that the global community's recent commitments to climate change action—including the 2015 Paris Agreement and the 2021 Glasgow Climate Pact with its global target of net-zero GHG emissions by mid-century—and sustainability more broadly as embedded in the SDGs create an urgent need for the WTO to operationalize the *sustainable development* mandate of the Marrakesh Agreement. We also believe that this language means countries should be seen as free to adopt trade measures, including subsidies, in pursuit of their Nationally Determined Contributions (NDCs) to climate change action and their sustainable development strategies more generally—subject to a set of carefully structured but limited constraints as we explain further.

As a result, we challenge the traditional approach and argue that, to ensure that the trading system actually pursues its sustainable development objectives, the logic underlying the trading system as it stands today needs to be rethought so that it does not simply *allow* countries to pursue sustainable development objectives, but rather *promotes, facilitates, and encourages* these efforts. And in rethinking and remaking the trading system, we look back to its origins, to Hull's vision. We believe that the trading system was always meant for something greater than trade liberalization. We think it is time to recognize that where Hull saw trade liberalization as instrumental to achieving and maintaining world peace, we now need a trading system that promotes a sustainable future in which citizens across the planet can thrive. Essential to this vision are trade rules that value government intervention to correct market failures and channel or complement market forces.

REMAKING SUBSIDIES FOR A SUSTAINABLE FUTURE

To better align the rules on subsidies with the original design of the multilateral trade project and with the current sustainable development imperative, we propose in the following sections an alternative framework which reflects the understanding that government intervention can be good (sustainability enhancing) under certain circumstances and can be complementary to market forces—as it was understood under the tradition of embedded liberalism. And to determine when such intervention is indeed 'good', our theory relies precisely on the *sustainability imperative*.

Time for reform

The trade law system, as it stands today, has been designed to address trade-distorting subsidies, but not sustainability-impairing subsidies. The subsidies disciplines that emerged from the Uruguay Round—contained in the SCM Agreement for industrial subsidies and in the AoA for agricultural subsidies—classify and regulate subsidies depending on the level of trade distortion they are susceptible to produce. On the contrary, their rationale, their purpose, and their positive or negative impacts on the environment or sustainable development are not taken into account and have no bearing on the decision as to whether a certain subsidy should be allowed or prohibited.

The result is a set of rules that are not fit for the purpose of reducing environmentally harmful or sustainability-diminishing subsidies. First, existing subsidies disciplines do not include *implicit* support within their definition. In fact, the negative environmental impacts linked to the use of fossil fuels or of certain agricultural processes translate into costs for society rather

⁶¹ Esty (n 53) 27–32. See also Thomas E Skilton, 'GATT and the Environment in Conflict: The Tuna-Dolphin Dispute and the Quest for an International Conservation Strategy' (1993) 26 Cornell International Law Journal 455.

than being borne by those who directly benefit from these activities. Producers in these sectors end up having a competitive advantage over those involved in renewable energy or sustainable agriculture. Second, WTO subsidies disciplines generally fail to address certain environmentally harmful subsidies, such as support for fossil fuel production, because they do not fit in the existing definition of what constitutes a subsidy. For instance, they usually are not specific since they are available throughout the economy, they do not involve traded goods, they are not necessarily conferred by a public body, and the main harm they cause is not the type of competitive injury addressed in WTO law. Third, no distinction is made between subsidies on the basis of their impact on the environment or their contribution to the SDGs.

Rethinking multilateral rules on subsidies for a sustainable future requires an entirely new framework of analysis. A framework that is grounded in the distinction between subsidies *not* on the basis of trade distortion *but rather* on their contribution to the sustainability agenda. A framework that would therefore allow the trading system to encourage subsidies that contribute to the SDGs, while discouraging or prohibiting harmful subsidies.

The idea that not only trade, but also trade rules and institutions, can play a significant role in contributing to the SDGs is no longer limited to environmental circles, but has gained ground among the trade community and has had a direct impact on trade law- and policy-making. WTO Members have already implicitly accepted a mandate that extends beyond trade liberalization alone into the negotiation and implementation of requirements to reduce environmentally harmful subsidies with the 2022 Agreement on Fisheries Subsidies⁶² in which States agreed to eliminate subsidies on illegal, unregulated, and unreported fishing. In addition, in 2022, the WTO began negotiations on Fossil Fuel Subsidy Reform, toward reducing subsidies for fossil fuels.⁶³ These negotiations represent an important turning point for the trade system, as they address national measures that are internationally problematic not so much because they distort trade, but because they impair sustainability.

Reform pillars

What we propose in this article is to broaden the scope of the reform and extend this sustainability-based approach to subsidies at large, including but not limited to energy subsidies as well as agricultural subsidies that increase the burning of fossil fuels or result in excessive use of fertilizers and insecticides, encourage deforestation, pollute the air or water, and impair biodiversity. In this Section, we spell out the three core elements of our framework for subsidies reform and explain the logic for our alternative approach.

WTO rules should be refocused on a questioned subsidy's purpose and whether the impact of the subsidy is sustainability-positive or negative

Existing subsidies disciplines, as it was suggested earlier in this article, build on the recognition that domestic subsidies can have spillover effects on other WTO Members. Existing rules, however, only recognize trade-distortive, mercantilist, or protectionist spillover effects, namely promoting exports or impairing import opportunities. On the contrary, they fail to take into account that several forms of subsidies, such as fossil fuel subsidies and harmful agricultural and fisheries subsidies, in addition to possible trade-distorting effects, have alarming sustainability-impairing effects. For instance, agricultural subsidies can be harmful if they result in harmful excessive intensity of production, or harmful excessive use of fossil fuels, fertilizers, insecticides, and herbicides.

⁶² Agreement on Fisheries Subsidies, Ministerial Decision of 17 June 2022, WT/MIN(22)/33, W/L/1144 (22 June 2022).

⁶³ See Ministerial Statement on Fossil Fuel Subsidies, WT/MIN(21)/9/Rev.2 (10 June 2022).

On the other side of the spectrum, there are a wide range of subsidies which may have a more or less severe impact (if any) on international trade and competitiveness but which produce positive sustainability impacts. Sustainability is here intended in a very broad sense, as to encompass the three pillars of sustainable development (economic development, social progress, and environmental protection) as spelled out in the 17 SDGs listed in the 2030 Agenda for Sustainable Development.

In line with the overarching objective of sustainable development that the trading system as a whole is meant to pursue, under our framework, sustainability becomes the primary test of whether subsidies should in principle be allowed, and trade disruptions a secondary factor. This means that sustainability-positive subsidies will generally be allowed (subject to disciplines that vary depending on the extent of their distorting effect on trade).⁶⁴ This reframing would allow WTO Members to adopt a wide range of support measures in a number of sustainability-positive sectors such as renewable energy, sustainable agriculture, etc. On the contrary, fossil fuel subsidies and harmful agricultural and fisheries subsidies, regardless of whether or not trade-distortive, would in principle be prohibited (here again, with slightly different consequences depending on the level of trade distortion).

Opening the door to the repurposing of harmful subsidies

The importance of phasing out environmentally harmful subsidies has been stated in a loud and clear way through an increasing number of international instruments. The 2030 Agenda for Sustainable Development calls on States to ‘rationalize inefficient fossil-fuel subsidies that encourage wasteful consumption by removing market distortions ... including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts’⁶⁵ and to ‘prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing’.⁶⁶ The need to phase out fossil fuel subsidies is similarly emphasized in all the more recent climate law instruments, such as the 2021 Glasgow Climate Pact, the 2022 Sharm El-Sheikh Implementation Plan, as well as the Outcome of the first Global Stocktake adopted at COP28 in Dubai in December 2023.⁶⁷

By grounding the test for WTO compliance on the impact of a subsidy on sustainability rather than on their trade-distorting effects—and therefore, in principle prohibiting sustainability-diminishing subsidies while allowing those that contribute to the sustainable development agenda—this proposal aims to facilitate the repurposing of economically inefficient, trade-disruptive, and environmentally harmful subsidies. By doing so, it intends to create a powerful new dynamic to help countries structure their policies in ways that promote sustainability, while opening up export opportunities in several sectors for many developing countries.

Let’s consider the example of fossil fuel subsidies.⁶⁸ While fossil fuel subsidies distort trade, of much greater concern is the torque such funding creates toward the use of GHG-emitting energy options rather than renewable energy sources. Even after decades of focus on the need for a clean energy transition, the level of fossil fuel subsidies still far exceeds that of the renewable fuel subsidies. To promote a fundamental shift to renewable energy, WTO rules should be structured to

⁶⁴ Several authors have suggested ways to rethink how we distinguish between good and bad subsidies. See eg Jennifer A Hillman and Inu Manak, ‘Rethinking International Rules on Subsidies’, Council of Foreign Relations, Special Report No 96, September 2023; and Elena Cima, ‘Trade and Renewable Energy Subsidies’, White Paper, Remaking Trade for a Sustainable Future Project, September 2022.

⁶⁵ 2030 Agenda, Goal 12.c.

⁶⁶ *ibid* Goal 14.6.

⁶⁷ Glasgow Climate Pact, para 20; Sharm El-Sheikh Implementation Plan, para 13; Outcome of the first Global Stocktake, Draft Decision—CMA.5 (13 December 2023) para 28(h).

⁶⁸ See eg OECD (n 2).

encourage States to end their fossil fuel subsidies and shift their funding to programmes that promote clean and renewable energy options. Similarly, production-based agricultural subsidies, which we propose that WTO rules be reframed to prohibit or reduce (because they are sustainability impairing), might be repurposed for nutrition enhancement, transitional assistance toward sustainable farming, or to address climate change.

Equity for developing countries

The political legitimacy of the trading system as well as principles of fundamental fairness suggest that the burden of the transition away from sustainability-negative subsidies should not fall unduly on poor individuals or poor States. The sustainable development agenda requires policymakers to take into account the different circumstances and needs of developing countries to reflect this cornerstone principle of intra-generational equity.⁶⁹ In international environmental law, climate change law, as well as the law of sustainable development, this principle is articulated in several different ways.⁷⁰ In the climate change context, the equity commitment has been framed as a Principle of *common but differentiated responsibilities and respective capabilities* (CBDR-RC), according to which developing countries have differentiated responsibilities based on their historical contribution to climate change and environmental degradation as well as their technical, technological, and financial capacity to contribute to climate change mitigation, environmental protection, and sustainable development.⁷¹ The objective of such *differentiation* is to recognize differential starting points in terms of development and economic capacity—and to respond to the deep inequalities among countries.⁷² Alongside the principle of CBDR-RC, environmental law instruments often call for *special priority* to be given to the ‘special situation and needs of developing countries, particularly the least developed and those most environmentally vulnerable.’⁷³ This second principle is reflected in a variety of provisions that require or invite developed countries to provide developing ones with financial assistance, technology transfers, and capacity building to facilitate their task of contributing to the sustainable development agenda.⁷⁴

A similar approach can be found in the WTO law. In fact, the WTO agreements contain *special and differential treatment* (SDT) provisions that accord developing countries special rights and encourage other members to treat them more favourably. Typical SDT provisions allow for: (i) longer time periods for implementing agreements and commitments; (ii) measures to increase trading opportunities for these countries; (iii) provisions requiring all WTO members to safeguard the trade interests of developing countries; (iv) support to help developing countries build the infrastructure to undertake WTO work, handle disputes, and implement technical standards; and (v) provisions related to least-developed country members.

Our framework incorporates equity considerations in three critical ways. First, our proposed assessment of whether a subsidy is sustainability positive or negative would focus on the full spectrum of SDGs and the 3-fold (economic/environmental/social) definition of *sustainability*. Second, we propose that these sustainability assessments be done on a case-by-case basis to ensure the appropriate balancing of different needs and priorities. Finally, we propose to create a fund devoted to facilitating the sustainable development transition for developing countries.

⁶⁹ See eg Dire Tladi, *Sustainable Development in International Law. An Analysis of Key Enviro-Economic Instruments* (Pretoria University Law Press 2007) 48–58.

⁷⁰ In the Rio Declaration, for instance, see Principles 5, 6, and 7.

⁷¹ See eg Sumudu Atapattu, *Emerging Principles of International Environmental Law* (Brill 2007) 379–436.

⁷² Philippe Cullet, ‘Differentiation’ in Lavanya Rajamani and Jacqueline Peel (eds), *The Oxford Handbook of International Environmental Law* (2nd edn OUP, Oxford 2021) 320.

⁷³ Rio Declaration, Principle 6. In the context of the climate regime, see Paris Agreement to the United Nations Framework Convention on Climate Change, 12 December 2015, TIAS No 16–1104 (Paris Agreement) (Preamble, art 3 and art 4.5).

⁷⁴ Paris Agreement, arts 9, 10, and 11.

	Positive sustainability impacts	Negative sustainability impacts
No trade distortions	<u>Green Box</u> Allowed	<u>Red Box</u> Rebuttable presumption of inconsistency with WTO law
Trade distortions	<u>Yellow Box</u> Rebuttable presumption of consistency with WTO law	<u>Double Red Box</u> Prohibited - Obligation to phase out

Figure 1. Sustainability-based matrix.

Source: compiled by the authors.

A FRAMEWORK FOR SUBSIDIES REFORM

In this Section, we illustrate how our WTO subsidies reform might work in practice. We also clarify that we do not expect a definitive solution to the WTO debate around subsidies, which has gone on for more than two decades in a range of national and international fora, to emerge directly from our proposed reconceptualization of the problem. Rather, we seek to reinvigorate the trade community's subsidies conversation by proposing a new analytical framework, fully aware of the fact that many terms and concepts we introduce will have to be further defined in a broader set of discussions.

One such concept is *sustainability*, which encompasses multiple dimensions and definitions. We rely on the 2030 Agenda for Sustainable Development and its depiction of the 17 SDGs as our starting point. The 17 SDGs reflect the three core pillars of sustainable development, and we take note of the fact that the same subsidy may be more or less positive depending on the pillar one is considering and may even produce positive impacts vis-à-vis one pillar (i.e. environmental protection) and negative ones vis-à-vis another (i.e. economic development). We also take note of the fact that each country may assign to each of these three pillars (and consequently to each of the SDGs) a different degree of priority and that the specific circumstances and priorities of the country adopting the subsidy should be taken into account.

In our framework, within the broad notion of *sustainability*, considering the severity and urgency of the climate crisis, special emphasis is placed on the environmental pillar of sustainable development. At the same time, our framework is designed to be implemented on a case-by-case basis in a manner that permits the balancing of sustainability gains against trade disruption effects—and sustainability goals and progress across the SDGs against each other. This case-by-case assessment would be conducted by a panel in case a dispute is filed, and/or by domestic authorities before determining whether to allow the adoption of a countervailing duty.⁷⁵

Building on the three core elements we presented in the previous Section, our new framework for analysis yields a two-by-two matrix, whereby all subsidies are assessed on a spectrum across two key variables: sustainability impacts and trade distortion. [Figure 1](#) offers a visual representation of our matrix, and the rest of this section describes each of the four Boxes in greater detail.

Green box

In our matrix, subsidies that produce positive sustainability outcomes and relatively little in the way of trade distortions would fall in the Green Box, with the result that they would be automatically allowed—which means that they would also not be countervailable. In fact, it should be noted that countervailing duties in the renewable energy sector can produce an environmentally

⁷⁵ Such an assessment would be greatly facilitated by ensuring that countries that notify their new subsidies incorporate all the relevant information in their notification. On the importance of improving transparency and notifications, see Hillman (n 63) and Cima (n 64).

harmful result, namely, the increase in price of renewable energy technologies, ultimately slowing down the deployment and diffusion of renewable energy and making it less competitive vis-à-vis fossil fuels.⁷⁶

We acknowledge that most (production) subsidies produce some kind of distortion of international trade, so the Green Box would only include those subsidies that cause just minor trade distortions that can be dismissed as *de minimis* or which correct existing trade distortions. This situation could arise, for instance, in the energy sector, where the support—both implicit and explicit—to the fossil fuel industry is so significant that it has been even argued that, ultimately, renewable energy subsidies are simply leveling the playing field and correcting for other distortions.⁷⁷

In determining whether a subsidy produces positive sustainability impacts, it will be necessary to conduct a holistic assessment of the net sustainability impact of the measure, to ensure that, while there may be some divergent effects across the 17 SDGs and three core pillars of sustainable development, the negative impacts do not outweigh the positive effects.

The idea behind this Box is to adopt a permissive stance towards sustainability-enhancing government interventions. In brief, we want it to be clear that if a State adopts a support measure that is broadly sustainability positive and has very limited impacts on trade, it should be allowed within the WTO context. Such subsidies, we argue, should be subject to a review focused narrowly on establishing the legitimacy of the sustainability agenda advanced and the subsidy's limited impact on trade, after which the government programme should be immune from multilateral challenges as well as countervailing duties. We anticipate that this *green light* from a trade perspective would provide an important incentive for governments to invest in sectors and industries that contribute to sustainable development—thus responding to critical domestic needs and creating positive global externalities from which all can benefit.

Yellow box

The Yellow Box is designed to include those subsidies that produce substantial net-positive sustainability impacts but which cause a notable degree of trade distortion. Because they produce positive sustainability impacts, we propose that subsidies of this sort be granted a rebuttable presumption of WTO rules consistency as they advance the trade system's central vision of promoting sustainable development. Because these subsidies produce non-trivial trade distortions, the presumption in their favour should be open to rebuttal by reference to an assessment of the degree of sustainability gains they generate against the scale of trade disruption they cause. We propose that this balancing be undertaken with reference to the list of factors outlined further.

In a nutshell, if all the following statements are true, the assumption of WTO law consistency is not rebutted, and the subsidy should be allowed and not be countervailable. First, the subsidy is *transparent and carefully explained* (in a published framework with parameters provided and compelling rationale for the policy laid out). Second, the subsidy is *effective in advancing sustainability* (with the positive sustainability claim not merely asserted, but rather the gains are shown to be real based on appropriate data provided that demonstrate the effectiveness of the measure—thus ensuring there can be no suggestion of subsidy *greenwashing*). Third, the subsidy does *not constitute a disguised barrier to trade or hidden protectionism*. Fourth, the subsidy does not create a risk of creating a market-dominant competitor who might use the support provided to under-price competitors and drive them out of the marketplace. Finally, the subsidy *meets a proportionality test*, which would assess the scale of trade distortion against sustainability gains. In other words, trade losses should not be significantly disproportionate to the sustainability gains

⁷⁶ On trade remedies more broadly, see Wu and Salzman (n 4). For a specific focus on China, see Mark Wu, "The "China, Inc." Challenge to Global Trade Governance" (2016) 57 Harvard International Law Journal 261.

⁷⁷ Howse (n 6) 6. Charnovitz and Fischer (n 59) 184.

(calculated on a cumulative net basis across all of the various sustainability goals). This balancing will be done on a case-by-case basis with a recognition that the sustainable development priorities of each country will vary depending on their level of development.

Red box

The upper right quadrant Red Box encompasses subsidies that are sustainability-impairing but not producing relevant trade distortions. For these subsidies, we propose a rebuttable presumption of inconsistency with WTO law because such subsidies are at odds with the trading system's sustainable development mandate. We envision this presumption being rebuttable in the case of over-riding and competing trading system principles or domestic policy priorities (e.g. national security or progress on other SDGs) which should be assessed as discussed earlier on a cumulative basis and subject to the proportionality test. Simply put, the importance of the competing principle or goal has to be significantly higher than the sustainability loss.

Double red box

Subsidies that produce both negative sustainability impacts and significant trade distortions would fall in the Double Red Box. These subsidies are particularly problematic both from trade and sustainable development perspectives—and therefore should be outright prohibited. We propose that all WTO members be asked to phase out any such government support on a fixed schedule. The timeline for these phase-outs might differ depending on the level of economic development of the country concerned—reflecting the equity principle discussed earlier. In fact, we suggest that any such *double bad* subsidies be eliminated in 5 years for developed countries—and in 6, 8, 10, or 12 years for developing countries, depending on their level of economic development.

In addition, we propose that the Double Red Box provide for a *safety valve* that would permit Members to delay their phase-out of these doubly harmful subsidies by paying a sum equal to 10 per cent of the value of the subsidy into a Global Sustainability Transition Fund (GSTF) if they deem it to be politically impossible to respect the phase-out schedule. Payments (escalating by 20 per cent per year) would have to be made every year the subsidy remains in place. The possibility to pay to the GSTF would be limited in time—and after a certain number of years countries will have no other option but to remove the subsidy. Furthermore, this safety valve reflects another key international environmental law concept, the Polluter Pays Principle, which suggests that countries should bear the costs of the environmental degradation they cause.⁷⁸ In addition, we see the GSTF as a way to ensure that the broader subsidy reform proposal provides equity to developing nations by providing them with financial assistance from the Fund for 'agreed incremental costs' required to transform their industries towards sustainability.

CONCLUSIONS

The trading system (and especially the WTO) stands at a watershed moment. It needs to become better aligned with the world community's twenty-first century expectations and values, most notably, the *sustainability imperative*—or it risks drifting toward the margins of global governance. We believe there is a reform agenda available which would restore the original vision of the trade regime regarding subsidies and put the WTO on a path forward that is much more sustainability-aligned, economically sound, and politically attractive. We think our proposed WTO reconceptualization of subsidies—grounded on a primary focus *not* on trade distortion *but rather* on their contribution to the sustainability agenda—would go some distance toward

⁷⁸ See eg Rio Declaration, Principle 16. As a concrete application of the polluter pays principle, Elliott and Esty call for an 'end to externalities': Elliott and Esty (n 9).

demonstrating the capacity of the trading system to take cognizance of the broader context in which global trade occurs, promote (and not undermine) global climate change action, and advance a just transition toward a clean energy economy.

We acknowledge that the proposal put forward in this article simply provides a starting point for an important conversation. It offers a reform pathway, but it remains to be seen if the conceptual reframing advanced can be fleshed out in a way that would be politically viable. Of several things, however, we are sure: (i) the current subsidy structure of the WTO is misaligned with the global community's commitment to climate change action (and a sustainable future more generally) and is therefore untenable, (ii) the appetite for transformational change within the trading system is greater today than at any point in recent decades, and (iii) the time has come to implement the international trading system's own Marrakesh Agreement sustainable development mandate.

