

Tackling Fossil Fuel Subsidies Through International Trade Agreements: Taking Stock, Looking Forward

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Fossil fuel subsidies undercut the international community's Sustainable Development Goals and climate change objectives in many ways. Estimated at several hundred billion dollars per year, such subsidies also affect fossil fuel prices, and can therefore have distorting impacts on trade and investment. Given its central role in disciplining trade-distorting subsidies across sectors, the World Trade Organization (WTO) is an obvious candidate for advancing fossil fuel subsidy reform internationally. However, its engagement on this topic has been limited. While a growing body of disputes on renewable energy support measures have been brought before the WTO, Members have yet to initiate legal proceedings against subsidies for oil, coal, or gas. This Article highlights the range of explanations for this puzzling discrepancy. The Article analyses the compatibility of four selected fossil fuel support measures in the Group of 20 countries with the WTO's 1994 Agreement on Subsidies and Countervailing Measures. In doing so, it identifies some of the key legal questions and challenges faced at the WTO. Specifically, the findings highlight the difficulty of litigating fossil fuel consumption subsidies. In light of these shortcomings, the Article identifies five complementary avenues for reform of international trade policy to enable countries to better address fossil fuel subsidies: (i) promoting technical assistance and capacity building; (ii) enhancing transparency; (iii) pledging subsidy reform and ensuring credible follow-up through reporting and review; (iv) adopting a political declaration; and (v) expanding the category of prohibited subsidies. Some of these options could be pioneered by one or several WTO Members, or through regional, megaregional and plurilateral trade agreements. The adoption of the 2030

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Agenda and the Paris Agreement represent a call for more decisive action on climate change and sustainable development, providing a clear mandate for deeper engagement of the international trade community in this space.

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I. INTRODUCTION

Fossil fuel subsidy reform is attracting increasing attention as a way to bring about significant sustainable development benefits and help to meet the objectives of both the Paris Agreement on climate change¹ and the 2030 Agenda for Sustainable Development.²

From the perspective of climate change mitigation, such subsidies are a major impediment to a sustainable energy transition: they artificially enhance the competitiveness of fossil fuels, divert investment from renewables and energy efficiency, and lock in carbon-intensive energy systems for the coming decades.³ It has been estimated that greenhouse gas emissions could be reduced by about eleven percent on average by 2020 if fossil fuel subsidy reform were to be implemented in a sample of twenty countries, rising to eighteen percent if thirty percent of the savings were reinvested into renewable energy and energy efficiency.⁴ From a broader sustainable development perspective, fossil fuel subsidies divert investment from pressing development needs, such as healthcare and education.⁵ Moreover, there is a growing understanding that such subsidies tend to be regressive in nature, undercutting arguments that they are a necessary tool for poverty alleviation.⁶ In recognition of the various advantages of subsidy reform, the Group of 20 (G20) committed in September 2009 to “phase out and rationalize over the medium term inefficient fossil fuel subsidies,”⁷ a pledge

1. Paris Agreement on Climate Change, art. 2(1), Dec. 12, 2015, T.I.A.S. No. 16-1104.

2. G.A. Res. 70/1, Transforming Our World: the 2030 Agenda for Sustainable Development (Sept. 25, 2015) [hereinafter ‘Transforming Our World’].

3. Henok Birhanu Asmelash, *Falling Oil Prices and Sustainable Energy Transition: Towards a Multilateral Agreement on Fossil-Fuel Subsidies*, UNITED NATIONS UNIV. WIDER WORKING PAPER 2016/13 4 (Mar. 2016).

4. LAURA MERRILL ET AL., TACKLING FOSSIL FUEL SUBSIDIES AND CLIMATE CHANGE: LEVELING THE ENERGY PLAYING FIELD 49 (2015). The study included Algeria, Bangladesh, China, Egypt, Ghana, India, Indonesia, Iran, Iraq, Morocco, Nigeria, Pakistan, Russia, Saudi Arabia, Sri Lanka, Tunisia, United Arab Emirates, U.S., Venezuela, and Vietnam. Another study suggested that subsidy removal would lead to a smaller reduction of “0.5–2 gigatons of carbon dioxide or 1%–4% by 2030”, about a quarter of the total emission reductions planned (4–8 gigatons) under the Paris Agreement’s first round of nationally determined contributions. Jessica Jewell et al., *Limited Emission Reductions from Fuel Subsidy Removal Except in Energy-Exporting Regions*, 554 NATURE 229, 231 (2018).

5. ANDREAS BAUER ET AL., INT’L MONETARY FUND, ENERGY SUBSIDY REFORM: LESSONS AND IMPLICATIONS, 15 (Benedict Clements et al. eds., 2013) (“Some countries spend more on energy subsidies than on public health and education.”).

6. David Coady et al., *The Unequal Benefits of Fuel Subsidies Revisited: Evidence for Developing Countries*, (Int’l Monetary Fund, Working Paper No. 15, 250) (“The analysis confirms that a very large share of benefits from fuel price subsidies goes to high-income households, further reinforcing existing income inequalities.”).

7. Group of 20 (G20), *G20 Leaders Statement: The Pittsburgh Summit* ¶ 24 (Sept. 24–25, 2009), <http://www.g20.utoronto.ca/2009/2009communiqué0925.html>.

subsequently echoed by the twenty-one economies of the Asia Pacific Economic Cooperation (APEC) group.⁸

Owing to its wide membership, its central role in disciplining trade-distorting subsidies across economic sectors, and its well-established dispute settlement system, the World Trade Organization (WTO) would seem well suited to take the fossil fuel subsidy reform agenda forward. To date, however, the Organization's involvement in this issue has been limited. In fact, while various disputes relating to renewable energy subsidies have been launched at the WTO over the past decade, no fossil fuel subsidies have been challenged thus far.⁹

Arguably, however, the topic falls squarely in the Organization's mandate. By affecting fossil fuel prices, subsidies can have distorting impacts on trade and investment.¹⁰ Moreover, the WTO was established with a view to ensure economic progress is achieved in accordance with the objective of sustainable development.¹¹ The 2030 Agenda recognizes that the achievement of sustainable consumption and production patterns (Sustainable Development Goal (SDG) 12) will require "rationaliz[ation of] inefficient fossil-fuel subsidies that encourage wasteful consumption including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts."¹² It thus strengthens the rationale for addressing fossil fuel subsidies within the WTO.

Although parallels should not be overstated, it is also worth noting the WTO's engagement on reducing subsidies for environmentally harmful fisheries as part of the Doha Development Round.¹³ Observing the discrepancy in how the two subsidy types were treated by the Organization,

8. Asia-Pacific Economic Cooperation, *2009 Leaders' Declaration* (Nov. 14, 2009), http://www.apec.org/Meeting-Papers/Leaders-Declarations/2009/2009_aelm.aspx.

9. Susanne Drooge et al., *The Trade System and Climate Action: Ways Forward under the Paris Agreement*, 13 S.C. J. INT'L L. & BUS. 195, 219 (2017).

10. See generally Jean-Marc Burniaux et al., *The Trade Effects of Phasing Out Fossil-Fuel Consumption Subsidies* (OECD Trade and Environment Working Papers, Paper No. 2011/05, 2011).

11. Marrakesh Agreement Establishing the World Trade Organization Annex 1, preamble Apr. 15, 1994, 1867 U.N.T.S. 154 [hereinafter Agreement Establishing WTO].

12. Transforming Our World, *supra* note 2, Goal 12.c.

13. For a sample of authors that have drawn this parallel (including the limitations thereof), see Sadeq Z. Bigdeli, *Will the "Friends of Climate" Emerge in the WTO? The Prospects of Applying the "Fisheries Subsidies" Model to Energy Subsidies*, 2 CARBON & CLIMATE L. REV. 11 (2008); Margaret A. Young, *Energy Transitions and Trade Law: Lessons from the Reform of Fisheries Subsidies*, 17 INT'L ENVTL. AGREEMENTS: POL., L. & ECON. 371; Heloisa Pereira, *How the WTO Can Help Tackle Climate Change through Fossil Fuel Subsidy Reform: Lessons from the Fisheries Negotiations*, INTERNATIONAL CENTRE FOR TRADE AND SUSTAINABLE DEVELOPMENT (ICTSD) (Dec. 2017).

the then-WTO Director-General Pascal Lamy characterized the absence of fossil fuel subsidies from the WTO agenda as a “missed opportunity.”¹⁴

Against this backdrop, this Article aims to clarify why the WTO’s engagement on fossil fuel subsidy reform has thus far been limited and to explore potential avenues for enhancing this involvement in future. This Article seeks to go beyond theoretical considerations by assessing whether specific fossil fuel support measures are compatible with the WTO’s rules. The findings of this practical exercise inform our suggestions for WTO reform.

This Article proceeds as follows. Part II provides an overview of the size and scope of fossil fuel subsidies, while acknowledging conceptual and definitional challenges. Part III offers an introduction to WTO subsidies law. Although the 1994 General Agreement on Tariffs and Trade (GATT)¹⁵ and Agreement on Trade-Related Investment Measures (TRIMs Agreement)¹⁶ are highlighted in this context, particular attention is paid to the WTO’s dedicated subsidies treaty, the Agreement on Subsidies and Countervailing Measures (ASCM).¹⁷ Part IV then addresses the critical question of why the WTO’s case law thus far has focused on renewable energy subsidies, while fossil fuel subsidies have evaded litigation. It discusses both political and legal factors and concludes with an appeal to avoid treating “fossil fuel subsidies” as a single entity, as there is much to be gained from considering their WTO legality on a case-by-case basis. Part V offers a blueprint for such an approach by subjecting four fossil fuel support measures in G20 countries to an initial test of their ASCM compatibility. In doing so, this Part also identifies some of the key challenges and questions that such an analysis must overcome, making a novel contribution to the literature on fossil fuel subsidies and the WTO, which has so far been primarily theoretical. It concludes that there is much room for further exploration of fossil fuel subsidy litigation, but data availability remains a key challenge. Based on the findings of the previous sections, Part VI discusses options for reform of WTO law and practices towards a stronger engagement with fossil fuel subsidies. Some of these options appear relatively feasible in the current political context, while others are more

14. Pascal Lamy, Director-General, World Trade Org., Energy Policy and the WTO, Speech Delivered to the Workshop on the Role of Intergovernmental Agreements in Energy Policy (Apr. 29, 2013), https://www.wto.org/english/news_e/sppl_e/sppl279_e.htm.

15. General Agreement on Tariffs and Trade, Oct. 30, 1947, 61 Stat. A-11, 55 U.N.T.S. 194, as incorporated in General Agreement on Tariffs and Trade 1994, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex IA, 1867 U.N.T.S. 187 [hereinafter GATT].

16. Agreement on Trade-Related Investment Measures, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, 1868 U.N.T.S. 186 [hereinafter TRIMs].

17. Agreement on Subsidies and Countervailing Measures, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 U.N.T.S. 14 [hereinafter ASCM].

controversial and involve changes to existing WTO law. Part VII concludes the Article.

II. DEFINING AND MEASURING FOSSIL FUEL SUBSIDIES

The term “subsidy” has no universal definition.¹⁸ Nevertheless, some general observations about fossil fuel subsidies can be offered. At the most basic level, they can be described as government interventions that support either consumers or producers of fossil fuels.¹⁹ Consumer subsidies reduce the cost of fossil fuels for consumers and are typically found in developing countries.²⁰ Producer subsidies benefit the producers of fossil fuels by raising the price or lowering production costs.²¹ These measures are present in a wide range of countries, including both developed and developing countries.²² Given the varying features of both subsidy types, the consumer/producer distinction can have both policy and political implications.²³ As shown in Parts IV and V, *infra*, it may also lead to disparate treatment under WTO law.

The most comprehensive studies on the size of global fossil fuel subsidies have been published by the International Energy Agency (IEA), the International Monetary Fund (IMF) and the Organisation for Economic Co-operation and Development (OECD). Estimates vary widely, however, because of different valuation methods used, countries studied, and different interpretations of what constitutes a “subsidy” in the first place.²⁴ The IEA estimated global fossil-fuel consumption subsidies at just over US\$300 billion in 2017,²⁵ and the OECD estimates subsidies to consumption and production, in the forty-three countries it covers, of

18. WORLD TRADE ORGANIZATION (WTO), WORLD TRADE REPORT 2006: EXPLORING THE LINKS BETWEEN SUBSIDIES, TRADE AND THE WTO 47 (2006).

19. Thijs Van de Graaf & Harro van Asselt, *Introduction to the Special Issue: Energy Subsidies at the Intersection of Climate, Energy, and Trade Governance*, 17 INT'L ENVTL. AGREEMENTS: POL., L. & ECON. 313, 317 (2017).

20. *See, e.g.*, Toshiyuki Shirai & Zakia Adam, *Commentary: Fossil-Fuel Consumption Subsidies are Down, but not Out*, INT'L ENERGY AGENCY (Dec. 20, 2017).

21. *See, e.g.*, Elizabeth Bast et al., *Empty Promises: G20 Subsidies to Oil, Gas and Coal Production*, OVERSEAS DEVELOPMENT INSTITUTE AND OIL CHANGE INTERNATIONAL 58 (Nov. 2015) (estimating subsidies to fossil fuel production at \$444 billion per year in the G20 countries).

22. *Id.* at 41 (showing fossil fuel production subsidies in both developed and developing countries part of the G20).

23. *See, e.g.*, Vernon Rive, *Fossil Fuel Subsidy Reform: A New Zealand Perspective on the International Law Framework*, 27 N.Z.U. L. REV. 73, 94 (2015) (examining how New Zealand's efforts to advance fossil fuel subsidy reform initially focused primarily on consumption subsidies).

24. For a discussion of the use of different definitions of fossil fuel subsidies and their implications, *see generally* Jakob Skovgaard, *The Devil Lies in the Definition: Competing Approaches to Fossil Fuel Subsidies at the IMF and the OECD*, 17 INT'L ENVTL. AGREEMENTS: POL., L. & ECON. 341 (2017); and Doug Koplow, *Defining and Measuring Fossil Fuel Subsidies*, in THE POLITICS OF FOSSIL FUEL SUBSIDIES AND THEIR REFORM (Jakob Skovgaard & Harro van Asselt eds., 2018).

25. INT'L ENERGY AGENCY, WORLD ENERGY OUTLOOK 2018 55 (2018).

US\$150–250 billion per annum over the 2010–2016 period.²⁶ The IMF includes selected consumption-related externalities — notably due to greenhouse gas emissions — in its definition of “post-tax subsidies,” which brings its estimate of global fossil-fuel subsidies to US\$5.3 trillion in 2015.²⁷ The IEA, which has provided estimates of global fossil-fuel consumption subsidies for more than a decade, calculates them using a “price-gap” approach. This focuses on the gap between reference prices (the full cost of supply, or the free market prices) and the prices being charged to consumers.²⁸ While this method is attractive in its simplicity, identifying an appropriate reference price poses significant challenges.²⁹ In addition, the approach overlooks government interventions that do not result in a difference in observed energy prices, but that may nevertheless benefit fossil producers or consumers.³⁰ The IEA estimates exclude producer subsidies. These subsidies add up to around at least another US\$70 billion per year in the G20 countries.³¹

In an effort to complement the IEA’s estimates, the OECD calculates subsidies that cannot be measured by price gaps. This involves constructing an “inventory” of individual policies that constitute government support. Support is defined as “a result of a government action that confers an advantage on consumers or producers [of energy], in order to supplement their income or lower their costs.”³² With its emphasis on granting an advantage, the OECD’s subsidy definition follows the logic of the ASCM, where the presence of a subsidy requires proof of a “benefit” to the recipient.³³ The OECD estimates tally the value of more than 1,000 such policies in thirty-five member countries, as well as eight partner economies (Argentina, Brazil, China, Colombia, India, Indonesia, Russia and South Africa).³⁴ Though data-intensive, this approach has the advantage of covering a broader range of subsidies, including those to producers.

The IMF has published estimates of fossil fuel subsidy levels both “pre-tax” and “post-tax.” The former, which combines estimates of fossil-fuel

26. ORGANIZATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT (OECD), OECD COMPANION TO THE INVENTORY OF SUPPORT MEASURES FOR FOSSIL FUELS 2018 3 (2018) [hereinafter OECD Companion].

27. David Coady et al., *How Large are Global Energy Subsidies?*, INT’L MONETARY FUND 18 (2015). The major difference between the pre-tax and post-tax subsidies is due to the impacts from coal, which “reflects the substantial undercharging for its environmental impacts.” *Id.* at 19.

28. INT’L ENERGY AGENCY, WORLD ENERGY OUTLOOK 2014 318 (2014).

29. Doug Koplow, *Measuring Energy Subsidies Using the Price-Gap Approach: What Does It Leave Out?*, INT’L INST. FOR SUSTAINABLE DEV. 6 (2009).

30. *Id.* at 2.

31. Bast et al., *supra* note 21, at 40–41 (counting only national subsidies, and excluding investments by state-owned enterprises and public finance from government-owned financial institutions).

32. OECD, ENVIRONMENTALLY HARMFUL SUBSIDIES: POLICY ISSUES AND CHALLENGES 191 (2005).

33. ASCM, *supra* note 17, Art 1.1. *See infra* Part III.B.1.

34. OECD Companion, *supra* note 26, at 9.

consumption subsidies (using the price-gap approach) and the OECD's estimates of producer subsidies, reached US\$333 billion in 2015,³⁵ an amount that fits with the IEA/OECD range. The latter, at US\$5.3 trillion, is of another order of magnitude. The difference can be explained by the fact that — controversially — the IMF's post-tax approach includes the monetized value externalities associated with the use of fossil fuels, such as those related to climate change and air pollution. It also includes the monetized value of externalities related to driving, such as traffic congestion, accidents, and road wear-and-tear.³⁶ Although, according to Professor Nicholas Stern, the IMF work has helped to “shatter the myth that fossil fuels are cheap,”³⁷ broadening the concept of subsidies to include negative externalities risks diverting attention from the many, more direct fiscal support measures that sustain the fossil fuel industry.

Leaving aside the question of whether externalities should be included in valuations, the term “fossil fuel subsidy” can be interpreted in a way that includes a range of government measures. For instance, they include direct transfer of funds (such as cash payments), the purchase of goods above the market rate, or funding for research and development. They also include tax revenue forgone, such as deviations and exemptions from standard tax rules (e.g. value added tax). Governments may also forgo other revenues, such as beneficial terms of access to resources. Governments can also allow for the transfer of risks, for example by providing loans, loan guarantees, insurance or indemnifications at below-market rates. Lastly, governments can take measures to induce the transfer of funds, for instance through price controls or purchase requirements.³⁸

It may be relatively straightforward to identify and account for some of these support measures, while others are significantly more difficult to quantify and go unreported in government accounts. Although fossil fuel subsidies involve vast amounts even by the most conservative estimates, the acceptance by different stakeholders that certain support measures qualify as subsidies varies.³⁹ In this context, the WTO's approach to subsidies provides an anchor. Through the ASCM, the WTO provides one of the few widely agreed upon definitions of a subsidy, which, as noted above, has also informed the approach of other organizations (e.g. the OECD). In Part III,

35. Coady et al., *How Large are Global Energy Subsidies?*, *supra* note 27, at 17.

36. The latter are independent of the type of fuel used, however, and would be generated as well by all-electric vehicles.

37. *Quoted in* Damien Carrington, *Fossil Fuels Subsidised by \$10m a Minute, Says IMF*, THE GUARDIAN, May 18, 2015.

38. The categories mentioned here are based on OECD, *INVENTORY OF ESTIMATED BUDGETARY SUPPORT AND TAX EXPENDITURES FOR FOSSIL FUELS 2011*, 20 (2012).

39. *See generally* Ivetta Gerasimchuk, *A Crash Course on Subsidy definition by Dante, Shakespeare and Russian Folklore*, INT'L. INST. FOR SUSTAINABLE DEV. (Oct. 22, 2015), <https://www.iisd.org/blog/crash-course-subsidy-definition-dante-shakespeare-and-russian-folklore>.

we take a closer look at how the WTO has sought to define and discipline subsidies through several legal agreements.

III. DISCIPLINING SUBSIDIES UNDER THE WORLD TRADE ORGANIZATION

There are several agreements relevant to the disciplining of subsidies⁴⁰ among the dozens comprising the WTO legal regime. They include the cornerstone 1994 GATT and the 1994 ASCM, which elaborates on the GATT's provisions. Moreover, as evidenced by recent case law, the 1994 TRIMs Agreement can also be invoked with respect to energy support measures. Disciplines that address subsidies to agriculture and fisheries are also being discussed in the (currently stalled) trade negotiations of the Doha Round⁴¹ and the General Agreement on Trade in Services⁴² requires WTO Members to negotiate subsidy rules. Other, more specialized treaties, such as the Agreement on Agriculture⁴³ and the Agreement on Government Procurement⁴⁴ also contain rules for particular subsidy types. However, the analysis below is restricted to the three agreements most obviously relevant to the disciplining of fossil fuel subsidies.

It is important to keep in mind that, from a WTO law perspective, subsidies are currently considered objectionable insofar as they distort trade. Therefore, climate change and other environmental or socioeconomic concerns do not necessarily enter the equation. Indeed, while we restrict the reflection on the current WTO rules on subsidies, a range of authors have argued that these are among the WTO regulations that should be revised to meet the urgent imperatives of climate science.⁴⁵

40. The word “subsidy” in this Article will be used in line with the definition provided in the previous Part, i.e. “a government intervention that supports either the producers or consumers of fossil fuels.” Given that the ASCM maintains its own, narrower, definition of what constitutes a subsidy, a measure meeting the ASCM's subsidy requirements will be referred to as “a subsidy under the ASCM” to avoid confusion.

41. World Trade Organization, Ministerial Declaration of 14 November 2001, ¶¶ 13, 28, WTO Doc. WT/MIN(01)/DEC/1, 41 ILM 746 (2002) [hereinafter Doha Declaration].

42. GENERAL AGREEMENT ON TRADE IN SERVICES, Apr. 15, 1994, MARRAKESH AGREEMENT ESTABLISHING THE WORLD TRADE ORGANIZATION, 1869 U.N.T.S. 183.

43. AGREEMENT ON AGRICULTURE, Apr. 15, 1994, MARRAKESH AGREEMENT ESTABLISHING THE WORLD TRADE ORGANIZATION, 1867 U.N.T.S. 410.

44. Agreement on Government Procurement, Apr. 15, 1994, 1915 U.N.T.S. 103, 121.

45. See, e.g., Aaron Cosbey & Petros C. Mavroidis, *A Turquoise Mess: Green Subsidies, Blue Industrial Policy and Renewable Energy: the Case for Redrafting the Subsidies Agreement of the WTO*, 17 J. INT'L ECON. L. 11 (2014); Luca Rubini, *The Wide and the Narrow Gate: Benchmarking in the SCM Agreement after the Canada-Renewable Energy/FIT Ruling*, 14 WORLD TRADE REV. 211 (2015); Ilaria Espa & Sonia E. Rolland, *Subsidies, Clean Energy, and Climate Change*, E15 INITIATIVE, ICTSD AND WORLD ECONOMIC FORUM (2015); Gary Horlick & Peggy A. Clarke, *Rethinking Subsidy Disciplines for the Future: Policy Options for Reform*, 20 J. OF INT'L ECON. L. 673(2017); Dirk De Bièvre et al., *No Iceberg in Sight: On the Absence of WTO Disputes Challenging Fossil Fuel Subsidies*, 17 INT'L ENV'TL AGREEMENTS: POL., L. & ECON. 411

A. The General Agreement on Tariffs and Trade

The 1947 GATT did little to constrain countries' domestic subsidy policies.⁴⁶ Despite several elaborations in the following decades, including a plurilateral Tokyo Round Subsidies Code in the 1970s, the Agreement's subsidy rules remained relatively tolerant of subsidies.⁴⁷ Nevertheless, the 1994 GATT was successfully invoked in an energy subsidy case as recently as 2016,⁴⁸ demonstrating its enduring relevance.

Articles VI and XVI of the 1994 GATT address subsidies explicitly. GATT Article VI *inter alia* prohibits a WTO Member from imposing countervailing duties (CVDs) on imports unless it determines that the effect of subsidization of these imports "is such as to cause or threaten material injury to an established domestic industry, or [...] retard materially the establishment of a domestic industry."⁴⁹ Given that the ASCM also addresses countervailing measures, including CVDs, the Appellate Body (AB) in *Brazil — Desiccated Coconut* considered that CVDs "may only be imposed in accordance with the provisions of Part V of the [ASCM] and Article VI of the GATT 1994, taken together."⁵⁰

GATT Article XVI consists of two sections. Section A does not restrict subsidization as such but introduces a duty for countries to notify other Members of all subsidies that increase its exports, or reduce its imports. The paragraph also provides that the Member shall, upon request, discuss the possibility of limiting the subsidization "[i]n any case in which it is determined that serious prejudice to the interests of any other contracting party is caused or threatened by any such subsidization."⁵¹ Section B regulates subsidies contingent on the export of products, generally leading to a lower price in the importing country compared with that charged in the exporting country. Recognizing that such subsidies "may have harmful effects for other contracting parties," the provision outlaws them.⁵²

(2017); Joel P. Trachtman, *Fossil Fuel Subsidies Reduction and the World Trade Organization*, ICTSD (Oct. 2017).

46. Andrew Green, *Trade Rules and Climate Change Subsidies*, 5 *WORLD TRADE REV.* 377, 390 (2006).

47. Alan O. Sykes, *The Economics of WTO Rules on Subsidies and Countervailing Measures* 12-14 (John M. Olin Program in Law and Economics Working Paper No. 186, 2003) (noting that the original GATT was "tolerant" of subsidies, and that even after the Subsidies Code "subsidies were generally permissible for domestic producers").

48. *See, e.g.*, Appellate Body Report, *Canada—Certain Measures Affecting the Renewable Energy Generation Sector*, WTO Doc. WT/DS412/AB/R (adopted May 24, 2013) [hereinafter *Canada—Renewable Energy AB*]; and Appellate Body Report, *India—Certain Measures Relating to Solar Cells and Solar Modules*, WTO Doc. WT/DS456/AB/R (Sept. 16, 2016) [hereinafter *India—Solar Cells AB*].

49. GATT, *supra* note 15, Art. VI:6(a).

50. Appellate Body Report, *Brazil—Measures Affecting Desiccated Coconut*, WTO Doc. WT/DS22/AB/R ¶ E2 (adopted Mar. 20, 1997).

51. GATT, *supra* note 15, Art. XVI.

52. *Id.*

As explained below, the ASCM expands upon both Articles VI and XVI of the GATT. Before turning to this specialized treaty, however, it is worth highlighting a few additional GATT provisions that may be relevant to the regulation of subsidies.

GATT Article III (the “national treatment” obligation) prohibits financial measures and other measures that “afford protection to domestic production,” and, more generally, discrimination between foreign and domestic “like products.”⁵³ While paragraph 8(b) stipulates that this article “shall not prevent the payment of subsidies exclusively to domestic producers,”⁵⁴ case law has found the scope of this exception limited to a specific subset of subsidies.⁵⁵ Consequently, complainants can rely, and indeed have relied, on this provision to challenge certain types of subsidies involving discriminatory local content requirements.⁵⁶

Under GATT Article XXIII:1(b), a Member may complain if a benefit it accrued under the Agreement is being “nullified or impaired” as a result of “the application by another contracting party of any measure, whether or not” this measure conflicts with the GATT.⁵⁷ This provision is potentially relevant, for instance, where a WTO Member’s subsidies undermine the tariff concessions it has made to another country.⁵⁸ The remedy in this case does not necessarily entail the removal of the subsidy but could involve another form of “satisfactory adjustment,” including compensation.⁵⁹

Finally, there is an ongoing debate on the relevance for subsidies of the general exceptions of GATT Article XX. Under certain conditions, governments can rely on this provision to maintain policies (including subsidies covered by the GATT) that violate other provisions of the Agreement. This “shelter” can be invoked for a variety of reasons, including to uphold measures that are demonstrated to be necessary to protect human, animal, or plant life or health,⁶⁰ or relate to the conservation of exhaustible natural resources.⁶¹ The GATT’s general exceptions also apply to the TRIMs Agreement, which explicitly incorporates the right to invoke these

53. *Id.* Art. III.

54. *Id.* Art. III:8(b).

55. Based on case law, Coppens identifies three cumulative requirements for this carve-out to apply, i.e., cases where: (1) payments of subsidies (2) are made exclusively to domestic producers (not purchasers or processors) and (3) do not discriminate between imported and domestic products. DOMINIC COPPENS, *WTO DISCIPLINES ON SUBSIDIES AND COUNTERVAILING MEASURES: BALANCING POLICY SPACE AND LEGAL CONSTRAINTS* 189–90 (2014).

56. *See, e.g., Canada—Renewable Energy AB*, *supra* note 48; and *India—Solar Cells AB*, *supra* note 48 (both cases in which the claimant relied upon Article III:8(a) GATT).

57. GATT, *supra* note 15, Art. XXIII:1(b).

58. Green, *supra* note 46, at 391.

59. GATT, *supra* note 15, Art. XXIII.

60. *Id.* Art. XX(b).

61. *Id.* Art. XX(g).

provisions.⁶² While it has been argued that the GATT's exceptions could additionally provide a defense for certain subsidies challenged under the ASCM,⁶³ the majority of authors considers this approach unfeasible.⁶⁴

B. The Agreement on Subsidies and Countervailing Measures

Like the 1994 GATT, the ASCM was in the package of agreements that emerged from the negotiations of the Uruguay Round. It is applicable in addition to the GATT and elaborates the GATT's provisions on subsidies in many ways. It applies only to trade in goods, not services.

Under the ASCM, a Member can seek the withdrawal of a subsidy or of its adverse effects through the WTO's dispute settlement mechanism (i.e. multilateral track). Or, in the alternative, it can launch its own investigation and impose CVDs on subsidized imports to remedy their trade-distorting effects (i.e. unilateral track).⁶⁵

Showing a violation of the ASCM requires meeting a number of cumulative conditions. These include satisfying the ASCM's "three-part test" for determining whether a measure meets the Agreement's subsidy definition and falls within the ASCM's scope, demonstrating the existence of either a prohibited subsidy, or of adverse effects to the interests of another Member.

i. Definition of Subsidy and Scope of the Agreement

In notable contrast to the GATT and the Tokyo Round Subsidies Code, the ASCM defines the term "subsidy" in its first Article. For the purposes of the Agreement, a subsidy is (i) a financial contribution by a government that (ii) confers a benefit. The ASCM applies only to measures that meet this definition. Moreover, its disciplines are further restricted to those subsidies that are deemed or determined to be "specific."⁶⁶

To meet the ASCM's subsidy definition, a measure must first be proven to be a "financial contribution by a government or any public body within

62. TRIMs Agreement, *supra* note 16, Art. 3.

63. Robert Howse, *Securing Policy Space for Clean Energy under the SCM Agreement: Alternative Approaches*, E15 INITIATIVE, ICTSD AND WORLD ECONOMIC FORUM 2–3 (2013).

64. COPPENS, *supra* note 55, at 192 ("the majority of authors considering such a defence unavailable seems to be correct").

65. MATSUO MATSUSHITA ET AL., *THE WORLD TRADE ORGANIZATION: LAW, PRACTICE, AND POLICY* 303–04 (3d ed., 2015).

66. ASCM, *supra* note 17, Art. 1.1, Art. 1.2.

the territory of a Member.”⁶⁷ The ASCM provides an exhaustive list of measures this may entail:

- (i) a government practice involves a direct transfer of funds (e.g. grants, loans, and equity infusion) or potential direct transfers of funds or liabilities (e.g. loan guarantees);
- (ii) government revenue that is otherwise due is forgone 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; and
- (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 above.⁶⁸

A measure that constitutes “any form of income or price support in the sense of” GATT Article XVI (i.e. operating directly or indirectly to increase exports of any product from, or reduce imports into, a Member’s territory) also meets the ASCM’s first threshold requirement.⁶⁹

To be considered a subsidy under the ASCM, a measure must also confer a benefit to the recipient.⁷⁰ The ASCM provides some guidance on the concept of benefit in Article 14, which addresses the calculation of the subsidy amount in terms of the benefit to the recipient when it comes to CVD investigations. The case law has also helped to elaborate the concept.

Guided by Article 14, the AB in *Canada—Aircraft*⁷¹ introduced what has been dubbed a “private market test”⁷² to establish the existence of a benefit. This test specifies that a benefit is conferred when “the recipient has received a financial contribution on terms more favourable than those available to [it] in the market.”⁷³ Consequently, it is neither necessary nor sufficient to demonstrate that a government incurred a cost as a result of the financial contribution or price support it has provided.⁷⁴

In accordance with ASCM Article 14, this private market test does not have to be substantively met where government revenue is forgone, as a

67. *Id.* Art. 1.1(a)(1).

68. *Id.*

69. *Id.* Art. 1.1(a)(2).

70. *Id.* Art. 1.1(b).

71. Appellate Body Report, *Canada—Measures Affecting the Export of Civilian Aircraft*, WTO Doc. WT/DS70/AB/R ¶ 157 (adopted Aug. 20, 1999) [hereinafter *Canada—Aircraft AB*].

72. COPPENS, *supra* note 55, at 60.

73. *Canada—Aircraft AB*, *supra* note 71, ¶ 158. “Market” has been defined by the Panel as “the area of economic activity in which buyers and sellers come together and the forces of supply and demand affect prices.” Panel Report, *United States—Subsidies on Upland Cotton*, WTO Doc. WT/DS267/R ¶ 7.1236 (adopted Mar. 21, 2005), as modified by Appellate Body Report WTO Doc. WT/DS267/AB/R [hereinafter *US—Upland Cotton Panel*].

74. *Canada—Aircraft AB*, *supra* note 71, ¶¶ 154–156; see also Panel Report, *Canada—Measures Affecting the Export of Civilian Aircraft*, ¶¶ 9.111–9.120, WTO Doc. WT/DS70/R (adopted Aug. 20, 1999).

benefit seems automatically conferred in such cases.⁷⁵ As such, the need for a substantive benefit analysis is limited to a (potential) direct transfer of funds, and the provision of goods or services or the purchase of goods. In this regard, Article 14 indicates that the conditions in the marketplace at the time the financial contribution was made forms the correct market benchmark.⁷⁶ That a recipient could have received the financial contribution at a similar “better-than-market” rate from another (private) actor is therefore not relevant to the benefit analysis.⁷⁷

There are instances where a financial contribution itself distorts the conditions in the private market, for instance by suppressing prices.⁷⁸ This prompted the AB in *US—Softwood Lumber IV* to consider that for calculating a benefit there may be benchmarks other than the private market (e.g. proxies that take into account prices for similar goods quoted on world markets, or proxies constructed on the basis of production costs).⁷⁹ However, it also considered the possibility for using alternative benchmarks “very limited.”⁸⁰ The AB’s ruling in *US—Anti-Dumping and CVDs (China)* endorsed this view.⁸¹ The AB in *Canada—Renewable Energy* additionally held that an alternative benchmark should also be used in instances where, in providing a financial contribution, a government creates a market that would not otherwise exist.⁸² However, this rationale for constructing an alternative benchmark (i.e. because government regulation has created a market that would not otherwise exist) has proved highly controversial.⁸³ Pursuant to ASCM Article 2, only subsidies that are “specific” are subject to the disciplines of the Agreement. Several types of specificity are distinguished, whereby access to a subsidy is limited to:

- a particular enterprise or enterprises (i.e. enterprise specificity);
- a particular industry or industries (i.e. industry specificity); or

75. COPPENS, *supra* note 55, at 61.

76. Appellate Body Report, *European Communities and Certain Member States—Measures Affecting Trade in Large Civil Aircraft*, ¶ 706, WTO Doc. WT/DS316/AB/R (adopted June 1, 2011) [hereinafter *EC—Large Civil Aircraft AB*].

77. COPPENS, *supra* note 55, at 64.

78. *Id.* at 64, 66.

79. Appellate Body Report, *United States—Final Countervailing Duty Determination with Respect to Certain Softwood Lumber from Canada*, WTO Doc. WT/DS257/AB/R ¶ 103 (adopted Feb. 17, 2004) [hereinafter *US—Softwood Lumber IV AB*].

80. *Id.* ¶ 102.

81. Appellate Body Report, *United States—Definitive Anti-Dumping and Countervailing Duties on Certain Products from China*, WTO Doc. WT/DS379/AB/R ¶ 444 (adopted Mar. 25, 2011).

82. *Canada—Renewable Energy AB*, *supra* note 48, ¶¶ 5.185, 5.188.

83. See, e.g., COPPENS, *supra* note 55, at 465 (“As a matter of law, the AB got it wrong . . . From an economic perspective, the [AB] again got it wrong.”); and Cosbey & Mavroidis, *supra* note 45, at 12 (suggesting that the WTO adjudicating bodies, by departing from established case law during the benefit analysis, “engage[d] in legal acrobatics” to avoid classifying Canada’s feed-in tariff program as a subsidy under WTO law, while nevertheless finding a violation of the national treatment obligation).

- recipients in a certain region within the granting authority's jurisdiction (i.e. regional specificity).⁸⁴

Export subsidies or local content subsidies (i.e. prohibited subsidies) are automatically considered specific. The Agreement provides that such specificity may be stated explicitly in law (de jure) or be present in fact (de facto). To establish de jure specificity, the AB in *US—Large Civil Aircraft* developed a two-step approach, involving identification of (i) the relevant subsidy scheme and (ii) whether this is limited by the granting authority or legislation to certain enterprises.⁸⁵ If, notwithstanding a finding of non-specificity, there are reasons to believe that the subsidy may be specific — or vice versa — a further analysis is needed.

A positive finding of specificity may be undercut if “objective criteria or conditions” have been established for the eligibility and the amount of a subsidy.⁸⁶ However, this provision has not yet been successfully invoked.⁸⁷

In case of a negative finding, de facto specificity could still be determined. Relevant factors in this regard include: use of the subsidy by a limited number of certain enterprises; predominant use of the subsidy by certain enterprises; granting of disproportionately large amounts of a subsidy to certain enterprises; and the manner in which discretion has been exercised by the granting authority in making decisions to grant the subsidy.⁸⁸ Notably, a finding of de facto specificity does not require the deliberate limitation of a subsidy's reach.⁸⁹ However, in examining this issue, account must be taken of the diversification of economic activities within the jurisdiction of the granting authority, as well as of the length of time during which the subsidy has been in operation.⁹⁰

With the exception of cases concerning prohibited subsidies (where specificity is always presumed), the onus of showing specificity rests on the complainant. This may be an important obstacle to a successful challenge, as complaining Members may have less access to relevant information.⁹¹

84. ASCM, *supra* note 17, Art. 2.1–2.2.

85. Appellate Body Report, *United States—Measures Affecting Trade in Large Civil Aircraft (Second Complaint)*, ¶ 753, WTO Doc. WT/DS353/AB/R (adopted Mar. 23, 2012) [hereinafter *US—Large Civil Aircraft AB*]; see also COPPENS, *supra* note 55, at 103–04.

86. ASCM, *supra* note 17, Art. 2.1(b). Footnote 2 of the ASCM clarifies that this entails criteria or conditions that are “neutral do not favor certain enterprises over others, and are economic in nature and horizontal in application, such as the number of employees or size of enterprise.”

87. COPPENS, *supra* note 55, at 106.

88. ASCM, *supra* note 17, Art. 2.1(c).

89. Panel Report, *United States—Final Countervailing Duty Determination with Respect to Certain Softwood Lumber from Canada*, WTO Doc. WT/DS257/R ¶ 7.116 (adopted Feb. 17, 2004) [*US—Softwood Lumber Panel*].

90. ASCM, *supra* note 17, Art. 2.1(c).

91. COPPENS, *supra* note 55, at 101.

ii. Types of Subsidies

Unless all three elements discussed above are present, a measure will not fall within the remit of the ASCM. Even where all three factors have been demonstrated, however, a subsidy is not necessarily illegal under the Agreement.

Historically, the ASCM has distinguished three types of subsidies, each associated with different disciplines: prohibited (often referred to as “red light”), actionable (referred to as “yellow” or “amber light”), and non-actionable (“green light”).⁹² During the first five years of the ASCM (1994–1999), the latter permitted, up to certain amounts, subsidies to promote adaptation of existing facilities to new environmental requirements imposed by law or regulations.⁹³ However, after the lapse of the initial five-year term in 2000, during which not a single non-actionable subsidy was notified,⁹⁴ this category was not renewed.⁹⁵ A “safe harbour” for subsidies that promote certain policy goals thus no longer exists.⁹⁶ The ASCM currently distinguishes only two types of subsidies: prohibited (never permitted) and actionable (permitted, unless certain types of trade effects, or the threat thereof, are demonstrated).

The ASCM’s category of “prohibited subsidies” comprises two types of measures: export subsidies and local content subsidies. Export subsidies are “contingent, in law or in fact, whether solely or as one of several other conditions, upon export performance.”⁹⁷ ASCM Annex I provides for a non-exhaustive “Illustrative List” of twelve measures that meet this definition.⁹⁸ Complainants can therefore prove the existence of an export subsidy by either (i) demonstrating the existence of a subsidy per Article 1, in conjunction with Article 3.1(a) on export subsidies; or (ii) identifying the measure in question in the Illustrative List (if it is included). The latter approach enables complainants to bypass not only Article 3.1(a)’s export contingency test, but also the subsidy test of Article 1.⁹⁹

Local content subsidies are contingent upon the use of domestic rather than foreign products. Although the ASCM refers only to *de jure*

92. MATSUSHITA ET AL., *supra* note 65, at 329.

93. ASCM, *supra* note 17, Art. 8.2 (c).

94. Mark Wu, *Re-examining ‘Green Light’ Subsidies in the Wake of New Green Industrial Policies*, E15 INITIATIVE, ICTSD AND WORLD ECON. F. 3 (2015).

95. COPPENS, *supra* note 55, at 116.

96. PETROS C. MAVROIDIS, *TRADE IN GOODS: THE GATT AND THE OTHER AGREEMENTS REGULATING TRADE IN GOODS* 201 (2007).

97. ASCM, *supra* note 17, Art. 3.1(a).

98. *Id.* Annex I.

99. COPPENS, *supra* note 55, at 118.

contingency, case law has confirmed that, as with export subsidies, this provision also applies to de facto contingency.¹⁰⁰

If a prohibited subsidy is found to exist, it must be withdrawn “without delay.”¹⁰¹ Given that both export and local content subsidies are considered trade-distorting,¹⁰² as well as intrinsically specific, prohibited subsidies do not require a demonstration of harm or of specificity. The legal threshold for formulating a prohibited subsidy claim is therefore typically lower than for an actionable subsidy.¹⁰³

Unlike prohibited subsidies, actionable subsidies are in principle permissible under the ASCM, unless they cause “adverse effects to the interests of other members.”¹⁰⁴ Such harmful trade effects can manifest in the three ways discussed below. The burden to demonstrate their existence falls mainly on the complaining Member¹⁰⁵ and can be “burdensome and expensive.”¹⁰⁶

(a) Serious prejudice to the interests of another Member

The first type of adverse effects is that of serious prejudice, or the threat thereof. Initially, the ASCM contained a rebuttable presumption of serious prejudice in four cases.¹⁰⁷ This subsidy category required the complainant to prove only the existence of this type of specific subsidy, leaving it up to the defendant to demonstrate that there was not serious prejudice within the meaning of the Agreement.¹⁰⁸ However, the provisional five-year period of this subsidy—together with that of the “green” category of non-actionable subsidies—elapsed in late 1999, and neither has been renewed.¹⁰⁹

At present, ASCM Article 6.3 characterizes several instances that affect the trade interests of a WTO Member in terms of volumes sold or price as “serious prejudice”:

- (i) the effect of the subsidy is to displace or impede the imports of a like product of another Member into the market of the subsidising

100. Appellate Body Report, *Canada—Certain Measures Affecting the Automotive Industry*, WTO Doc. WT/DS139,142/AB/R ¶¶ 135–43 (adopted June 19, 2002).

101. ASCM, *supra* note 17, Art. 4.7.

102. Horlick & Clarke, *supra* note 45, at 15.

103. COPPENS, *supra* note 55, at 148.

104. ASCM, *supra* note 17, Art. 5.

105. COPPENS, *supra* note 55, at 144.

106. Chris Wold et al., *Leveraging Climate Change Benefits through the World Trade Organization: Are Fossil Fuel Subsidies Actionable?*, 43 GEO. J. INT'L L. 635, 685 (2012).

107. These are: (i) the total *ad valorem* subsidization of a product exceeds 5 percent; (ii) the subsidy covers operating losses sustained by an industry; (iii) the subsidy covers operating losses sustained by an enterprise, other than one-time measures; or (iv) there is direct forgiveness of debt. ASCM, *supra* note 17, Art. 6.

108. *Id.* Art. 6.1–6.2.

109. See Agreement on Subsidies and Countervailing Measures (“SCM Agreement”), at note 2 https://www.wto.org/english/tratop_e/scm_e/subs_e.htm.

Member; (ii) the effect of the subsidy is to displace or impede the exports of a like product of another Member from a third-country market; (iii) the effect of the subsidy is a significant price undercutting by the subsidised product as compared with the price of a like product of another Member in the same market or significant price suppression, price depression or lost sales in the same market; (iv) the effect of the subsidy is an increase in the world market share of the subsidising Member in a subsidised primary product or commodity compared to the average share of the previous three years, and the trend is consistent when subsidies are granted.¹¹⁰

It is up to the complainant to demonstrate these effects. To succeed, a serious prejudice claim must demonstrate the existence of any of these effects and, in most cases, prove them to be the effect of the subsidy itself. Although the size of the subsidy may be relevant to this last requirement, there is no obligation to quantify the subsidy amount precisely.¹¹¹ This is, however, a higher causation standard than that under injury (as discussed below), which requires only to prove that the effect is a result of the subsidized product.

In addition to evidence requirements that are specific to each type of serious prejudice, there are a number of other general conditions to be satisfied. First, in accordance with ASCM Article 6.3, it is necessary to show the existence of present adverse effects. Historical data could be used for this purpose.¹¹² Note that the temporal aspect revolves around effects: it is not necessary to show that the measure in question, nor the conferred benefit, are currently present.¹¹³ Second, a complainant must show that these effects are being felt for products originating in its own territory.¹¹⁴ Third, certain effects must have been caused by subsidies to a “like product” (in the case of ASCM Articles 6.3(a), (b); and price undercutting under ASCM Article 6.3(c)), defined as a product “identical,” “alike in all respects,” or with characteristics that closely resemble the one being harmed.¹¹⁵ In this regard, the product’s physical characteristics are important, although other criteria such as end uses and consumer tastes and habits are also relevant.¹¹⁶ Case law on the issue of likeness under the ASCM is limited, however. Wold

110. See ASCM, *supra* note 17, Art. 6.3.

111. *US—Large Civil Aircraft AB*, *supra* note 85, ¶ 697.

112. See, e.g., Panel Report, *European Communities and Certain Member States—Measures Affecting Trade in Large Civil Aircraft*, WTO Doc. WT/DS316/R ¶ 7.194 (adopted June 1, 2011) [hereinafter *EC—Large Civil Aircraft Panel*].

113. COPPENS, *supra* note 55, at 149.

114. Panel Report, *Indonesia—Certain Measures Affecting the Automobile Industry*, WTO Doc. WT/DS54,55,59,64/R ¶¶ 14.201–14.202 (adopted July 23, 1998) [hereinafter *Indonesia—Autos Panel*].

115. ASCM, *supra* note 17, fn. 46.

116. See, e.g., *Indonesia—Autos Panel*, *supra* note 114, at ¶¶ 14.172–14.173.

et al. observe that “under the [ASCM], it is not clear just how tightly the accordion of likeness should be squeezed.”¹¹⁷ In their extensive analysis of the topic of “likeness” in the context of fossil fuel and renewable energy, they conclude that although renewable energy products such as wind turbines and solar panels are not “like” fossil fuels, others, such as biodiesel blended with petrodiesels, may be. Electricity from non-renewable and renewable energy sources could be considered “like products” under the ASCM.¹¹⁸ Fourth, and related to the previous point, per ASCM Article 6.3, it must be shown that the harmed product is competing in the same market as the subsidized product. Both demand-side and supply-side substitutability may be relevant in this regard.¹¹⁹

Finally, as noted above, a complainant could also invoke this provision in the context of a threat of serious prejudice, though the relevant remedy may differ.¹²⁰

(b) Injury to the domestic industry of another Member

ASCM Article 5 uses the term “injury to the domestic industry” in the same sense as the Agreement’s section on CVD investigations.¹²¹ The term encompasses both material injury to a complaining Member’s industry, as well as “the threat of” such injury, or “material retardation of the establishment” of such an industry.¹²² If a subsidy is thought to have caused any of these effects, a Member can either unilaterally undertake a CVD procedure or pursue the multilateral route.

Mirroring the approach used in CVD investigations, the Panel in *EC—Large Civil Aircraft* sought to establish the existence of injury in two steps.¹²³ This entailed, first, establishing material injury during the reference period, i.e. for the complaining member’s domestic industry’s overall performance, or some relevant factors to have deteriorated over the reference period.¹²⁴ Among “relevant economic factors and indices having a bearing on the state of the industry,” the ASCM identifies: actual and potential decline in output, sales, market share, profits, productivity, return on investments, or utilization of capacity, factors affecting domestic prices, actual and potential negative effects on cash flow, inventories, employment, wages, growth, and

117. Wold et al., *supra* note 106, at 664.

118. *Id.*

119. *EC—Large Civil Aircraft* AB *supra* note 76, ¶ 1119.

120. COPPENS, *supra* note 55, at 149.

121. ASCM, *supra* note 17, fn. 11.

122. *Id.* Art. 15, fn. 45.

123. *EC—Large Civil Aircraft* Panel, *supra* note 112, ¶ 7.2082. Although while considering this approach appropriate, the Panel did not deem it mandatory. See COPPENS, *supra* note 55, at 144.

124. Even if an industry’s performance would have been materially better in the absence of the subsidized imports, the claim will not succeed unless performance actually deteriorated. See COPPENS, *supra* note 55, at 145.

ability to raise capital or investments.¹²⁵ The Agreement clarifies that the list is non-exhaustive, “nor can one or several of these factors necessarily give decisive guidance.”¹²⁶ Regarding the question of whether an injury is “material,” the Panel in *EC—Large Civil Aircraft* held that this is dependent on “the nature of the product and industry in question,” and therefore on the specifics of each case.¹²⁷

As a second step, causation must be demonstrated by showing that the subsidized imports are causing the material injury through their volume and price effects. This is a more lenient requirement than the need to show the adverse effects are caused by the challenged subsidies themselves, as in the case of serious prejudice.¹²⁸

A “threat of” material injury, should be based “on facts and not merely on allegation, conjecture or remote possibility.”¹²⁹ Among relevant factors to consider in this regard, the Agreement highlights: the nature of the subsidy or subsidies and the trade effects likely to arise from them; a significant increase of subsidized imports into the domestic market; and whether imports are entering at prices that will have a significant depressing or suppressing effect on domestic prices, and would likely increase demand for further imports.¹³⁰

(c) Nullification or impairment of benefits accruing directly or indirectly to other Members under the GATT in particular the benefits of concessions bound under GATT Article II

This final category of adverse effects reflects the possibility that the benefits accruing to a Member by virtue of the GATT may be undercut through subsidies.¹³¹ For instance, the expected export benefits for country A as a result of country B reducing its tariffs on imported steel, may be undermined by country B’s simultaneous subsidization of domestic steel producers. While injury takes place in the domestic market of the complaining Member (hence allowing for a unilateral approach), nullification or impairment of benefits occurs in the market of the subsidizing country; thereby causing harm to the complainant’s export industry. This can only be remedied through a multilateral approach.

125. ASCM, *supra* note 17, Art. 15.4.

126. *Id.*

127. *EC—Large Civil Aircraft* Panel, *supra* note 112, ¶ 7.2083.

128. COPPENS, *supra* note 55, at 145.

129. ASCM, *supra* note 17, Art. 15.7.

130. *Id.*

131. Note that the term “benefit” in this context refers to market-opening concessions, especially multilateral tariff bindings, and should not be confused with use of the word under the ASCM’s subsidy test.

The ASCM employs the term “nullification or impairment” in the same sense of non-violation complaints under the GATT: “[T]he existence of such nullification or impairment is to be established in accordance with the practice of application of these provisions.”¹³² In accordance with the case law, the complainant must therefore demonstrate (i) the use of a subsidy; (ii) the existence of a benefit accruing under the GATT; in particular, the benefit of trade concessions; and (iii) the nullification or impairment of a benefit as a result of subsidy use.¹³³

The final step, proving that nullification or impairment has been caused by the subsidy in question, represents a particularly high bar for any complainant. The GATT Panel in *EEC—Oilseeds I* considered that this effect occurs when a tariff concession is “systematically” offset or counteracted by a subsidy program, an approach reflecting the exceptional nature of this remedy.¹³⁴ As with serious prejudice, and in contrast to cases of injury, moreover, this requires proving that the effects are caused by the subsidy, as opposed to the subsidized product.

C. *The Agreement on Trade-Related Investment Measures*

Adopted in 1994, the TRIMs Agreement seeks to discipline any trade-distorting effects of investment measures related to trade in goods. The Agreement applies the GATT’s national treatment obligation to all trade-related investment measures.¹³⁵ When it comes to subsidies, as seen with the GATT and as illustrated by the case law,¹³⁶ this obligation may bear particular relevance to government support measures with local content requirements.

While the Agreement does not define trade-related investment measures, it does provide an Annex with illustrative examples of TRIMs that are inconsistent with GATT Article III:4 (national treatment obligation) and GATT Article XI (general elimination of quantitative restrictions). In addition to local content requirements for the production of goods, the list includes other mandatory and domestically enforceable measures that WTO members might impose, such as trade-balancing requirements, exchange-balancing requirements, and export restrictions.¹³⁷

Although investment measures that violate the TRIMs Agreement’s national treatment obligation may also independently violate the GATT’s obligations, the former “expand[s] the reach of those rules somewhat to

132. ASCM, *supra* note 17, fn. 12.

133. COPPENS, *supra* note 55, at 146.

134. *Id.*

135. TRIMs, *supra* note 16, Art. 2.1.

136. *See, e.g., Canada—Renewable Energy AB*, *supra* note 48; and *India—Solar Cells AB*, *supra* note 48.

137. TRIMs, *supra* note 16, Annex.

measures that might arguably be investment measures related to products but not about products themselves.”¹³⁸

While these disciplines are applicable to any type of subsidy in theory, including fossil fuel subsidies, the practice shows that challenging such subsidies has been difficult in practice. The next Part explores the possible reasons for this.

IV. WHY HAVE FOSSIL FUEL SUBSIDIES EVADED LITIGATION?

Despite various disputes on renewable energy support,¹³⁹ so far none of the complaints initiated with the WTO dispute settlement mechanism have pertained to fossil fuel subsidies.¹⁴⁰ This Part discusses the numerous political and legal explanations that have been given for this discrepancy, and that have sparked calls for reforms to improve the WTO’s receptiveness to climate change concerns. Given the diversity of fossil fuel subsidies, however, it also cautions against hasty generalizations on the prospects of any fossil fuel subsidy dispute at the WTO. As with so many legal issues, the devil is in the detail.

A. Political Factors

From a political perspective, Meyer highlights the important role of domestic pressure groups in compelling governments to launch investigations, or initiate a dispute, against another Member.¹⁴¹ While producers of renewable energy equipment have been particularly effective lobbyists in this regard, those standing to lose from fossil fuel subsidies have, for a variety of reasons, remained much more passive.¹⁴² One possible explanation is that the fossil fuel market includes a number of large multinationals that may benefit from subsidies in multiple countries.¹⁴³ The

138. Tim Meyer, *The World Trade Organization’s Role in Global Energy Governance*, in THE PALGRAVE HANDBOOK OF THE INTERNATIONAL POLITICAL ECONOMY OF ENERGY 139, 160 (Thijs Van de Graaf et al. eds., 2016).

139. See generally Droege et al., *supra* note 9, at 263–76. See generally Joanna I. Lewis, *The Rise of Renewable Energy Protectionism: Emerging Trade Conflicts and Implications for Low Carbon Development*, 14 GLOB. ENVTL. POLITICS 4, 10 (Nov. 2014).

140. However, European coal subsidies came under intense scrutiny in the early 1990s, nearly sparking a formal trade dispute. See GATT Committee on Subsidies and Countervailing Measures, *Questions Submitted by Australia on the Legislation of the European Communities*, GATT Doc. SCM/W/247 and L/6630/Add.20 (Oct. 22, 1991).

141. See Tim Meyer, *Explaining Energy Disputes at the World Trade Organization*, 17 INT’L ENVTL. AGREEMENTS: POL., L. & ECON. 391 (2017).

142. Henok Birhanu Asmelash, *Energy Subsidies and WTO Dispute Settlement: Why Only Renewable Energy Subsidies Are Challenged*, 18 J. INT’L ECON. L. 261, 282–84 (2015).

143. De Bièvre et al., *supra* note 45, at 419 (“the fossil fuel sector is dominated by a small set of large players, which may make it easier for these firms to act individually or collectively than the generally smaller and more numerous firms in the [renewable energy] sector”).

“loss-aversion hypothesis” also suggests that new measures that harm trade may be more likely to be challenged than existing ones: while new renewables support measures can disrupt investment expectations, long-standing fossil fuel subsidies may have already been built in investors’ decisions.¹⁴⁴

Other explanations put forward for this incongruity include the fact that several key fossil fuel exporters only joined the WTO relatively recently, as a result of which disputes have yet to emerge.¹⁴⁵ Governments may also be more inclined to address energy trade concerns in specialized forums such as the Energy Charter Treaty,¹⁴⁶ and their fears of retaliatory litigation may override their incentives to initiate disputes at the WTO.¹⁴⁷ A reluctance of WTO Members to expose their own subsidy programs to scrutiny has been observed in other contexts. An example is the unwillingness to litigate over fisheries policy.¹⁴⁸ It is worth noting, however, that the WTO’s rules on standing do not require a complainant to have “legal interest” to be able to request the establishment of a panel in a dispute.¹⁴⁹ Therefore, countries such as low-lying islands, who are most vulnerable to climate change and stand to suffer most acutely from any increase in greenhouse gas emissions resulting from fossil fuel subsidies, could conceivably launch a case against the subsidies of a major fossil fuel producer, even in the absence of trade effects on their domestic industry.

Another explanation is that Members are more likely to challenge measures in diversified economies, which include several important renewable energy players, but exclude some key fossil fuel producing countries.¹⁵⁰ Given that WTO judgements are usually enforced by restricting third-product imports from the contravening country, a diversified economy may represent a more attractive target for litigation.¹⁵¹

While these political factors may indeed have a role to play, most explanations for the absence of fossil fuel subsidy disputes at the WTO concern legal considerations.

144. Meyer, *Explaining Energy Disputes*, *supra* note 141, at 405 (arguing that “[i]nvestments in fossil fuels in effect bake in the WTO-inconsistent policies, dampening down the pressure on governments to challenge trade-distorting fossil fuel policies.”).

145. *Id.* at 397–98; see also Yulia Selivanova, *Managing the Patchwork of Agreements in Trade and Investment*, in *GLOBAL ENERGY GOVERNANCE: THE NEW RULES OF THE GAME* 49 (Andreas Goldthau & Jan Martin Witte eds., 2010).

146. Meyer, *Explaining Energy Disputes*, *supra* note 141, at 393.

147. Wold et al., *supra* note 106, at 635.

148. See generally Margaret A. Young, *Fragmentation or Interaction: The WTO, Fisheries Subsidies, and International Law*, 8 *WORLD TRADE REV.* 477 (2009).

149. Appellate Body Report, *European Communities—Regime for the Importation, Sale and Distribution of Bananas*, WTO Doc. WT/DS27/AB/R ¶ 132 (adopted Sept. 25, 1997).

150. See Meyer, *Explaining Energy Disputes*, *supra* note 141.

151. *Id.*

B. *Legal Factors*

Notwithstanding the environmental imperative of addressing fossil fuel subsidies, the particular features of WTO law currently appear to “undercapture” such subsidies compared to those granted to renewable energy. With a reduced chance of success, the argument goes, governments are less likely to challenge the former in the first place.¹⁵² This reasoning is applied in reference to both prohibited and actionable subsidies under the ASCM.

As seen in Part II, prohibited subsidies—those contingent on products’ export, or on use of local content—are generally among the more straightforward to challenge under the ASCM. These subsidies require neither a demonstration of specificity nor of harmful effects, since both factors are assumed. Further, the case law demonstrates that local content requirements can be challenged under the GATT and the TRIMs Agreement, sidestepping the potentially burdensome ASCM requirements of demonstrating a form of financial contribution, or income or price support that confers a benefit to specific enterprises, industries or regions. The *India—Solar* case, in which the United States (U.S.) dropped its claims under the ASCM in the confidence that the GATT and TRIMs Agreement would provide sufficient legal recourse,¹⁵³ illustrates this point.

Turning to the energy market, it has been suggested that support schemes for renewables are more likely than fossil fuel support measures to incorporate local content measures incompatible with WTO rules.¹⁵⁴ As Wilke has noted, “[s]elling ‘green’ as a stimulus measure is often seen as a means of reconciling consumer fears [of increased electricity costs] by creating jobs while increasing the share of renewable energy.”¹⁵⁵ At the same time, the incorporation of local content requirements appears to render such support measures more vulnerable to a WTO challenge. Strong support for this argument comes from the fact that, despite their widespread use globally, only feed-in tariffs attached to local content requirements have been challenged at the WTO to date. While the ASCM’s second category of prohibited subsidies — export subsidies — has yet to attract a WTO

152. See, e.g., Asmelash, *supra* note 142; De Bièvre et al., *supra* note 45.

153. Asmelash, *supra* note 142, at 278 (noting that the United States only claimed violations of GATT Article III:4 and TRIMs Agreement Article 2.1 in its second complaint).

154. De Bièvre et al., *supra* note 45, at 417 (noting that local content requirements have become widespread in renewable energy support programs); see also Jan-Christoph Kuntze & Tom Moerenhout, *Are Feed-in Tariff Schemes with Local Content Requirements Consistent with WTO Law?*, in *FRONTIERS OF INTERNATIONAL ECONOMIC LAW: LEGAL TOOLS TO CONFRONT INTERDISCIPLINARY CHALLENGES* (Freya Baetens & José Caiado, eds., 2014) (ebook).

155. Marie Wilke, *Feed-in Tariffs for Renewable Energy and WTO Subsidy Rules: An Initial Legal Review*, ICTSD 1 (2011).

challenge in the energy market, it has been suggested that such measures are also more widespread among renewable energy than among fossil fuels.¹⁵⁶

A comparable dynamic of fossil fuel subsidy “undercapture” has been identified with regard to the ASCM’s category of “actionable subsidy.” Commentators have pointed out that the ASCM’s emphasis on specificity, a necessary condition for any subsidy to be considered actionable, forms an impediment for challenging measures in support of fossil fuels.¹⁵⁷ Whereas renewable energy subsidies tend to be granted to producers (where demonstrating specificity can be relatively straightforward), many fossil fuel subsidies are provided to energy consumers. An example are dual pricing schemes (i.e. consumer subsidies that set domestic prices lower than export prices).¹⁵⁸ In such cases, specificity may well be absent,¹⁵⁹ although it has been argued that a subset of such subsidies could be de facto specific if they disproportionately benefit energy-intensive industries.¹⁶⁰

Moreover, even where fossil fuel subsidies can be proven to be specific, the ASCM’s requirement to demonstrate adverse trade effects still represents an important hurdle to a successful challenge.¹⁶¹

C. Towards a Case-by-Case Approach

A combination of political and legal factors has thus far appeared to stymie fossil fuel subsidy disputes at the WTO, while, paradoxically, renewables support programs have become the subject of several disputes. Several authors have therefore highlighted the need to revisit WTO subsidy law, as one of several ways to improve the Organization’s responsiveness to climate change concerns.¹⁶² Yet, while there indeed may be merit in careful WTO reform, the differences between subsidies for renewables and fossil fuels should not be overstated in the process.

The existence of a subsidy is to some extent in the eye of the beholder. As such, certain measures considered “fossil fuel subsidies” by some actors (e.g. externalities in the case of the IMF) are unlikely to ever meet the WTO’s subsidy criteria. Others may already fall squarely within the ASCM’s subsidy

156. Asmelash, *supra* note 142, at 274 (“Export subsidy is not an issue in the fossil fuel industry as fossil fuel exports are hardly subsidized. The industry is rather riddled with export taxes and export restrictions.”). However, we would posit that this is an empirical question, which needs to be examined on a case-by-case basis.

157. Asmelash, *supra* note 142, at 281.

158. See generally Anna Marhold, *Fossil Fuel Subsidy Reform in the WTO: Options for Constraining Dual Pricing in the Multilateral Trading System*, ICTSD (Dec. 2017).

159. De Bièvre et al., *supra* note 45, at 418.

160. Asmelash, *supra* note 142, at 281; but see Yulia Selivanova, *The WTO and Energy: WTO Rules and Agreements of Relevance to the Energy Sector*, ICTSD 30 (2017).

161. Wold et al., *supra* note 106, at 653 *et seq.*; De Bièvre et al., *supra* note 45, at 418.

162. See *supra* note 45.

definition.¹⁶³ Wold et al. illustrate this point with several examples of U.S. and European governments providing access to fossil fuel resources at below-market rates, forgoing revenue otherwise due or engaging in direct transfers of funds or price supports to the fossil fuel industry.¹⁶⁴

While producer subsidies and local content requirements may be widespread among support measures for renewable energy, these elements may also feature in fossil fuel support programs. As previously noted, the G20's subsidization of fossil fuel production may be in the range of US\$70 billion annually.¹⁶⁵ It has also been pointed out that local content requirements, while widespread in the renewables sector, have a "long history" in the oil and gas industries.¹⁶⁶ The fact that attempts by international and non-governmental organizations (NGOs) to shed light on the fossil fuel subsidies landscape have emerged quite recently also warns against hasty generalizations about these measures as a whole.

There are also examples of renewable energy subsidies provided to consumers,¹⁶⁷ thereby likely to fall outside the ASCM's scope. It is furthermore worth noting that many subsidies that benefit renewable energy are targeted at the electricity that these energy sources generate. As electricity is not widely traded across borders, this renders a successful WTO challenge unlikely.

In summary, even though political and legal factors may interact to make challenges on subsidies to renewables more likely, certain measures in support of fossil fuels may well be captured by WTO rules, and the inverse may hold true for certain renewable energy subsidies. The paucity of official data on subsidies pose an additional problem to generalizations.¹⁶⁸ Any assessment about the WTO legality of a measure in support of fossil fuels would thus have to be conducted on a case-by-case basis. The next Part will engage in such an exercise.

163. Espa & Rolland, *supra*, note 45, at 5 ("The most common types of fossil fuel production subsidies typically fall within the ASCM definition of a subsidy and are in principle countervailable if they are designed to pass the specificity test.").

164. Wold et al., *supra* note 106, at 655.

165. *See supra* Part I.

166. Meyer, *Explaining Energy Disputes*, *supra* note 141, at 394; *see also* SILVANA TORDO ET AL., LOCAL CONTENT POLICIES IN THE OIL AND GAS SECTOR (2013).

167. Arunabha Ghosh & Himani Gangania, *Governing Clean Energy Subsidies: What, Why, and How Legal?*, ICTSD GLOB. PLATFORM ON CLIMATE CHANGE, TRADE AND SUSTAINABLE ENERGY 22 (2012), <https://www.ictsd.org/sites/default/files/downloads/2012/09/governing-clean-energy-subsidies-what-why-and-how-legal.pdf>.

168. *See generally* Liesbeth Casier et al., *Shining a Light on Fossil Fuel Subsidies at the WTO: How NGOs Can Contribute to WTO Notification and Surveillance*, 13 WORLD TRADE REV. 4, 603 (2014).

V. THE COMPATIBILITY OF SPECIFIC FOSSIL FUEL SUBSIDIES WITH THE ASCM

This Part applies the relevant provisions of the ASCM to four selected fossil fuel support measures currently or previously in place in G20 countries. In doing so, it seeks, where possible, to make a preliminary assessment of their compatibility with WTO law. As discussed below, despite a growing understanding of the fossil fuel subsidy landscape, data and information challenges are manifold. As a result, none of the four analyses conducted here can be considered a conclusive or exhaustive investigation into the ASCM compatibility of the relevant measure. Rather, given the pioneering nature of this exercise, the analyses seek to lay the basis for more in-depth studies in future, including by: offering an impression of some of the most common types of subsidy in G20 countries; identifying some of the key legal questions to address when an ASCM analysis is conducted; providing an initial estimation, where possible, of the likelihood that the measure would pass the various ASCM legal thresholds; and highlighting some of the key challenges that any attempt to challenge fossil fuel subsidies under the WTO faces, including data and information gaps.

The decision to restrict the scope of the analysis to G20 countries takes into account the economic and trading clout of these major economies — the G20 nations account for some eighty percent of global GDP.¹⁶⁹ It also considers that all G20 countries in 2009 committed to phase out and rationalize inefficient fossil fuel subsidies.¹⁷⁰ All G20 countries are WTO Members.¹⁷¹

The analyses conducted in this Part consider the following four fossil fuel support measures: (i) Expensing of exploration and development costs in the U.S.; (ii) Compensation for below-market prices for fuels in Indonesia; (iii) Fuel tax credit for agriculture and fisheries in Mexico; and (iv) Support to Queensland Rail's coal and freight services in Australia.

While not purporting to be comprehensive, the selection of measures seeks to cover some of the most common fossil fuel subsidies. The purpose is to give a flavor of the questions and challenges these raise from the perspective of WTO law. The analysis sought to provide diverse examples in terms of subsidy type (production or consumption), fossil fuel (oil, coal or gas) and sector covered, as well as geographic location of the measure. In

169. Government of Germany, Members and Participants, Participants of the G20 Summit in Hamburg in 2017 (2017), https://www.g20.org/Webs/G20/EN/G20/Participants/participants_node.html.

170. *See* Group of 20, *supra* note 7.

171. While the Member States of the European Union are also WTO Members in their own right, the European Commission represents European Union Member States at almost all WTO meetings. *See* The European Union and the WTO, https://www.wto.org/english/thewto_e/countries_e/european_communities_e.htm.

addition, factors such as magnitude and timing (e.g. most recent) were taken into account.

The OECD's online inventory of fossil fuel subsidies, which documents and provides estimates for more than 1,000 individual measures in OECD countries and selected non-OECD economies, has been the starting point for the analyses.¹⁷² All four measures considered in this Part are included in the database.¹⁷³ For each of them, the inventory details features such as history, eligibility criteria and recipients, formal incidence, and related fuel. The database therefore helps ensure comparability across different measures, forming an adequate starting point for a preliminary assessment of ASCM compatibility. The database offers two additional advantages. First, it draws heavily on government sources,¹⁷⁴ so the information can be considered relatively uncontroversial. Second, as discussed in Part II, the OECD definition of "support" is comparable to the ASCM definition of subsidies, in that the OECD similarly considers whether a benefit has been provided. The Companion to the Inventory notes in this regard: "[t]he OECD continues to identify, document, and estimate direct budgetary transfers and tax expenditures that confer a benefit or preference for fossil-fuel production or consumption relative to alternatives."¹⁷⁵ Arguably, then, the OECD database's emphasis on provision of a benefit or preference offers a preliminary indication that a measure may pass the ASCM hurdle of "benefit conferred."

Although future assessments could also take into account other public sources (e.g. primary legislation, G20 peer reviews, and research institute or NGO reports), considering this material was beyond the scope of this exercise. While this is a drawback of this analysis, using additional sources can also hamper comparability as they consider different years and apply a different methodology. For instance, the U.S. self-review under the G20 estimates the annual costs of its intangible drilling costs subsidy at US\$1,629 million,¹⁷⁶ while the NGOs Oil Change International and the Overseas Development Institute estimate this subsidy at US\$2.6 billion annually.¹⁷⁷ The OECD, instead, provides a year-by-year breakdown of the costs of the subsidy, therefore providing the most comprehensive picture.

The analysis focuses on the ASCM. As discussed in Part III, other WTO Agreements may be relevant to litigation of subsidies, and indeed, the case

172. See OECD, *Inventory of Support to Fossil Fuels*, <http://www.oecd.org/site/tadffss> (last visited Feb. 15, 2018).

173. *Id.*

174. OECD Companion, *supra* note 26, at 9.

175. *Id.* at 9 (emphasis added).

176. UNITED STATES SELF-REVIEW OF FOSSIL FUEL SUBSIDIES, SUBMITTED DECEMBER 2015 TO THE G-20 PEER REVIEWERS, 2 (Dec. 2015).

177. Alex Doukas, *G20 Subsidies to Oil, Gas and Coal Production: United States*, OVERSEAS DEVELOPMENT INSTITUTE AND OIL CHANGE INTERNATIONAL 2 (2015).

law has thus far relied primarily on the TRIMs Agreement and GATT to challenge renewable energy support measures. However, given that the measures in question focused on a narrow subset of subsidies — those to renewable energy producers and containing local content requirements — there is merit in using the ASCM as a starting point for assessing the wider range of support measures discussed here.

The absence of data in many cases has been an impediment to a conclusive assessment of whether a measure passes the ASCM legal thresholds. As highlighted above, reliance on a broader range of sources may have helped addressing this constraint to some extent. Nevertheless, in several cases, preliminary findings could still be achieved based on the information included in the OECD database and previous case law. In this regard, it is important to note that even if additional data may have yielded different findings, the main purpose of the analysis was to reveal the mechanics of assessing the WTO compatibility of fossil fuel support measures. It was not to deliver a decisive judgement for any of the measures under consideration.

The approach taken towards managing this uncertainty is as follows. If a measure is deemed unlikely to pass the relevant ASCM threshold, it appears to be compatible with the ASCM, so we terminate the analysis. The exception is if there is a negative finding of a prohibited subsidy. In this case, the analysis can proceed to the next step, as an actionable subsidy with adverse effects may still be present. Conversely, if the subsidy is likely to pass the relevant ASCM threshold, an ASCM violation may be present, and we continue to the next step to explore this possibility further. Finally, if we deem inconclusive whether a subsidy passes the relevant ASCM threshold or not, we also opt to continue the ASCM analysis to avoid leaving unexamined a measure that is potentially in violation of the Agreement.

A. Case Study 1: Expensing of Exploration and Development Costs in the U.S.

i. Background

This measure enables independent crude oil and natural gas producers to “deduct entirely (i.e. expense) the intangible drilling costs (IDC)¹⁷⁸ associated with successful investments in domestic oil and gas wells in the year they are incurred.” In addition, the measure allows integrated oil and natural gas companies (“large, vertically-integrated producers”) to deduct up

178. Defined by the U.S. Internal Revenue Service as the costs of developing a well before production begins, which may include wages, fuel, hauling costs, machinery for grading and drilling, and unsalvageable materials used in developing a well. See OECD, United States, Expensing of Exploration and Development Costs, http://stats.oecd.org/Index.aspx?DataSetCode=FFS_USA# (last visited Feb. 15, 2018) [hereinafter OECD data U.S.].

to seventy percent of such costs at once and recover the remaining 30 percent over a five-year period.¹⁷⁹

Because IDC occur prior to production and are properly attributable to future output, normal income-tax rules would treat them as capital costs and allow deductions for depletion only as resources from the well are extracted, i.e. as the asset depreciates.¹⁸⁰ As the OECD explains: “Accelerated depreciation causes tax revenues to be lower in the early years of a given asset’s useful life than they would have been had the asset been depreciated in a conventional way. This implies that a net benefit is conferred upon the recipient in present-value terms.”¹⁸¹ The OECD also notes, however, that annual cash flow estimates of revenue forgone can also at times be negative, for instance when the industry to which the provision applies contracts, thereby slowing or reversing capital accumulation. According to the database, the measure was associated with an average tax expenditure of US\$646 billion per year over the period 2007–2016 for crude oil alone.¹⁸² The measure dates to 1986, although older versions go as far back as 1916.¹⁸³

ii. Analysis

The first step in determining the compatibility of the IDC measure with the ASCM is to establish whether the measure can be considered a subsidy under the Agreement. This firstly requires evidence of a financial contribution by a government or public body.¹⁸⁴ Given the measure’s apparent deviation from normal income-tax rules, examination of whether it represents government revenue that is otherwise due “forgone or not collected” forms the most promising line of inquiry in this regard.

In accordance with WTO jurisprudence, and in contrast to other types of financial contribution, demonstrating the existence of forgone or not-collected government revenue does not require evidence of involvement by a government, since the decision to forgo revenue inherently involves exercise of government authority.¹⁸⁵ Establishing its presence nevertheless calls for a three-step legal analysis,¹⁸⁶ as set out below:

(i) Identifying the challenged tax treatment applied to recipients, including considering “objective reasons” for this treatment.¹⁸⁷ In this case, the ability of producers to deduct, fully or partially, certain IDC in the year

179. *Id.*

180. *Id.*

181. *Id.*

182. *Id.*

183. *Id.*

184. ASCM, *supra* note 17, Art. 1.1(a)(1).

185. Appellate Body Report, *United States—Definitive Anti-Dumping and Countervailing Duties on Certain Products from China*, WTO Doc. WT/DS389/AB/R ¶ 286 (adopted Mar. 25, 2011).

186. *US—Large Civil Aircraft* AB, *supra* note 85, ¶¶ 812–815.

187. *Id.* ¶ 812.

they are incurred appears to deviate from the norm and would therefore constitute the relevant challenged tax treatment. However, identifying the “reasons” for this treatment can be a complex endeavor, requiring, *inter alia*, consideration of the internal principles of the tax regime.¹⁸⁸ The OECD database does not go into such detail, making a determination in the present exercise impossible.

(ii) Identifying a benchmark tax treatment. While this identification step can be challenging, “[v]ery often this benchmark will be the general tax rules applicable to comparable income.”¹⁸⁹ In this regard, the OECD database specifically highlights that “normal income-tax rules” would treat pre-production costs “as capital costs and allow deductions for depletion only as resources from the well are extracted, i.e. as the asset depreciates.”¹⁹⁰ This gives an indication of what the benchmark treatment is supposed to be.

(iii) Comparing the “reasons” for the challenged tax treatment with the benchmark treatment. Such a comparison enables determination of whether, “in the light of the treatment of the comparable income of comparably situated taxpayers, the government is foregoing revenue that is otherwise due in relation to the income of the alleged recipients.”¹⁹¹ As noted under (i), however, the present analysis has not been able to establish for what (if any) tax-regime-related reasons the IDC measure has been adopted. As such, these reasons cannot be compared to the benchmark tax treatment identified under (ii).

On the basis of the information at hand, it is thus unclear whether or not the IDC measure constitutes a “financial contribution”. As a consequence, it also remains uncertain whether the measure meets the second step of the ASCM’s subsidy test, i.e. the benefit threshold. As noted previously,¹⁹² a finding of government revenue otherwise due forgone or not-collected normally automatically implies conferral of a benefit.¹⁹³ In the absence of a conclusive finding regarding the existence of such a financial contribution, the analysis should also withhold judgement on the presence of a benefit conferred.

When it comes to determining the presence of a prohibited subsidy, the results remain similarly inconclusive. As discussed above,¹⁹⁴ a prohibited subsidy can manifest in several ways, namely if a measure is:

188. COPPENS, *supra* note 55, at 47.

189. *Id.* at 49.

190. OECD data U.S., *supra* note 178.

191. *US—Large Civil Aircraft AB*, *supra* note 85, ¶ 814.

192. *See supra* Part III.B.i.

193. According to the Panel in *US—Large Civil Aircraft*, a “tax break is essentially a gift from the government, or a waiver of obligations due, and it is clear that the market does not give such gifts.” Panel Report, *United States—Measures Affecting Trade in Large Civil Aircraft (Second Complaint)*, WTO Doc. WT/DS353/R ¶ 7.170 (adopted Mar. 23, 2012).

194. *See supra* Part III.B.ii.

(i) *De jure contingent on export or use of local content.* Such contingency should be “demonstrated on the basis of the words of the relevant legislation, regulation or other legal instrument.”¹⁹⁵ While the OECD database provides no indication that such contingency is present,¹⁹⁶ neither can such presence conclusively be ruled out on the basis of the relatively limited information at hand.

(ii) *De facto contingent on export or local content.* To determine if there is a de facto export subsidy, the test considers whether “the granting of the subsidy [is] geared to induce the promotion of future export performance by the recipient,”¹⁹⁷ and whether the subsidy “favour[s] a recipient’s export sales over its domestic sales.”¹⁹⁸ Even if the increased production as a result of the subsidy is exported as whole, the measure does not necessarily constitute an export subsidy. This will only be the case if the intervention somehow distorts pre-existing conditions of supply and demand in a way that induces exports over domestic sales. For local content contingency, the legal standard is similar.¹⁹⁹ However, like in de jure contingency, the OECD description does not provide a sufficient basis to determine the presence of de facto contingency. This assessment thus goes beyond the scope of this Article.

(iii) *Covered by one of the items contained in the ASCM’s Illustrative List of Export Subsidies (Annex I).* Again, the absence of information makes it impossible to assess whether the measure falls within the scope of this list.

Turning next to the question of actionability, the OECD database does offer some clues as to the likely specificity of the measure. While the measure appears primarily relevant to the oil and gas industries, the OECD notes that “[s]imilar rules apply in the case of certain exploration and development costs for energy minerals other than oil and natural gas, for coal and uranium in particular.”²⁰⁰ This raises the question of whether the measure’s scope is too broad to pass the ASCM’s specificity threshold.

The Panel’s reasoning in the *US—Softwood Lumber IV* case offers some useful insights here. Considering the question of specificity in the context of the “wood product industries,” the Panel suggested that this particular grouping “constitutes at most only a limited group of industries — the pulp industry, the paper industry, the lumber industry and the lumber

195. Panel Report, *Canada—Measures Affecting the Export of Civilian Aircraft*, WTO Doc. WT/DS70/R ¶ 167 (adopted Aug. 20, 1999); see also Appellate Body Report, *Canada—Certain Measures Affecting the Automotive Industry*, ¶ 100, WTO Doc. WT/DS139,142/AB/R (adopted June 19, 2002).

196. OECD data U.S., *supra* note 178.

197. Appellate Body Report, *European Communities and Certain Member States—Measures Affecting Trade in Large Civil Aircraft*, WTO Doc. WT/DS316/AB/R ¶ 1044 (adopted June 1, 2011).

198. *Id.* ¶ 1053.

199. COPPENS, *supra* note 55, at 141 n. 141.

200. OECD data U.S., *supra* note 178.

remanufacturing industry — under any definition of the term ‘limited.’”²⁰¹ As such, it considered these industries to be sufficiently specific for the purposes of the ASCM. A similar argument could conceivably be construed for the current case study, whereby the “energy minerals industries” appears restricted to oil, natural gas, coal, and uranium, and hence may be sufficiently limited to be considered specific.

Even if the energy minerals industries targeted by this subsidy are found to be too broad to meet the ASCM’s specificity test, it may moreover be possible to argue that the present measure is de facto specific. Indeed, an appearance of such de facto specificity can be detected in the OECD’s description of the measure, which notes that “exploration and development expenditure for coal and other fuel minerals [than oil and gas] generally accounts for a very small share of total support provided under this measure (around 1% only).”²⁰² While the IDC measure is thus likely specific, building a successful case against it would require more information as to whether it causes adverse effects. Subsidies to producers will, in theory, enable firms to drill new wells and expand production to some more “optimum” amount. Erickson et al. found that at recent oil prices of US\$50 per barrel, tax preferences and other subsidies in the U.S., including the IDC subsidy, push nearly half of new, yet-to-be-developed oil into profitability. This will potentially increase U.S. oil production by almost 17 billion barrels over the next few decades.²⁰³ With this in mind, it seems possible that the IDC measure has led to an expansion of U.S. fossil fuel production, thereby causing serious prejudice, injury or nullification or impairment of benefits to third countries. However, to conduct this assessment, more data are needed on the impacts of the IDC subsidy on fossil fuel production levels in the U.S., on concomitant impacts on trade flows, and on what fossil fuel producers and third countries were most affected, if any.

In conclusion, the compatibility of this measure with the ASCM cannot be ascertained on the basis of the information at hand. More information is needed to assess whether it (i) would pass the three-part analysis of “government revenue otherwise due is forgone or not collected” (and therefore confers a benefit); (ii) represents a prohibited subsidy; and (iii) causes adverse effects.

201. *US—Softwood Lumber Panel*, *supra* note 89, ¶ 7.121.

202. OECD, *Indonesia, Inventory of Support Measures for Fossil Fuels*, http://stats.oecd.org/Index.aspx?DataSetCode=FFS_IDN# (last visited Feb. 15, 2018) [hereinafter *OECD data Indonesia*].

203. Peter Erickson et al., *Effect of Subsidies to Fossil Fuel Companies on United States Crude Oil Production*, 2 *NATURE ENERGY* 891, 894 (2017).

B. Case Study 2: Compensation for Below-Market Prices for Certain Types of Petroleum in Indonesia

i. Background

Since 1967, the Indonesian government has set the retail prices for certain brands of petroleum below market levels while providing the state-owned energy company, Pertamina, with direct financial compensation for the resultant losses. As a result of a decline in domestic oil production and the increase in international oil prices the rate of this compensation increased substantially in the 2000s. However, the subsidy was eliminated in 2015, when the price of gasoline was adjusted to reflect the international oil price. While diesel and kerosene will still be subsidized, these fuels were allocated significantly fewer resources in 2015.

ii. Analysis

Considering the existence of a financial contribution by a government or public body, it is unclear whether the measure meets this first step of the ASCM's subsidy test.

As a starting point, it should be noted that the Indonesian government's subsidization of petroleum appears to lower prices indiscriminately for consumers and producers. At first glance, it may appear as if a direct transfer of funds is taking place through the compensation of Pertamina. Such a contribution may also be present if a public body, which state-owned Pertamina might be, or a private actor directed or entrusted by the government, which Pertamina could also be seen as, fulfils this task.²⁰⁴ However, while a transfer of funds does appear to be taking place between the Indonesian government and Pertamina, the company does not appear to be fulfilling a proxy role, as the act of keeping prices artificially low in accordance with prices set by the government does not represent a direct transfer of funds to fossil fuel consumers and producers. Sticking to the letter of the ASCM, then, this type of financial contribution may not be present.

Instead, this measure may be a case of a government (through the proxy, Pertamina) providing goods (i.e. petroleum) other than general infrastructure.²⁰⁵ Indeed, since fuel is not a type of infrastructure, it does not fall under this exception. A complainant would, however, have to demonstrate that this activity falls under the "provision" of goods and the case law does not shed much light on whether lowering prices would be included in this definition.²⁰⁶

204. In accordance with ASCM, *supra* note 17, Art. 1.1(a)(1)(i).

205. *Id.* Art. 1.1(a)(1)(iii).

206. *See* COPPENS, *supra* note 55, at 42–45, for a discussion of the relevant jurisprudence.

Finally, the measure may fall under “any form of income or price support.”²⁰⁷ While the case law on this clause is limited, in *China—GOES*, the Panel found that price support “includes direct government intervention in the market with the design to fix the price of a good at a particular level.”²⁰⁸ However, the normal purpose of such an intervention is to ensure a minimum, rather than a maximum price.²⁰⁹ It is thus unclear whether the current measure falls within this definition.

With regard to the presence of a conferred benefit (step two of the ASCM’s subsidy test), the AB in *Canada—Aircraft* introduced the so-called “private market test” to establish the existence of a benefit.²¹⁰ This test specifies that a benefit is conferred when “the recipient has received a financial contribution on terms more favourable than those available to [it] in the market.”²¹¹

In this regard, it appears evident that the measure confers a benefit to purchasers of different forms of petroleum (crude oil, liquefied petroleum gas, motor gasoline excluding biofuels, other kerosene, and gas or diesel oil excluding biofuels). As noted above, this may include fossil fuel producers as well as consumers. According to the OECD database, “[t]he compensation the government provides to Pertamina [. . .] is equivalent to the difference between the subsidized retail prices and the benchmark market price multiplied by the respective domestic consumption volumes.”²¹² In other words, consumers and producers do not pay the market price, but obtain a more favorable rate. Based on the private market test, a benefit thereby appears to be conferred to both types of purchasers. As discussed above,²¹³ in some cases there may be difficulties in identifying the benchmark market price if the subsidy itself is leading to a distortion of this price. In the present case, however, identifying the benchmark price appears relatively straightforward, since the government already appears to be availing itself to a benchmark price in order to assess the compensation due to Pertamina.

Regarding the existence of a prohibited subsidy, the measure appears to be available to producers that use oil as an input good. In theory, such provision may be contingent on export or the use of domestic products, and as with Case Study 1, there is insufficient information in the OECD database

207. ASCM, *supra* note 17, Art. 1.1(a)(2).

208. Panel Report, *China—Countervailing and Anti-Dumping Duties on Grain Oriented Flat-Rolled Electrical Steel from the US*, WTO Doc. WT/DS414/R ¶ 7.85 (adopted Nov. 16, 2012).

209. Vitaliy Pogoretsky, *Energy Dual Pricing in International Trade: Subsidies and Anti-dumping Perspectives*, in REGULATION OF ENERGY IN INTERNATIONAL TRADE LAW: WTO, NAFTA, AND ENERGY CHAPTER 181, 202 (Yulia Selivanova ed., 2011).

210. *Canada—Aircraft* AB, *supra* note 71, ¶ 157; COPPENS, *supra* note 55, at 60.

211. *Canada—Aircraft* AB, *supra* note 71, ¶ 158.

212. OECD data Indonesia, *supra* note 202.

213. See *supra* Part III.B.i.

to establish without a doubt whether such contingency is present. However, given that this measure is available to consumers in addition to producers, we consider such contingency to be extremely unlikely.

Similarly, the Indonesian support measure is very unlikely to be actionable. The measure benefits all purchasers of certain brands of petroleum, and is thus not specific to a certain enterprise or group of enterprises, a certain industry or group of industries, or recipients in a certain region within the jurisdiction of the granting authority's, as per the ASCM's specificity requirements. Given the measure's lack of specificity, it appears unnecessary to proceed with an analysis of its possible adverse effects.

In conclusion, this measure is very likely to be compatible with the ASCM. While it was not possible to determine whether Indonesia's measure meets the ASCM definition of a subsidy, it is unlikely this would be a prohibited subsidy. The measure lacks specificity and as such, it falls outside of the scope of the Agreement.

C. Case Study 3: Fuel Tax Credit for Agriculture and Fisheries in Mexico

i. Background

This measure has been in place in Mexico since 2003, providing the agriculture and fisheries sectors with “a fuel-tax credit on their purchases of diesel fuel for final use in general machinery, with the exception of vehicles, regardless of the prevailing rate of the [excise tax law (Impuesto Especial sobre Producción y Servicios)].”²¹⁴ The subsidies ranged from Mex\$51.5 million in 2011 up to Mex\$4.08 billion in 2016.

ii. Analysis

The OECD description suggests that while the Mexican government would usually be able to retain revenues from diesel taxes, under this measure, the agriculture and fisheries sectors are able to obtain tax credit on their diesel fuel in certain instances. As such, this measure most likely represents forgone or not-collected government revenue that is otherwise due.

As noted under Case Study 1, there is no need to demonstrate action taken by government when it comes to showing this type of financial contribution. Similarly, the three-step test introduced in Case Study 1 is applicable here. While its execution faces similar challenges, it should be noted that “fiscal incentives such as tax credits” are explicitly mentioned in ASCM Article 1.1(a)(1) as an example of forgone revenue; making it more

214. OECD, Mexico, Inventory of Support Measures for Fossil Fuels, http://stats.oecd.org/Index.aspx?DataSetCode=FFS_MEX# (last visited Feb. 15, 2018).

likely that this measure will pass this test. As a consequence, it is also likely that the measure would pass the ASCM's benefit threshold: as discussed in Case Study 1, the private market test does not have to be substantively met where government revenue is forgone, as a benefit seems automatically conferred in such instances.

Turning to the possible presence of a prohibited subsidy, the OECD database again makes no reference to the measure being contingent on either export performance or use of domestic over foreign products. However, given its broad scope, it would seem unlikely that the measure has been implemented with any of these considerations in mind.

The limited amount of information available about this subsidy also renders it difficult to ascertain its actionability. However, there is no indication in the OECD database that the subsidy is limited to certain (sub-)sectors of the agriculture or fisheries industries.

In *US—Upland Cotton*, the Panel did not consider the U.S. argument that a crop insurance subsidy generally available to the U.S. agriculture sector as a whole would not be specific within the meaning of ASCM Article 2, given that the Panel had already found that the crop insurance subsidy in question was not available to all agricultural production.²¹⁵ However, the Panel did consider that U.S. crop insurance subsidies which were “generally available for most crops but . . . not generally available in respect of the entire agricultural sector in all areas” could be considered specific.²¹⁶ It noted that:

a subsidy that is limited to a small proportion of industries, such as those producing one or two individual United States products would be limited and thus ‘specific’ within the meaning of Article 2 of the *SCM Agreement*. These subsidies are ‘specific’ as they are not even available in respect of a number of commodities.²¹⁷

It further added that:

the industry represented by a portion of United States agricultural production that is growing and producing certain agricultural crops (and certain livestock in certain regions under restricted conditions) is a sufficiently discrete segment of the United States economy in order to qualify as ‘specific’ within the meaning of Article 2 of the *SCM Agreement*.²¹⁸

The Panel's reasoning in *US—Upland Cotton* would suggest that, conversely, subsidies available to the agriculture sector as a whole, including

215. *US—Upland Cotton* Panel, *supra* note 73, at ¶ 7.1152.

216. *Id.* at ¶¶ 7.1150-7.1151.

217. *Id.* at ¶ 7.1147.

218. *Id.* at ¶ 7.1151.

all crops and livestock, and the many industries comprised therein, cannot be considered specific. This would appear to be the correct approach given that the ASCM specificity requirement is limited to enterprises and industries, but does not refer to the broader term of “sector(s).”

The absence of specificity would seem even more clear-cut if the subsidy is provided to other sectors, in addition to agriculture. It would thus appear unlikely that the current measure, which is not limited to specific industries or sub-sectors within agriculture, but also extends to fisheries, would be considered specific. Consequently, the measure likely falls outside the scope of the ASCM, and is therefore compatible with the Agreement.

D. Case Study 4: Support to Queensland Rail’s Coal and Freight Services in Australia

i. Background

In the 2003–2004 financial year, the Queensland state budget directed AU\$94 million to Queensland Rail’s Coal and Freight Services to upgrade and acquire rolling stock such as diesel locomotives.²¹⁹ Supplementing capital expenditure by state-owned Queensland Rail of about AU\$615 million over the same year, this program benefitted Queensland’s hard-coal industry as a whole.²²⁰

ii. Analysis

This measure could plausibly fall under the financial contribution type of “the provision of goods or services . . . other than general infrastructure.”²²¹ The AB has endorsed a wide interpretation of the term “provision,” with this issue hinging on whether a transaction made goods or services available.²²² With regard to the present measure, the OECD database notes that the Queensland state budget for the 2003–2004 fiscal year directed AU\$94 million to Queensland Rail’s coal and freight services “to upgrade and acquire rolling stock such as diesel locomotives.”²²³ It thus appears that this transaction made the upgrading and acquisition of the rolling stock available.

With regard to the carve-out of “general infrastructure,” it can reasonably be argued that rolling stock such as locomotives cannot be considered infrastructure. Indeed, in *EC—Large Civil Aircraft*, the Panel

219. OECD, Australia, Inventory of Support Measures for Fossil Fuels, http://stats.oecd.org/Index.aspx?DataSetCode=FFS_AUS# (last visited Feb. 15, 2018) [hereinafter OECD data Australia].

220. *Id.*

221. ASCM, *supra* note 17, Art. 1.1(a)(1)(iii).

222. *US—Softwood Lumber IV* AB, *supra* note 79, ¶¶ 68–75.

223. OECD data Australia, *supra* note 219.

highlighted that the ordinary meaning of infrastructure refers to “installations and services (power stations, sewers, roads, housing, etc.) regarded as the economic foundation of a country.”²²⁴ While the case may thus have been different if the government of Queensland’s financing had gone to maintenance of the railway infrastructure,²²⁵ the present measure does seem to fall under this carve-out, and rather appears related to the provision of goods and services under ASCM Article 1.1(a)(1)(iii).

Finally, it should be noted that the government of the state of Queensland falls within the scope of a “government” under the ASCM. In accordance with public international law, the conduct of any organ of the state, at whatever level, is attributable to that state.²²⁶

Considering the second step of the ASCM’s subsidy test, it appears that a benefit has been conferred on Queensland’s hard coal industry, since the recipient “has received a financial contribution on terms more favourable than those available to [it] in the market.”²²⁷ On the private market, the coal industry would have either to make the rolling stock investments itself, or to forgo the advantages of such an investment.

While it is thus likely that this measure represents a subsidy as per the ASCM’s definition, as with Case Study 1, there is insufficient information available in the OECD database to ascertain whether it represents a prohibited one.

Turning instead to the question of actionability, the OECD inventory notes that this subsidy “benefited Queensland’s hard coal industry as a whole.”²²⁸ However, the inventory also mentions the subsidy was granted to the state-owned rail company’s coal and freight services. As such, it is not immediately evident to what extent the subsidy is specifically limited to the coal industry in Queensland. As noted, the case law has in practice adopted a wide reading of the concept of specificity, with industries “producing wood products”²²⁹ or producing “a subset of basic agricultural products”²³⁰ being considered sufficiently specific for the ASCM’s purposes. At the same time, the concept is necessarily delimited. More information into the nature of the freight and the industries involved, and the extent to which different industries benefitted from this subsidy (both *de jure* and *de facto*) would be needed to conduct this assessment.

With regard to the final stage of the ASCM analysis, the adverse effects test, there is at least a possibility that this measure has harmed the trade

224. *EC—Large Civil Aircraft* Panel, *supra* note 112, ¶ 7.1036.

225. This would have required determination of the “generality” of the infrastructure in question; *see, e.g., id.* at ¶ 7.1039.

226. COPPENS, *supra* note 55, at 51.

227. *Canada—Aircraft* AB, *supra* note 71, ¶ 158.

228. OECD data Australia, *supra* note 219.

229. *US—Softwood Lumber IV* AB, *supra* note 79, ¶ 7.121.

230. *US—Upland Cotton* Panel, *supra* note 73, at ¶ 7.1148.

interests of other WTO Members. Indeed, more than three-quarters of Australia's coal output goes to export, making the country the world's largest coal exporter in volume.²³¹ The Queensland government is a major exporter of coal, with exports estimated at AU\$23.5 billion for 2014–2015.²³² However, more specific information regarding the impacts of this subsidy on production and trade flows is needed to assess whether it is causing serious prejudice, injury, or nullification or impairment of benefits to other Members. This challenge is compounded by the fact that while the measure is historical in nature, serious prejudice, for instance, requires that adverse effects occur at present, or represent a future threat.²³³ It is therefore not possible to determine whether this measure is compatible with the ASCM on the basis of the information at hand.

E. Discussion

The analyses conducted in the previous section have led to different assessments of our case studies on fossil fuel consumer support on the one hand, and on producer support measures on the other. Several variations within these two categories are also discernible. The analyses have served to highlight common challenges across different measures, in particular when it comes to demonstrating adverse effects.

Our analyses found two support measures to be likely in conformity with the ASCM: Case Study 2 (Compensation for Below-Market Prices for Certain Types of Petroleum in Indonesia) and Case Study 3 (Fuel Tax Credit for Agriculture and Fisheries in Mexico). Both measures were deemed unspecific, thereby falling outside the ASCM's scope. These findings are in line with the existing literature on fossil fuel subsidies and the WTO, which suggests that most consumer subsidies are unlikely to be captured by the ASCM, and are therefore particularly difficult to litigate under WTO law (see Part III, *supra*). Determining whether Case Study 2 represents a financial contribution by a government, or income or price support, also proved challenging. This may in part be explained by the fact that the ASCM is not geared towards addressing consumer subsidies, as the Agreement's specificity requirement shows.

By contrast, our analyses of the ASCM-conformity of the two producer case studies proved inconclusive. Although specificity could be preliminarily determined for Case Study 1 (Expensing of Exploration and Development Costs in the U.S.), the absence of readily available information made

231. OECD, *Inventory of Support to Fossil Fuels*, *supra* note 170.

232. *Coal Resources*, QUEENSLAND GOVT., <https://www.business.qld.gov.au/industries/invest/mining/resources-potential/mineral-resources/coal-resources> (last visited Nov. 9, 2018).

233. See *supra* Part III.B.ii.

conducting other legal tests necessary to determine ASCM-compatibility impossible. This includes the three-part analysis to determine whether government revenue that is otherwise due is forgone or not collected under the ASCM's "subsidy" test. Given the link between forgone government revenue and benefit conferred, it was also not possible to determine whether the U.S. measure meets the ASCM's benefit threshold.

Similarly, the exercise left unanswered numerous questions related to prohibited subsidies. This was primarily due to a lack of information on the precise characteristics of the measure in question. In future, however, this shortcoming could be addressed through a more in-depth examination of the rules governing the measure and how it is implemented in practice, including with consultation of a wider range of sources besides the OECD database. There is merit in exploring the prevalence of this type of subsidy among fossil fuel support measures, given that prohibited subsidies allow complaints to bypass the ASCM's specificity and adverse effects tests. As evidenced by the case law on local content requirements, they can also be challenged under the TRIMs Agreement or GATT. In addition, in contrast to some of the softer remedies available if adverse effects are found, prohibited subsidies must be withdrawn "without delay". Such a withdrawal is arguably the most desirable outcome when it comes to fossil fuel subsidies.

One step of the ASCM analysis warrants further discussion and that concerns adverse effects. In the two case studies where this step was considered (i.e. the producer support measures in Case Studies 1 and 4), our findings were inconclusive. The analysis could not proceed beyond general statements on fossil fuel production and export in the country in question.

An adverse effects analysis, however, requires a very targeted approach. It would demand more information on the impacts of the measure on production levels in the country where support is provided; concomitant impacts on trade flows; and which fossil fuel producers and third countries were most affected, if any.

It may be possible to ascertain country A's petrodiesel production and export levels over, for example, the last ten years. It may also be possible to determine who were other major exporters and importers of diesel over that period, and related changes. But linking country A's supported exports, or, as required under serious prejudice, the support itself to adverse trade effects in any given Member represents an enormous challenge. In addition, as discussed in Part II, *supra*, it would have to be proven that the adverse effects are currently present. Under a serious prejudice claim, it would also have to be demonstrated, in certain instances, that harm was caused to a like

product, raising further potential challenges with regard to the likeness of, for example, petrodiesel, biodiesel, and petrodiesel-biodiesel blends.²³⁴

This analysis thus corroborates the understanding that the adverse effects threshold forms a significant, if not necessarily insurmountable, obstacle for litigating subsidies under the ASCM.²³⁵

The analysis in this Part is in line with previous findings suggesting that there are important challenges in tackling fossil fuel subsidies through WTO litigation. In particular, most consumer support measures are likely to fall outside the scope of the ASCM, and there are key information difficulties in demonstrating adverse effects of producer subsidies. Nevertheless, the futility of litigating fossil fuel subsidies under the WTO should not be treated as a foregone conclusion.²³⁶ Contravention of the ASCM could not be decisively ruled out for either of the actionable subsidies examined here. Indeed, both producer subsidies reached (conditionally) the final, adverse-effects, stage of the analysis, suggesting there may be insights to gain from further probing the trade effects of these measures. Moreover, there is an opportunity to further explore the presence of prohibited subsidies among fossil-fuel support measures, as these may be easier to litigate. At the same time, our findings point strongly to the need of a better understanding of particular fossil fuel subsidies governments have in place, as well as their trade effects.

VI. TACKLING FOSSIL FUEL SUBSIDIES BY REFORMING INTERNATIONAL TRADE AGREEMENTS

The previous Parts have shown how challenging it may be to determine whether certain fossil fuel subsidies are either compatible or incompatible with WTO law. But where to go from there?

This Part offers some possible ways forward in addressing fossil fuel subsidies through international trade agreements — including but not limited to the WTO Agreements. It begins by offering an overview of the state of play in international trade talks in relation to fossil fuel subsidies. It then sets out a variety of options to address fossil fuel subsidies. Finally, it

²³⁴ See, e.g., Wold et al., *supra* note 106, at 670–82.

²³⁵ *Id.*

²³⁶ For instance, Slattery analyzed a proposed concessional loan to build a railway between the Carmichael coal mine and a coal port in Australia was subjected to an analysis of WTO compatibility, concluding that the subsidy would violate the ASCM. See Christian Harris Slattery, *Fossil Fueling the Apocalypse: Australian Coal Subsidies and the Agreement on Subsidies and Countervailing Measures*, WORLD TRADE REV. (2018, forthcoming). See also Gary Horlick, *The WTO Subsidies Agreement Can Be Changed to Discipline Fossil Fuel Subsidies*, ICTSD OPINION AND ANALYSIS (Aug. 22, 2017), <https://www.ictsd.org/opinion/the-wto-subsidies-agreement-can-be-changed-to-discipline-fossil-fuel-subsidies> (noting that “[l]itigation could for instance be brought by WTO members to treat the uncompensated externalities as ‘foregone revenue’ and thus an actionable subsidy under the ASCM.”).

discusses the choice of forum to address such subsidies through trade agreements.

The feasibility of each of these options presented here will depend, among other factors, on (i) their (perceived) costs, (ii) actors in favor of or opposed to, a role for trade agreements in addressing fossil fuel subsidies, (iii) the extent to which legal changes (i.e. amendments) are necessary or can be avoided, (iv) activities already undertaken by other (international) organizations, and (v) broader contextual circumstances unrelated to the issue of fossil fuel subsidies (e.g. the future of the Doha Round of trade negotiations). Moreover, the prospects of pursuing any of these options would likely change should a dispute arise in relation to fossil fuel subsidies. Although further discussion is needed, the main point is that there is a plethora of options available, going well beyond introducing new trade disciplines for fossil fuel subsidies.

A. State of Play in International Trade Talks

The 2001 Doha Declaration formed the basis for “negotiations aimed at clarifying and improving disciplines under the . . . [ASCM].”²³⁷ Although fossil fuel subsidies have not been addressed under these negotiations, the Negotiation Group on Rules, which is tasked with negotiations under paragraphs 28 and 29 of the Doha Declaration, discussed fisheries subsidies, another form of environmentally harmful subsidies.²³⁸

Fossil fuel subsidies have been regularly raised in the Committee on Trade and Environment (CTE). At these meetings, members of the Friends of Fossil Fuel Subsidy Reform²³⁹ — including New Zealand, Norway, and Switzerland — have highlighted progress made in other international forums, such as the G20 and APEC, while arguing that trade agreements have a role to play in addressing fossil fuel subsidies. Some WTO Members (e.g. Canada, Mexico, Nigeria, the Philippines) have indicated they are open to (continue) such discussions under the CTE, whereas others (e.g. Qatar, Saudi Arabia, Venezuela) have expressed concerns that the WTO is not the

237. Doha Declaration, *supra* note 41, ¶ 28.

238. These negotiations have yet to lead to any agreement and are hampered by the ongoing deadlock in the Doha Round. See Young, *Energy Transitions and Trade Law: Lessons from the Reform of Fisheries Subsidies*, *supra* note 13. However, it should be noted that, by one estimate, fuel subsidies (notably for diesel used for fishing) account for twenty-two percent of global fisheries subsidies. See U. Rashid Sumaila et al., *Global Fisheries Subsidies: An Updated Estimate*, 69 MARINE POL'Y 189 (2016).

239. The Friends are an informal group comprising nine countries — Costa Rica, Denmark, Ethiopia, Finland, New Zealand, Norway, Sweden, Switzerland, and Uruguay — that seek to promote fossil fuel subsidy reform. See generally Vernon Rive, *Anatomy of an International Norm Entrepreneur: The Friends of Fossil Fuel Subsidy Reform*, in THE POLITICS OF FOSSIL FUEL SUBSIDIES AND THEIR REFORM, *supra* note 24; FRIENDS OF FOSSIL FUEL SUBSIDY REFORM, <http://fffsr.org/about> (last visited Nov. 11, 2018).

appropriate forum for this discussion.²⁴⁰ In addition to talks in the CTE, fossil fuel subsidies (and their reform) have been brought up in the Committee on Subsidies and Countervailing Measures (SCM Committee) and the Trade Policy Review Body.²⁴¹ A significant step forward was taken at the December 2017 WTO Ministerial Conference (MC11), when a set of Members adopted the “Fossil Fuel Subsidies Reform Ministerial Statement,” calling for further WTO action on disciplining fossil fuel subsidies.²⁴²

Shifting the focus away from multilateral trade talks, fossil fuel subsidies have been brought up in the context of regional trade agreements. In the negotiations on the Trans-Pacific Partnership (TPP),²⁴³ for instance, a proposal was made to link the agreement to voluntary commitments under APEC, though this proposal was not included in the final text due to the opposition of some countries.²⁴⁴ Nevertheless, the final version of the agreement — dubbed the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) — includes provisions prohibiting specific fisheries subsidies that would “negatively affect fish stocks that are in an overfished condition” or that are caught through “IUU” (illegal, unreported, and unregulated) fishing,²⁴⁵ as well as provisions strengthening the transparency of such subsidies, including fuel subsidies.²⁴⁶

Another regional trade agreement — between the European Union (EU) and Singapore, still awaiting ratification by EU Member States — includes a provision specifically aimed at fossil fuel subsidies:²⁴⁷ The Parties recognize the need to ensure that, when developing public support systems for fossils [sic] fuels, proper account is taken of the need to reduce greenhouse gas emissions and to limit distortions of trade as much as

240. *See, e.g.*, Committee on Trade and Environment, Report of the Meeting Held on 22 June 2015, WTO Doc. WT/CTE/M/59 ¶¶ 1.101–1.111 (Sept. 3, 2015); Committee on Trade and Environment, Report of the Meeting Held on 30 June 2016, WTO Doc. WT/CTE/M/61 ¶¶ 1.30–1.52 (Oct. 14, 2016); Committee on Trade and Environment, Report of the Meeting Held on 14 and 15 November 2016, WTO Doc. WT/CTE/M/62 ¶¶ 1.15–1.30 (Mar. 20, 2017).

241. *See infra* Part VI.B.ii.

242. Fossil Fuel Subsidies Reform Ministerial Statement, WTO Doc. WT/MIN(17)/54 (Dec. 12, 2017). The statement was made by Chile, Costa Rica, Iceland, Liechtenstein, Mexico, the Republic of Moldova, New Zealand, Norway, Samoa, Switzerland, the Separate Customs Territory of Taiwan, Penghu, Kinmen and Matsu, and Uruguay. *See infra* Part VI.B.iv.

243. Which involved Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, the U.S. and Vietnam. The U.S. withdrew from the Agreement in January 2017, but the remaining eleven countries decided to sign an only slightly revised version one year later. Associated Press, *11 nations to sign Pacific trade pact as US plans tariffs*, N.Y. DAILY NEWS (Mar. 8, 2018).

244. Young, *Energy Transitions and Trade Law*, *supra* note 13, at 284–285.

245. Comprehensive and Progressive Agreement for Trans-Pacific Partnership, Art. 20.16.5 (Feb. 21, 2018), <https://www.mfat.govt.nz/en/trade/free-trade-agreements/free-trade-agreements-in-force/cptpp/comprehensive-and-progressive-agreement-for-trans-pacific-partnership-text> [hereinafter CPTPP].

246. *Id.* Art. 20.16.9–11.

247. EU-Singapore Free Trade Agreement, Art. 12.11.3 (April 2018), <http://trade.ec.europa.eu/doclib/press/index.cfm?id=961>.

possible. While subparagraph (2)(b) of Article 11.7 (Prohibited Subsidies) does not apply to subsidies to the coal industry, the Parties share the goal of progressively reducing subsidies for fossil fuels. Such a reduction may be accompanied by measures to alleviate the social consequences associated with the transition to low carbon fuels.

Although this has not been used yet in other regional trade agreements, and the provision itself is not subject to the agreement's dispute settlement system,²⁴⁸ this type of provision shows an emerging recognition among major trading nations of the connection between fossil fuel subsidy reform and trade liberalization.

B. Options to Address Fossil Fuel Subsidies Through International Trade Agreements

Opportunities for the WTO and other international trade agreements to start addressing fossil fuel subsidies are plentiful. Here, we map the landscape of available options.

i. Promote Technical Assistance and Capacity-Building

A first step towards fossil fuel subsidy reform is identifying existing subsidies. Some countries, however, lack the necessary capacity and technical expertise to do so. Capacity-building and technical assistance on how to identify, measure, and evaluate fossil fuel or wider energy subsidies may help overcome this challenge. In this way, Members' understanding of energy subsidies, their trade and environmental impacts, and anticipated effects of reform could be improved.²⁴⁹

Capacity-building and technical assistance could also take the form of lesson sharing from countries' efforts to reform fossil fuel or wider energy subsidies. This would help Members better understand the circumstances under which subsidy reform is appropriate, how it can be made to work, and how it can support countries' wider development goals and plans. Such capacity-building needs have been identified especially in fossil fuel-exporting countries, such as the countries of the Gulf Cooperation Council, which need to build capacity to distribute wealth through means other than subsidies.²⁵⁰

248. *Id.* Art. 12.16.1.

249. Such capacity-building efforts are likely to take place also in the context of reporting on SDG 12.c, which has as an indicator for reporting the “[a]mount of fossil-fuel subsidies per unit of GDP (production and consumption) and as a proportion of total national expenditure on fossil fuels”. See UN DESA, *The Sustainable Goals Development Report 2018* (2018) <https://sustainabledevelopment.un.org/sdg12>.

250. Tom S.H. Moerenhout, *GCC States and Energy Pricing Reform: Building and Using International Frameworks of Cooperation*, EMIRATES DIPLOMATIC ACADEMY WORKING PAPER, 13 (Sept. 2017).

Within the WTO, experiences with reform are already shared informally when the subject comes up in CTE meetings,²⁵¹ or in Trade Policy Reviews (TPRs, see below). This could be supported by ongoing research by international organizations, NGOs, and academia that have provided insights on case studies about reform.²⁵² This should include consideration of how the poor and vulnerable in society can be supported after reform. It could also include a focus on vulnerable sectors of the economy (e.g. energy-intensive, trade-exposed sectors). Much of the capacity-building could build on and/or be coordinated with efforts by existing international and non-governmental organizations, including the World Bank (and its Energy Sector Management Assistance Program²⁵³), the IMF, and the Global Subsidies Initiative.

The WTO's Economic Research and Statistics Division could be requested to supply relevant information on subsidies to help strengthen the knowledge base. It could also draw on ongoing work by other international and non-governmental organizations. Moreover, the WTO has a long-standing experience of building capacity and providing technical assistance on trade-related matters.²⁵⁴ The issue of fossil fuel subsidies could therefore be mainstreamed in existing capacity-building initiatives by the WTO Secretariat, as well as initiatives undertaken in partnership with other international organizations, such as the multi-agency Enhanced Integrated Framework for Least Developed Countries.²⁵⁵

ii. Enhance Transparency of Fossil Fuel Subsidies

Improving transparency has been a key tenet of international efforts to address fossil fuel subsidies. A key example are the voluntary peer reviews introduced by the G20 and APEC,²⁵⁶ as well as the ongoing efforts by organizations like the OECD to compile data on fossil fuel subsidies. Within the WTO, however, there is still room for improvement.

251. See *supra* note 240.

252. See, e.g., Shelagh Whitley and Laurie van der Burg, *Fossil Fuel Subsidy Reform: From Rhetoric to Reality*, NEW CLIMATE ECON. (2015); Jun Rentschler and Morgan Bazilian, *Principles for Designing Effective Fossil Fuel Subsidy Reforms*, 11 REV. ENVTL. ECON. & POL'Y 138 (2017). For case studies of reform, see also <http://www.iisd.org/gsi/fossil-fuel-subsidies/case-studies-lessons-learned-attempts-reform-fossil-fuel-subsidies>.

253. See World Bank Group, *Energy Sector Management Assistance Program*, <http://www.esmap.org/>.

254. See *Building Trade Capacity*, https://www.wto.org/english/tratop_e/devel_e/build_tr_capa_e.htm.

255. Besides the WTO, the Framework is supported by the U.N. Conference on Trade and Development, the International Trade Centre, the U.N. Development Program, the IMF and the World Bank. It already has two focal areas that could be linked to fossil fuel subsidies, namely "Trade and Environment" and "Sustainable Development Goals". See Enhanced Integrated Framework (EIF), *About Us*, EIF Website, <http://www.enhancedif.org>.

256. See IEA & OECD, UPDATE ON RECENT PROGRESS IN REFORM OF INEFFICIENT FOSSIL FUEL SUBSIDIES THAT ENCOURAGE WASTEFUL CONSUMPTION 5 (2018).

Under the ASCM, WTO Members are obliged to notify their subsidies.²⁵⁷ However, a major deficiency with of the ASCM notification system is that Members fail to notify in time.²⁵⁸ Moreover, given the lack of a common understanding regarding key terms of the ASCM, including specificity and adverse effects, Members often do not notify their subsidies. Perhaps as a result, the notification record of fossil fuel subsidies is also patchy. Between 2008 and 2013, WTO members notified 64 fossil fuel subsidies through the ASCM, while the OECD inventory contained 640 notifications for the same period.²⁵⁹

In addition to notifications under the ASCM, fossil fuel subsidies can also be included in Trade Policy Reviews under the Trade Policy Review Mechanism. This mechanism includes reports prepared by the Member under review as well as by the WTO Secretariat, with a view to improve understanding about trade policies and other practices of individual WTO Members.²⁶⁰ While such reports have started to include information related to fossil fuel subsidies — and their reform — in various ways,²⁶¹ the presentation of this information has thus far lacked consistency. Moreover, in 2017, the frequency of TPRs was reduced to once every three, five, or seven years, depending on the size of the economy.²⁶² In the world of fossil fuel subsidies, these are relatively long intervals, as international oil price volatility can significantly affect especially consumer subsidies.²⁶³

Improved transparency could help shed light on the subsidies provided, especially by countries that have not yet undergone voluntary peer review in other forums. Moreover, transparency can help avoid the emergence of

257. ASCM, *supra* note 17, Art. 25.

258. To illustrate the problem, in October 2016, 89 Members had not yet filed their 2015 notifications, and 63 Members had failed to make their 2013 notifications. This prompted the Chair of the SCM Committee to lament “discouragingly low compliance” and admit that “chronic low compliance . . . caused a serious problem in the proper functioning of the [ASCM].” See WTO: 2016 News Items, *Chair Cites “Discouragingly Low” Compliance with WTO Subsidy Notification Requirements*, WORLD TRADE ORG. (Oct. 25, 2016), https://www.wto.org/english/news_e/news16_e/scm_28oct16_e.htm.

259. Gregory Shaffer et al., *Can Informal Law Discipline Subsidies?*, 18 J. INT’L ECON. L. 711, 736 (2015).

260. See generally Sam Laird & Raymundo Valdés, *The Trade Policy Review Mechanism*, in THE OXFORD HANDBOOK ON THE WORLD TRADE ORGANIZATION 463 (Amrita Narlikar et al. eds., 2012); MATHIAS KENDE, THE TRADE POLICY REVIEW MECHANISM: A CRITICAL ANALYSIS (2018).

261. Of the 27 TPRs prepared between August 2015 and July 2016, 10 did not mention fossil fuel subsidies. Some generally noted the existence of fossil fuel subsidies and, at times, how they operated (Haiti, Malawi, Moldova, and Namibia). Others were more detailed and discussed what type of consumer or producer received subsidies, what fuels were mainly subsidized and what type of fossil fuel subsidy reform attempts had been made or were planned in the near future. Four even included fossil fuel subsidy estimates, albeit to different degrees of detail.

262. General Council Approves First Ever Amendment to Trade Policy Review Mechanism, WORLD TRADE ORGANIZATION (July 26, 2017), https://www.wto.org/english/news_e/news17_e/tpr_26jul17_e.htm.

263. On the link between oil prices and fossil fuel subsidies, see generally Keith Benes et al., *Low Oil Prices: An Opportunity for Fuel Subsidy Reform*, COLUMBIA UNIVERSITY CENTER ON GLOBAL ENERGY (2016), <https://www.theigc.org/blog/low-oil-prices-an-opportunity-for-fuel-subsidy-reform/>.

disputes, instead generating dialogue and clarity on fossil fuel subsidies, and options for reform.²⁶⁴ A few options can be identified in this regard.

First, Members could, unilaterally or plurilaterally, pioneer new approaches to strengthened transparency by committing to voluntarily notify fossil fuel subsidies under the ASCM according to a common template. Self-reporting of fossil fuel subsidies has already taken place in the context of the G20. Improved notifications would help governments and other stakeholders better understand what subsidies are being provided, and track efforts to reform them over time. By using an improved notification template,²⁶⁵ barriers of ambiguous requirements and other technical difficulties from the use of the current template could be overcome. Although — as the G20 experience has demonstrated²⁶⁶ — self-reporting may mean that only a limited number of subsidies are notified, it is a first step towards stronger transparency.

Second, the WTO Secretariat could seek to consistently include fossil fuel subsidies within its TPRs. WTO Members could also, on their own initiative, unilaterally or plurilaterally, decide to include information on fossil fuel subsidies in their reports in response to the TPR. To encourage this practice, the Trade Policy Review Body could require the WTO Secretariat to pay particular attention to environmentally harmful subsidies in its reports, for instance in the discussion of specific trade policies and practices (which include subsidies). Alternatively, it could encourage the Secretariat to pay attention to fossil fuels in general (e.g. trade of fossil fuels, or greenhouse gas emissions from their combustion) in sectoral discussions about energy.

Members could take up the emerging practice of including information from other sources, e.g. countries' peer and self-reviews under the G20 and APEC or third-party material, in the process. Such material could be classified as official, requiring it to be considered by the WTO Secretariat in preparing its reports. The role of the Trade Policy Review Mechanism in addressing fossil fuel subsidies could additionally be strengthened by granting NGOs and other stakeholders with expertise on the matter observer status at meetings of the Trade Policy Review Body. The Secretariat is allowed to use third-party analyses in the development of the

264. Robert Wolfe, *Letting the Sun Shine in at the WTO: How Transparency Brings the Trading System to Life*, WORLD TRADE ORG. ECON. RESEARCH AND STATISTICS DIV., STAFF WORKING PAPER ERSRSD-2013-03 22 *et seq.* (Mar. 6, 2013).

265. *See, e.g.*, Ronald Steenblik & Juan Simón, *A New Template for Notifying Subsidies to the WTO*, GLOBAL SUBSIDIES INITIATIVE (2011).

266. *See generally* Joel Smith & Johannes Urpelainen, *Removing Fuel Subsidies: How Can International Organizations Support National Policy Reforms?*, 17 INT'L ENVTL. AGREEMENTS: POL., L. & ECON. 327 (2017); *see also* Joseph E. Aldy, *Policy Surveillance in the G-20 Fossil Fuel Subsidies Agreement: Lessons for Climate Policy*, 144 CLIMATIC CHANGE 97 (2017).

TPRs, and having an observer status could facilitate the interaction with external experts holding valuable information on fossil fuel subsidies.

Third, the enforceability of existing notification obligations with regard to fossil fuel subsidies could be strengthened in order to help address transparency-related deficiencies. For instance, Bacchus suggests to “[m]andate full disclosure of fossil fuel subsidies under WTO rules.”²⁶⁷ This option would likely require a change in the rules, as Article 25 of the ASCM (on notification) does not specify which types of subsidies, beyond those meeting the definition of Articles 1–2, should be notified, nor does Article 25 specify any consequences for incomplete notifications. More specifically, Porterfield and Stumberg suggest a provision modelled after Annex V of the ASCM, where non-cooperation in disclosing information about a subsidy could lead to a finding of “adverse effects.”²⁶⁸

iii. Adopt Subsidy Reform Pledges and Ensure Credible Follow-up Through Reporting and Review

A more far-reaching option would be for WTO Members — again, acting alone or with others — to pledge to eliminate or progressively reduce their fossil fuel subsidies, as well as to report progress and review each other’s advances. This option would combine elements of increased transparency, as discussed under option 2, with a voluntary process to set commitments. Such a pledge-and-review process may gain more recognition following the adoption of the Paris Agreement in 2015,²⁶⁹ under which countries submit five-year, non-legally binding “nationally determined contributions”, which are to be followed up with reporting and review.²⁷⁰

267. James Bacchus, *Global Rules for Mutually Supportive and Reinforcing Trade and Climate Regimes*, E15 INITIATIVE, ICTSD, AND WORLD ECONOMIC FORUM at 17 (2016). In a later publication, Bacchus goes one step further, suggesting that “[a]ll WTO members should be required to disclose the details of all their fossil fuel subsidies to the WTO or risk WTO dispute settlement if they do not.” James Bacchus, *Triggering the Trade Transition: The G20’s Role in Reconciling Rules for Trade and Climate Change*, ICTSD AND WORLD ECONOMIC FORUM 17 (Feb. 2018).

268. Matthew Porterfield & Robert Stumberg, *Using the Transatlantic Trade and Investment Partnership to Limit Fossil Fuel Subsidies*, DISCUSSION PAPER FOR THE GREENS IN THE EUROPEAN PARLIAMENT, 8 (2014); Annex V specifies that, in case of a dispute, non-cooperation in an information-gathering process by the WTO dispute settlement body by the subsidizing Member may result in a ruling of adverse effects. ASCM, *supra* note 17, Annex V, ¶¶ 5–7. Annex V “reflects the awareness among drafters that much information which the complaining member needs in order to demonstrate serious prejudice is in the ‘sole control’ of the subsidizing country and/or third countries.” COPPENS, *supra* note 55, at 199. It may thus offer an important potential means of overcoming the heavy burden of proof for fossil fuel subsidies.

269. See generally Daniel Bodansky, *The Paris Climate Change Agreement: A New Hope?*, 110 AM. J. INT’L L. 288 (2016); Harro van Asselt, *International Climate Change Law in a Bottom-Up World*, 6 QUESTIONS OF INT’L L. 5 (2016).

270. The Paris Agreement specifies that each Party “shall prepare, communicate and maintain successive nationally determined contributions that it intends to achieve”, and do so on a five-yearly basis. Paris Agreement on Climate Change, *supra* note 1, art. 4 ¶2, 4 ¶9. It further establishes a reporting and review process for individual Parties’ progress through an “enhanced transparency framework.”

Moreover, pledge-and-review processes also have a firm basis in the WTO, which has employed legally binding “Schedules of Concessions” for tariffs and non-tariff measures.²⁷¹ Although it is not suggested here that measures to eliminate or reduce fossil fuel subsidies would necessarily be included in the Schedules, the regular pledging of subsidy reform could make it part of a bargaining process, allowing (energy-rich) Members to trade-off commitments to reform fossil fuel subsidies with other trade-related commitments.²⁷²

Through this mechanism, commitments to action could be anchored to the WTO, with Members peer reviewing each other’s reports to share lessons and increase ambition. This approach could build on the ASCM and could seek to link to other voluntary commitment and review processes (e.g. under the G20 and APEC) while extending to Members that do not participate in such forums.

iv. Adopt a Political Declaration

Another series of options consists of political declarations adopted by WTO Members (or a group of them) about fossil fuel subsidies. Such “soft law” declarations could be modelled after the Doha Declaration on the Agreement on Trade-Related Aspects of Intellectual Property Rights and Public Health, which offered a specification of another WTO agreement on a contentious issue;²⁷³ or after the Nairobi Ministerial Decision on Export Competition, which sought to limit export subsidies in the agricultural sector.²⁷⁴ The value of a declaration lies in providing clarity on how WTO rules apply to fossil fuel subsidies and/or offering a signal that the WTO seeks to advance fossil fuel subsidy reform.

Such declarations could provide clarity on how subsidies rules apply to fossil fuel (or wider energy) subsidies. One option would be to negotiate a political understanding on whether fossil fuel subsidies, or specific types of fossil fuel subsidies, would fall under the definition of ASCM Article 1. This could specify which types of energy subsidies would fall under which part of the definition. It would not necessarily mean that such subsidy types are

Id. art. 13. Moreover, Parties are to assess collective progress every five years by means of a “global stocktake,” starting in 2023. *Id.* art. 14.

271. GATT, *supra* note 15, Art. II. *See also* https://www.wto.org/english/tratop_e/schedules_e/goods_schedules_table_e.htm.

272. *See also* Trachtman, *supra* note 45, at 18 (“The WTO is a forum for exchange of diverse commitments, making negotiation through cross-sectoral bargaining more likely to reach agreement.”).

273. Declaration on the TRIPS Agreement and Public Health, WTO Doc. WT/MIN(01)/DEC/2 (Nov. 20, 2001); *see also* James T. Gathii, *The Legal Status of the Doha Declaration on TRIPS and Public Health under the Vienna Convention on the Law of Treaties*, 15 HARV. J. L. & TECH. 291 (2002).

274. World Trade Organization, Ministerial Decision of 19 December 2015, WTO Doc. WT/MIN(15)/45 (Dec. 21, 2015). *See* Henok Birhanu Asmelash, *Phasing Out Fossil Fuel Subsidies in the G20: Progress, Challenges, and Ways Forward*, ICTSD 15 (Sept. 2017).

specific, or that they would cause adverse trade effects, so this assessment would need to be made separately.

Alternatively, a political declaration could be made in the form of statements of intent regarding fossil fuel subsidies in the context of trade. For instance, although discussions in the CTE occasionally touch upon the issue, Members could agree to continue discussing fossil fuel or wider energy subsidies within the CTE, and specify that the CTE's mandate should include debating how they could be reformed within the WTO. Moreover, WTO Members could more generally state their support for addressing the issue under the WTO, whether within the CTE or in any other body. The "Fossil Fuel Subsidies Reform Ministerial Statement", adopted by twelve WTO Members at MC11, is such a declaration.²⁷⁵ The statement reaffirms the signatories' commitments related to sustainable development under the 2030 Agenda, and recognizes that WTO Members had made relevant pledges in the context of, inter alia, the G20, APEC, the Paris Agreement, and the Addis Ababa Action Agenda on Financing for Development.²⁷⁶ It further seeks to build the case for action under the WTO, suggesting that "trade and investment distortions caused by fossil fuel subsidies reinforce the need for global action including at the World Trade Organization," and arguing that the WTO "can play a central role in achieving effective disciplines on inefficient fossil fuel subsidies."²⁷⁷ As such, the countries adopting the statement "seek to advance discussion in the [WTO] aimed at achieving ambitious and effective disciplines on inefficient fossil fuel subsidies that encourage wasteful consumption, including through enhanced [WTO] transparency and reporting that will enable the evaluation of the trade and resource effects of fossil fuel subsidies programmes."²⁷⁸

Although declarations are non-legally binding, they may have legal effects.²⁷⁹ This would be the case for a declaration that interprets the scope of ASCM Article 1. Such a declaration could be considered either a "subsequent agreement between the parties regarding the interpretation of the treaty or the application of its provisions" or "subsequent practice in the application of the treaty which establishes the agreement of the parties regarding its interpretation" under the Vienna Convention on the Law of Treaties.²⁸⁰ As such, it would be relevant for interpreting WTO law (in this

275. Fossil Fuel Subsidies Reform Ministerial Statement, *supra* note 242.

276. *Id.* at ¶ 2.

277. *Id.* at ¶¶ 9–10.

278. *Id.* at ¶ 10.

279. See Joost Pauwelyn, *Is It International Law or Not, and Does It Even Matter?*, in *INFORMAL INTERNATIONAL LAWMAKING* 125, 155–57 (Joost Pauwelyn et al. eds., 2015) (discussing the possible legal effects of informal international law).

280. Vienna Convention on the Law of Treaties, art. 31 ¶3(a)-(b), May 23, 1969, 1155 U.N.T.S. 331.

case, the ASCM). By contrast, a declaration mandating the CTE to discuss fossil fuel subsidies would have no such legal effects. Likewise, while the declaration adopted at MC11 offers an important statement of intent of the 12 signatories, it does not generate any legal effects as such.

v. Expand the Category of Prohibited Subsidies, with Possible Exemptions

One last group of options would require a change of existing rules, as it would expand the category of prohibited subsidies under ASCM Article 3. Although the categories of Article 3 have remained unchanged since the inception of the ASCM, there have been proposals to expand the list, with the EU for instance suggesting categorization of dual pricing as a prohibited subsidy.²⁸¹ Some have suggested that fossil fuel subsidies should be included as a category of prohibited subsidies (in addition to export subsidies and local content subsidies).²⁸² However, any such provision need not apply to all fossil fuel subsidies, but could be limited to a specific sub-set, for instance based on particular trade-related or environmental effects.²⁸³

Multilateral and regional negotiations on fisheries subsidies could be used as an example of how to distinguish between different types of measures in this regard. For instance, the targeting of subsidies used to support IUU fishing in the CPTPP demonstrates how trading partners can agree on a specific category of prohibited subsidies.²⁸⁴ The CPTPP seeks to link subsidy prohibitions to “negative effect” (based on “the best scientific evidence available”) on overfishing.²⁸⁵ Similarly, in the WTO negotiations on fisheries subsidies, it was suggested to prohibit a wide range of measures taking into account the particular characteristics of the sector.²⁸⁶ The advantage of such an approach would be that WTO Members obtain guidance on how the subsidies covered would be treated under WTO rules, and which of them could be disciplined.

281. Subsidies, Submission of the European Communities, WTO Doc. TN/RL/GEN/135 (Apr. 24, 2006); see also COPPENS, *supra* note 55, at 116.

282. See, e.g., Horlick & Clarke, *supra* note 45, at 14.

283. Pereira, *supra* note 13, at 13–14, for instance, proposes a prohibition for “the most egregious kinds of subsidies,” including subsidies for new coal-fired power plants, subsidies for new fossil fuel exploration and extraction, or subsidies for infrastructure for the fossil fuel industry. *Id.* at 13–14. While such proposals may offer a starting point for discussions, achieving common ground on which subsidies exactly are “the most egregious” will be a significant challenge. For another proposal, focusing on the impacts in terms of carbon dioxide emissions, see Trachtman, *supra* note 45.

284. CPTPP, *supra* note 245, Art. 20.16.5(b). The CPTPP further demonstrates the importance of bringing on board opponents of subsidy reform. See Pereira, *supra* note 13, at 22 (referring to the TPP).

285. *Id.* Art. 20.16.5(a), fn. 14.

286. See Draft Consolidated Chair’s Text of the AD and SCM Agreements, Annex VIII, Art. I, WTO Doc. TN/RL/W/213 (Nov. 30, 2007). One proposed prohibition specifically related to the environmental impact of the subsidy: “any subsidy [...] the benefits of which are conferred on any fishing vessel or fishing activity affecting fish stocks that are in an unequivocally overfished condition shall be prohibited”. *Id.* Annex VIII, Art. I.2.

In addition to distinguishing between different types of subsidies, any prohibition could be tailored to meet specific needs. Importantly, the prohibition could take into account the type of Member and provide for special and differential treatment (e.g. exempting least developed countries or linking to provisions on technical assistance and capacity-building). The prohibition could also apply to fossil fuel subsidies above a quantified limit. Exemptions could be made for countries that can prove subsidies are used to achieve certain socio-economic benefits (e.g. targeting low-income communities). Moreover, the prohibition could be phased in gradually for some or all countries.²⁸⁷

Expanding the category of prohibited subsidies would amount to an amendment. But submitting such an amendment would already require consensus among WTO Members and giving it effect would demand it is accepted by a majority of at least two-thirds.²⁸⁸

Options 1 to 5 need not be mutually exclusive, and many would likely be particularly effective if adopted together. A pledge, report, and review system, for instance, would benefit from parallel efforts to improve transparency. Moreover, the options could be carried out as subsequent steps, with voluntary commitments following efforts to build capacities. All approaches, ranging from voluntary to binding, would necessarily be led by WTO Members and be embedded in the WTO's dispute settlement mechanism. This provides scope for gradual increase in ambition. Last but not least, any successful effort to address fossil fuel subsidies through the international trading system would need to adequately address the special circumstances of developing countries. That might involve special and differential treatment provisions, including potential exemptions and carve-outs for development needs, including enhanced energy access.

vi. Choice of Forum

The options discussed above could be pursued through several trade-related forums. For several reasons, it can be argued the WTO is an appropriate one. First, trade should contribute to sustainable development. This was already mentioned in the preamble of the Marrakesh Agreement establishing the WTO, which refers to the objective of sustainable development.²⁸⁹ Also, SDG 17 explicitly identifies trade as a critically important means of implementation for the Sustainable Development

287. Porterfield & Stumberg, *supra* note 268, at 8; Bacchus, *supra* note 267, at 17.

288. Agreement Establishing WTO, *supra* note 11, Art. X.

289. *Id.* pmbl. In *U.S.—Shrimp*, the Appellate Body emphasized the importance of this preambular text, stating it “must add colour, texture and shading to our interpretation of the agreements.” Appellate Body Report, *United States—Import Prohibition of Certain Shrimp and Shrimp Products*, ¶ 153, WTO Doc. WT/DS58/AB/R (adopted Oct. 12, 2013). *See also* Doha Declaration, *supra* note 41, ¶ 6.

Goals.²⁹⁰ Trade should therefore be viewed as an enabler for achieving the SDGs and targets, including the reduction of fossil fuel subsidies set out under SDG 12. Second, the WTO has very wide membership from both developed and developing countries,²⁹¹ suggesting its efforts to govern fossil fuel subsidies could be considered more legitimate than those of a smaller group of countries (e.g. the G20). Third, the WTO has put in place an institutional infrastructure to promote compliance and deal with cases of non-compliance.²⁹² Fourth, through the ASCM, the WTO has played a key role in disciplining subsidies, and has over time gained a significant amount of experience in developing, interpreting and applying rules about subsidies. Related to this, the WTO's dispute settlement system offers an important tool for strengthening the credibility of any commitments made. Finally, fossil fuel subsidies may have impacts on trade, making them directly relevant for the achievement of the WTO trade liberalization goals.

At the same time, ensuring agreement within the WTO may be challenging. As noted above, submitting an amendment to existing agreements, such as the ASCM, would require consensus among Members. Nonetheless, some amendments might be possible, as evidenced by a recent one made to the TPR procedures.²⁹³

While other options, such as an authoritative interpretation by the Ministerial Conference, can be achieved with a majority — in this case a three-fourths majority²⁹⁴ — in practice this also requires a consensus.²⁹⁵ As noted above, however, options can go beyond changing WTO rules or adopting an authoritative interpretation, and may also be in the form of a political declaration. Although the political hurdles for any of these choices remain significant, a successful outcome of the ongoing negotiations on fisheries subsidies would undoubtedly set a promising precedent. At MC11, however, Members merely agreed to “continue to engage constructively in the fisheries subsidies negotiations,” with a view to adopting an agreement by the end of 2019.²⁹⁶

290. Transforming Our World, *supra* note 2, at ¶¶ 17.10–17.12.

291. *See Members and Observers*, WORLD TRADE ORGANIZATION, https://www.wto.org/english/thewto_e/whatis_e/tif_e/org6_e.htm (last accessed Nov. 12, 2018).

292. *See* Pereira, *supra* note 13, at 3 (suggesting that the WTO is “well suited to effectively and in a timely way ensure the implementation of new fossil fuel subsidy disciplines”, including by offering countermeasures under the ASCM). Moreover, the WTO allows for cross-retaliation, which “may be needed to preserve cross-sectoral bargains struck to induce states to agree to FFS reduction.” Trachtman, *supra* note 45, at 18.

293. *See supra* note 262.

294. Agreement Establishing WTO, *supra* note 11, Art. IX.2.

295. Claus-Dieter Ehlermann & Lothar Ehring, *The Authoritative Interpretation Under Article 1X:2 of the Agreement Establishing the World Trade Organization: Current Law, Practice and Possible Improvements*, 8 J. INT'L ECON. L. 803, 806 (2005).

296. Fisheries Subsidies, Ministerial Decision of 13 December 2017, WTO Doc. WT/MIN(17)/64 ¶ 1 (Dec. 18, 2017).

Given the challenges to progress within the WTO, some have argued that other international forums, including regional, mega-regional, and plurilateral trade agreements, may offer a better way forward, at least in the interim.²⁹⁷ For regional trade agreements, such provisions can expand on the precedent of the EU-Singapore Free Trade Agreement or the abandoned provisions of the CPTPP on fossil fuel subsidies. Inspiration could also be drawn from disciplines on fisheries subsidies, with the CPTPP text again offering an example. Trade negotiators could also look beyond these agreements, and consider the wide variety of environmental provisions introduced in regional trade agreements in the past decades.²⁹⁸ Indeed, addressing fossil fuel subsidies through trade agreements will likely require creativity in the drafting process.

Negotiations on several plurilateral trade agreements have started in recent years, including on services and environmental goods. Some of these agreements, such as the Environmental Goods Agreement,²⁹⁹ involve a “critical mass” that extends benefits to all WTO Members.³⁰⁰ Which WTO Members form the critical mass depends on the subject matter. In the context of fossil fuel subsidies, bringing together some major trading nations providing significant fossil fuel subsidies could be sufficient for establishing a critical mass, as when a country reduces or eliminates its subsidies, producers of the same or competing products in all other countries automatically benefit. Possible candidates can be found within the group of countries that have pledged to phase out their inefficient fossil fuel subsidies, for instance those that signed up to the G20 commitment, as well as the countries that adopted the declaration at MC11.³⁰¹

Pursuing options through the WTO or through regional or plurilateral agreements can be done in parallel. Rules, policies, and practices at the regional level could influence multilateral discussions and vice versa, allowing for a dynamic of multi-level reinforcement.

297. Ronald Steenblik, Jehan Sauvage & Christina Timiliotis (2018), *Fossil-Fuel Subsidies and the Global Trade Regime*, in THE POLITICS OF FOSSIL FUEL SUBSIDIES AND THEIR REFORM, *supra* note 24.

298. See Jean-Frédéric Morin et al., *Mapping the Trade and Environment Nexus: Insights from a New Data Set*, 18 GLOB. ENVTL. POL. 122 (2018) (reporting on a dataset of environmental provisions in regional trade agreements); see also Harro van Asselt, *Climate Change and Trade Policy Interaction: Implications of Regionalism* 30-33 (OECD Trade and Environment Working Papers, Paper No. 2017/03, 2017) (discussing options for including climate-related considerations in regional trade agreements).

299. See World Trade Organization, ENVIRONMENTAL GOODS AGREEMENT (EGA), https://www.wto.org/english/tratop_e/envir_e/ega_e.htm. Negotiations on the Agreement came to a halt in December 2016 but discussions continue informally. See International Centre for Trade and Sustainable Development *Ministerial Talks to Clinch Environmental Goods Agreement Hit Stumbling Block*, 20 BRIDGES 42 at 1 (Dec. 8, 2016).

300. Peter Draper & Memory Dube, *Plurilateral and the Multilateral Trading System*, E15 INITIATIVE, ICTSD AND WORLD ECONOMIC FORUM 4, at 2 (2013).

301. See *supra* note 242.

VII. CONCLUSION

By impeding the low-carbon transition and diverting funds from vital areas such as health and education, fossil fuel subsidies form a major obstacle to achieving the goals of the Paris Agreement and the 2030 Agenda. In recognition of the need to address the hundreds of billions in public funds that flow to fossil fuel production and consumption each year, a host of nations, including the members of the G20 and the economies of APEC, committed in 2009 to phase out and rationalize inefficient fossil fuel subsidies.

The WTO has a well-established record of addressing subsidies, and its ASCM also contains one of the few internationally-agreed definitions of the term “subsidy.” However, fossil fuel subsidies have been conspicuously absent from the Organization’s dispute settlement mechanism. While several renewable energy support measures have been challenged at the WTO, no proceedings have been initiated against fossil fuel support measures to date.

Both political and legal explanations have been put forward to account for this discrepancy. From a political perspective, the role of domestic pressure groups and the notion that new measures are more likely to be challenged than existing ones, help explain why renewable energy subsidies are more likely to be contested than their fossil fuel counterparts. From a legal perspective, it has been suggested that WTO law “undercaptures” fossil fuel subsidies compared with those to renewables. Local content requirements for project developers, for instance, are common among renewable energy support measures, making such measures incompatible with the ASCM’s “prohibited subsidy” category. By contrast, many fossil fuel subsidies are targeted at consumers, making them “unspecific” for the purposes of the ASCM and allowing them to fall outside the scope of the Agreement.

While there is merit in both types of explanations, it is important to remember that fossil fuel support measures can differ on a case-by-case basis and the WTO legality of a given measure cannot necessarily be determined without closer examination of its specific features. As such, this Article has sought to move beyond generalities. To this end, it has subjected four G20 fossil fuel support measures to an analysis of compatibility with the WTO’s ASCM, an exercise that, to our knowledge, was never been attempted before. In doing so, we have sought to identify some of the key legal questions that such support measures raise within the WTO, as well as challenges in completing the legal analysis.

Our findings are broadly consistent with the existing literature on this topic. Both fossil fuel consumption subsidies considered were deemed to

fall outside the ASCM's scope, while we considered it plausible that the two production subsidies were potentially "actionable" under the Agreement. However, determining the existence of adverse effects towards the trade interests of other WTO Members proved to be a key challenge to deliver conclusive results about the WTO legality of these measures. This, too, corroborates previous findings on the difficulties of challenging subsidies under the ASCM due to the high thresholds of evidence that must be met under this test.

Nevertheless, litigation of fossil fuel subsidies may still have a role to play. When it came to ascertaining the existence of prohibited subsidies, for instance, time and resource constraints prevented our analysis from going beyond initial considerations. But there are possibilities to further explore the existence of this category of "never permitted" subsidies among fossil fuel support measures.

Our findings also take home the need of enhanced transparency to improve our understanding of the various types of fossil fuel subsidies in existence. However, current notification system under the ASCM carries a number of deficiencies that have made notification sporadic. Given these and other shortcomings in the WTO's approach to addressing fossil fuel subsidies, this Article proposes a number of options that WTO Members could pursue towards enhanced action. First, Members can promote technical assistance and capacity building, and encourage lesson-sharing on fossil fuel subsidy reform and technical cooperation. To ensure value added, the work of the WTO in this area can build on, and be coordinated with, activities by other international and non-governmental organizations, such as the World Bank, the IMF, and the Global Subsidies Initiative. Second, Members can enhance transparency by voluntarily notifying fossil fuel subsidies under the ASCM based on a common template. Members could also commit to include fossil fuel subsidies within their TPRs, and strengthen the enforceability of existing notification obligations. Improved transparency under the WTO could add value to other existing efforts in this regard (notably the G20 self-reporting and the G20 and APEC voluntary peer reviews) and will broaden the group of countries offering clarity on their fossil fuel subsidies. Third, Members can adopt subsidy reform pledges and ensure credible follow-up through reporting and review, building on the ASCM. By linking to other voluntary commitment and review processes (e.g. those of the G20 and APEC), the system would be extended to Members that do not participate in such forums. Fourth, Members can adopt a political declaration. One option in this regard would be to negotiate a political understanding on how fossil fuel subsidies, or specific types of fossil fuel subsidies, would fall under the definition of ASCM Article 1, offering an interpretation of the scope of the ASCM. Another option, without any legal effects, would be to clarify the mandate

of the CTE to discuss fossil fuel subsidies or more generally affirm that the WTO is an appropriate venue for intergovernmental dialogue on fossil fuel subsidies. With the adoption of a declaration at MC11, some Members have decided to pursue the latter option. Finally, Members can seek to expand the category of prohibited subsidies under the ASCM, with possible exemptions. This option could involve inclusion of fossil fuel subsidies among the ASCM's category of prohibited subsidies, for instance those with particular trade or environmental effects. Prohibitions could be tailored to meet specific needs, such as taking into account special and differential treatment, subsidies aimed at the poor, and flexible timelines.

In the current political climate, some of these options may gain more traction than others. Some can be pioneered by one or several WTO Members, or through regional, mega-regional and plurilateral trade agreements. Whatever approach is chosen, it would need to adequately address the special circumstances of developing countries and complement ongoing efforts in other forums.

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