

# Rethinking WTO Subsidy Disciplines for Sustainable Development

## Abstract

This paper examines the WTO legal framework governing subsidies and reviews recent reform proposals concerning the identification and categorization of subsidies under the SCM Agreement. It argues that the prevailing trade-distortion-centred approach to subsidy regulation is increasingly misaligned with the WTO's sustainable development mandate. The paper therefore proposes a reform of WTO subsidy disciplines in which alignment with sustainable development objectives becomes a central criterion, alongside trade effects, for assessing the permissibility of subsidies, while preserving the fundamental principles of the multilateral trading system.

**KEYWORDS:** subsidies, WTO, international trade law, sustainable development

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## 1 | Overview of Subsidies in the WTO Legal Framework

In the multilateral trading system, subsidies are common economic policy instruments applied to achieve diverse objectives, such as stimulating investment, supporting strategic industries, promoting regional

development, attracting high technology, and addressing market failures. Subsidies are also used to support the transition to a green economy by funding renewable energy projects or clean technologies. Most subsidies carry huge economic and social benefits, but they may also have unintended consequences for international trade. By enhancing the competitiveness of domestic producers, subsidies can distort the flow of goods and services, disrupt market balance, and trigger trade disputes between WTO Members. If subsidies are not effectively regulated, they may result in unfair competition and distort the inherent comparative advantages of countries. Therefore, it has become rather pertinent to set legal rules on the use of subsidies within the global trading framework. In response, the World Trade Organization (WTO) provides this framework mainly through Articles VI and XVI of the General Agreement on Tariffs and Trade 1994 (GATT 1994) and the Agreement on Subsidies and Countervailing Measures (SCM Agreement).

The SCM Agreement is the first instrument within the WTO legal framework to provide a comprehensive and detailed definition of “subsidy” under Article 1.1. Accordingly, under the SCM Agreement, a measure qualifies as a subsidy if it satisfies three elements: (i) there is a financial contribution; (ii) such financial contribution is made by a government or any public body within the territory of a Member; and (iii) it confers a benefit on the recipient. In addition, Article 1.2 of the SCM Agreement adds the requirement of “specificity”, meaning that the subsidy measure must be limited to certain enterprises or industries, or a specific group thereof, in order to fall within the scope of the Agreement.<sup>[1]</sup>

Therefore, a measure will only be deemed a “subsidy” if it satisfies all four elements concurrently. First, there is a financial contribution such as the direct transfer of funds (e.g., grants, loans, equity infusions); potential direct transfers of funds or liabilities (e.g. loan guarantees); the foregoing or non-collection of mandatory levies (such as tax credits); the provision of goods or services other than general infrastructure or purchases of goods, contributions to special financing mechanisms; or entrusts or directs a private body to carry out one or more of the aforementioned functions. Second, the financial contribution must be provided or directed by a government or any public body, whether at the central or local level, or by agencies vested with public authority, such as the central bank or tax authorities.

<sup>1</sup> Agreement on Subsidies and Countervailing Measures (SCM Agreement), WTO. [https://www.wto.org/english/docs\\_e/legal\\_e/24-scm.pdf](https://www.wto.org/english/docs_e/legal_e/24-scm.pdf). [accessed: 10.8.2025].

Third, the measure must confer a benefit on the recipient, meaning that the subsidized entity enjoys more favorable conditions than those generally available under normal market circumstances. In US - Large Civil Aircraft (2012), the WTO emphasized that the assessment of “benefit” is based on the actual economic advantage conferred on the recipient, rather than on the cost incurred by the government. Fourth, the subsidy must be “specific” in that it is limited to a particular enterprise, industry, or geographic region, rather than being a generally available measure across the economy. Such specificity may be expressly provided in the legal instruments (*de jure*) or inferred from how the measure is applied (*de facto*).

Under the SCM Agreement, subsidies are classified into three main categories: (i) prohibited subsidies; (ii) actionable subsidies; (iii) non-actionable subsidies (this category has ceased to be in force pursuant to Article 31 of the SCM Agreement).

Prohibited subsidies are regulated under Article 3 of the SCM Agreement and comprise two types: (1) subsidies contingent, in law or fact, whether solely or as one of several other conditions, upon export performance, and (2) subsidies contingent upon the use of domestic over imported goods. Annex I of the SCM Agreement provides a non-exhaustive list of specific forms of export subsidies. When a Member is alleged to maintain a prohibited subsidy, the dispute settlement mechanism under Article 4 applies, allowing the affected Member to request consultations and, if no mutually agreed solution is reached, to initiate proceedings before the WTO. If there is a violation, the subsidizing Member is required to withdraw the measure without delay, failure to comply may result in the imposition of countermeasures.

The second category comprises actionable subsidies under Article 5 of the SCM Agreement. These subsidies are not absolutely prohibited. However, they may still produce adverse effects in international trade, such as causing injury to the domestic industry of another Member (Article 5(a)), nullifying or impairing benefits accruing to another Member under the GATT 1994 (Article 5(b)), or causing serious prejudice to the interests of another Member (Article 6.3).

The third category, non-actionable subsidies, was formerly provided for under Article 8 of the SCM Agreement. It covered subsidies designed to support activities like research and development, assistance to disadvantaged regions, or environmental protection. However, these provisions expired in 2000 and have not been reinstated, leaving a legal gap in safeguarding positive forms of subsidies, such as green subsidies.

Although the SCM Agreement plays a vital role in regulating subsidies in international trade, its current provisions reveal significant limitations when viewed in the context of sustainable development objectives. Specifically, the SCM Agreement was primarily designed to address trade-distorting practices, without fully considering the environmental impacts of subsidy measures or the potential role of subsidies in promoting environmentally friendly goods and services.<sup>[2]</sup> Currently, the SCM Agreement contains no specific exceptions for policies supporting goods with positive environmental and public health externalities, such as renewable energy, clean technologies, or sustainable agricultural products.

## 2 | Sustainability-Oriented Subsidies and Legal Issues under WTO Law

Recent empirical evidence demonstrates that the sustainability implications of government subsidies are no longer marginal, but structural. According to the World Bank (2023), environmentally harmful subsidies, particularly in the fossil fuel, agriculture, and fisheries sectors, consume approximately USD 1.25 trillion annually, equivalent to 8% of global GDP. In the energy sector, these subsidies reduce fossil fuel prices, contributing to air pollution, with an estimated one in five global deaths being linked to the combustion of subsidized low-cost fuels. In agriculture, subsidies contribute to roughly 21% of global deforestation, water quality crises, and up to 26% of total global CO<sub>2</sub> emissions. Meanwhile, in fisheries, over 30% of fish stocks are overexploited, causing economic losses of approximately USD 83 billion per year, while subsidy schemes continue to exacerbate the depletion of these resources.<sup>[3]</sup>

<sup>2</sup> Carolyn Fischer, *Strategic Subsidies for Green Goods*. [https://www.tse-fr.eu/sites/default/files/TSE/documents/conf/energy\\_climat/Papers/fischer.pdf](https://www.tse-fr.eu/sites/default/files/TSE/documents/conf/energy_climat/Papers/fischer.pdf). [accessed: 10.8.2025].

<sup>3</sup> Richard Damania, *Detox Development: Repurposing Environmentally Harmful Subsidies report*, 2024, <https://openknowledge.worldbank.org/server/api/core/bitstreams/61d04aca-1b95-4c06-8199-3c4a423cb7fe/content#page=38.99>. [accessed: 10.8.2025].

These figures indicate several shortcomings in the current subsidy regulations within the sustainability context: (1) the rules do not take into account, or fail to reflect fully, the negative environmental impacts of subsidies; (2) the scope of the SCM Agreement omits many forms of environmentally harmful subsidies; and (3) the current approach remains narrowly focused on the criterion of “trade distortion” without assessing whether a subsidy contributes positively to sustainable development objectives.<sup>[4]</sup> The absence of an explicit legal framework accommodating sustainability-oriented subsidies has made many governments cautious in adopting such measures, even where they are essential for fulfilling international climate and environmental commitments.<sup>[5]</sup> This hesitation not only heightens the risk of trade-environment conflict, but also diminishes the effectiveness of trade policy as a tool to support the global green transition.

Within this context, the concept of “green subsidies” has gained increasing prominence in academic discourse and policy practice since the early 2000s, particularly in the context of energy transitions and climate mitigation. Although “green subsidies” are not expressly defined in the official legal instruments of the WTO, the notion has been well established and evolved considerably in academic discourse and international practice. Scholars, notably Steve Charnovitz, have emphasized that such subsidies involve the allocation of public resources to correct market failures linked to environmental externalities.<sup>[6]</sup> From this perspective, sustainability-oriented subsidies are not arbitrary interventions, but responses to systemic distortions created by markets’ failure to internalize environmental costs and benefits.

As these subsidies have proliferated across both developed and developing economies, their consistency with WTO law, particularly the SCM Agreement, has become increasingly contested. This contestation stems not only from the growing scale and diversity of such measures, but also from the structural design of WTO subsidy disciplines, which were developed

<sup>4</sup> Daniel C. Esty, Elena Cima, *Reshaping WTO Subsidy Rules for a Sustainable Future*, <https://tessforum.org/latest/reshaping-wto-subsidy-rules-for-a-sustainable-future>. [accessed: 10.8.2025].

<sup>5</sup> Steve Charnovitz, *Green Subsidies and the WTO*. [https://scholarship.law.gwu.edu/cgi/viewcontent.cgi?article=2341&context=faculty\\_publications&utm\\_source](https://scholarship.law.gwu.edu/cgi/viewcontent.cgi?article=2341&context=faculty_publications&utm_source). [accessed: 10.8.2025].

<sup>6</sup> Sherzod Shadikhodjaev, “Renewable Energy and Government Support: Time to «Green» the SCM Agreement” *World Trade Review*, No. 3 (2015): 479.

in an era indifferent primarily to environmental externalities and climate policy objectives. To conceptualize this uncertainty, scholars have proposed typologies distinguishing between subsidies that are clearly compatible with WTO rules, those that are explicitly prohibited, and a large intermediate category of measures occupying a legal “grey space.”<sup>[7]</sup>

This grey space encompasses a wide range of contemporary environmental support measures, particularly in the renewable energy and green technology sectors, whose legality cannot be determined *ex ante* with any degree of certainty.<sup>[8]</sup> Although these measures are not explicitly prohibited, they remain vulnerable to legal challenges if proven to cause “serious adverse effects” under Articles 5 and 6 of the SCM Agreement. Furthermore, key elements of subsidy qualification, such as “financial contribution,” “specificity,” “benefit,” and the territorial scope of application still involve legal ambiguities, as they have not been consistently clarified through WTO jurisprudence.

Regarding the element of “serious adverse effects” under Article 6 of the SCM Agreement, the assessment includes three tiers: (i) injury to the domestic industry, (ii) nullification or impairment of benefits, and (iii) serious prejudice. Although each case is evaluated based on specific facts and evidence, certain risks can be anticipated from the design of subsidy policies. Measures that are neutral and do not discriminate between domestic and imported goods or services are generally less likely to be found as causing adverse effects. Conversely, subsidies targeting a specific technology or group of products carry a higher risk. Additionally, the nature of the market also matters that subsidies for domestically consumed electricity are less likely to be challenged, as electricity is rarely traded across borders due to infrastructure constraints; by contrast, subsidies for clean energy equipment, such as solar panels or wind turbines are more likely to be contested, as these products are widely traded and may significantly affect international competition.

Under Article 2 of the SCM Agreement, a subsidy is considered specific where it is limited to certain enterprises, industries, or regions. Although Article 2.1(b) provides a presumption of non-specificity for subsidies based

<sup>7</sup> Steve Charnovitz, *Green Subsidies and the WTO*. [https://scholarship.law.gwu.edu/cgi/viewcontent.cgi?article=2341&context=faculty\\_publications/](https://scholarship.law.gwu.edu/cgi/viewcontent.cgi?article=2341&context=faculty_publications/). [accessed: 10.8.2025].

<sup>8</sup> Luca Rubini, “Ain’t Wastin’ Time No More: Subsidies for Renewable Energy, the SCM Agreement, Policy Space, and Law Reform” *Journal of International Economic Law*, No 2 (2012): 525-579.

on neutral, objective, and transparent eligibility criteria, this presumption may be rebutted under Article 2.1(c) where, in practice, the measure disproportionately benefits a particular sector or group of firms. This framework is particularly relevant to sustainability-oriented subsidies, which often target defined industries, such as solar, wind, or clean energy technologies, in pursuit of environmental and climate objectives. While such targeting may be economically justified, it increases the likelihood that these measures will be characterized as *de facto* specific, thereby exposing them to potential challenge under the SCM Agreement. As a result, the legal treatment of sustainability-oriented subsidies under WTO law is highly context-dependent. Measures pursuing similar environmental objectives may be assessed differently depending on their design features, the sector concerned, market conditions, and the evidentiary record developed in dispute settlement proceedings. This variability reinforces legal uncertainty and highlights the persistent “grey space” within WTO subsidy disciplines. The lack of clear legal criteria for accommodating sustainability-oriented objectives within a trade-distortion-centred framework has resulted in inconsistent and often unpredictable outcomes in both scholarly analysis and WTO dispute settlement practice. While existing typologies assist in identifying the relative legal risks of different subsidy designs, they stop short of addressing the deeper structural misalignment between sustainable development objectives and the current logic of WTO subsidy regulation.

WTO dispute settlement practice further illustrates this ambiguity. Although only a limited number of disputes have directly involved sustainability-oriented subsidies, adjudicative bodies have tended to approach these measures through traditional lenses such as national treatment, benefit, specificity, and trade distortion, often without providing definitive guidance under the SCM Agreement itself. In the two disputes involving Canada (DS412, DS426), the dispute settlement bodies examined whether the FIT and microFIT contracts of the Province of Ontario,<sup>9</sup> designed to promote the development of renewable energy, constituted prohibited subsidies under Article 3 and conferred a “benefit” within the meaning of Article 1.1(b) of the SCM Agreement. However, the Appellate Body did

<sup>9</sup> World Trade Organization, Canada – Certain Measures Affecting the Renewable Energy Generation Sector (Canada – Renewable Energy), WT/DS412/; World Trade Organization, Canada – Measures Relating to the Feed-in Tariff Program (Canada – Feed-In Tariff Program), WT/DS426/R, para 7.216.

not reach a definitive conclusion on whether these measures violated the SCM Agreement, thereby illustrating the ongoing legal uncertainty and controversy surrounding the determination of whether a measure qualifies as a lawful green subsidy.<sup>[10]</sup> Similarly, in the case India – Solar Cells (DS456), the local content requirements were found to be inconsistent with the National Treatment obligation under Article III:4 of the GATT 1994 and Article 2.1 of the TRIMs Agreement. However, the dispute was not examined under the SCM Agreement, further highlighting the lack of clarity in applying the SCM disciplines to environmental measures.

At the same time, the expansion of sustainability-oriented subsidies has raised legitimate concerns regarding the risk of disguised protectionism. Subsidy schemes incorporating local content requirements or export conditions may distort trade flows and disproportionately disadvantage smaller economies with limited fiscal capacity. Developing countries may face restricted market access, declining export opportunities, and increased inequality, constraining both their participation in global trade and their ability to pursue domestic sustainability transitions. These competing concerns between enabling legitimate, sustainability-oriented interventions and preventing protectionist misuse highlight the inadequacy of a subsidy regime that relies exclusively on a trade-distortion-centered analysis.

In general, these developments point to a persistent structural “grey space” in WTO subsidy law. Sustainability-oriented subsidies are neither clearly permitted nor categorically prohibited under the SCM Agreement, resulting in legal uncertainty that may deter governments from adopting environmentally necessary measures while failing to discipline environmentally harmful support effectively. In a context marked by escalating climate risks and the growing need to mobilize investment for sustainable development, this ambiguity has become increasingly difficult to sustain. The absence of clear legal guidance weakens Members’ incentives to implement environmental subsidy programs, as concerns over litigation risk and exposure to dispute settlement continue to shape policy choices. Clarifying the treatment of sustainability-oriented subsidies, whether through interpretative development or negotiated reform, has therefore become essential to enhancing coherence, predictability, and legitimacy within

<sup>10</sup> World Trade Organization, Canada – Renewable Energy/Canada – Feed-In Tariff Program, WT/DS412/R; WT/DS426/R, part VIII.

the multilateral trading system.<sup>[11]</sup> More explicit rules could help define permissible forms of support, establish appropriate criteria for exemptions, and reduce the likelihood of disputes, thereby strengthening transparency and consistency in the application of WTO subsidy disciplines.

### 3

## Reforming the WTO Subsidies Disciplines for Sustainable Development

The subsidy rules under the SCM Agreement make no distinction between subsidies for the renewable energy sector and those for fossil fuels.<sup>[12]</sup> As a result, many renewable energy subsidies have been challenged before the WTO, as in Canada – Renewable Energy, Canada – Fed-in Tariff Program, and India – Certain Measures Relating to Solar Cells and Solar Modules. By contrast, fossil fuel subsidies amounted to USD 1.5 trillion in 2022<sup>[13]</sup> and are widely recognized as having harmful effects on both the environment and the global economy. However, no WTO dispute has ever been initiated concerning fossil fuel subsidies. One major reason for this imbalance lies in the “one-size-fits-all” approach of the SCM Agreement, under which all subsidies are assessed against the same criteria, regardless of whether their objectives are environmentally beneficial. While this approach constrains regulatory space for subsidies pursuing sustainability and climate-related objectives, it simultaneously fails to discipline large-scale subsidies that entrench carbon-intensive production and consumption. At the same time, the absence of differentiation based on policy objectives creates the risk of abuse, as governments may invoke environmental justifications to shield

<sup>11</sup> Sophie Wenzlau, “Renewable Energy Subsidies and the WTO, 340, 341. <https://environs.law.ucdavis.edu/sites/g/files/dgvnsk15356/files/media/documents/ENV-41-2-articles-Wenzlau.pdf#:~:text=As%20of%20January%202018%2C%20WTO,an%20hampers%20international%20efforts%20to>. [accessed: 10.8.2025].

<sup>12</sup> Elena Cima, “Caught between WTO Rules and Climate Change: The Economic Rationale of «Green» Subsidies,” [in:] *Environmental Law and Economics*, ed. Klaus Mathis, Bruce R. Huber (Cham: Springer 2017), 375-397.

<sup>13</sup> Hannah Ritchie, “How Much does the World Subsidize Fossil Fuels?” *Our World in Data*. <https://ourworldindata.org/how-much-subsidies-fossil-fuels>. [accessed: 10.8.2025].

trade-distorting measures from scrutiny, giving rise to concerns about so-called green protectionism. Such practices erode confidence in the multilateral trading system and disproportionately disadvantage smaller or less developed economies. Therefore, it is necessary to differentiate subsidies based on their objectives, since the purpose of a subsidy directly affects whether the measure should be considered to cause adverse effects on international trade.<sup>[14]</sup>

To address this issue, two possible approaches have been proposed: (i) introducing explicit legal space for sustainability-oriented subsidies within the existing WTO framework, especially SCM Agreement; or (ii) revising the SCM Agreement to reclassify subsidies into four categories, based on the degree of trade distortion and their actual contribution to sustainable development.

### 3.1. Legal Pathways for Integrating Sustainability into WTO Subsidy Rules

Within the WTO, Members may seek to accommodate sustainability-oriented subsidies through interpretative and institutional mechanisms without immediate treaty amendment. Two legal pathways are commonly identified in this regard. First, Members may rely on the application of Article XX of the GATT as a general exception capable of justifying certain subsidies pursued for environmental or climate-related objectives. Second, Members may advocate for the reinstatement or redesign of Article 8 of the SCM Agreement, which previously recognized a category of non-actionable subsidies serving legitimate public policy purposes.

#### 3.1.1. Application of Article XX Flexibilities

The possibility of invoking the general exceptions under Article XX of the GATT for green subsidies remains a contentious issue. However, there is no established legal basis for applying Article XX to green subsidies that are inconsistent with the SCM Agreement. Footnote 56 to Article 32.1 of the SCM Agreement does not expressly exclude the application of Article XX, yet

<sup>14</sup> Cima, "Caught between WTO Rules and Climate Change: The Economic Rationale of «Green» Subsidies," 391.

Article XX has so far been understood as applicable only to countervailing measures, not to the use of subsidies themselves.<sup>[15]</sup> Within the WTO framework, the Agreement on Trade-Related Investment Measures, the Agreement on the Application of Sanitary and Phytosanitary Measures, and the Agreement on Preshipment Inspection explicitly refer to Article XX of the GATT as an exception. By contrast, the SCM Agreement does not provide for the invocation of Article XX. Furthermore, Article 8 of the SCM Agreement, which previously set out non-actionable subsidies, effectively functioned as an exception analogous to Article XX of the GATT. At that time, Article 8 would not have been necessary if Article XX had been directly applicable to the SCM Agreement.<sup>[16]</sup> Although the provisions on non-actionable subsidies have lapsed, this does not alter the conclusion regarding the inapplicability of Article XX to the SCM Agreement.

Accordingly, bridging this gap by extending the applicability of Article XX of the GATT to measures inconsistent with the SCM Agreement is essential. This approach could create a new pathway for recognizing subsidies that support sustainable development, particularly in the renewable energy sector. If the exceptions under Article XX were applied to subsidies under the SCM Agreement, measures consistent with subparagraph (g) of Article XX, relating to the conservation of exhaustible natural resources, could be justified. This would contribute to reconciling the objective of free trade with the urgent environmental policy needs of all WTO Members.

### 3.1.2. Restoration of Article 8 of the SCM Agreement

Article 8 of the SCM Agreement entered into force in 1995, expired in 2000. In particular, Article 8.2(c) of the SCM Agreement provided as follows:

The following subsidies shall be considered non-actionable: [...] (c) assistance to promote the adaptation of existing facilities to new environmental requirements imposed by law and/or regulations which result in greater constraints and financial burden on firms [...]

<sup>15</sup> Shadikhodjaev, “Renewable Energy and Government Support,” 499.

<sup>16</sup> “GATT Article XX as an Exception to the SCM Agreement” *International Economic Law and Policy Blog* <https://ielp.worldtradelaw.net/2012/05/gatt-article-xx-as-an-exception-to-the-scm-agreement.html>. [accessed: 10.8.2025].

Accordingly, Article 8.2(c) of the SCM Agreement expressly recognized an exception for subsidies aimed at encouraging enterprises to comply with environmental requirements and move towards sustainable development. Reinstating Article 8 could restore essential policy space for WTO Members to implement subsidies that facilitate clean energy development and environmental compliance.

However, the simple revival of Article 8 of the SCM Agreement would not provide sufficient legal scope for green subsidies. Article 8.2(c) applies only to “existing facilities”, namely enterprises already in operation that require assistance to adapt to new environmental regulations. It does not extend to newly established enterprises. This creates a regulatory gap with respect to subsidies aimed at promoting the green transition. Therefore, for Article 8 to be effectively reinstated in today’s context, its scope would need to be expanded beyond adaptation support to also cover subsidies that incentivize new investment and the development of green technologies.

Between the two approaches discussed above, reinstating and expanding Article 8 of the SCM Agreement would be more practical. The reason is that Article XX of the GATT was designed to apply to trade-restrictive measures and is structurally and purposively ill-suited to regulate subsidies. By contrast, expanding Article 8 would allow for the establishment of a dedicated framework more consistent with the specific characteristics and nature of green subsidies, while also limiting the risk of abuse through transparent criteria and clearly defined policy objectives.<sup>[17]</sup>

### 3.2. Reclassification of WTO Subsidies Based on Trade Distortion and Sustainability Objectives

At present, under the SCM Agreement, the remaining effective subsidies are (i) prohibited subsidies; and (ii) actionable subsidies. This classification focuses primarily on trade effects, without fully reflecting considerations of environmental protection and sustainable development. Nowadays, subsidy rules need to take into account whether a measure promotes or undermines sustainability. Subsidies that advance sustainable development

<sup>17</sup> Jennifer Hillman, Inu Manak, *Council Special Report: Rethinking International Rules on Subsidies*, <https://www.cfr.org/event/council-special-report-rethinking-international-rules-subsidies>. [accessed: 10.8.2025].

should be encouraged, while those that hinder it should be restricted. However, if sustainability impact alone were used as the standard, Members might exploit this rule in ways that produce negative effects on international trade. Therefore, subsidies should be assessed on the basis of both their environmental impact and the proportionality of their costs and benefits, in order to distinguish between “allowed” subsidies and “harmful” subsidies. Such benefit assessments could be entrusted to expert panels in economics and sustainable development to determine whether the trade-distorting effect of a subsidy is outweighed by its positive contribution to sustainability.<sup>[18]</sup>

Based on these two criteria (i) environmental impact and (ii) the degree of trade distortion, the classification framework of subsidies under the SCM Agreement could be divided into four categories as follows.

**Table 1: Proposed classification of subsidies based on environmental impact and degree of trade distortion**

|                               | <b>More positive sustainability impacts</b>                      | <b>More negative sustainability impacts</b>                     |
|-------------------------------|--|---|
| <b>Less trade distortions</b> | GREEN BOX<br>Allowed   | RED BOX<br>Rebuttable presumption of inconsistency with WTO law |
| <b>More trade distortions</b> | YELLOW BOX<br>Rebuttable presumption of consistency with WTO law | DOUBLE RED BOX<br>Prohibited – Obligation to phase out          |

Source: Daniel C. Esty, Elena Cima, *Reshaping WTO Subsidy Rules for a Sustainable Future*.  
<https://tessforum.org/latest/reshaping-wto-subsidy-rules-for-a-sustainable-future>.

The first group is the “Green Box”, which includes subsidies that promote sustainable development while causing only minimal trade distortion. These subsidies are always deemed consistent with WTO law and are not subject to countervailing measures. The second group is the “Yellow Box”, which applies to subsidies that deliver sustainability benefits but at the same time cause significant trade disruption. This group is allowed under WTO rules if it is transparency. It must also show strong evidence of positive environmental impact. It must keep a fair balance between environmental benefits and trade effects and does not eliminate competition

<sup>18</sup> Remaking Trade Project, *Villars Framework for a Sustainable Global Trade System*, version 2.0, 2024 <https://remakingtradeproject.org/villars-framework>. [accessed: 10.8.2025].

or reinforce market dominance. The third group is the “Red Box,” covering subsidies that negatively affect sustainable development, but cause only limited trade distortion. These subsidies are considered inconsistent with the SCM Agreement unless the Member can demonstrate a legitimate and specific policy objective. The last group is the “Double Red Box,” which consists of subsidies that both undermine sustainable development and significantly distort trade. Such subsidies are strictly prohibited, must be terminated within a short timeframe, and are subject to countervailing measures.

## 4 | Conclusion

The current SCM Agreement does not adequately integrate environmental objectives into subsidy rules and fails to provide sufficient policy space for sustainable-oriented subsidies, which are widely regarded as crucial instruments in the transition toward sustainable development. This legal gap not only creates uncertainty for governments seeking to implement legitimate environmental measures, but also increases the risk of green protectionism, where subsidies are used as disguised industrial policy to shelter domestic producers and distort trade flows. To address these concerns, WTO Members can consider two reforms: (i) restoring the validity of Article 8 of the SCM Agreement to re-establish the category of “non-actionable subsidies” for measures aimed at environmental protection and sustainable development; or (ii) creating new subsidy categories based on their degree of trade distortion and their actual contribution to sustainability objectives. Both approaches seek to ensure a balanced relationship between trade obligations and the right to make environmental policies under WTO legal framework.

## Bibliography

Bacchus James, "Sustainable Business Practices" *Harvard Business Review*. <https://hbr.org/2012/11/the-case-for-clean-subsidies>.

Brian Lips, *The Past, Present, and Future of Federal Tax Credits for Renewable Energy*. NC Clean Energy Technology Center. <https://nccleantech.ncsu.edu/2024/11/19/the-past-present-and-future-of-federal-tax-credits-for-renewable-energy/>.

Charnovitz Steve, *Green Subsidies and the WTO*. [https://scholarship.law.gwu.edu/cgi/viewcontent.cgi?article=2341&context=faculty\\_publications](https://scholarship.law.gwu.edu/cgi/viewcontent.cgi?article=2341&context=faculty_publications).

CIIS, "The Significance of Green Subsidies for the Future of Climate and Trade" *International Economic Integration Portal*, 17 March 2023. <https://www.hoinhap.org.vn/phan-tich-binh-luan/hoi-nhap-kinh-te-quoc-te/44117-y-nghia-cua-tro-cap-xanh-doi-voi-tuong-lai-cua-khi-hau-va-thuong-mai.html#:~:text=L%C3%A0o%20t%E1%BB%95%20ch%E1%BB%A9c%20ph%C3%A1t%20th%E1%BA%A3i,c%C3%B4ng%20b%E1%BB%91%20v%C3%A0o%20n%C4%83m%202022>.

Cima Elena, "Caught between WTO Rules and Climate Change: The Economic Rationale of «Green» Subsidies," [in:] *Environmental Law and Economics*, ed. Klaus Mathis, Bruce R. Huber. 379-404. Cham: Springer 2017.

Couture Toby D., Karlynn Cory, Claire Kreycik, Emily Williams, *A Policymaker's Guide to Feed-in Tariff Policy Design*. <https://docs.nrel.gov/docs/fy10osti/44849.pdf#page=1.00&gsr=0>.

Damania Richard, *Detox Development: Repurposing Environmentally Harmful Subsidies report*, 2024. <https://openknowledge.worldbank.org/server/api/core/bitstreams/61d04aca-1b95-4c06-8199-3c4a423cb7fe/content#page=38.99>.

Daniel C. Esty, Elena Cima, *Reshaping WTO Subsidy Rules for a Sustainable Future*. <https://tessforum.org/latest/reshaping-wto-subsidy-rules-for-a-sustainable-future>.

Fischer Carolyn, *Strategic Subsidies for Green Goods*. [https://www.tse-fr.eu/sites/default/files/TSE/documents/conf/energy\\_climat/Papers/fischer.pdf](https://www.tse-fr.eu/sites/default/files/TSE/documents/conf/energy_climat/Papers/fischer.pdf).

„GATT Article XX as an Exception to the SCM Agreement” *International Economic Law and Policy Blog*. <https://ielp.worldtradelaw.net/2012/05/gatt-article-xx-as-an-exception-to-the-scm-agreement.html>.

*Greening Regional Trade Agreements – Subsidies Related to Energy and Environmental Goods*. (Paris: OECD Publishing, 2014). <https://www.oecd-ilibrary.org/docserver/7e1fe8ed-en.pdf?expires=1721573851&id=id&accname=guest&checksum=7C9B57A151D1DABDF96463076287B938>.

Jennifer Hillman, Inu Manak, *Council Special Report: Rethinking International Rules on Subsidies*. <https://www.cfr.org/event/council-special-report-rethinking-international-rules-subsidies>.

Luca Rubini, "Ain't Wastin' Time No More: Subsidies for Renewable Energy, the SCM Agreement, Policy Space, and Law Reform" *Journal of International Economic Law*, No. 2 (2012): 525-579.

María Victoria Lottici, Carlos Galperin, "«Green Trade Protectionism»: An Analysis of Three New Issues that Affect Developing Countries, *Chinese Journal of Urban and Environmental Studies* Vol. 2, No. 2 (2014): 1450016. [https://www.worldscientific.com/doi/pdf/10.1142/S234574811450016X?srslid=AfmBOoqUCpWqM\\_Jb\\_4j5XYdPrOQpvjGIHtslT47e5d6oCoob9KXtGWDC](https://www.worldscientific.com/doi/pdf/10.1142/S234574811450016X?srslid=AfmBOoqUCpWqM_Jb_4j5XYdPrOQpvjGIHtslT47e5d6oCoob9KXtGWDC).

Matt Baumgurtel, Adriaan van der Merwe, Minji Kim, Ollie Chang, *China's 2025 Energy Law and Implications for Australian Renewable Supply Chains*. <https://hamiltonlocke.com.au/chinas-2025-energy-law-and-implications-for-australian-renewable-supply-chains/#:~:text=China's%20first%20comprehensive%20energy%20law,an%20drive%20a%20green%20transition>.

Milano Finanza, "State of the Union 2023 Address" *Milano Finanza*, 2023. [https://www.milanofinanza.it/news/stato-dell-unione-2023-202309121943377047?refresh\\_cens](https://www.milanofinanza.it/news/stato-dell-unione-2023-202309121943377047?refresh_cens).

Remaking Trade Project, *Villars Framework for a Sustainable Global Trade System*, version 2.0, 2024. <https://remakingtradeproject.org/villars-framework>.

Ritchie Hannah, "How Much does the World Subsidize Fossil Fuels?" *Our World in Data*, <https://ourworldindata.org/how-much-subsidies-fossil-fuels>.

Shadikhodjaev Sherzod, "Renewable Energy and Government Support: Time to «Green» the SCM Agreement" *World Trade Review*, No. 3 (2015).

Signoret Jose, Milla Cieszkowsky, "To Tackle Climate Change, Governments Increasingly Turn to Green Subsidies" *World Bank Blogs*. [https://blogs.worldbank.org/en/trade/to-tackle-climate-change--governments-increasingly-turn-to-green?cid=ECR\\_LI\\_worldbank\\_EN\\_EXT\\_profilesubscribe](https://blogs.worldbank.org/en/trade/to-tackle-climate-change--governments-increasingly-turn-to-green?cid=ECR_LI_worldbank_EN_EXT_profilesubscribe).

Van den Bossche Peter, Nguyễn Văn Tuấn, *Cẩm nang giới thiệu pháp luật của Tổ chức Thương mại Thế giới (Bilingual Vietnamese-English)* (Hanoi: National Political Publishing House, 2009).

Van den Bossche Peter, Werner Zdouc. *The Law and Policy of the World Trade Organization*, 4<sup>th</sup> ed. (Cambridge: Cambridge University Press, 2017).

Wenzlau Sophie, *Renewable Energy Subsidies and the WTO*. <https://enivrons.law.ucdavis.edu/sites/g/files/dgvnsk15356/files/media/documents/ENV-41-2-articles-Wenzlau.pdf#:~:text=As%20of%20January%202018%2C%20WTO,an%20hampers%20international%20efforts%20to>

World Trade Organization, Agreement on Subsidies and Countervailing Measures (SCM Agreement). [https://www.wto.org/english/docs\\_e/legal\\_e/24-scm.pdf](https://www.wto.org/english/docs_e/legal_e/24-scm.pdf).

World Trade Organization, Canada – Certain Measures Affecting the Renewable Energy Generation Sector (Canada – Renewable Energy). WT/DS412/R.

World Trade Organization, Canada – Measures Relating to the Feed-in Tariff Program (Canada – Feed-In Tariff Program). WT/DS426/R.

World Trade Organization, Canada – Renewable Energy/Canada – Feed-In Tariff Program. WT/DS412/R; WT/DS426/R, part VIII.

World Trade Organization, Disputes by Agreement. [https://www.wto.org/english/tratop\\_e/dispu\\_e/dispu\\_agreements\\_index\\_e.html](https://www.wto.org/english/tratop_e/dispu_e/dispu_agreements_index_e.html).



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