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ENVIRONMENTAL LAW

Tackling Subsidies for Plastic Production:

Key Considerations for the Plastics Treaty Negotiations

Executive Summary

In February 2022, the United Nations Environment Assembly adopted a mandate to establish an intergovernmental negotiating committee (INC) that will “develop an international legally binding instrument on plastic pollution, including in the marine environment.”¹ To achieve this objective, it is essential for policymakers to holistically analyze — and work toward removing — existing fiscal incentives and subsidies for the production of primary plastics.

Both international and domestic trade rules discipline subsidies. The Agreement Establishing the World Trade Organization (WTO Agreement) defines certain types of government financial contributions as subsidies, and if they are specific, they can be subject to discipline. Certain kinds of subsidies are presumed to distort international trade and are therefore prohibited outright; others are subject to removal or redress only where they cause adverse effects. Although the WTO has sectoral agreements for subsidies in agriculture and fisheries, as a rule, it does not regulate subsidies in specific sectors, including plastics.

Economists and trade lawyers use divergent definitions and methodologies to identify and calculate subsidies. As a result, it is challenging to agree upon global figures for plastic subsidies and their environmental impact. Adding to the difficulty is a lack of transparency around existing subsidies and other financial incentives. Nevertheless, an initial review of data suggests that the amount of government money that flows into plastic production is remarkable and includes direct grants for manufacturing plants, long-term tax incentives, concessionary development bank lending, and a variety of subsidies on inputs.

Experience in other multilateral environmental agreements (MEAs) suggests that where crossover trade disciplines are being considered, there should be a degree of coherence between a new agreement and existing frameworks. This coherence is important on topics such as subsidies, where international trade rules have been the subject of extensive negotiation, considerable controversy, and complex litigation. Therefore, sensitivity is essential to successfully negotiate new framework obligations, while a high degree of expertise is required to monitor ongoing implementation continually. It is recommended that negotiators concentrate on disciplines for direct subsidies in respect of plastics manufacturers and indirect subsidies in the form of lower input prices for gas and oil feedstocks. The framework would be maintained through notification, peer review, and independent expert analysis.

Introduction

Evidence indicates that the production of plastics is subsidized, deepening the plastic pollution crisis. Many of these subsidies come through its main feedstock: fossil fuels. Currently, the price of plastics does not fully capture any externalities² that occur across the life cycle. Direct subsidies to the production of plastic precursors (understood as the monomers, polymers, chemical additives, and processing agents used in their production) or indirect subsidies (in the form of cheaper oil and gas feedstocks) exacerbate the crisis by artificially reducing the cost of plastics, thus increasing the use and production of plastics.

Defining ‘Externalities’

In a perfect market, the price of a good would include environmental impacts along its life cycle. In this way, market engagement with the good would capture the direct and indirect effects of its production and consumption. But market structures do not ‘price’ a good in a way that captures all costs, including environmental impacts. This is how using an improperly priced good gives rise to economic externalities: negative consequences of private use that someone else — usually society as a whole — ends up paying for. Modern regulatory frameworks seek to capture negative externalities as much as possible, using price signals and other measures. Carbon pricing is one type of corrective measure. Taxes or limitations on using environmentally harmful goods — such as plastics or persistent organic pollutants (POPs) — are another. Failure to price for externalities remains global and endemic.

The numbers are remarkable. A recent study prepared for the International Monetary Fund (IMF) found that globally, “estimated fossil fuel subsidies were \$7 trillion in 2022 or 7.1 percent of GDP with explicit and implicit subsidies accounting for 18% and 82% percent of the total, respectively.”³ This figure is substantially higher than the \$5.9 trillion estimated by the same institution in 2020. The IMF refers to implicit subsidies as the cost of environmental externalities of fossil fuel products.⁴ The rest are explicit subsidies. These include, for example, a CAD\$408 million grant for a plastics facility;^{5*i*} USD\$1.6 billion in tax breaks over 25 years for one petrochemical facility, and potentially USD\$670 million in tax credits for four more;⁶ and \$6.5 billion in support through development banks for major petrochemical projects.⁷ The IEA estimates that in 2022, global fossil fuel subsidies will reach USD\$1 trillion — an all-time high — a figure that helps to account^{8,ii} for the massive jump in the IMF’s subsidy numbers between 2020 and 2023.^{9,10}

The United Nations Environment Assembly (UNEA) Resolution 5/14¹¹ establishes a mandate to create an intergovernmental negotiating committee (INC) to develop an international legally binding instrument — a treaty — to end plastic pollution by comprehensively addressing the entire life cycle of plastics. To effectively reach this objective, the future plastics treaty must use a holistic approach that addresses subsidies allocated to plastic production. In fact, several States have identified this as a critical element to end plastic pollution and have expressed their support for including

i. CAD\$408 million is equivalent to USD\$297.23 million at the time of writing (October 5, 2023).

ii. At least half was a response to post-COVID inflation and volatility related to the Ukraine war.

provisions related to subsidies.ⁱⁱⁱ In September 2023, UNEP released the ‘zero draft’ of the treaty text — a draft that will serve as a foundation for negotiations beginning with INC-3. The draft contains a provision on the “removal of subsidies and other fiscal incentives to the production of primary plastic polymers.”¹²

Successfully addressing the subject of subsidies for plastics production in the future plastics treaty requires a well-developed, balanced, and comprehensive policy framework informed by existing disciplines and approaches in both trade law and international environmental agreements. The plastics treaty will ideally address subsidies under a full life cycle approach. However, this paper will only focus on production subsidies by clarifying the definition of subsidies under international trade law, providing examples from other international agreements, and bringing some key takeaways and recommendations to consider in the negotiations of the plastics treaty.

What is a Subsidy?

The economic and policy definitions of a *subsidy* have not always been consistent. As a result, it took almost a decade of intense negotiations to come to an agreement on a definition and disciplines for subsidies in the WTO Agreement on Subsidies and Countervailing Measures (SCM Agreement).¹³ Under the SCM Agreement, a subsidy has two general elements: a financial contribution by a government that confers a benefit.^{iv} The IMF definitions of *explicit* (undercharging for the supply costs of fossil fuels) and *implicit* (undercharging for environmental costs and forgone consumption tax revenues) subsidies is useful in underlining the scope of the problem. It also underlines why, until the entry into force of the WTO Agreement in 1995, there was no agreement on what constituted a ‘subsidy’: the economic and policy definitions of ‘subsidy’ are not always consistent.

Despite the difference in approaches, the WTO definition is more workable and advisable for Parties to use in the plastics treaty for three reasons:

- **Broad international agreement:** The definition is part of an international legal framework and has been incorporated into the domestic legal regimes of 164 WTO Members.
- **A tested definition:** The definition took years to develop, and over the past 25 years, expensive, contentious, and complex litigation has resulted in additional clarification of the terms and concepts set out in the SCM Agreement.
- **Broad adoption in international law:** The WTO definition is widely understood, and it is the definition that WTO Members use to devise domestic policy and assess their trading partners’ policies.

Still, it is critical to understand the elements of the WTO definition and how it can be applied to the future plastics treaty.

^{iii.} As the result of the positions expressed by members of the committee, the options paper for INC-2, for instance, contemplates an option to eliminate “fiscal incentives and subsidies for primary plastics production.” Moreover, the zero draft of the plastics treaty, released in September 2023, includes the removal of subsidies as a key measure for achieving production reductions in primary plastic polymers.

^{iv.} The SCM Agreement also identifies the following as a possible first element: “there is any form of income or price support in the sense of Article XVI of GATT 1994.” In practice, almost all subsidy analyses are conducted under the “financial contribution” element.

Financial Contribution by a Government

The term *financial contribution* is limited to three types of measures. Under the SCM Agreement, a financial contribution includes:

- **Direct payments** such as grants or loans, or potential direct payments such as loan guarantees (e.g., a government grant for constructing a steam cracker or polymerization plant).
- **Foregone revenue** that is otherwise due, such as specific tax incentives (e.g., investment tax credits for constructing or operating a petrochemical plant).
- **Provision of goods and services** or purchase of goods (e.g., a dedicated railway to transport plastic precursors produced in a specific facility).^v In these cases, they are considered provided goods and services rather than general infrastructure.

A government can provide a financial contribution either directly or indirectly:

- A **direct contribution** is provided by a public body such as a government ministry or a government-owned and controlled entity (e.g., a loan provided by a government-owned and controlled development bank).
- An **indirect contribution** is where a private entity is directed or entrusted to provide it to the recipient. Where a law requires that a private oil and gas producer set aside a portion of its production for sale to domestic industrial users, such as petrochemical companies, this is an example of direction in the provision of a good and constitutes an indirect financial contribution through entrustment or direction.

Where a measure does not fall within the scope of financial contribution, it is not a subsidy, regardless of its impact on a good, an enterprise, or a sector.¹⁴ For example, from a legal perspective, the implicit subsidies previously mentioned in the IMF study do not fall into any of the types of measures set out in the SCM Agreement's definition of financial contribution. While acknowledging the significant and substantial externalities encompassed within these implicit subsidies, it is important to recognize that reaching a consensus on their valuation and determining which plastics treaty should address may prove overly complex and counterproductive in the context of the treaty negotiation. Therefore, negotiators should adhere to the subsidies already covered under the SCM Agreement definition. Adopting the IMF's implicit subsidy approach would likely result in extensive and contentious negotiations over which externalities to include and how to cost those externalities.

Benefit Conferred

The SCM Agreement does not define the term *benefit*. However, it has been clarified by dispute settlement reports arising out of complex litigation. A financial contribution confers a benefit that leaves the recipient better off than what the recipient could get in the market. A benefit exists where:

- A **grant** is given for constructing a plastic production facility (e.g., a steam cracker or a polymerization plant) because private markets do not normally make non-repayable contributions.
- A **loan** is extended at terms, for example, with low-interest rates or a long repayment timeframe, and this confers the particular recipient (e.g., a major petrochemical producer) a condition that otherwise could not be obtained on the market.
- **Goods** provided by the government at prices lower than market benchmarks^{vi} or that do not otherwise represent *adequate remuneration* (e.g., an airport or railway line).

v. There are instances where – in the initial days of renewable energy – a market for a good or service does not exist. In those cases, government measures that create a market by incentivizing production and consumption of the good do not necessarily confer a benefit.

vi. This paper will not address countervailing duties.

There are instances where a subsidy confers a benefit to producers that use the subsidized good as input. For example, a subsidy goes to a gas producer, and the resulting gas is then used as a feedstock to produce plastics precursors. In these instances, conducting a pass-through analysis demonstrating that the subsidy to the gas producers actually transfers into plastic production is needed. This analysis should consider the direct and indirect beneficiaries of the subsidy. In applying the SCM Agreement definition, the future plastics treaty (in the context of subsidies for plastic production) would ordinarily discipline those subsidies that result in a price effect for the feedstock (i.e., the impact that a change in value has on the consumer demand for a product or service in the market).

How Are Subsidies Disciplined Multilaterally in the SCM Agreement?

The fact that a measure is a subsidy does not mean that it is subject to the disciplines of the SCM Agreement or other international trade agreements. In general terms, trade agreements impose different kinds of controls on subsidies, depending on the particular subsidy's form and impact, and include sanctions for each. This section emphasizes those types of disciplines on subsidies that are *agreed* multilaterally (i.e., adopted and implemented by the 164 Members of the WTO) and *imposed* through multilateral institutions.^{vii}

Scope of the SCM Agreement: Specificity

A subsidy is subject to the disciplines of the SCM Agreement only where it is specific. A subsidy program is considered specific where it provides subsidies to an enterprise, industry, or industrial sector or where it is limited to recipients in a particular region. The legal structure and design of a program, or the circumstances of its operation, may also establish specificity. For example, a specific tax incentive for oil and gas feedstocks used in steam crackers to produce plastic precursors is likely a subsidy specific to an industry or industrial sector.

Applicable Disciplines and Enforcement: Prohibited and Actionable Subsidies

The SCM Agreement sets out two **multilateral frameworks**^{viii} for regulating subsidies. Both frameworks require a WTO Member to bring a formal dispute before the WTO's dispute settlement mechanism, demonstrating the elements of a subsidy and how it meets the requirements set out in the SCM Agreement before asking for the subsidy or its negative effects to be removed (see 'Implementation and Enforcement' below).

Two types of subsidies are deemed to have a distorting impact on terms of trade and are **prohibited** outright: subsidies that are conditioned – *or* 'contingent upon' – export performance and use of domestic over imported goods. The condition may be a legal requirement or it may be proven to exist, *in fact*, based on surrounding circumstances of its payment. For example, a subsidy is contingent on export performance where, as a condition of receiving a subsidy, a petrochemical producer undertakes to export 25% of its production.

A subsidy is **actionable**, meaning that it may be challenged in the WTO, where it is specific, and where it results in certain types of economic adverse effects (e.g., lost contracts).

vii. This paper will not address countervailing duties.

viii. Countervailing duties are "unilateral" actions in the sense that each Member may undertake an objective assessment of whether a subsidy exists and causes material injury to its domestic industry and impose measures to counter those subsidies.

Under the SCM Agreement, Members are permitted to provide purely domestic subsidies, such as research and development in a new type of plastic polymer. However, if those subsidies result in harm to the domestic industries of other Members, those other Members may challenge the Member's subsidies and ask that the subsidy or its adverse effects be withdrawn.

A Member of the WTO has the right to have recourse to formal dispute resolution. If the challenge is successful, the next steps depend on the kind of subsidy.

- If it is a **prohibited** subsidy, the Member is required to withdraw the subsidy without delay. If it does not do so, the Member may be subject to retaliatory trade measures roughly equivalent to the quantum of subsidies found to have been provided.
- If it is an **actionable subsidy**, the Member must take appropriate steps to remove the adverse effects or withdraw the subsidy. If the Member does not do so, it may be subject to retaliatory trade measures equivalent to the adverse effects found to have existed (e.g., the value of any lost contracts).

Transparency

Members of the WTO are required to notify the WTO of their subsidy measures. In exchange, Members may engage in bilateral diplomatic discussions regarding those subsidies, raise concerns in WTO committees, or seek third-party mediation to resolve outstanding disagreements. Nevertheless, it continues to be difficult to find data — particularly sectoral data — on Members' subsidy measures. The OECD, and to some extent, the IMF and the World Bank, engage in some data generation. For a sectoral framework, such as the plastics treaty, to be effective, it will be necessary to create a dedicated research and monitoring effort.

Relevant Insights From Sectoral Agreements in the Discipline of Subsidies

Subsidies related to the agriculture and fisheries sectors are subject to special regimes in the WTO and, as such, may provide valuable insight for the future plastics treaty.

The **WTO Agreement on Agriculture** (AoA) is a comprehensive regime that sets out detailed requirements for Members to notify and reduce production-related agricultural subsidies, including export subsidies. In this sense, the disciplines of the AoA are more permissive than those of the SCM Agreement. The AoA also permits two types of subsidies without a reduction requirement:

- subsidies that aim to reduce production; and
- subsidies that are 'decoupled' from production, such as defraying the costs of meeting environmental requirements.

At the 2015 Nairobi Ministerial Conference, WTO Members succeeded in eliminating export subsidies granted by developed and developing countries¹⁵ and agreed to detailed terms for export credit programs. Given the limited availability of data and the limited identification of specific subsidies related to plastics production, the future plastic treaty should look to the "notify and reduce" framework of the AoA for inspiration.^{ix} The AoA can also provide valuable insights and lessons learned due to its recognition that subsidies may be used and redirected to reduce and eliminate production altogether.

^{ix.} Export subsidies are already prohibited for non-agricultural products.

The new **WTO Agreement on Fisheries Subsidies** (Fisheries Agreement) prohibits harmful subsidies for fisheries. While the Agreement was adopted in June 2022, it has not yet entered into force.¹⁶ The Fisheries Agreement prohibits three types of subsidies:

- contributions to illegal, unreported, and unregulated (IUU) fishing;
- targeting a stock in an overfished condition through fishing or fishing-related activities; and
- providing to fishing or fishing-related activities in the unregulated high seas.

A WTO Member acting in its capacity as a coastal^x or as a flag^{xi} State can trigger an affirmative declaration of IUU fishing. In both cases, the IUU determination can target either a domestic vessel or a vessel owned, operated, and/or subsidized by another Member. Therefore, a subsidy is not prohibited because of its form (i.e., given to a fisheries vessel), but rather, because of a specific condition that makes a subsidy harmful.

Features of the Fisheries Agreement that could be relevant for a plastic treaty include:

- a framework for determinations (for example, of what constitutes illegal, unreported, and unregulated fisheries);
- a framework for notifications and information exchange concerning matters that would trigger a prohibition;
- special and differential treatment for less developed countries; and
- a funding mechanism for targeted technical assistance and capacity building.

Creating Synergies Between Multilateral Environmental Agreements and Trade Disciplines

A treaty is a delicate balance of rights and obligations — concessions and compromises — between its Parties. A treaty does not arise, exist, or operate in a vacuum; Parties negotiate each international legal instrument against a background of existing treaties, customs, and practices. A State that is negotiating a treaty is deemed to be in compliance in good faith with its obligations under other treaties to which it is party. This means that a State is presumed to negotiate and enter into any new treaty obligation, ensuring consistency with its existing legal commitments under other treaties.

When negotiating a new treaty, States can craft new definitions or disciplines or use existing ones. It is often prudent for States to adhere to established definitions and disciplines because they have already received consensus and have been incorporated into domestic law. Ensuring consistency helps mitigate potential challenges arising in international and domestic law (e.g., treaty relations vs. the coherence and consistent implementation of international legal obligations). However, when negotiating a new treaty, State Parties may choose to depart from existing definitions and disciplines and create new ones, potentially giving rise to issues under international law about the relationship of treaties and under domestic law about coherence and consistency of implementation of international legal obligations.

For these reasons, States should have due regard concerning obligations and disciplines in existing agreements when devising trade-related measures in MEAs. Examining existing MEAs may provide some guidance for future approaches. A series of issue briefs published by the Center for International Environmental Law outlines key considerations relating to trade provisions, non-Party trade provisions, and WTO rules in the context of the plastic treaty negotiation.¹⁷

x. If a state acts in its capacity as a coastal state, the activity must take place in waters within the state's jurisdiction, defined as the exclusive economic zone (EEZ), an area that extends 200 nautical miles from the coast

xi. If a state acts in its capacity as a flag state, this would include activities of vessels flying the state's flag, whether in the high seas or in another country's EEZ.

In general terms, trade disciplines in MEAs that build on existing trade law definitions, concepts, and principles are easier to negotiate than those that would seek direct or indirect change in those definitions. In the context of the plastics treaty, adopting the definition set out in the SCM Agreement, which has already been accepted and adopted by 164 States, may mean adopting a narrower but more concrete, known, and workable definition of a covered subsidy^{xii} rather than seeking to capture all possible incentives and externalities.

Finally, the compliance mechanisms of MEAs are generally less formal and complex than the dispute settlement framework under trade agreements. For example, the WTO dispute settlement framework has a formal ‘trial level’ panel and an Appellate Body, with additional implementation procedures, a reasonable implementation period, and a quantum of retaliatory measures. No MEA has a dispute settlement framework of this level of formality and complexity. Each approach has its strengths and challenges. For this reason, considerable care must go into designing the institutional provisions dealing with subsidies regulation to ensure that the plastic treaty’s enforcement and dispute resolution mechanism is effective and ‘fit for purpose.’

Proposed Elements of Plastic Production Subsidy Disciplines Under the Plastics Treaty

Definition

The internationally agreed definition of ‘subsidy’ is narrower than the universe of incentives governments may provide to a sector, such as plastics. Nonetheless, it is advisable for Parties negotiating the plastics treaty to use the existing definition of subsidy in the SCM Agreement to both benefit from over twenty-five years of multilateral clarification and implementation and to avoid conflicts with domestic implementation and interagreement contradictions.

Parties can include the agreed definition of a subsidy in the future plastic treaty through four possible pathways:

- using the text of the WTO definition of subsidies in the plastics treaty;
- incorporating “by reference” to the WTO definition;
- incorporating “by reference” to the WTO definition as developed through clarifications and official interpretations; or
- relying on each WTO Member’s domestic definition of subsidy (which, in most instances, reflects the WTO definition).

^{xii.} Article 1 of the WTO Agreement on Fisheries Subsidies provides an example of how the SCM Agreement definition can be operationalized:

“This Agreement applies to subsidies, within the meaning of Article 1.1 of the Agreement on Subsidies and Countervailing Measures (SCM Agreement) that are specific within the meaning of Article 2 of that Agreement, to marine wild capture fishing and fishing related activities at sea.”

Types of Subsidies

Subsidies that shape or skew the production of plastics may be classified into three categories.

Direct Subsidies

Direct subsidies are fiscal or financial measures directly impacting production, such as sectoral tax concessions,¹⁸ plant construction contributions,¹⁹ or concessionary loans. Due to a lack of transparency, data concerning direct subsidies can be difficult to find. Some examples of actual or likely subsidies are below:

Table 1: Direct Subsidies

| Location | Facility | Structure | Type | Amount (USD, millions) | Data | Duration |
|-----------------------------|--------------------------------------|--------------------------------|--------|------------------------|------------|------------|
| Uzbekistan ²⁰ | Surgil Natural Gas Chemicals Project | financing and similar measures | direct | \$400 | individual | multi-year |
| Canada ²¹ | multi-year | grant | direct | \$300 | individual | one-time |
| Saudi Arabia ²² | multi-year | financing and similar measures | direct | \$6,500 | individual | multi-year |
| United States ²³ | multi-year | tax incentive | direct | \$2,270 | individual | recurring |
| India ²⁴ | multi-year | grant | direct | \$14 | individual | one-time |

Indirect Subsidies

Indirect subsidies are measures that reduce the cost of raw materials²⁵ or other inputs into the production process, such as input price controls²⁶ or support. Research, analysis, and policy papers on financial incentives concerning plastic production often concentrate on fossil fuel subsidies.²⁷ For good reason: 99% of plastics come from fossil fuels, which are a primary input as a feedstock and energy source in plastic production.^{28, 29, 30} Access to cheap raw materials is a key factor in the expansion of plastic production.³¹ These are examples of indirect subsidies.

Table 2: Indirect Subsidies

| Structure | Type | Amount (USD, millions) ^{xiii} | Data | Duration |
|---------------|----------|--|-----------|-----------|
| grant | indirect | \$13,600 ³² | aggregate | unknown |
| tax incentive | indirect | \$48,670 ³³ | aggregate | recurring |

^{xiii}. The aggregate figures are based on our calculations from data on fossilfuelsubsidytracker.org. For the methodology, please contact info@ciel.org.

At the same time, the absence of coherence in terminology, inconsistent methodology,³⁴ and lack of full transparency³⁵ hampers a complete accounting of indirect subsidies or their proper discipline.

For example, a pass-through analysis is required to determine whether incentives for gas and oil production result in lower input prices for plastics production (see above). Such an analysis depends on the overall structure of the sector in any given State. In a number of countries, the oil, gas, and petrochemical sectors are shielded from international markets such that subsidies for oil and gas production result in lower oil and gas prices for domestic petrochemical plants. In those states, a pass-through analysis would demonstrate that oil and gas subsidies have a direct impact on making artificially cheaper plastic production. In most states, however, domestic petrochemical plants purchase feedstock based on global spot or futures market prices. In those countries, oil and gas production subsidies alone do not result in cheaper inputs for plastic production. There is, to be sure, a global impact – subsidies increase global production and thus potentially reduce global oil and gas prices – but the impact is not direct.

Finally, **structural incentives** comprise the background rules^{xiv} that, by undercharging for environmental costs and foregone consumption taxes, result in externalities, skewing production and consumer decisions. As we have seen, the IMF study refers to some of these as implicit subsidies.³⁶ Tackling externalities in full requires a complete reorientation of modern economies. As mentioned above, it is advisable that provisions in the plastic treaty aim to discipline subsidies by concentrating on **direct** and **indirect** subsidies rather than address other externalities through different control measures (e.g., detoxifying the plastic supply chain through control measures on monomers, polymers, and chemical additives of concern).

Disciplines

Subsidies disciplines reflect a balance: on the one hand, subsidies can have a distorting effect on both trade and the environment; on the other, they can be an important instrument of social cohesion and industrial development. Understanding this key tension is important in devising effective and durable disciplines.

Disciplines may be **form-based** or **effects-based**.

The **prohibited** subsidies provisions of the SCM Agreement, the AoA, and the Fisheries Agreement are all examples of **form-based disciplines**. This has the advantage of certainty in planning. At the same time, form-based disciplines constrain State action regardless of whether there is evidence of harm (the harm is presumed). Therefore, devising form-based prohibitions requires agreement on the causal connection between conditions and presumed harm.

Effect-based regulation of subsidies is based on considerations of policy space in economic and social planning. This approach accepts the legitimacy of State action or market intervention in the form of subsidies, but seeks to contain and discipline only **demonstrated harm**. In this framework, a Party would have considerable scope to design subsidy programs and only be required to avoid harming its trading partners' interests. However, under this approach, a subsidy may be disciplined only after it has inflicted harm.

xiv. Other background rules such as property and contract laws, municipal zoning, or natural resources management could also have a distorting impact on production and consumer dec

In the context of the plastics treaty, a **form-based prohibition** is recommended for *direct* subsidies. It should include:

- A prohibition on new subsidies by national or subnational governments for the construction or operation of plastic production infrastructure, particularly steam crackers and polymerization plants;
- The phaseout, over time, of existing tax incentives and multi-year contributions;
- Coordination with multilateral development banks and agencies for the phaseout or elimination of concessionary financing; and
- An exception for measures that aim at phasing out production or transitioning production to other products, such as reuse and refill systems or substitutes to plastics.

An **effects-based** prohibition is recommended for *indirect* subsidies. It should include:

- With respect to gas, oil, and coal directly used as feedstock by domestic petrochemical plants for the production of primary plastic polymers and precursors, the prohibition of:
 - subsidies that result in lower input prices, such as *payments in kind*,
 - direct or indirect price support or price controls, and
 - export restraints and other production set-offs for domestic sale; and
- The prohibition of subsidies for fossil fuels used as energy consumed by domestic petrochemical plants for the production of primary plastic polymers or precursors.

In the context of developing and less developed countries (DCs and LDCs), Parties may also want to consider establishing a phaseout period that allows for a just transition and prevents regressive unwanted impacts.

Implementation and Enforcement

At the time of writing this issue brief, the WTO's institutional enforcement framework has proven inadequate at resolving subsidies-related trade disputes. Formal dispute resolution has been lengthy, complex, and costly, rarely resulting in the removal of a subsidy program. Subsidy disputes are marked by billions of dollars in trade retaliation rights that are either not exercised or, when exercised, harm other sectors and do nothing to correct the underlying distortion.

In other contexts, informal dispute resolution frameworks have had greater success in addressing underlying concerns (though not necessarily removing inconsistent measures). The approach used in other MEAs to achieve progress on agreed goals is to ensure that specific treaty provisions – the elimination of subsidies in this case – are binding and subject to implementation and compliance provisions. Compliance proceedings in MEAs can result in a range of actions, including, for example, providing capacity building or other in-country assistance; undertaking technical assessment or a verification mission; issuing warnings; requesting a compliance action plan; suspending treaty benefits; or actions to be taken in the case of non-compliance, including trade suspensions. A similar approach is recommended for the plastics treaty, and Parties are advised to consider the following elements:

- creating binding and measurable targets for subsidy elimination;
- including treaty provisions on subsidies in the scope of the compliance mechanism;
- including a standing agenda item to review progress on the elimination of subsidies at each regular meeting of the governing body or relevant subsidiary body;
- including progress on subsidy elimination targets in national annual reporting;
- including progress on subsidy elimination targets in the periodic assessment and monitoring of the progress of implementation of the treaty and effectiveness evaluation; and
- requesting analyses and reports by the Secretariat.

Special and Differential Treatment

Importantly, while special and differential treatment (S&DT) may be needed, those should not imply a blanket exemption from obligations. The emphasis of S&DT provisions should be on the following four areas only with respect to those DCs and LDCs that notify existing subsidies:

- differentiated phase out periods, with due consideration of national conditions;
- labor and industrial transition aid linked directly to the phaseout of existing subsidies, where the phaseout is demonstrated to have an adverse local economic impact;
- targeted technical assistance with respect to implementation measures; and
- capacity building for future industrial policy planning.

Key Takeaways for the Plastics Treaty Negotiations

1. Parties are advised to adopt the definition of subsidies set out in the WTO Agreement. This definition has already been agreed upon by 164 WTO Members and integrated into their domestic legal frameworks.
2. The plastics treaty should adopt a form-based prohibition for direct subsidies, which means banning those fiscal or financial measures directly impacting production. This prohibition should cover subsidies on new production infrastructure subsidies, a gradual tax incentive phaseout, and cooperation with development banks to eliminate concessionary financing.
3. The plastics treaty should adopt an effects-based prohibition to indirect subsidies, which means banning those measures that reduce the cost of raw materials or other inputs into the production process. This prohibition should cover subsidies for gas, oil, and coal used as feedstock that result in lower input prices, direct or indirect price support and controls, and export restraints and other production set-offs for domestic sales. It should also cover subsidies for fossil fuels used as energy consumed by domestic petrochemical plants for the production of primary plastic polymers or precursors.
4. Transparency requirements are critical for the discipline of subsidies in the plastics treaty. It is recommended to include requirements for each Party to disclose and notify existing subsidies, including detailed information on the measure, recipients, amounts, and phase out plans for those subsidies.
5. Parties should consider implementing binding and measurable subsidy elimination targets and incorporating subsidy provisions into the compliance mechanism to ensure enforcement and compliance. Additionally, they should include regular progress reviews, national annual reporting on subsidy elimination, and request analyses and reports by the Secretariat for effective monitoring and implementation evaluation.

Annex

Article 1

Definition of a Subsidy

1.1 For the purpose of this Agreement, a subsidy shall be deemed to exist if:

(a)(1) there is a financial contribution by a government or any public body within the territory of a Member (referred to in this Agreement as “government”), i.e. where:

(i) A government practice involves a direct transfer of funds (e.g., grants, loans, and equity infusion), potential direct transfers of funds or liabilities (e.g., loan guarantees).

(ii) Government revenue that is otherwise due is foregone or not collected (e.g., fiscal incentives such as tax credits).

(iii) A government provides goods or services other than general infrastructure, or purchases goods.

(iv) A government makes payments to a funding mechanism, or entrusts or directs a private body to carry out one or more of the type of functions illustrated in (i) to (iii) above which would normally be vested in the government and the practice, in no real sense, differs from practices normally followed by governments.

or

(a)(2) there is any form of income or price support in the sense of Article XVI of GATT 1994;

and

(b) a benefit is thereby conferred.

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- Indonesia G20 country report:
- Another measure benefiting end-users of natural gas is the domestic market obligation (DMO) policy, which required PSC gas contractors to supply a share [25%] of their output to the domestic market at heavily discounted prices [10%]. This measure mainly benefits local industries (fertiliser, petrochemicals, steel, etc.) since they are the main consumers of natural gas in the country.
- At 57.
27. Jane Patton, "Beyond Recycling Reckoning with Plastics in a Circular Economy" (Center for International Environmental Law, March 2023), <https://www.ciel.org/wp-content/uploads/2023/03/Beyond-Recycling-Reckoning-with-Plastics-in-a-Circular-Economy.pdf>. at pg. 10 and footnote 84, for example.
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 31. "Input", *ibid.*:

According to Alsabri et al. (2021) access to 1/3 of the world's oil and natural gas resources in the Gulf Cooperation Council region has enabled and allows for the further development of the chemical and petrochemical industries in this region. As a consequence, the Gulf Cooperation Council is now the main producer and exporter of polypropylene in the world [Alsabri et al. 2020].
- At 147.
32. *Supra*, note 26 Country Data – Fossil Fuel Subsidies (fossilfuelsubsidytracker.org)
 33. *Supra*, note 26 Country Data – Fossil Fuel Subsidies (fossilfuelsubsidytracker.org)

34. Supra, note 26 Under “public money committed to fossil fuels,” for example:
- Canada is listed as having committed \$3.84 billion in “support” for the oil and gas sector through Export Development Canada in 2021. Without further information, it is not clear whether this “support” comprises incentives.
 - Emissions reduction grants for the oil and gas sector are counted as “fossil fuel” subsidies. This, of course, is a different form of incentive than production or consumption incentives.
 - Included as “Fossil unconditional” is \$720 million earmarked for highway rehabilitation, including \$225 million in bridge replacement. It’s not clear in what way general infrastructure expenditure of this type is a “fossil fuel” support.
 - COVID-related support for the airline sector is listed as “fossil conditional”. Of the \$522 million identified in the chart, half was expected to reimburse paying customers who want their money back after COVID flight cancellations.

See also United Nations Environment Programme, “Durability as a Measure of Success: An Analysis of Fossil Fuel Subsidy Reform in Indonesia” (Geneva: United Nations Environment Programme, 2016), <https://www.cbd.int/doc/case-studies/inc/cs-inc-indonesia-fuel.pdf>:

In their joint G-20 report on the phasing out of fossil fuel subsidies, the IEA, OECD and the World Bank define an energy subsidy as “any government action that lowers the cost of energy production, raises the revenues of energy producers, or lowers the price paid by energy consumers.

At s. 2. The first two do not necessarily imply a benefit for downstream users.

35. Asian Development Bank, “Fossil Fuel Subsidies in Indonesia: Trends, Impacts, and Reforms” (Manilla: Asian Development Bank, 2015), <https://www.adb.org/sites/default/files/publication/175444/fossil-fuel-subsidies-indonesia.pdf>. See for example at 5:

Most governments do not systematically account for fossil fuel subsidies. Lack of publicly available data makes it hard to estimate subsidies accruing to energy producers. The available estimates of fossil fuel subsidies for developing countries, therefore, relate largely to subsidies on consumption.

Deepak Birewar, “From Export Benefits to Capital Subsidies, the \$178-Billion Chemical Industry Pins Hope on Budget 2023,” *The Economic Times*, January 24, 2023, https://economictimes.indiatimes.com/small-biz/sme-sector/from-export-benefits-to-capital-subsidies-the-178-billion-chemical-industry-pins-hope-on-budget-2023/articleshow/97268769.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst.

See:

The government is developing a Production Linked Incentive (PLI) programme for the chemical sector to encourage domestic manufacturing. This year, we are expecting a positive momentum towards this PLI scheme.

The Department of Scientific and Industrial Research (DSIR) provided manufacturing businesses tax exemptions of up to 150% under Section 35 (2AB) of the Income Tax Act of 1961 for R&D in their field until March 31, 2020. After this, the tax exemption was reduced to 100% of R&D expenses. All significant manufacturing enterprises involved in R&D were hit hard. This year’s budget should improve DSIR tax benefits. It will empower firms to spend more on R&D, enabling new technologies.

36. Black, supra note 2. The paper relies on the following studies:

Coady, David, Ian Parry, Nghia-Piotr Le, and Baoping Shang, 2019. “Global Fossil Fuel Subsidies Remain Large: An Update Based on Country-Level Estimates.” Working paper 19/89, International Monetary Fund, Washington, DC.

Coady, David, Ian Parry, and Baoping Shang, 2018. “Energy Price Reform: Lessons for Policymakers.” *Review of Environmental Economics and Policy*, Vol. 12, No. 2, pp. 197–219.

Coady, David, Valentina Flamini, and Louis Sears, 2015. “The unequal benefits of fuel subsidies revisited: evidence for developing countries.” In: Clements, B., de Mooij, R., Gupta, S., Keen, M. (Eds.), *Inequality and Fiscal Policy*. International Monetary Fund, Washington, DC.

This issue brief is authored by Rambod Behboodi, with the support of Helinor de Anzizu, Daniela Duran, and David Azoulay. It was reviewed by Andrés del Castillo and Melissa Blue Sky. Special thanks to Merel Terwisscha van Scheltinga for research assistance. It was edited by Cate Bonacini.

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Design & Layout: Tyler Unger

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