

A Study on the Path of Building the WTO Trade Rules under the Urgent Need of Tackling Plastic Pollution

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Abstract: In 2020, the WTO members, led by China, initiated an informal Dialogue on Plastic Pollution and Environmentally Sustainable Plastics Trade through a joint statement initiative, drawing the WTO's attention to the issue of plastic pollution. In moving forward in tandem with the discussion of an international plastics instrument at the United Nations Environment Assembly, the WTO plastics process has not received sufficient attention and has been slow to progress. The plastic problem is rooted in the plastics economy. The complete lifecycle of plastic products and their unprecedented involvement in human society dictate that the solution to this pollution problem cannot be based solely on restrictive measures and national action plans at the environmental level. A viable way to limit plastic pollution is centered on the WTO trade rules and the multilateral trading system. With trade-related plastics measures as a tool, the WTO should play a greater role in pollution cessation and transition to a more circular plastics economy. To this end, by sorting out the existing plastics agenda and making reference to the goal-oriented, problem-oriented and result-oriented system design methodology for the forward-looking construction of the WTO plastics rules, the focus and obstacles of future discussions can be clarified. At the same time, as the initiator of the issue, China should contribute more actively to the promotion of the Plastic Pollution Dialogue, and contribute Chinese solutions to the economic and trade methods of solving plastic pollution.

Keywords: The WTO Trade Rules, Circular Plastics Economy, Trade of Plastic Substitutes and Alternatives, Chinese Contribution

During the WTO's Trade and Environment Week in 2020, the delegations of China and Fiji co-convened the WTO's Informal Dialogue on Plastic Pollution and Environmentally Sustainable Plastics Trade to promote discussion and exploratory work at the WTO on regional, national and global efforts to reduce plastic pollution and transit to an eco-friendly and circular economy model. In response to this call, seven members, including Australia and Canada, launched the Informal Dialogue on Plastic Pollution and Environmentally Sustainable

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Plastics Trade (IDP, the name of which was changed to DPP — Dialogue on Plastic Pollution and Environmentally Sustainable Plastics Trade), to which all WTO members were invited. While the focus on plastic pollution is arguably longstanding, it was the first time that the WTO, which promotes the fairness and facilitation of trade, had been included in this process. Despite the three-year discussion, this WTO's DPP is still at an early stage due to the deep-rooted nature and complexity of plastic pollution. Under this topic, the role that trade measures should play in addressing plastic pollution is often underestimated. The WTO should act as a leader in the global governance of plastics much more than it currently does by promoting the transformation of the plastics economy and plastics trade.

I. INTRODUCTION: SERIOUSNESS OF PLASTIC POLLUTION AND THE INADEQUACY OF EXISTING REGULATORY PATHWAYS

A. The Unprecedented Severity and Complexity of Plastic Pollution

Perhaps due to the escalation of global crises such as climate change, the issue of plastic pollution has not received the attention it deserves. In fact, plastic pollution is one of the most underestimated man-made planetary crises within the existing international legal framework. From 1950, there has been an exponential growth in the production of plastics, driven by the material's adaptability, durability, light weight, high thermal and electrical insulating properties, and notably, its low cost. These features have changed the market landscape heavily with the introduction of a large number of innovative products.¹ According to the Organization for Economic Co-operation and Development (OECD), the current global plastics output stands at 430 million metric tons annually, with projections indicating a potential tripling by 2060 if “business-as-usual” continues.² Nowadays, in the social and economic

¹ Samvel Varvastian, The Role of Courts in Plastic Pollution Governance, *International and Comparative Law Quarterly*, Vol. 72, 2023, p. 638.

² United Nations Environment Programme (UNEP), Turning Off the Tap: How the World Can End Plastic Pollution and Create a Circular Economy, p. 14, https://wedocs.unep.org/bitstream/handle/20.500.11822/42277/Plastic_pollution.pdf?sequence=4 (Last Visited on November 11, 2023).

frameworks, plastics have become deeply embedded, finding utility in a wide range of applications, from general consumer goods, food packaging, industrial goods, to medical technologies, including hearing aids and the pioneering polymer heart valves. This ubiquity highlights the material's irreplaceable role as a synthetic source.

Although plastics have commendable properties, the associated environmental and human health risks are equally worrisome. The 2021 report by the United Nations Special Rapporteur on hazardous substances and human rights delineates a broad array of detrimental impacts attributable to the entire lifecycle of plastics, including extraction and refining of fossil fuels, production, transport, use and waste.³ The vast majority (more than two-thirds) of the plastics produced are short-term or even single-use products, swiftly transitioning to waste. This waste mainly finds its final resting places in marine environments, landfills, or is exported from developed to developing nations via the waste trade. The latter often lacks the requisite infrastructure for effective waste management and thereby shoulders the full impact of increased pollution. Such practices prolong and intensify the global plastic pollution crisis, positioning it as one of the foremost threats to both human well-being and ecological integrity.

B. Fragmentation Flaws in the International Process of Regulating Plastic Pollution

Despite the flourishing trade in plastics and the serious pollution it caused, the international community has yet to forge a comprehensive treaty specifically dedicated to the regulation of plastic products. This absence is stark against the context of the pressing need for systemic monitoring. There are no rules in the international law that directly correspond to the various stages of the lifecycle of plastics, with the sole exception of the concern over plastic waste. Fragmentation and isolation are notable features of the international process of

³ UN Human Rights Council, The Right to Science in the Context of Toxic Substances – Report of the Special Rapporteur on the Implications for Human Rights of the Environmentally Sound Management and Disposal of Hazardous Substances and Wastes, A/HRC/48/61, pp. 5-7, <https://www.ohchr.org/en/hr-bodies/hrc/regular-sessions/session48/list-reports> (Last Visited on March 18, 2024).

plastic pollution.

On the global stage, the international framework lacks a cohesive, legally binding agreement specifically targeting plastics. Beyond the realm of marine debris, the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (Basel Convention) with its 2019 Amendments — also known as the Plastic Waste Amendments — stands as the sole treaty with direct relevance to plastics, focusing on the regulation of plastic waste. Adopted in 1989, with primary objective of safeguarding human health and the environment from the detrimental impacts of hazardous and other forms of wastes, the Convention applies to all types of hazardous wastes as defined by their origin or composition and characteristics, as well as to other wastes, including household waste and incinerator ash.⁴ The Convention has been effective in regulating transboundary movements of wastes through its three pillars — (i) restricting transboundary movements of hazardous waste (TBM), (ii) environmentally sound management of hazardous waste (ESM), and (iii) preventing and minimizing the generation of hazardous waste. In May 2019, the Conference of the Parties to the Convention adopted its decision BC-14/12 — Plastic Waste Amendments, thereby broadening the definitions of Hazardous Wastes and Other Wastes within Annexes VIII and II. This amendment included a majority of plastic waste under the three main waste management procedures by clearly categorizing them.⁵

This focus on plastic waste is, in essence, a reflection of the international community's longstanding concern about plastic pollution and the efforts it has made. From another perspective, however, it also fully illustrates the inherent constraints of the early view of plastics management. It is clear that such efforts to regulate a single aspect have not achieved the desired results, and are even outweighed by the growing plastics economy and the plight of plastic pollution. Following the enactment of the Plastic Waste Amendments to the Basel

⁴ Linda Del Savio, The Role of Trade in Governing Plastic Pollution, *Ocean and Coastal Law Journal*, Vol. 27, No. 1, 2022, p. 18.

⁵ Yeeun Uhm, Plastic Waste Trade in Southeast Asia after China's Import Ban: Implications of the New Basel Convention Amendment and Recommendations for the Future, *California Western Law Review*, Vol. 57, No. 1, 2020, p. 16.

Convention, many countries that used to be recipients of plastic waste have instituted bans on the import of such waste. Nevertheless, these prohibitions have unintentionally led to the transfer of waste streams to jurisdictions without such bans, with negligible impact on the overall governance of plastic waste. This situation underscores the holistic nature of the international community and the systemic feature of the plastics economy arising from the lifecycle of plastic products. Addressing isolated stages of this lifecycle is insufficient for a systemic resolution to the pollution dilemma. Thus, a comprehensive international framework that focuses on the entire plastics cycle is imminent.

Moreover, within the domain of plastics governance, although numerous national initiatives exist, there is still an absence of policy harmonization across borders, limited dialogues between the national and international bodies, and a lack of consistency in policy standards at both the national and local levels. And corporations, as the main body in the production and trade of plastics, frequently lack a cohesive and transparent framework for monitoring and reporting their adherence to national plastics regulations and standards.⁶ According to data from the WTO, significant disparities and fragmentation are also striking in the Trade-related Plastics Measures (TrPMs) implemented among countries with different development status, which correspond to a high likelihood of risk transfer. Developed countries tend to prefer technical regulations which set out specification requirements for plastic products, while developing countries may resort to import licenses or complete bans, and the least developed countries (LDCs) might rely on conformity assessment procedures, among other strategies.⁷

C. Mere “Restrictions” Are Unlikely to Solve the Problem of Plastic Pollution

In 2022, the 5th United Nations Environment Assembly (UNEA) unanimously adopted the resolution titled “End Plastic Pollution: Towards an Internationally Legally Binding Instrument”. This resolution underscored the imperative

⁶ *Supra* n. 1, p. 641.

⁷ WTO, Factual Report (2021), INF/TE/IDP/W/3, pp. 22-23, https://www.wto.org/english/tratop_e/ppesp_e/ppesp_e.htm (Last Visited on March 18, 2024).

for further international actions to develop an international legally binding instrument addressing the plastic pollution. To this end, an Intergovernmental Negotiating Committee (INC) was established, tasked with commencing negotiations within the same year. The ambition of a legally binding international convention on plastics is planned to be achieved by the end of 2024. If this ambitious international process succeeds in fulfilling its promise, it will create one of the most important multilateral environmental agreements after the Paris Agreement. The INC has met three times so far, and the latest session, INC 3, was held in Nairobi, Kenya, in mid-November, 2023. Despite being more than halfway to the target date, little substantive progress has been made. Discussions during the first two meetings were predominantly procedural, focusing on the selection of officers and the application of the draft rules of procedure. Consensus had even not been reached on a critical procedural aspect, the adoption of decisions as per draft rule 38(1), either by consensus or by majority vote. At INC 3, participants engaged in comprehensive discussion on the substantive elements of the Zero Draft, exploring its potential components such as the objectives, fundamental obligations, regulatory measures, and enforcement mechanisms. However, these discussions did not lead to any consensus, highlighting the challenges inherent in achieving international agreement on this pressing environmental issue.

The global consensus on the forthcoming treaty on plastic pollution remains vague, and it still seems difficult to make specific predictions about its content and path. Presently, the international approach to drawing the treaty's targets and the roadmap to mitigate plastic pollution seems poised to draw inspiration from established models within the realm of international environmental legislation, notably the Montreal Protocol and the Paris Agreement. The two treaties establish two typical models for the control of emissions of specific substances. The Montreal Protocol adopts a time-scheduled progressive ban, in which countries are mandated to ban emissions of a substance, but are given a scheduling buffer that allow them to phase out the use of Chlorofluorocarbons (CFCs) according to a timetable.⁸ Conversely,

⁸ Marian N. Leich, *The Montreal Protocols to the Warsaw Convention on International Carriage by Air*, *American Journal of International Law*, Vol. 76, No. 2, 1982, p. 412.

the Paris Agreement adopts a more flexible model, encouraging states to define their own Nationally Determined Contributions (NDCs) towards emissions reduction. These NDCs are subject to periodic reassessment and enhancement, fostering an evolutionary process aimed at increasing the targets of emissions reduction and mitigation efforts over time.⁹

These two models are essentially more flexible and practicable variants of the “ban” strategy, with a continuing role for the limitations on Freon and greenhouse gases. These approaches have been proven effective and have been simulated in numerous subsequent environmental agreements. In the INC discussions, there were also debates regarding the core obligation on plastic pollution, specifically whether it should be defined through mandatory controls or NDCs. Nonetheless, the distinct nature of plastics, as opposed to these gaseous pollutants, poses a significant challenge for these traditional environmental regulatory methods to effectively address this new problem.

Firstly, plastics, similar to CFCs regulated by the Montreal Protocol, are synthetic products. However, the pervasive reliance of human society on plastics introduces regulatory complexities that are different from those of ozone-depleting substances. The Montreal Protocol’s success in establishing its mandatory prohibition was largely due to the feasibility of substituting CFCs, whose role in economic and societal activities was relatively marginal.¹⁰ This example is not directly applicable to plastics, which, in less than a century, have become integral to human existence far exceeding any other synthetic products in terms of utility and presence in daily and industrial applications. Consequently, a ban on the production or utilization of plastics is impracticable, given the profound and potentially severe socio-economic effects such a prohibition would entail.

Secondly, the environmental harm associated with plastics is compounded by their non-biodegradable nature, which worsens the situation beyond the direct toxic contamination. The amount of plastic waste entered ecosystems

⁹ Daniel Bodansky, The Paris Climate Change Agreement: A New Hope, *American Journal of International Law*, Vol. 110, No. 2, 2016, p. 290.

¹⁰ Elizabeth A. Kirk, The Montreal Protocol or the Paris Agreement as a Model for a Plastics Treaty, *American Journal of International Law (Unbound)*, Vol. 114, 2020, p. 213.

often surpasses the natural assimilative capacity of the environment,¹¹ making approaches such as NDCs less effective in mitigating the plastic pollution. Left unaddressed, existing plastic pollutants could persist in the environment for durations surpassing the lifespan of human civilization.

Moreover, imposing restrictions at any single point in the lifecycle of plastics is unlikely to offer a comprehensive solution to the pollution crisis. Limitations on raw materials and manufacturing processes could result in a supply shortfall, failing to satisfy the demands of daily consumer and industrial needs. Conversely, constraints on the disposal and emissions of plastic waste would merely exacerbate the ongoing aggregation of such materials. Regulatory efforts targeting specific categories of plastics, such as single-use or toxic variants, face significant challenges in ensuring strict adherence at the implementation stage. Therefore, within a range of strategies to address the plastic pollution, either the conventional restriction or prohibition model is not the optimal approach. Given the unique challenges posed by the nature and prevalence of plastics, there is an urgent need to forge an innovative pathway that acknowledges the specificity and complexity of the issue. In this context, making full use of trading rules under the WTO framework and the trading system could play a pivotal role in the global endeavor to curtail plastic pollution.

II. ADDRESSING PLASTIC POLLUTION THROUGH THE WTO AND ITS MULTILATERAL TRADING SYSTEM

A. The Multilateral Trading System Is Key to a Systemic Solution to the Plastics Issue

While pollution is present at every stage of the lifecycle of plastics, trade plays an equally ubiquitous role in this whole process, manifesting either through the direct exchange of plastic goods or indirectly through the trade dynamics influenced by factors such as the availability and pricing of raw materials

11 Jutta Guttherlet, *Global Plastic Pollution and Informal Waste Pickers*, *Cambridge Prisms: Plastics*, Vol. 1, p. 2.

necessary for the plastics production. Moreover, trade patterns (intra-regional, domestic, or international) reflect and influence the movement and distribution of plastics. The WTO, through its multilateral trading system and established trade regulations, is poised to exert influence at any part of the plastics lifecycle. It's definitely not idle to say there are intersections between trade and plastic pollution management; they are actually intertwined with the existing WTO concerns. For instance, initiatives aimed at Fossil Fuel Subsidy Reform could directly affect the economics of plastics production by altering raw material costs.

The problem of the plastic pollution is rooted in the plastics economy. While the direct cause of plastic pollution is the improper disposal of plastic waste, the upstream of the plastics lifecycle, particularly focusing on the production and consumption patterns that drive the demand for plastics, constitutes the origin.¹² On the one hand, from the perspective of prohibition, certain contributors to the plastic pollution can be progressively eliminated by imposing trade restrictions on problematic plastics and fostering the trade of eco-friendly substitutes. On the other hand, “keeping plastics in the economy”, plastics should be integrated into a sustainable economic loop through enhancing recycling and reuse capabilities via technical assistance and supporting the trade of recyclable plastic products. This approach advocates for transforming from a linear to a circular lifecycle for plastics, thereby preventing their transition into waste and subsequent entry into the pollution treatment process.¹³ This two-side strategy, which merges restrictive measures with the principle of a circular economy, underscores the potential and pivotal role of the WTO in facilitating a sustainable framework for the mitigation of plastic pollution.

The domestic plastics restriction initiatives observed across various nations reflect a global consensus on the detrimental impacts of the plastic pollution. However, the inefficiency in practice stems from the disparate nature of

¹² UNEP, *From Pollution to Solution: A Global Assessment of Marine Litter and Plastic Pollution*, <https://www.unep.org/resources/pollution-solution-global-assessment-marine-litter-and-plastic-pollution> (Last Visited on November 11, 2023).

¹³ *Supra* n. 2, p. 8.

national regulations and TrPMs is the stumbling block. The WTO's multilateral trading system offers a cohesive framework to address these challenges. The universal membership of the WTO, coupled with its comprehensive set of rules, has provided universal compliance for the national policies and regulations. The WTO's foundational principles of non-discrimination, fair trade, and transparency, along with rule-making informed by these doctrines, significantly mitigate the risk of regulatory disorder driven by trade protectionist motives, thereby ensuring national TrPMs are correctly targeted. Furthermore, the WTO framework facilitates the standardization and harmonization of measures such as customs classification, tariff schedules, and environmental standards across member states, further enhancing the coherence.

Besides, one of the core mandates of the WTO is to serve as a platform for its members to engage in negotiations concerning multilateral trade relations. This function positions the WTO as an ideal global arena for the formulation of regulations pertaining to plastics. By fostering dialogues among its members and involving key stakeholders, including international organizations, the WTO can coordinate a comprehensive participatory process. This collaborative approach enables the assemble of data, insights, experiences, and best practices, thereby enhancing the collective efficacy of the international framework.¹⁴ Negotiations within the WTO context inherently involve a balancing of interests among members, which is crucial for the multifaceted issue of plastics. Through its negotiation mechanisms, the WTO facilitates a holistic consideration of varied interests and developmental stages. This process not only recognizes but also leverages the comparative advantages of different countries, thereby crafting solutions that are both equitable and efficient. The outcome of such negotiations is likely to yield strategies characterized by a high degree of consistency and coordination that will ensure a lasting impact on the global effort to mitigate plastic pollution.

B. Providing Coercive Guarantees by the WTO Plurilateral Trade Agreements

Within the existing framework for regulating plastic pollution, there are no

¹⁴ Xueping Li, *WTO, Carbon Tariffs and the Environmental Responsibility of Chinese Companies*, *WTO Law and China Series*, 2011, p. 227.

mandatory binding global rules in the international community, apart from the fragmented regulations of hazardous plastic waste and toxic chemicals involved in plastic products under the Basel and Stockholm Conventions. While the INC's plastics instrument seems to hold the ambition of setting legally binding rules based on national commitments, its voluntary nature still shows a lack of coercion. In this context, the inherent mandatory binding nature of WTO rules could significantly enhance the enforceability of measures aimed at controlling plastic pollution. By embedding plastic pollution control within the WTO's legal framework, the international rules on plastics could be endowed with the requisite authority or "teeth" to ensure compliance and push forward meaningful changes.

In response to the challenges faced by the WTO multilateral negotiation function, the Joint Statement Initiative has emerged in recent years as a novel approach to advance the development and revision of trade rules.¹⁵ This initiative reflects a strategic pivot shift towards open plurilateral negotiations, a method increasingly embraced by the WTO members amidst the organization's profound crises. Open plurilateral agreements typically commence with a coalition of the WTO members who jointly address specific subject areas, maintaining inclusiveness that permits other members to participate during the negotiation phase and even after the agreements are finalized. The distinctive features of these open plurilateral negotiations are their inherent openness and non-discriminatory applicability of benefits, regardless of their direct involvement in the agreement's formulation or not.¹⁶ Plastic pollution was initiated in the WTO in the form of such joint statement, and a special working group was set up to take forward the discussions under this issue.

The legitimacy and potential incorporation of plurilateral agreements into the WTO legal framework as legally binding instruments remain the subjects of intense debates. The primary concerns surround the lack of explicit provisions within the WTO law to validate such agreements and their perceived

15 Fangyan Bai, *The Legitimacy of Open Plurilateral Agreement in the WTO and Its Insertion into the Multilateral System*, *Wuhan University International Law Review*, Vol. 7, No. 1, 2023, p. 92.

16 *Ibid.*, p. 93.

inconsistency with the WTO's foundational consensus-based decision-making model. This contention is particularly highlighted by the stipulation in the Marrakesh Agreement Establishing the WTO (WTO Agreement) that members to any new trade agreement must require the Ministerial Conference to decide whether this agreement can be added to Annex 4.¹⁷ Plurilateral agreements, by design, allow the participating members to consent to mutual obligations while excluding non-consenting members, challenging the WTO's traditional consensus principle.¹⁸ However, the impasse experienced during the WTO Doha Round negotiations and the crisis affecting the dispute settlement mechanism have underscored the urgent need for reformative measures to sustain the WTO's functionality. In such circumstances, plurilateral agreements have emerged as a pragmatic solution, offering an alternative avenue to advance the WTO's agenda despite the deadlock.

These agreements inherently do not impose obligations on non-participating members, yet they permit the extension of their benefits to the entire membership based on the most-favored-nation (MFN) principle. This approach has been applied to various domains, including e-commerce, domestic regulation of trade in services, and investment facilitation, yielding significant progress and reflecting the potential of plurilateral negotiations to revive the WTO's role in fostering international trade. In light of these developments, initiatives such as the DPP, operated under the auspices of joint statement initiatives and open plurilateral negotiations, can be seen as compatible with the WTO legal framework. The outcomes of such negotiations, while binding on the participants, also hold the potential to broadly benefit the global community, thereby significantly contributing to the governance of international plastic pollution.

C. The WTO's Dialogue on Plastics (from IDP to DPP)

Despite the initiation of the IDP happened in 2020, the journey towards

¹⁷ Marrakesh Agreement Establishing the World Trade Organization, Article X(9).

¹⁸ Jane Kelsey, *The Illegitimacy of Joint Statement Initiatives and Their Systemic Implications for the WTO*, *Journal of International Economic Law*, Vol. 25, 2022, p. 4.

achieving significant substantive outcomes has been gradual. Building on the Transparency and International Co-operation Practices Initiative (TIPI) proposed by the co-sponsors in March 2021, the IDP began by completing a factual report on existing practices and discussions to serve as a basis to support members' discussions and subsequent trade policy choices. In the fact sheet, in addition to providing a summary of plastics intervention measures adopted by members and stakeholders, the report introduced a novel analytical framework tailored to the complexities of plastic pollution, the Lifecycle Analysis of Plastic Products (LCA). This methodology deconstructs the journey of plastic products into eight distinct life stages, ranging from "plastic feedstock" to "recycling" (plastic feedstock, primary plastics, plastic-based inputs, finished plastic goods and manufacturing, packaging materials, plastic use, waste and scrap, and recycling, respectively).¹⁹ The LCA framework is instrumental in pinpointing the specific stages where trade measures exert direct impact. This precision enables the formulating of trade policies and the regulation of plastics trade with a nuanced understanding of the unique dynamics characterizing each stage of the plastics lifecycle.

In December 2021, during a public meeting co-convened by the WTO's Trade and Environmentally Sustainable Structured Discussions Initiative (TESSD), IDP and the Fossil Fuel Subsidy Reform Initiative (FFSR), the IDP unveiled its inaugural ministerial statement, which set out a viable roadmap for the Dialogue to reach the Plastics Limitation Targets, comprising three main steps, the first of which is to intensify existing work on areas of common interest, including improved understanding of plastics trade and transparency of plastics trade-related policies, sharing of effective experiences in circular economy transformation, trade capacity-building, and aid for trade; the second is to better support and engage in other international processes, such as the development of plastic product definitions, scope and standards, and data collection on plastics trade flows; and the final calls for moving forward with dedicated discussions to clarify the role of trade policy in reducing plastic

¹⁹ *Supra* n. 7, p. 8.

pollution and promoting a circular economy, and to promote trade in goods and services in this area.²⁰

Furthermore, in this statement, the IDP committed to achieving concrete, practical and effective results on the above actions by the 13th Ministerial Conference. To effectively progress along the outlined roadmap and fulfill the set objectives, the IDP organized four plenary sessions throughout 2022 and engaged in additional work between these sessions. To facilitate focused discussions and work on the priorities identified in the Ministerial Statement, three dedicated workstreams were established, namely the Working Group on Cross-cutting Issues, the Working Group on Trade Solutions to Plastic Pollution, and the Working Group on Reducing Plastic Pollution and Developing the Plastics Circular Economy respectively, which took forward the work during the intersessional period through informal dialogues and workshops.²¹ At the end of 2022, on top of all the preliminary work, the IDP changed its name to the Dialogue on Plastic Pollution and Environmentally Sustainable Plastics Trade (DDP), which showed again the progresses gained from the efforts the IDP had made, especially in terms of the dramatical rise of WTO participants to 78 till February 2024.

As of the latest updates, the co-sponsors of the DPP reached agreement on the ministerial statement to be issued at the MC13. This statement reiterated the emphasis on shared principles and delineated a spectrum of TrPMs aimed at mitigating the plastic pollution.²² Notwithstanding the rapid pace of the Dialogue and development observed throughout 2022, the progression of Discussions in 2023, particularly in the latter half, has markedly slowed down, mainly lingering at the stage of factual reporting. This apparent slowdown in momentum may stem from a strategic intent to avoid redundancy, especially in

20 WTO, Ministerial Statement on Plastic Pollution and Environmentally Sustainable Plastics Trade, WT/MIN(21)/8/Rev.2, pp. 2-3, https://www.wto.org/english/news_e/news21_e/ddgjp_15dec21_e.htm (Last Visited on March 18, 2024).

21 WTO, IDP PLAN 2022, INF/TE/IDP/W/5, https://www.wto.org/english/news_e/news22_e/ppesp_21mar22_e.htm (Last Visited on March 18, 2024).

22 WTO, MC13 Statement, INF/TE/IDP/W/10/Rev.2, https://www.wto.org/english/news_e/news24_e/ppesp_26jan24_e.htm (Last Visited on March 18, 2024).

light of the ongoing advancements with regard to the INC Plastics Instrument. Nevertheless, the persistent and escalating challenges posed by the plastic pollution stress the necessity for more robust and decisive actions from the WTO.

III. THE WTO PLASTICS RULE-DESIGN BASED ON THE ORIENTATION OF GOAL, PROBLEM AND OUTCOME — A DISCUSSION ABOUT THE COMPATIBILITY OF THE WTO RULES WITH TRADE RELATED PLASTICS MEASURES

A. Plastics Trade Rule-design Based on Goal-orientation

1. Environmental Purpose and Balance between Trade and Environment

Adopting a goal-oriented approach mandates the definition of objectives through a lens of comprehensive analysis and forward-looking consideration.²³ This necessitates that the development and enactment of regulations must be consistent with the overarching aims, ensuring that every aspect of these rules is constructed to further the central objectives. The preamble of the WTO Agreement specifies that the organization's objectives encompass "allowing for the optimal use of the world's resources in accordance with the objective of sustainable development, seeking both to protect and preserve the environment and to enhance the means for doing so in a manner consistent with their respective needs and concerns at different levels of economic development".²⁴ This explicit acknowledgment within the WTO framework underlines the critical importance of environmental conservation and the sustainable management of resources as foundational pillars of the organization's objectives. Moreover, it legitimizes the implementation of strategies designed

²³ Houmin Zhu, A Correct Understanding of the Dialectic and Unity between Problem Orientation and Goal Orientation – In-depth Study of Jinping Xi's Methodology of Governance, *Theory and Modernity*, No. 1, 2021, p. 34.

²⁴ *Supra* n. 17, Preamble.

to fulfill these requirements.

This principle is exemplified within the WTO's regulatory framework, most notably through the general exceptions outlined in Article XX of the General Agreement on Tariffs and Trade (GATT) 1994, especially under subparagraphs (b) and (g). Pursuant to these two paragraphs, the WTO members may adopt policy measures that are inconsistent with the GATT norms as long as they are essential for the protection of human, animal, plant life or health, or pertain to the conservation of exhaustible natural resources. Furthermore, such measures are required to comply with the conditions set forth in the introductory clause of Article XX, ensuring they do not serve as vehicles for "means of arbitrary or unjustifiable discrimination" or "a disguised restriction on international trade".²⁵ This exception has served as a backbone for member states in enacting domestic policies aimed at fulfilling environmental objectives, often being the primary point of reference in trade disputes involving environmental issues. Moreover, recent trends within the WTO highlight a growing emphasis on the synergy between trade liberalization, sustainable development, and environmental protection. This is evidenced by initiatives such as the negotiations for the Fisheries Subsidies Agreement and efforts to reform fossil fuel subsidies, both of which reflect the WTO's commitment to environmental sustainability and its integration within the trade regime.

However, it is clear that the purpose of the WTO goes far beyond mere environmental protection. As the pre-eminent body governing international trade and economic matters, the WTO's role and unique qualities necessitate a broader perspective on environmental issues, unlike other environmental entities, such as the UNEA, whose primary focus is on ecological safeguarding. Within the framework of environmental protection and sustainable development, the WTO's demand for environmental rules stems from the search on a harmonious balance between trade and environmental protection. While pure environmental norms are assumed by specialized environmental bodies, the WTO scrutinizes the implications of environmental measures on the creation of potential trade

²⁵ General Agreement on Tariffs and Trade 1994, Article XX.

barriers and the possible infringement on the equitable trading rights of its members as provided by the WTO agreements.²⁶ By establishing a balance between trade and environmental objectives through rules and mechanisms, the WTO aims to ensure that efforts toward ecological preservation do not inadvertently compromise the principles of fair trade, and environmentally friendly economic development is promoted through trade liberalization.

This equilibrium is epitomized by Article XX of the GATT, which seeks to ensure that the closeness between a regulatory measure and its stated objective is a crucial criterion for its assessment. According to Article XX, for an environmental measure related to trade to qualify for an exemption under paragraphs (b) and (g), a member must demonstrate a substantive linkage between the objective it aims to achieve and the specific measure at issue. To determine whether a measure is “necessary” to protect human, animal or plant life or health under Article XX(b), a process of weighing and balancing a series of factors has been used by the Appellate Body, including (i) the contribution made by the environmental measure to the policy objective; (ii) the importance of the common interests or values protected by the measure; and (iii) the impact of the measure on international trade. If this analysis yields a preliminary conclusion that the measure is necessary, this result must be confirmed by comparing the measure with its possible alternatives, which may be less trade restrictive while providing an equivalent contribution to the achievement of the objectives pursued.²⁷ At the same time, in order to fulfil the requirements of equity and non-discrimination, this measure should also have the same restrictive impact on domestic production and consumption.

The introductory clause or the beginning of Article XX of the GATT serves as a fundamental safeguard against the abuse of its exceptions. The WTO Appellate Body has interpreted its meaning as ensuring that members’ right to make use of exceptions is exercised in good faith in order to protect related

26 Shigui Tao, New Issues in GATT: Trade-related Environmental Protection Measures, *World Economy Studies*, No. 1, 1994, p. 45.

27 WTO, WTO Rules and Environmental Policies: GATT Exceptions, https://www.WTO.org/english/tratop_e/envir_e/envt_rules_exceptions_e.htm (Last Visited on November 17, 2023).

legitimate interests, not as a means to circumvent one member's obligations towards other WTO members.²⁸ In other words, Article XX embodies the recognition by the WTO members of the need to maintain a balance between the rights of a member to invoke an exception and the rights of the other members under the GATT. WTO jurisprudence has delineated various scenarios that may illustrate compliance with the chapeau of Article XX, including the engagement in relevant coordination and cooperation activities by the defendant.²⁹ And the Appellate Body has also noted that good faith means that a multilateral approach is strongly preferred over a unilateral approach.³⁰

Therefore, in the context of formulating the WTO regulations on plastics, the objectives should be delineated with an eye towards harmonizing environmental goals with the principle of trade equity. Insights drawn from the DPP, particularly the latest statement of MC13, highlight the established objectives within the DPP framework. These include improving transparency of trade flows throughout the plastics value chain, providing support to LDCs and small island states, reducing unnecessary and hazardous plastic products, mitigating the adverse effects of primary plastics and polymers, fostering safe recycling practices through the adoption of plastic alternatives and reuse strategies, ensuring the environmentally sound management of plastic waste, and overseeing the transboundary movement of plastic pollution.³¹

These goals encompass the different phases of the plastics lifecycle and highlight the catalytic function that trade measures can serve in this domain. Nevertheless, the current framework does not capture all necessary sides, such as the lack of focus on standardization in plastics manufacturing and, crucially, the underemphasized role of advancing a circular economy for plastics, whereas the prevailing linear approach to managing plastic pollution

28 Lorand Bartels, *The Chapeau of the General Exceptions in the WTO GATT and GATS Agreements: A Reconstruction*, *American Journal of International Law*, Vol. 109, No. 95, 2015, p. 96.

29 WTO, *Brazil – Measures Affecting Imports of Retreaded Tyres*, Report of the Appellate Body, WT/DS332/AB/R, para. 215.

30 *Supra* n. 27.

31 WTO, MC13 Statement of Dialogue on Plastic Pollution and Environmentally Sustainable Plastics Trade (DPP), INF/TE/IDP/W/10/Rev.2.

is widely recognized as inadequate. Therefore, fostering a circular economy for plastics, particularly through trade measures that encourage the proliferation of eco-friendly plastic products in the upstream phase and support the recycling, recovery, and reuse in the disposal phase, emerges as a strategic approach to effectively tackle the issue of plastic pollution.

2. A Circular Plastics Economy as the Central Goal

The concept of a circular plastics economy advocates for a transformative shift from the traditional linear model to a closed-loop system, with the vision of eliminating unnecessary production and consumption, which avoids negative impacts on ecosystems and human health, keeping products and materials in the economy and safely collecting and disposing wastes that cannot be economically processed.³² Such an approach inherently fosters an increase in material circularity, a reduction in greenhouse gas emissions and the cessation of plastic pollution. It has been proven that focusing solely on the disposal of plastic waste or the cessation of plastics production through prohibitive measures does not constitute viable solutions to the challenges posed by plastic pollution. Within this context, the plastics circular economy emerges as a “beacon”, guiding towards a sustainable resolution of the issues associated with plastic pollution.

By addressing the lifecycle of plastics, including strategies such as minimizing the use of non-biodegradable and toxic raw materials in the production phase, fostering the creation of durable and eco-friendly plastic alternatives through the development of biobased and biodegradable substitutes, incentivizing the market for recycled plastic goods at the consumption level to bolster the trade in such products, and enhancing recycling and recovery capacities at the waste management stage to ensure plastics are retained within the economic sphere for extended durations without leaking into the environment as polluting waste, the circular plastics economy necessitates systemic changes and collaborative efforts at every stage of a circular plastics

³² *Supra* n. 2, p. 7.

economy. It is precisely because the circular economy is the only viable path to solving plastic pollution that such a transition manifests the pivotal role of economic and trade policies in driving environmental sustainability. All of these position the WTO as a key entity capable of leveraging its influence in the international economic and trade arena to advocate for and implement the principles of a circular plastics economy.

The emphasis on the transition to a circular economy is definitely not mere rhetoric, but rather an integration of the perspectives from pivotal entities such as the UNEP, United Nations Conference on Trade and Development (UNCTAD), DPP, as well as discussions within the INC, and it draws inspiration from comprehensive international research on plastic pollution. This transition requires an all-round approach, which presents significant opportunities for the WTO to contribute, aligning with its dual objectives of fostering trade equity and promoting environmental sustainability. Consequently, the WTO's rule-making endeavors in the realm of plastics should be steadfastly directed towards fostering a circular economy for plastics. This entails using trade rules as a tool to facilitate the international trade of plastic substitutes and alternatives, utilizing trade as a catalyst to expand the production and use of environmentally friendly plastics, and providing economic and technical support, particularly to developing nations, LDCs, and small island states, for the establishment and operation of facilities dedicated to plastic waste disposal and recycling.

B. Problem-oriented Design of the WTO Plastics Rules

Problem-orientation focuses on the entry point of rule design, with the emphasis on starting from existing problems, and discovering, analyzing, and solving problems in a timely manner. In this process, it is necessary to clarify the main and secondary problems, analyze the reasons for the existence of the problems, and explore the solutions to the problems with the idea of achieving those general goals.³³

³³ Discussion on the Orientation of Goal, Problem and Outcome, *Study Times*, December 15, 2019, p. 1.

In formulating the WTO rules on plastics, it is necessary to consider three challenges primarily to ensure coherence, compatibility, and systemic synergy within the global framework addressing plastic pollution. The first is the harmonization with the INC's Plastics Treaty. The DPP and the INC's plastics treaty are advancing at almost the same time. These two progressions necessitate a clear delineation of the scope and focus of each initiative to prevent overlap and inefficiency. Against the backdrop of the existing INC process and the results to be achieved, the WTO's rule-making should be strategically positioned to differentiate from the INC's efforts to ensure that the rules not only avoid redundancy but also reinforce the international instrument on plastics. The second is the compatibility with existing trade rules. The environmental measures introduced to combat plastic pollution will inevitably influence international plastics trade. In this context, the WTO's design of plastics rules must carefully balance environmental objectives with the principles of free trade embodied in existing trade regulations. This requires that the WTO, in the design of the plastics rules, should take into full consideration how to prevent the existing trade rules from impeding the promotion of TrPMs and the achievement of restricting plastic pollution, so as to provide a channel for the realization of the environmental goals without undermining the premise of fair trade. The third is standardization and coherence. The multifaceted nature of unilateral TrPMs adopted by various member states presents a complex landscape that the WTO's rules must navigate to foster coherence and effectiveness. Central to this endeavor is the standardization and harmonization of rules, which are essential for mitigating the fragmentation of approaches to dealing with plastic pollution. The WTO's framework should aim to establish a set of common standards or guidelines that member states can adopt, thereby streamlining efforts and enhancing the collective impact of individual measures.

1. Harmonization with INC Plastics Treaty

Despite the DPP was discussed prior to the INC Plastics Instrument, the latter has demonstrated a more rapid progression in its subsequent developments.

Lately, statements from the DPP participants have reflected a unified commitment to contributing towards the establishment of INC's binding international plastics instrument. In both processes, avoiding duplication will help to ensure that the dialogues progress efficiently and will be more conducive to maintaining the consistency of the rules, as has been repeatedly emphasized in the DPP meeting reports. Therefore, in the construction of the WTO plastics rules, how to differentiate from the plastics instrument under the INC advancement and better focus on the core competence of the WTO is the issue that needs to be addressed first.

The recent advancements in the INC discussions, particularly following the release of the "Zero Draft" on October 1, 2003 which based on discussions among the participants at the INC 2 meeting, provided a clearer outline of the objectives and core obligations that the international plastics instrument aims to address. These core obligations include striving to prevent and mitigate the proliferation of primary plastic polymers (PPPs), reducing the utilization of problematic and unnecessary plastic products, mitigating microplastic pollution, enhancing plastic waste management, advocating for recyclable design, as well as promoting the adoption of safe and sustainable alternatives,³⁴ which show considerable alignment with the initiatives advocated by the DPP.

Given the broadly overlapping objectives shared by the INC and the DPP, it becomes imperative for the WTO to strategically position its plastics regulation efforts to complement these existing frameworks. The INC's focus on establishing principle-based core obligations suggests that its instrument may not explore deeply into those specific issues, but rather may require member states to commit to broad objectives, such as reduction programs and action plans to diminish the prevalence of problematic plastics.³⁵ In this light, the WTO's approach to plastics regulation should focus on strengthening these broad commitments through trade-specific mechanisms, emphasizing

³⁴ UNEP, Zero Draft Text of the International Legally Binding Instrument on Plastic Pollution, Including in the Marine Environment, UNEP/PP/INC.3/4, <https://wedocs.unep.org/bitstream/handle/20.500.11822/43239/ZERODRAFT.pdf> (Last Visited on November 17, 2023).

³⁵ *Ibid.*, p. 22.

the organization's strengths in trade facilitation and dispute settlement. By promoting the facilitation of a circular plastics economy via trade policies, the WTO can provide a unique and critical contribution to the global fight against such pollutant.

2. Compatibility with Existing Trade Rules

The compatibility of environmental measures with WTO trade rules has been at the center of discussions on trade in environmentally affected products. At the heart of these dialogues has been the examination of whether unilateral environmental interventions undertaken by nations, which impact cross-border commerce, serve as disguised restrictions on trade, thereby becoming a frequent guest in the dispute settlement of the WTO. In such contexts, the invocation of Article XX's environmental exceptions within the GATT stands as a critical tactic for states engaged in disputes, aiming to effectively assert their positions.

However, the frequent recourse to dispute settlement to address the tension between environment and trade concerns may result in excessive inefficiency. Moreover, an analysis of past disputes where Article XX exceptions were cited reveals a tendency for states implementing environmental measures to predominantly face adverse outcomes. Currently, in the absence of a global treaty, there is a noticeable trend of nations implementing a diverse array of measures to restrict plastics usage. This variety, however, should not be misinterpreted as ineffective or unreasonable. Indeed, members have adopted plastics reduction strategies that yield positive environmental outcomes within their territories and even potentially extend to the whole plastics sector. If these measures lead to frequent trade conflicts, they could deter nations from addressing the environmental challenges associated with plastics, thereby undermining the broader plastic-controlling objective. Furthermore, persistent trade disputes could impair trade efficiency and disrupt its stability, which is detrimental to the principles governing free and orderly international trade. Consequently, it is significant for the WTO's approach to plastics regulation to scrutinize the conformity of current and prospective national TrPMs with

existing WTO rules, from the perspective of both curbing plastic pollution and advancing sustainable, free, and equitable trade.

a. Non-discrimination principle

At the heart of the WTO multilateral trading framework lies the foundational principle of non-discrimination, manifested through the obligations of MFN and national treatment. This principle mandates that WTO members must extend identical treatment to “like products” and ensure that any restrictions imposed, including those motivated by environmental considerations, are applied uniformly to both domestic goods and those from foreign countries, without creating unfair discrimination against the latter’s import and export conditions.³⁶ In the context of regulations pertaining to plastics, there is no controversy to recognize that any measures targeting specific plastic products must be fairly enforced on imports as well as equivalent domestic products, otherwise it may amount to trade protection.

A critical issue within the scope of the non-discrimination principle is the definition of a “like product” and the consideration of whether this definition should incorporate processing and production methods (PPMs) standard. Through the WTO’s dispute settlement, the Panel and Appellate Body have basically established the criteria for determining “like products”, including the physical properties of the products, the extent to which the products are capable of serving the same or similar end-uses, the extent to which consumers perceive and treat the products as alternative means of performing particular functions in order to satisfy a particular want or demand, and the international classification of the products for tariff purposes.³⁷ However, with the extensive variety of raw materials and manufacturing processes used in the plastics industry, products with the same physical properties and usage can differ significantly in terms of cost, environmental impact, and other factors. Therefore, there is an urgent need to refine the criteria for assessing product likeness more precisely, taking into account the lifecycle of the product’s manufacturing processes, which is

³⁶ WTO, WTO Rules and Environmental Policies: Key GATT Disciplines, https://www.WTO.org/english/tratop_e/envir_e/envt_rules_GATT_e.htm (Last Visited on October 3, 2023).

³⁷ *Ibid.*

directly related to the PPMs criterion.

The PPMs criterion was first notably discussed in the context of international trade law during the DS21/R: *United States — Restrictions on Imports of Tuna (Mexico)*, as documented in the Panel report. In this case, the United States justified its refusal to import Mexican-caught tuna on the grounds that the fishing methods employed did not incorporate adequate safeguards for the protection of certain dolphin species. The Panel, however, dismissed this argument, distinguishing the production processes from the product itself. It posited that the discrimination based on the production processes violated the national treatment principle under Article III of the GATT.³⁸

The introduction of the PPMs criterion was intended to address the external diseconomies associated with product manufacturing. Specifically, when a producer lowers costs by engaging in environmentally harmful practices that do not affect the product itself but confer a price advantage, the risk of environmental pollution associated with this production processes is significantly heightened.³⁹ This raises a critical need to consider environmental pollution within the production processes as part of a comprehensive lifecycle analysis of products, particularly plastics, where pollution from plastics is not solely the result of improper waste disposal, but is also influenced by the production processes, which can result in considerable pollution and carbon emissions. Furthermore, the selection of production methods, raw materials, and additives plays a crucial role in determining the degradability and environmental friendliness of the final plastic products. Excluding PPMs from the criteria for defining “like products” in the context of plastics could potentially influence manufacturers’ decisions regarding production processes, thereby undermining efforts to manage environmental impacts throughout the product’s lifecycle and of the final product itself.

With the ambition of a circular plastics economy, the PPMs criterion should be given full attention to and applied in the context of plastic substitutes and alternatives. The absence of uniform standards for delineating such

38 WTO, *United States – Restrictions on Imports of Tuna*, Report of the Panel, DS21/R-39S/155, para. 5.10-5.16.

39 Shuping Xu, *Legal Study of Trade and Environment Issues*, 1st Edition, Wuhan University Press, 2002, p. 123.

substitutes and alternatives necessitates a discerning analysis of product substitutability, with a particular emphasis on the product's entire lifecycle. This issue has been consistently highlighted in the DPP discussions of plastic substitutes, as the environmental friendliness of substitutes is not necessarily guaranteed in terms of their overall lifecycle emissions. Notably, bio-based plastics, often advocated as a sustainable alternative to single-use plastics, do not unequivocally offer a lower carbon footprint compared to traditional plastics. Indeed, the environmental impact of bio-based plastics, when considered across their lifecycle, may in fact exert a more harmful effect on the ecosystem.⁴⁰

The WTO rules do not contain a basis for the application of the PPMs criterion. Historically, the invocation of PPMs encountered resistance, primarily because it was perceived to conflict with the principles stated in Article III of the GATT and the established benchmarks for defining "like products" within the context of dispute settlement. However, the growing emphasis on environmental sustainability in recent years has underscored the importance of considering the full lifecycle of products, including the environmental impact of their production processes, in efforts to mitigate environmental pollution. The adverse environmental externalities associated with the production of goods can be addressed and moderated through mechanisms such as pricing, taxing, and import and export restrictions, which, in turn, can foster the adoption of more stringent environmental standards for products. Consequently, in the realm of plastic products trade, integrating PPMs into the criteria for determining "like products" can significantly enhance the regulatory framework's capacity to curb environmental pollution associated with plastics.

b. The principle of general elimination of quantitative restriction

The principle of "General Elimination of Quantitative Restrictions" enshrined in Article XI of the GATT presents a complex challenge when co-existed with trade bans on specific plastic products aimed at environmental protection and sustainable development. Article XI generally prohibits the

⁴⁰ WTO, Factual Summary of Discussions on Sustainable and Effective Alternatives and Substitutes, INF/TE/IDP/RD/88/Rev.1, p. 25, para. 40.

use of quotas, import and export licenses, or other measures that restrict the quantity of goods traded,⁴¹ with specified exceptions related to agriculture, fisheries, balance of payments, economic development objectives, improvement of general living standard, safeguard measures set out in Article XX. Article XIII further mandates that any quantitative limitations imposed must adhere to a non-discriminatory framework.⁴²

The application of quantitative restrictions to plastic products for environmental reasons does not fall within the explicit exceptions outlined in Article XI. While the Basel Convention and its Plastics Amendments establish a legal framework for controlling the transboundary movement of hazardous plastic waste, this does not extend to other plastic products, thus leaving a gap in the regulatory framework for addressing the trade of problematic and single-use plastics. Making matters worse, the ambiguity of the standard concerning such problematic or single-use plastics, which largely due to the absence of international consensus on their definition and classification, complicates the assessment of whether such bans serve as veiled protectionist measures or are genuinely intended to mitigate the environmental impact of plastics. Restrictions on the production, use and trade of single-use and hazardous plastic products clearly have the effect of discouraging the production of such plastics. Therefore, while there is a growing international consensus on the necessity to phase out certain hazardous and single-use plastic products, as evidenced by initiatives like the DPP, the existing WTO framework on quantitative restrictions may not be fully equipped to support these environmental objectives effectively.

c. Subsidies for plastic substitutes and alternatives

The provisions of subsidies for the production of plastic substitutes and alternatives raise knotty problems regarding their compliance with the countervailing measures outlined in the Agreement on Subsidies and Countervailing Measures (SCM Agreement). In the pursuit of fostering a circular economy for plastics, the promotion of plastic substitutes and

⁴¹ *Supra* n. 25, Article XI.

⁴² *Ibid.*, Article XIII.

alternatives is of the top priority. These alternatives, unlike their single-use counterparts characterized by minimal price, often encounter market resistance due to the prohibitive costs associated with their raw materials and advanced production technologies. Market mechanisms typically sway consumers towards opting for the more economically priced single-use plastics, even though they are harmful to the environment. Similarly, manufacturers and intermediaries are frequently hesitant to give up profit margins and assume greater environmental responsibilities associated with the development of sustainable alternatives. Given these market dynamics, government intervention in the form of support and subsidies emerges as a critical facilitator for the transition towards environmentally friendly plastics economy which are pivotal in addressing market inefficiencies. However, the involvement of government support in product development inevitably intersects with the WTO's regulatory framework on subsidies.

The rules on subsidies within the WTO framework are basically centered on the SCM Agreement, delineating three distinct categories of subsidies: prohibited, actionable and non-actionable (non-existent). The assessment of a measure as a subsidy involves considerations beyond “governmental acts”, “fiscal actions” and “benefit conferral”,⁴³ placing significant emphasis on the “specificity” criterion.⁴⁴ Prohibited subsidies are typified by “subsidies upon export performance” and “subsidies upon the use of domestic over imported goods”,⁴⁵ which are deemed illegal without necessitating evidence of specificity. Actionable subsidies are not inherently prohibited but are subject to legal scrutiny based on their adverse effects, such as “injury to the domestic industry”, “nullification or impairment of benefits”, or “serious prejudice”.⁴⁶ The specificity of the subsidy is a critical factor in this evaluation. Non-actionable subsidies, meanwhile, are those that are exempt from countervailing

⁴³ Agreement on Subsidies and Countervailing Measures, Article 1.

⁴⁴ Guorong Qin, *Anti-subsidy Measure of WTO: Fundamental Ideas and System Function*, *The Jurist*, No. 4, 2006, p. 152.

⁴⁵ *Supra* n. 43, Article 3.

⁴⁶ *Ibid.*, Article 5.

measures, either they are non-specific or fall within designated exceptions, such as certain environmental subsidies aimed at one-time governmental support for upgrading existing facilities to meet new environmental requirements.⁴⁷ It is clear that subsidies for plastics substitutes cannot be included in this category. Generally speaking, such plastics subsidies, when provided by governments to facilitate market competitiveness against traditional plastics, predominantly align with the category of actionable subsidies. This classification arises from both the specificity of these subsidies to certain products or industries and the potential market distortion effects, where subsidized alternatives may disadvantage other plastic products.

In the inventory compiled by the DPP, it was observed that 24 of the various TrPMs implemented by members are identified as “support and financial programs”. These programs encompass a range of initiatives, including support for plastic waste recycling efforts such as machinery acquisition, preferential tax treatments for products that utilize resources more efficiently or incorporate recycled content, as well as direct grants and support aimed at enhancing waste collection for recycling purposes.⁴⁸ By offsetting the absence of market-driven incentives, such governmental support facilitates the production of recycled and substitutable plastic products, enabling them to surmount their inherent cost challenges and potentially compete with lower-priced single-use plastics in the market. This approach, while potentially disrupting the existing trade order and raising concerns about trade fairness, offers a critical pathway to realizing environmental goals. Consequently, such subsidies necessitate a nuanced examination within the framework for evaluating subsidies related to plastic substitutes and alternatives.

3. Standardization and Coherence

Fragmentation is an inherent flaw within the realm of the international laws, a notion starkly evident in the context of plastics regulation. In addition to

⁴⁷ *Ibid.*, Article 8.

⁴⁸ WTO, Factual Summary of Discussions on Reduction and Circularity to Tackle Plastic Pollution, INF/TE/IDP/RD/125, p. 8, para. 21.

the fragmentation of existing international plastics rules and national plastics control behaviors, the absence of uniform standards exacerbates this problem, particularly in terms of identifying problematic plastics, determining viable alternatives, and formulating targeted TrPMs. The lack of standardized norms can trigger disorder in the plastics trade, stemming from divergent trade positions. More critically, this fragmentation hampers the effectiveness of plastic pollution regulations, rendering even the most potent management strategies ineffective due to ambiguities regarding their application.

The current situation of “fragmented” regulatory landscape mirrors the systemic challenge of the plastic pollution, where conflicting international standards further compromise the effectiveness of international regulations. The universal character of international organizations, especially the WTO, coupled with the obligatory nature of its trade rules for member states, positions this entity as pivotal in driving the systematization and harmonization of standards. Affairs, including the development of plastics standards, the unification of the definition related to plastics, and the establishment of customs protocols for plastics identification, stand at the forefront of the DPP’s agenda. This commitment to harmonization is reflected in member states positions, DPP meeting reports, and its tendency to collaborate with the World Customs Organization (WCO) and the International Organization for Standardization (ISO). Currently, the urgent need for harmonization manifests across three primary domains.

Firstly, the issue of banning single-use and problematic plastics presents a notable challenge in the international legal sphere. Despite a general consensus on the necessity of such bans and the enactment of relevant regulations by nations, considerable disparities persist in defining what constitutes such plastics. In the case of bans on single-use plastics, the criteria encompass material thickness, usage, Polymer input, and end-of-life properties.⁴⁹ Each of these categories entails distinct standards that require clarification. Regarding the phase-out of “unnecessary and problematic plastics”, the rules are more

⁴⁹ *Ibid*, para. 19.

ambiguous and lack concrete parameters to identify such materials.⁵⁰ This ambiguity complicates the issue, as the expansive category of problematic plastics compared to the more narrowly defined single-use plastics significantly increases the likelihood of divergent national TrPMs. Such disparities could undermine the principles of free trade, either by imposing improper restrictions on plastics not universally recognized as problematic, thereby serving as *de facto* trade barriers to safeguard domestic plastics industries, or by exacerbating pollution through insufficient delineation of prohibited plastics. This scenario underscores the pressing need for a unified approach to defining and establishing criteria for problematic and single-use plastics.

Secondly, in the process of promoting plastic substitutes and alternatives, it is important to set firm criteria for what kind of plastics are environmentally friendly. Initially, the distinction between substitutes and alternatives was blurred. With the joint exploration of the DPP, alongside other international frameworks, such as the UNCTAD and the INC, the definitions and criteria for classifying these two categories have basically been harmonized. Substitutes focus on natural materials that have similar properties to plastics and are not hazardous for human, animal or plant life. While alternatives focus on better plastics, including bioplastics or biodegradable plastics which have lower greenhouse gas (GHG) emissions over the full lifecycle and should not be hazardous to the environment or human health.⁵¹ This basic delineation allows for a broad classification of eco-friendly plastic products developed by countries. Nonetheless, mere classification falls short of serving as a formal criterion for the precise positioning of products in terms of production, consumption, and trade. Given the frequent trade incentives provided to plastic substitutes and alternatives to bolster their adoption, a precise definition of qualified products is imperative. Ambiguity in this area may leave room for trade protection among member states.

⁵⁰ *Ibid.*

⁵¹ UNCTAD, Toward a Global Plastic Treaty: Global Trends in Plastics Trade, Control Measures and New Opportunities for Material Substitutes, <https://unctad.org/system/files/non-official-document/ditc-ted-INC2-Paris-UNCTAD-2.pdf> (Last Visited on November 11, 2023).

Moreover, as mentioned earlier, it is crucial to acknowledge that not all plastic substitutes, including bio-based plastics, are inherently eco-friendly. Their lifecycle carbon emissions and pollution leakage could surpass those of conventional problematic plastics. Attempting to define the environmental friendliness of plastics and their positioning as substitutes through comprehensive lifecycle assessments may incur prohibitive costs and inefficiencies.⁵² Additionally, there is a risk that poorly defined plastic substitutes might exacerbate environmental pollution rather than alleviate it. Therefore, setting clear standards to support the promotion of eco-friendly plastic substitutes and underpinning the rules applicable to their trade would contribute to the advancement of sustainable plastic products and the realization of a circular plastics economy.

Thirdly, customs inspection of plastic products should be subject to convenient and directly applicable standard-setting. Customs authorities play a pivotal role in enforcing the WTO trade rules, encompassing areas such as customs value, rules of origin, and the harmonized system, in addition to their fundamental function as product inspection bodies for import and export commerce.⁵³ The WTO consistently engages in close collaboration with the WCO, and this partnership extends to the formulation of trade regulations for plastic products. The Harmonized System of Codes (HS Codes) administered by the WCO is instrumental in gathering data on plastics trade and enhancing trade transparency. Furthermore, a standardized and harmonized approach to customs inspection, identification, and tariff classification would facilitate a regulated framework for managing problematic plastic products and encouraging the use of recyclable ones. However, the current HS codes system, limited to a 6-digit capacity, does not adequately cover the wide range of plastic products.⁵⁴ Moreover, the technical constraints of national customs agencies, as enforcing authorities, make the correct classification of plastic products through customs

⁵² *Supra* n. 48, pp. 15-16.

⁵³ Bo Yan, Analysis of the Role of the World Customs Organization and the WTO in Trade Facilitation, *World Trade Organization Focus*, No. 11, 2007, p. 18.

⁵⁴ *Supra* n. 40, p. 16.

inspections not only costly and inefficient, but also challenging to standardize across countries with varying levels of technical capacities.⁵⁵ This situation jeopardizes the effective implementation of well-intentioned trade regulations, reducing them to mere “paperwork” and undermining their potential to systematically enhance the governance of global plastics trade. Considering these challenges, the latest report by the DPP places special emphasis on the importance of enhancing cooperation with the WCO to promote coherence among trade measures for plastic substitutes by reforming HS codes system.

In addition, the mere establishment of standards does not guarantee their effective application; the WTO serves as a pivotal platform for the integration and implementation of these standards, thereby enhancing their influence in the international trade of plastics. The setting of standards is mainly undertaken by standard-setting organizations, which operate not only at the international level, exemplified by the ISO, but also at national and regional levels. And even individual corporations and consortia may establish their own standards for their internal purposes or to capture markets with their products based on a shared design.⁵⁶ Initially, these standards typically exert influence as soft laws but may become mandatory if they are adopted and enforced by governments, in which case they can be referred to as regulations. Except for the fragmentation and overlapping of standards setting processes, there are also many difficulties in the effective application of existing standard frameworks to the production and trade of plastic products.⁵⁷ For instance, the ISO Technical Committee 61 (ISO/TC 61), established in 1947 to devise standards for plastics, now includes representatives from 70 countries. As of early 2021, it had produced a total of 690 standards and created its Subcommittee 14, which is responsible for “all standardization activities in the field of plastics relating to environmental and sustainability aspects”, with a focus on, but not limited to, biobased plastics, biodegradability, environmental footprints (including carbon

⁵⁵ WTO, Communication to the World Customs Organization (WCO) on the Work of the IDP in Support of Efforts to Address Plastic Pollution, INF/TE/IDP/W/6/Rev.1.

⁵⁶ Carolyn D. Birkbeck etc., A Review of Trade Policies and Measures Relevant to Trade in Plastics and Plastic Pollution, *Global Trade and Customs Journal*, Vol. 16, 2021, p. 315.

⁵⁷ *Ibid.*

footprints), resource efficiency (including the circular economy).⁵⁸ Through the integration of ISO standards within the WTO's regulatory framework for plastics, a more structured approach to the standardization of plastic products can be achieved. This integration facilitates the incorporation of these product standards into the WTO trade regulations, and promoting their assimilation into the domestic legal frameworks of member states, which, in general, can prompt these standards to play an effective role in the regulation and harmonization of plastic products.

There are also other issues such as the task of aligning the WTO regulations on plastics with other international environmental agreements, such as the Basel Convention and its Plastics Amendments, the Stockholm Convention, the G7 Marine Pollution Charter, and UNCTAD's Sustainable Manufacturing Environmental Pollution Programme (SMEP), among others. The DPP is keenly aware of these international efforts and commits to not only support these global initiatives but also to potentially integrate their principles into the WTO's framework concerning plastics. The Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) serves as a good example in this context. Within its Environmental Chapter, Article 20.4 explicitly references several environmental treaties and emphasizes the obligations of CPTPP member states to adhere to these agreements. Furthermore, the CPTPP strengthens the enforcement of Multilateral Environmental Treaties (METs) by extending obligations to include sub-central governmental entities of member states (Article 20.12), incorporating non-governmental entities within the scope of METs (Article 20.17), and permitting the invocation of treaty-specific dispute resolution mechanisms to enhance the implementation of METs.⁵⁹

In addition, considering the disparate stages of national development, the capacity for managing plastic waste is often limited to mere disposal in

⁵⁸ ISO, ISO/TC 61/SC 14 Environmental Aspects, <https://www.iso.org/committee/6578018.html> (Last Visited on November 3, 2023).

⁵⁹ Qinning Wei, CPTPP Environmental Governance Paradigm and China's Practical Approach, *Journal of Jiangxi University of Science and Technology*, Vol. 43, No. 1, 2022, p. 37.

LDCs and small island nations. The expectations to foster the adoption of plastic substitutes or to establish sophisticated plastics recycling and disposal infrastructures are notably beyond the financial and technical capabilities of these states. Consequently, economic and technical assistance is necessary to facilitate their progress towards sustainable development goals. From this perspective, the allocation of such assistance and the potential establishment of Special and Differential Treatment tailored to the varying capacities of countries deserve thorough consideration by the WTO members.

C. Outcome-oriented Design of the WTO Plastics Rules

An outcome-oriented approach focuses on the value and ultimate destination of rules and actions, and mandates that the purposefulness and appropriateness of rules be judged in terms of the potential outcomes.⁶⁰ By establishing mechanisms for monitoring and evaluating outcomes, gaps within the rules and associated actions can be identified in a timely manner. Through a continuous review of efforts towards achieving stipulated outcomes, adjustments can be made to rectify the inherent limitations within the anticipatory nature of regulatory design. Such an approach ensures an adaptive strategy to contemporary challenges, providing assurance for the fulfillment of established objectives.

Within the framework of the WTO plastics regulations, engaging in timely trade policy review, information disclosure and public participation is crucial for ensuring transparency. These measures serve to identify and address any deficiencies or omissions in the regulatory design, thereby contributing to the supplement and update of the plastics rules. At the same time, the dispute settlement procedure provides a foundational support system to ensure the effective implementation of these plastics rules.

1. Transparency Rules

The principle of transparency stands as a cornerstone within the framework of trade laws, regulations, policies, decisions, and judgments of the WTO

⁶⁰ *Supra* n. 33, p. 4.

members. At its core, this principle mandates that all relevant laws, regulations, and documents must be published before they are enforced to ensure that no measure is applied in obscurity.⁶¹ As a fundamental principle, transparency plays a pivotal role in promoting international trade, facilitating the consistent implementation of trade rules and ensuring adherence to trade procedures among member states.

To reinforce the principle of transparency and promote compliance among its members, the WTO has established a comprehensive framework comprising norms of transparency and an associated monitoring mechanism. This framework distinguishes between internal and external transparency. Internal transparency focuses on the obligations of WTO members to inform both the WTO and other member states about specific policies and laws enacted within their territories. This is achieved through domestic publication and regular notification, thereby fulfilling the requirements for internal disclosure. Conversely, external transparency is geared towards keeping the public informed about the WTO's operations and activities through dissemination of information. Well-suited to the principle of transparency, the WTO executes its trade policy surveillance function via various monitoring mechanisms. These include overseeing members' compliance with notification obligations, conducting trade policy reviews, and advocating for the creation of publications.⁶² The enforcement of transparency rules is crucial for ensuring that WTO members adhere to trade regulations, and serves as a fundamental condition for the realization of core trade principles such as free and fair trade and non-discrimination.

Transparency concerns are a recurring theme across the WTO's agenda. For instance, within the Fisheries Subsidies Agreement (FSA), stringent guidelines have been established for reporting subsidy information and facilitating the exchange of such data among member states.⁶³ Similarly, during

61 Gai Wu, WTO Transparency Principle and China's Agricultural Compliance Practices, *Pacific Journal*, Vol. 30, No. 11, 2022, p. 45.

62 Yuechun Jiang and Yuhuan Zhang, WTO Reform and Prospects of the Multilateral Trading System, *Pacific Journal*, Vol. 28, No. 4, 2020, p. 86.

63 Shuiling Huang and Yongbin Chen, Evaluation of WTO Fisheries Subsidies Rules: Based on the Comparison with CPTPP, *Issues in Agricultural Economy*, Vol. 523, No. 7, 2023, p. 137.

meetings of the DPP, opacity regarding the dynamics of plastics trade flows has raised significant concerns among participants. To address the transparency of existing trade flows, the DPP has placed a particular emphasis on collaboration with the WCO and on reforming the HS codes framework. In the design of the plastics rules, it is necessary to adequately monitor both the enforcement of these rules and the progress being made in combating plastic pollution and regulating plastics trade. Given the plastic pollution represents a critical environmental issue with direct implications for the public, the involvement and protection of community interests are paramount. Drawing inspiration from the innovative approaches to information disclosure and public engagement outlined in the environmental chapter of the CPTPP, the plastics regulations could benefit from transparent information sharing and the provisions of mechanisms for public grievances. Such measures would enable comprehensive public monitoring, guaranteeing the practical application of plastics regulations and safeguarding the environmental rights and interests of individuals.⁶⁴

Therefore, the WTO plastics rules should incorporate transparency provisions across three primary dimensions. Firstly, regarding internal transparency, there is an imperative for members to consistently notify the WTO about their adherence to the regulations and their efforts in plastics governance. A dedicated body should be established to receive these notifications, facilitating the prompt review and assessment of rules implementation. Secondly, external transparency should be emphasized through the public dissemination of information related to plastic pollution and plastics trade. The WTO's official website already serves as a platform for such disclosures, reflecting a commitment to transparency. Public monitoring, in this context, serves as a deterrent against environmental degradation by empowering individuals with the right to monitor and advocate for environmental protection, thereby enhancing the overall efficiency of environmental governance. Thirdly, the establishment of a systematic trade policy review mechanism is crucial for

64 Haitao Tang and Gong Chen, CPTPP Environmental Rules: Commitment, Innovation and Enlightenment to the Perfection of China's Law, *Journal of Chongqing University of Technology (Social Science)*, Vol. 33, No. 8, 2019, p. 34.

the timely and accurate evaluation of the regulations' effectiveness. This process should include both behavioral and outcome-based feedback, monitoring national compliance to ensure the rules are effectively implemented. It should also track the application of these rules over time, and provide a dynamic list of best practices and illustrative guidelines that reflect the evolving nature of plastics regulations and the transition towards a circular plastics economy. This adaptive approach should be tailored to specific contexts and stages of regulations to optimize the translation of actions into final outcomes.

2. Dispute Settlement Mechanism

Settlement of trade disputes constitutes a core function of the WTO, which offers a platform for members to address and adjudicate conflicts arising from trade frictions and perceived infringements on their interests. This dispute settlement mechanism is critical in safeguarding the effective implementation of WTO rules. Numerous trade disputes within the WTO's jurisdiction have involved issues related to plastic products. Notable examples include DS215: *Philippines — Anti-dumping Measures Regarding Polypropylene Resins from Korea (2000)*, DS486: *European Union — Countervailing Measures on Certain Polyethylene Terephthalate from Pakistan (2014)*, and DS538: *Pakistan — Anti-dumping Measures on Biaxially Oriented Polypropylene Film from the United Arab Emirates (2018)*, etc. It is important to note, however, that the majority of these disputes have centered around trade remedies associated with dumping and subsidy measures. These cases were primarily initiated by complainants aiming to shield their domestic industries, rather than to deliberate on the legality of environmental regulations pertaining to plastics.⁶⁵

While there have yet to be formal disputes within the WTO framework specifically addressing environmental measures related to plastics, it is foreseeable that the introduction of the WTO plastics rules may lead to a significant number of trade disputes concerning plastics trade measures. Thus, there is a need to rely on a well-structured dispute resolution framework within the plastics regulations to maintain orderly trade and ensure the effective

⁶⁵ *Supra* n. 56, p. 310.

implementation of these rules.

Currently, the WTO's dispute settlement mechanism faces challenges, primarily due to the protracted impasse over the Appellate Body's functionality, but the creation of trade disputes will not be stopped. In response to this, it is advisable to draw inspiration from the dispute resolution provisions found in the FSA and regional trade agreements such as the CPTPP and Regional Comprehensive Economic Partnership (RCEP). By adopting a proactive and preventative approach to dispute settlement within the context of plastics regulations, it is possible to develop a coherent and effective framework that can address the anticipated influx of plastics trade disputes.

Addressing trade disputes that intersect with environmental considerations related to plastics through the WTO Dispute Settlement Body (DSB) represents a necessary avenue. In adjudicating these disputes, the invocation of plastics trade regulations as the primary legal framework is essential. However, due to the complexity of plastics, specific agreements, including the GATT, the SCM Agreement, the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS), the Agreement on Technical Barriers to Trade (TBT), the General Agreement on Trade in Services and the Agreement on Trade-Related Aspects of the Intellectual Property Rights (TRIPS), should be applied flexibly on the basis of specific disputes. In particular, it should be taken into account that the object of plastics trade disputes should not be limited to plastic products only, for example, the disposal of plastic waste should fall within the scope of regulations of trade in services under the GATS.⁶⁶

Upon the ratification and implementation of the WTO plastics rules, they inherently become subject to the organization's dispute settlement mechanism, and the mechanism, *vice versa*, ensures the legal enforcement and mandatory application of these rules in specific disputes. However, the dispute settlement mechanism has faced criticism for its protracted and complex nature, which arguably diminishes its efficacy, particularly in addressing urgent environmental issues like plastic pollution. During the long period of dispute settlement, pollution persists and intensifies, which underscores the need for a more

⁶⁶ *Supra* n. 4, p. 18.

effective approach to resolving such disputes. In light of these considerations, the innovative structure of the dispute resolution mechanism established by the CPTPP, a progressive four-tiered consultation process coupled with a dual approach to dispute resolution, offers valuable insights.

In dispute settlement, the CPTPP encourages agreement to be reached first through dialogues and consultations. This consultation requirement coincides with the WTO rules. Consultation serves not only as an essential preliminary step in the WTO dispute resolution framework but also as a continually accessible avenue throughout the whole procedure. In the CPTPP's dispute resolution protocol, parties embark on a sequential journey through "environmental consultations", "high representative consultations", and "ministerial consultations", culminating in the formation of an expert panel if these consultations are inconclusive.⁶⁷ Distinctively, the CPTPP's dispute resolution mechanism discards the appellate phase, making the panel's report the final one subsequent to the issuance of a preliminary version and public release after incorporating parties' feedbacks. This approach shows its contribution to efficiency, presenting both a model and a challenge to the WTO's more protracted dispute settlement mechanism. Taking the dispute procedures of the plastics rules as an opportunity, it may also offer potential directions for the evolution of the WTO's dispute settlement mechanism.

IV. CHINA, AS ONE OF THE CO-SPONSORS OF THE DPP, SHOULD PLAY A GREATER ROLE

A. Status of the Plastic Pollution Control in China

The issue of plastic pollution control within China offers a compelling case study of regulatory evolution and implementation. Historically, China has contended with significant challenges posed by "white pollution", a term refers to the pervasive environmental and developmental impacts of plastic waste. Given the status as both a large plastics producer and consumer, and formerly the recipient of global plastic waste exports, China has been particularly

⁶⁷ *Supra* n. 59, pp. 36-37.

vulnerable to the plastic pollution. In addressing these challenges, the Chinese government has undertaken a robust legislative approach, underpinned by the principle of sustainable development and stringent regulatory measures. These efforts have ultimately led to significant progress. The first initiative in this legislative path was the issuance of the Notice on Restriction of Production and Sales of Plastic Shopping Bags by the State Council in 2007. This Notice, representing China's first foray into plastics restriction, mandated the paid usage of plastic bags and outlawed the manufacture and distribution of plastic shopping bags with a thickness below 0.025mm. Further legislative advancements were realized with the enactment of the Circular Economy Promotion Act in 2008, later amended in 2018. This legislation advocates for improved resource utilization and high economic output with low resource consumption and environmental costs, which is an important guideline for environmentally responsible production and recycling of plastic goods. Moreover, Article 69 of the Law on the Prevention and Control of Environmental Pollution by Solid Waste (amended in 2020) delineates the State's role in fostering a reduction in the usage of single-use plastic products and enhancing recycling initiatives. It imposes restrictions on the production and sale of single-use plastics by enterprises, while advocating for the development and adoption of biodegradable and recyclable alternatives.

To strengthen the governance across the entire spectrum of plastic pollution and to promote the management of the 14th Five-year Plan in mitigating such pollution, the National Development and Reform Commission (NDRC) and the Ministry of Ecology and Environment (MOE) undertook a joint initiative in September 2021. This partnership ultimately led to the issuance of the "14th Five-year Plan" Action Programme for Plastic Pollution Management. This strategy document sets out specific tasks for various sectors, with a primary focus on reducing plastics production and usage at the source, accelerating the standardized recycling of plastic waste and carrying out the clean-up and remediation work of plastic waste in critical zones, including waters, scenic spots, and rural areas. The Programme lays out a definitive timeline, setting forth ambitious objectives to be realized by 2025. These goals encompass substantial advancements in the governance of plastic products lifecycle, which covers production, consumption, distribution, recycling, and disposal processes.

It also foresees a more effective regulatory framework for plastic pollution management and the effective containment of “white pollution”.⁶⁸ This holistic approach to plastic pollution management, emphasizing the entire lifecycle from production origins to waste disposal, reflects the regulatory philosophy and approach that China has consistently embraced and practiced.

In a significant policy shift concerning the management of “foreign plastic waste”, China took decisive action by notifying the WTO in July 2017 of its intent to urgently revise its importation standards for solid waste. This communication was followed by an announcement that, by the end of 2017, China would impose a prohibition on the importation of 24 categories of solid waste, including plastic waste from household sources. In the same month, the State Council formulated the Implementation Plan on Banning the Entry of Foreign Waste and Promoting the Reform of the Solid Waste Import Management System. This comprehensive plan sets out eighteen specific stipulations aimed at enhancing the regulation of foreign waste influx and the overall management of solid waste. By the end of 2018, China had enacted a comprehensive ban on all waste plastics, whether from household or industrial sources, thereby ending the longstanding issue of foreign waste pollution within the borders.⁶⁹ This regulatory action not only mitigated a critical environmental concern within China but also set a precedent for other nations confronted with similar challenges related to plastic waste pollution. The actions undertaken by China not only had an impact on the establishment of the Plastics Amendments to the Basel Convention,⁷⁰ but also set a model for other affected countries, leading to a desirable result that the long-standing issue of wastes transfer from developed nations which possess the capacity for proper disposal, to developing countries and LDCs where such capacity is often lacking, has seen its end.

After years of comprehensive regulation, the landscape of plastic pollution in China has seen a remarkable transformation. Ideas and Practices of Plastic Pollution Control in China published in 2022 by a national think tank,

⁶⁸ Xue Li et al., Present Situation and Prospect of Plastic Pollution Prevention and Control in China, *Chemical Engineering Management*, No. 16, 2022, p. 56.

⁶⁹ Heyang Wang, The Global Impact of China’s Ban on Foreign Waste, *Ecological Economy*, Vol. 34, No. 6, 2018, pp. 2-5.

⁷⁰ *Supra* n. 5, p. 4.

highlights that China now leads globally in the recycling of waste plastics. This achievement not only signifies a reduction in crude oil consumption and carbon dioxide emissions but also marks a significant economic milestone, with the recycling industry's output value surging to 105 billion RMB in 2021, marking a year-on-year increase of 33 percent.⁷¹ Moreover, this progress aligns with the realization of 100 percent material recycling nationwide, embodying China's persistent pursuit of the philosophy of ecological civilization, outlined in the adage that "lucid waters and lush mountains are invaluable assets". Despite the notable advancements, the current system for the prevention and control of plastic pollution is not without its shortcomings. Moving forward, the commitment to refining plastic pollution management will persist, with a focus on enhancing recycling capabilities and transitioning towards a model of eco-friendly plastics management. This ongoing effort shows a steadfast commitment to ecological management and the promotion of sustainable practices.

B. China's Contributions Help the WTO Construct Systemic Plastics Rules

In November 2019, China, in collaboration with Morocco and Sri Lanka, co-organized the inaugural workshop on plastic pollution in Geneva. Subsequently, on November 17, 2020, China and Fiji jointly initiated the WTO Informal Plastics Dialogue.⁷² Within the framework of plastics regulation, China's endeavors have consistently focused on the attention and technical assistance to the LDCs and small island nations, the emphasis on the important role of trade measures in eliminating global plastic pollution, and the efforts to promote members from different regions and different development stages to carry out cooperation in regulating plastic pollution on the basis of the DPP, while encouraging synergism between the DPP and other international

71 Academy of Macroeconomic Research NDRC, Report of the National Think Tank: Ideas and Practices of Plastic Pollution Control in China, https://www.ndrc.gov.cn/wsdwhfz/202206/t20220624_1328214.html (Last Visited on 19 March, 2024)

72 See the Statement by H.E. Mr. Shouwen Wang at the Joint Launch Event of Ministerial Statements – Trade, Environment and Sustainable Development, https://www.wto.org/english/tratop_e/tessd_e/china_statement_e.pdf (Last Visited on November 18, 2023).

processes such as the UNEA and the Basel Convention.

Firstly, China should advocate for the incorporation of the “community with a shared future for mankind” philosophy into the discussion on plastics, and foster the development of a circular plastics economy anchored in our green development principles embodied by the “two mountains theory”. The approach of the prevention and control of plastic pollution worldwide aligns with China’s vision of a shared human future. The governance of plastic pollution emphasizes the interconnection of international actions and outcomes, highlighting the impact of environmental challenges on the collective progress of human society. This perspective acknowledges the inherent limitations in pollution management, often illustrated by the “barrel theory”, where the capacity of the system is determined by its weakest component. Hence, it is crucial for the global community to cultivate collaborative efforts, which aims to address the governance challenges and capacity shortfalls faced by the LDCs and small island nations. Such unity and mutual assistance are essential elements of the “Community of Human Destiny” concept, emphasizing the collective responsibility and shared interest in securing a sustainable environmental future.

In the context of the WTO’s plastics Dialogue, China has assumed a pivotal role in initiating and advancing discussions on this pressing issue, thereby integrating the ethos of the “Community of Human Destiny” into the framework of international plastics governance. Recognizing that environmental challenges, particularly those pertaining to plastic pollution, are universal concerns that transcend national boundaries, and that China’s leadership therefore is crucial in shaping a collaborative and cohesive response within the global community, China should continue to pay attention to the voices and needs of the LDCs and small island nations. While taking actions to undertake the responsibility for plastic pollution prevention and control, China calls on all participants of the DPP to join in mitigating pollution and underscoring the shared responsibility in this global endeavor. Furthermore, the adoption of economic and trade measures to combat plastic pollution and facilitate the shift towards a circular plastics economy exemplifies the harmony between

economic development and environmental protection. China's commitment to the principle of "lucid waters and lush mountains are invaluable assets" shows its wealth of experience in pursuing sustainable development pathways that do not compromise environmental integrity. Within the framework of the DPP, China is poised to share insights and practices in simultaneously advancing environmental protection and economic growth. China could play a decisive role in realizing the vision of a circular plastics economy, thereby enriching the international discourses with Chinese experience and wisdom.

Secondly, to further advance the global agenda on plastic pollution mitigation, it is quite important that China persists in refining the domestic frameworks concerning the prevention and management of plastic pollution, while also enhancing our capabilities in pollution remediation and plastics recycling. Notably, China has already achieved commendable strides in this area, with an exceptionally high rate of plastic waste recycling, but continuing to improve recycling and disposal capacity remains a critical objective. In an era marked by global collective efforts to combat plastic pollution, it is essential for China to align with international trend and seize the opportunity to actively learn from advanced pollution treatment and recycling technologies. This entails a comprehensive approach to capacity building, encompassing the enactment of overall regulations on plastic pollution prevention, corporate accountability in pollution control, and fostering public consciousness regarding the reduction of plastics usage.

Thirdly, to further the global discourse on sustainable trade practices, a key strategy involves bolstering support for plurilateral negotiations within the WTO framework and leading to the formulation of comprehensive agreements. China's active contribution to these discussions, particularly in the domain of plastic pollution mitigation, underscores its commitment to fostering a multilateral trading system through plurilateral engagements. Except for the DPP, China's engagement extends across a spectrum of plurilateral topics within the WTO, including investment facilitation, e-commerce, domestic regulation of trade in services, and trade coupled with environmental sustainability. In each of these areas, China has been a proactive participant, striving to advance

the dialogues and shape the development of these critical issues. In the face of challenges confronting the WTO, plurilateral negotiations and agreements play a pivotal role in upholding the integrity of the multilateral trading system. By participating in and promoting the issue of plastic pollution management, China should actively participate in the plurilateral rules supply. This involves exploring the potential of plurilateral approaches to enrich the WTO's rules framework, while actively driving forward negotiations that align with both the WTO regulations and the broader interests of humanity. At the same time, it is important to remain cautious against the potential for other negotiating parties to leverage nationalistic protectionist stances to distort the WTO norms and the global trade order. In this regard, China's role transcends the promotion of the WTO rules formulation; it also entails safeguarding the national interests of China and advocating for the rights of smaller and medium-sized nations, thereby ensuring a balanced and equitable advancement of international trade regulations.