



# Fossil Fuel Subsidies Reduction and the World Trade Organization

Joel P. Trachtman



International Centre for Trade  
and Sustainable Development

Issue Paper



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**Published by**

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**Acknowledgements**

This paper is produced by the ICTSD Programme on Climate and Energy and is part of the E15 Initiative Engagement track on disciplining fossil fuel subsidies.

The author wishes to thank Joseph Aldy, Ilaria Espa, Jennifer Hillman, Robert Howse, Gabrielle Marceau, and Gilbert Metcalf, as well as participants in a conference on 22 September 2017 in New York and a workshop on 29 September 2017 in Geneva organised by ICTSD under the E15 Initiative, for their suggestions and/or valuable comments on earlier drafts of this paper.

ICTSD is grateful for the generous support from its core donors including the UK Department for International Development (DFID); the Swedish International Development Cooperation Agency (SIDA); the Ministry of Foreign Affairs of Denmark (Danida); and the Netherlands Directorate-General of Development Cooperation (DGIS).

ICTSD welcomes feedback on this publication. This can be sent to Sonja Hawkins ([shawkins@ictsd.ch](mailto:shawkins@ictsd.ch)) or Fabrice Lehmann, ICTSD's Executive Editor ([flehmann@ictsd.ch](mailto:flehmann@ictsd.ch)).

**Citation:** Trachtman, Joel P. 2017. *Fossil Fuel Subsidies Reduction and the World Trade Organization*. Geneva: International Centre for Trade and Sustainable Development (ICTSD).

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The views expressed in this publication are those of the author and do not necessarily reflect the views of ICTSD or the funding institutions.

ISSN 2225-6679

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## LIST OF ABBREVIATIONS

AMCEA	aggregate measure of carbon emission additionality
APEC	Asia-Pacific Economic Co-Operation
AoA	Agreement on Agriculture
CDM	Clean Development Mechanism
CEA	carbon emission additionality
CVD	countervailing duty
EU	European Union
FFS	fossil fuel subsidies
G20	Group of Twenty (leading industrialised and emerging economies)
GATT	General Agreement on Tariffs and Trade
IEA	International Energy Agency
IMF	International Monetary Fund
INDC	Intended Nationally Determined Contribution
IPCC	Intergovernmental Panel on Climate Change
OECD	Organisation for Economic Co-operation and Development
RFS	renewable fuel subsidies
SCM	Subsidies and Countervailing Measures
SDG	Sustainable Development Goal
US	United States
WTO	World Trade Organization

## FOREWORD

Two years after the world's governments adopted the Paris Agreement on climate change and the 2030 Agenda for Sustainable Development, climate action has reached a crossroads. While the United States, the largest carbon emitter, has expressed its intent to leave the Paris Accord, climate change is becoming increasingly pronounced. The international community's need to act on climate change and reduce emissions is thus more urgent than ever.

The use of fossil energy remains the biggest cause of greenhouse gas emissions. Addressing the climate challenge therefore requires a shift from fossil fuel production and consumption to clean energy use and increased energy efficiency. In practice, however, all major economies continue to subsidise the exploration, processing, and use of fossil fuels, thereby undermining the prospects of a speedy transition.

Members of the G20, G7, and APEC have committed to phasing out inefficient fossil fuel subsidies and the international community has introduced relevant provisions to this end in the Paris Agreement and the Sustainable Development Goals. Progress to implement these commitments has been slow. What appears to be missing is a legally binding tool for disciplines.

The multilateral trading system has an important role to play in this context. With the binding nature of its agreements and its effective enforcement mechanism, the World Trade Organization (WTO) could make a difference if members agreed on international rules that discipline the use of fossil fuel subsidies.

It is against this background that ICTSD, through a series of analytical papers and dialogues, seeks to explore options on how to strengthen the international trade system to assume the challenge of climate change by disciplining fossil fuel subsidies. As part of this endeavour, Joel Trachtman, Professor of International Law at the Fletcher School of Law and Diplomacy, has authored the present paper, exploring a possible new legal framework through the trade system.

The analysis has been informed by a series of workshops held in Geneva with trade delegates in 2016-2017 and builds on work undertaken by the joint ICTSD-World Economic Forum's E15 Initiative. It serves as a basis for the continuation of the project, which aims to outline options and lessons for disciplining fossil fuel subsidies through the trade system and to inform the deliberations of trade and climate delegates and policymakers towards a more sustainable future.



**Ricardo Meléndez-Ortiz**  
Chief Executive, ICTSD

## ABSTRACT

This paper develops the broad contours of an ambitious approach to fossil fuel subsidy reform using the multilateral trade system. It does not remain within the limits of existing World Trade Organization (WTO) law, or the overall market-opening goals of the WTO. Once those constraints are relaxed, it becomes clear that the requisite components of (i) defining the fossil fuel aspect of subsidies and ensuring an otherwise operational definition of the subsidies to be disciplined, (ii) establishing appropriate regimes for quantification, reporting, and surveillance, (iii) negotiating reduction commitments that will permit efforts to make fossil fuel use more efficient, as well as to transition to renewables, (iv) ensuring that reform does not harm the poor, and (v) establishing independent evaluation and dispute settlement mechanisms with appropriate incentives for compliance, are (vi) within the institutional capacities of the relevant institutions, or the broader multilateral system, (vii) either through formally binding or informal rules, and (viii) either within or outside the WTO system.

## 1. INTRODUCTION

As he was leaving his post as Director-General of the World Trade Organization (WTO), Pascal Lamy stated that the “discussion on the reform of fossil-fuel subsidies has largely bypassed the WTO. This is a missed opportunity.”<sup>1</sup> This paper is intended to explore and propose options to tackle fossil fuel subsidies (FFS) in the multilateral trade system. While individual states have some incentives to reduce fossil fuel subsidies, the Intergovernmental Panel on Climate Change (IPCC) found: “Effective mitigation will not be achieved if individual agents advance their own interests independently. Cooperative responses, including international cooperation, are therefore required to effectively mitigate GHG [greenhouse gas] emissions and address other climate change issues” (IPCC 2014).

### 1.1 Role of Fossil Fuel Subsidies in Climate Change

Fossil fuel use contributes to climate change, and fossil fuel subsidies contribute to fossil fuel use. International Monetary Fund (IMF) studies suggest that the complete elimination of FFS (including subsidies by virtue of failing to charge users for the social cost of carbon) would decrease global carbon dioxide emissions by 15-23 percent (Parry et al. 2014). The International Energy Agency (IEA) defines an energy subsidy as “any government action directed primarily at the energy sector that lowers the cost of energy production, raises the price received by energy producers or lowers the price paid by energy consumers” (IEA 2014, 315).

In 2016, the IEA made the following estimate of the magnitude of consumption FFS:

The value of subsidies to fossil fuels fell sharply in 2015 to \$325 billion, down from almost \$500 billion in 2014. Lower fossil-fuel prices were the main reason for the drop, but lower prices have also given additional impetus to pricing reforms in many countries, both fossil fuel importers and exporters.

Even with the drop in 2015, the amount going to subsidise fossil fuels is still more than double the \$150 billion spent on subsidies to renewable energy. (IEA 2016)

It is more difficult to estimate production FFS, especially those provided in the form of tax expenditures, and estimates of their magnitude vary widely. Furthermore, except in IMF estimates, these amounts do not include the enormous implicit subsidy from failure to cause producers and users of fuel to internalise the costs associated with global warming and other environmental detriments, which may raise the total subsidy very substantially—to US\$1 trillion annually or more (see Coady et al. 2017).

### 1.2 Existing Commitments

In various fora, governments have made informal (as opposed to legally binding) commitments to reduce FFS.

#### 1.2.1 United Nations Framework Convention on Climate Change

The main global vehicle for addressing climate change has been the 1994 United Nations Framework Convention on Climate Change. Article 2(1)(a)(v) of its 2005 Kyoto Protocol exhorts, but does not require, Annex 1 countries to

implement and/or further elaborate policies and measures in accordance with its national circumstances, such as: ... (v) Progressive reduction or phasing out of market imperfections, fiscal incentives, tax and duty exemptions and subsidies in all greenhouse gas emitting sectors that run counter to the objective of the Convention and application of market instruments.

Thirteen countries, including Ethiopia, India, and Morocco, referenced fossil fuel subsidy reform in their Intended Nationally Determined

1 Pascal Lamy, Director-General, WTO, Remarks to the Workshop on the Role of Intergovernmental Agreements in Energy Policy, 29 April 2013, [http://www.wto.org/audio/wks24042013\\_dgpl.mp3](http://www.wto.org/audio/wks24042013_dgpl.mp3) (audio recording).

Contributions (INDCs) prior to the UNFCCC Paris Agreement (Terton et al. 2015).

### 1.2.2 G20

At the G20 Pittsburgh Summit in 2009, G20 leaders made a commitment to

Rationalize and phase out over the medium term inefficient fossil fuel subsidies that encourage wasteful consumption. As we do that, we recognize the importance of providing those in need with essential energy services, including through the use of targeted cash transfers and other appropriate mechanisms. This reform will not apply to our support for clean energy, renewables, and technologies that dramatically reduce greenhouse gas emissions. We will have our Energy and Finance Ministers, based on their national circumstances, develop implementation strategies and timeframes, and report back to Leaders at the next Summit. We ask the international financial institutions to offer support to countries in this process. We call on all nations to adopt policies that will phase out such subsidies worldwide. (G20 Leaders 2009)

These commitments have been reaffirmed several times since 2009, most recently at the 2017 Hamburg Summit, including by the US and China in 2010 (U.S. Department of State 2010). In 2014, the US and China agreed (White House 2014) to reciprocal peer review of their fossil fuel subsidies under the G20 process, chaired by the Organisation for Economic Co-operation and Development (OECD) (OECD 2016a; 2016c). Germany, Indonesia, Italy, and Mexico have also agreed to undertake peer reviews.

### 1.2.3 Asia-Pacific Economic Cooperation

In 2009, the Asia-Pacific Economic Cooperation (APEC) group made a commitment, reaffirmed

in 2015, to “rationalize and phase out over the medium term inefficient fossil fuel subsidies that encourage wasteful consumption while recognizing the importance of providing those in need with essential energy services.” Under APEC, Peru, New Zealand, the Philippines, and Chinese Taipei have carried out peer reviews, with Vietnam and Brunei scheduled to follow.

### 1.2.4 Sustainable Development Goal 12

The United Nations has proposed as part of its 2015 Sustainable Development Goal 12 a non-binding Target 12c as follows:

Rationalize inefficient fossil-fuel subsidies that encourage wasteful consumption by removing market distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities.<sup>2</sup>

### 1.2.5 Friends of Fossil Fuel Subsidy Reform

In 2015, the Friends of Fossil Fuel Subsidy Reform—an informal group of non-G20 countries<sup>3</sup>—launched a communiqué calling on the international community to increase efforts to phase out subsidies to fossil fuels as a major contribution to climate change mitigation (FFFSR 2015).

### 1.2.6 G7

In 2017, at the G7 Rome Energy Ministerial Meeting, the G7 countries “reiterated the commitment of phasing out inefficient fossil fuel subsidies that encourage wasteful consumption, and encouraged all countries to do so, by 2025” (G7 Energy Ministerial 2017).

2 United Nations Resolution A/RES/70/1 of 25 September 2015.

3 The Friends of Fossil Fuel Subsidy Reform include Costa Rica, Denmark, Ethiopia, Finland, New Zealand, Norway, Sweden, Switzerland, and Uruguay.

### 1.3 Assessing and Defining Fossil Fuel Subsidies

There are four main types of FFS:

1. Consumption subsidies: lower consumer price compared to international benchmark.
2. Pre-tax production subsidies: direct grant or higher producer price compared to international benchmark.
3. Post-tax production subsidies: government revenue that is generally due but is not due in the case of otherwise taxable activities in the consumption or production of fossil fuels.
4. Anti-Pigovian subsidies: failure to impose taxes to account for the social cost of carbon.<sup>4</sup>

Consumption subsidies are used largely by petroleum-producing countries, and by some poor countries. Some consumption subsidies are also excluded from national budgets: the opportunity costs of selling fuel at costs below international benchmarks are not included in national budgets.

Production subsidies are often granted through tax reductions. Tax reductions are often not included in national budgets, and so require separate estimation. “Tax reductions” raise the issue of what the baseline tax is, and therefore what the magnitude of the reduction is.

A fourth type of subsidy, which (as will be discussed) is arguably excluded from the WTO definition of “subsidy,” is the failure to charge producers or consumers the cost of externalised

harmful effects of their fossil fuel production or consumption.

### 1.4 The Issue of Trade Relationship

Fossil fuel subsidies have an effect on both trade and environmental protection. While they distort trade and competition, the main reason for reviewing and modifying their regulation is to reduce carbon and thereby to reduce global warming.

Fossil fuels are extensively traded. Therefore, national subsidies practices can affect international prices. Furthermore, fossil fuel subsidies can subsidise downstream industries, especially those that are energy-intensive. FFS are regulated by the WTO General Agreement on Tariffs and Trade (GATT), as well as by the WTO Agreement on Subsidies and Countervailing Measures (SCM).

This dual aspect is shared with other areas of subsidies regulation, as well as other areas of WTO law. One example is fisheries subsidies, which also have both a trade-distorting effect and an adverse environmental effect (Pereira 2017). At the 2005 Hong Kong ministerial meeting, WTO members made clear that they were willing to extend WTO disciplines beyond market access goals when they agreed to a mandate to strengthen disciplines on fisheries subsidies.

Yet, in formal terms, the issue of trade relationship is not a significant issue. No international legal rule, or prudential principle, prevents WTO members from addressing non-trade issues within the WTO.<sup>5</sup> Perhaps negotiators, and states, suffer from the cognitive

4 A Pigovian tax would cause producers and consumers to internalize the costs of climate change. An anti-Pigovian subsidy is the failure to charge such a tax, and therefore to implicitly subsidize use of fossil fuels.

5 Article II of the Marrakesh Agreement specifies that the WTO “shall provide the common institutional framework for the conduct of trade relations among its Members in matters related to the agreements and associated legal instruments included in the Annexes to this Agreement.” This provision does not necessarily limit the ability of the WTO to address FFS—the question of what matters are related to the WTO agreements is for members to determine. Furthermore, this provision is capable of explicit or implicit amendment at the same time that an agreement on FFS is established, and it is clear that an agreement on FFS would have some relationship with trade, just as the Trade-Related Aspects of Intellectual Property Rights, Sanitary and Phytosanitary Measures, and other agreements have some trade relationship.

bias of “functional fixedness,” which limits their ability to conceptualise the utility of existing tools for new functions. However, the substantive question is whether the WTO is a useful tool in this context, and whether it is useful to link FFS to trade, in terms of negotiations, institutional structure, and compliance.

Even if there were no trade-distorting effect, there would still be important reasons to consider addressing FFS within the WTO, in terms of the existing characteristics and capabilities of the WTO. I describe these in more detail in section 5.

### **1.5 The National and International Politics of Fossil Fuel Subsidies**

Subsidies are politically persistent. Existing subsidies will be difficult to eliminate because those who receive them will advocate their maintenance. One of the roles of international negotiation and diverse commitments is to destabilise existing domestic political equilibria, by providing opportunities for reciprocal commitments that precipitate countervailing lobbying. Narrow reciprocity in reduction of FFS will be a part of the political inducement, but may not be sufficient in many countries. Instead, the WTO negotiation process is a process of discovery of “diffuse” reciprocity, in which one state might reduce FFS in exchange for greater market access in a different product or service granted by another state.

While “losers” from new international legal commitments are not ordinarily compensated, the political feasibility of new disciplines on FFS will be increased by arrangements, as appropriate, to compensate those who are harmed, especially among the poor. In addition to this practical political perspective, some workers in fossil fuel production, and poor recipients of FFS for consumption, may present a distributive justice case for compensation. One method of compensation might involve grants of renewable fuel subsidies (RFS).

### **1.6 Structure of Analysis**

In this brief paper, I will begin in section 2 by evaluating the current WTO law addressing FFS. Existing WTO law provides insufficient inducements for reduction of FFS because it was designed to address trade distortion as contrasted with environmental protection. In section 3, I will examine some analogical areas and other sources of precedents, such as agriculture, fisheries, and other WTO and non-WTO initiatives in other areas, as well as some existing ways in which the WTO addresses FFS, that will serve as models from which to derive ideas about broader FFS disciplines. Section 4 will develop a list of possible components of an international agreement on FFS disciplines. Section 5 evaluates the different types of vehicles for an international agreement on FFS disciplines.

## 2. CURRENT WTO LAW OF FOSSIL FUEL SUBSIDIES

The WTO GATT and SCM Agreement already address subsidies generally. Export subsidies and import substitution subsidies are prohibited. Certain specific subsidies that cause certain adverse effects to the interests of other members must be withdrawn or their adverse effects removed. Specific subsidies may be countervailed by importing states.

The SCM Agreement definition of “subsidy” includes circumstances where (i) there is a financial contribution sourced from a government or public body, and (ii) a benefit is conferred. Both production and consumption subsidies are included. The SCM Agreement definition has a closed, but broad, list of types of “financial contribution.”

One threshold issue would be whether the failure to cause producers and consumers to internalise the harms of carbon emissions that they cause should be understood as a financial contribution in connection with any agreement on reduction of FFS. The enormous uninternalised social cost of carbon does not fall naturally under any of the categories of “financial contribution” listed in Article 1.1(a) (1). Note also that the payer of the financial contribution is generally not directly the government per se, but society at large. For an argument to the effect that emissions of carbon make use of an implicit government grant of property—atmospheric absorption capacity—and therefore may be considered a financial contribution, see Howse (2010). If the SCM Agreement definition of “financial contribution” were to be utilised as a starting point in negotiation of a FFS discipline regime, this component should be clarified.

In addition, it has been quite difficult to define in practice the type of financial contribution that exists under Article 1.1(a)(1)(iii) where “government revenue that is otherwise due is foregone.” The series of cases against the

“Foreign Sales Corporation” tax reductions in the United States illustrate this problem. Many FFS for producers, in the US and elsewhere, are provided in the form of special tax treatment, such as deductions or depreciation. This type of issue would persist in any FFS discipline regime, but could be addressed specifically in scheduling negotiations.

From a WTO SCM Agreement perspective, consumer subsidies would be somewhat difficult to define also, because of the need for an independent reference price. Where the entire national market is characterised by an artificially low price, for example for gasoline, the difficult question, in addition to the specificity issue to be discussed, would be how to determine an appropriate reference price by which to measure the amount of the subsidy. The IEA and IMF address this problem by using international market benchmarks.

Even the scope of the “benefit” conferred by an FFS under the SCM Agreement definition would raise some issues, where a market benchmark is unavailable due to government intervention. This could be resolved by reference to world prices, where there are comparable products.

Furthermore, contributions from some state-owned enterprises might be excluded from the definition of “subsidy.” In *United States - Definitive Anti-Dumping and Countervailing Duties on Certain Products from China*,<sup>6</sup> the WTO Appellate Body determined that “a public body within the meaning of Article 1.1(a)(1) of the SCM Agreement must be an entity that possesses, exercises or is vested with governmental authority” (para. 317). Ownership and control by the government are not sufficient to constitute an entity a public body. Thus, not all state-owned enterprises would constitute public bodies for purposes of this definition.

<sup>6</sup> Appellate Body Report, *United States - Definitive Anti-Dumping and Countervailing Duties on Certain Products from China*, WT/DS379/AB/R, adopted 25 March 2011.

In order for most subsidies to be actionable under the SCM Agreement, they must be specific. Export subsidies and import substitution subsidies are deemed “specific.” For all other subsidies, no action can be taken against them, whether in the form of WTO dispute settlement challenge or countervailing duties, unless they are specific within the meaning of Article 2 of the SCM Agreement. The question is whether the subsidy “is specific to an enterprise or industry or group of enterprises or industries.”

Specificity exists if the subsidy explicitly limits access to certain enterprises or certain areas. On the other hand, where the subsidy programme establishes objective criteria governing the eligibility for and the amount of the subsidy, specificity does not exist. Under Article 2.1(b) of the SCM Agreement, “the criteria or conditions must be clearly spelled out in law, regulation, or other official document, so as to be capable of verification.” Furthermore, “objective” criteria are those “which are neutral, which do not favour certain enterprises over others, and which are economic in nature and horizontal in application, such as number of employees or size of enterprise.” A panel that recently considered specificity stated that “what matters is the existence of a restriction on access to the subsidy, in the sense that the subsidy is available to certain enterprises, industries, or groups of enterprises or industries, but not to others.”<sup>7</sup>

Where a subsidy is not de jure specific for these reasons, it may be examined to determine whether it is de facto specific. Factors to be considered in this determination under Article 2.1(c) include “use of a subsidy programme by a limited number of certain enterprises, predominant use by certain enterprises, the granting of disproportionately large amounts of subsidy to certain enterprises, and the manner in which discretion has been exercised by the granting authority in the decision to grant a subsidy.” The Appellate Body has stated that

where the granting of the subsidy indicates a disparity between the expected distribution of that subsidy, as determined by the conditions of eligibility, and its actual distribution, a panel will be required to examine the reasons for that disparity so as ultimately to determine whether there has been a granting of disproportionately large amounts of subsidy to certain enterprises.<sup>8</sup>

Some FFS programmes will meet the specificity requirement, but many will not. Moreover, those subsidies that are not specific are simply more broadly available, increasing their adverse environmental effects. Therefore, the existing SCM Agreement structure is not well designed to discipline FFS.

If a subsidy is specific, it may be actionable if it causes injury to the domestic industry of another member, if it otherwise causes serious prejudice to the interests of another member, or if it nullifies or impairs benefits accruing under GATT. “Serious prejudice” is defined to include certain trade effects, and does not appear to include environmental effects. Here, there are also difficulties insofar as FFS may not cause the requisite trade harm, or may actually benefit industries of other members, while doing significant environmental harm.

Furthermore, the harm included within “serious prejudice” is generally harm to producers of “like products” of the complaining member (but also includes increased market share). “Like products” are defined in note 46 to the SCM Agreement as products which are identical to the product under consideration, or if there is none, another product with closely resembling characteristics. It appears unlikely that renewables will qualify as “like products,” such that injury to the renewables industry of the complaining member would qualify as serious prejudice.

7 Panel Report, *United States - Countervailing Measures on Certain Hot-Rolled Carbon Steel Flat Products from India*, WT/DS436/R, adopted 19 December 2014, as modified by the Appellate Body Report, WT/DS 436/AB/R, adopted 19 December 2014, para. 7.121.

8 Appellate Body Report, *United States - Measures Affecting Trade in Large Civil Aircraft (Second Complaint)*, WT/DS353/AB/R, adopted 23 March 2012, para. 879.

It is also possible for states to find that a downstream product has been subsidised by virtue of the subsidisation of fossil fuel energy inputs. Provided that a satisfactory “pass-through” analysis is performed, if required to establish causation, countervailing duties may be imposed on a product to offset subsidies granted with respect to its input, or upstream, product.<sup>9</sup>

The SCM Agreement also contains extensive provisions for notification and surveillance. However, the notification provisions are often ineffective, particularly in the FFS context (see Casier et al. 2014; Lang, Wooders and Kulovesi 2010; Collins-Williams and Wolfe 2010).

Therefore, the existing GATT/SCM Agreement<sup>10</sup> mechanism is an unsatisfactory structure for

disciplining FFS.<sup>11</sup> It is designed to address subsidies that distort competition, rather than subsidies that accentuate use of fossil fuels. While modifications could be made to the SCM Agreement in order to address FFS, it would be simpler, and enable greater discipline, to develop a separate agreement focused specifically on FFS.

This paper suggests the contours of such an agreement. If the substance of an FFS regime were agreed, and if it were agreed to be part of the WTO system, it would be technically feasible to insert that regime in the SCM Agreement. However, such an approach would be inelegant and cumbersome, due to the need to revise so many of the components of the existing SCM Agreement regime.

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9 Appellate Body Report, *European Communities and Certain Member States - Measures Affecting Trade in Large Civil Aircraft*, WT/DS316/AB/R, adopted 1 June 2011, paras 773-6.

10 I have not discussed GATT separately, because its subsidies disciplines are largely subsumed within the SCM Agreement, and because its discrimination disciplines, while potentially applicable to FFS, are not salient to the disciplines discussed in this paper.

11 While the WTO Agreement on Agriculture would apply to regulate subsidies for agricultural production and consumption of fuel, and may have relevance for biofuels, it does not generally address FFS.

### 3. RELATED DISCIPLINES AND SOURCES OF ANALOGY

In order to develop possible contours of an FFS reduction regime, it is useful to examine some existing agreements addressing similar issues.

#### 3.1 WTO Accession Provisions

In the WTO period, accession commitments of a number of countries have included restrictions on FFS. Saudi Arabia, in connection with its 2005 accession, made a commitment that “producers/distributors of [natural gas liquids] in Saudi Arabia would operate, within the relevant regulatory framework, on the basis of normal commercial considerations, based on the full recovery of costs and a reasonable profit.”<sup>12</sup> Russia made a similar commitment.<sup>13</sup>

#### 3.2 European Union

Internally, the European Union (EU) has taken important steps towards reduction of FFS. The European Commission’s proposal for the 2016 European Consensus on Development includes the goal that “The EU and its Member States ... will also promote the phase out of fossil fuel subsidy ...” As of 2018, the EU will phase out subsidies for “uncompetitive coal mines.”<sup>14</sup>

#### 3.3 Agreement on Agriculture

The Agreement on Agriculture (AoA) represents an example of a mechanism to limit and reduce a specific category of subsidies, separately from the SCM Agreement. The AoA set individualised enforceable limits on both export subsidies and domestic subsidies on agriculture. Although its motivation was not environmental protection as such, its preamble refers to the need to protect the environment, and it has environmental collateral effects by progressively shifting

agricultural production to more efficient, less resource-intensive producers. Its progressive reduction structure can serve as an example of negotiation and agreement for progressive reduction of FFS.

The experience in implementing the WTO AoA has many lessons for the development of an FFS reform regime, including problems in reporting and surveillance, in the nature of commitments above actual implemented levels, and in enforcement.

#### 3.4 Fisheries Subsidies

The fisheries subsidies negotiations, undertaken pursuant to the Doha Declaration, represent an example of intensified subsidies disciplines for dual purposes of trade and sustainability. While these negotiations have not yet resulted in definitive obligations, they are at an advanced stage of discussions. The proposed disciplines, as described in a July 2017 “compilation matrix,” show how a sectoral subsidies regime might operate, and might be related to other WTO agreements (WTO 2017).

For example, in a May 2017 proposal, Argentina, Colombia, Costa Rica, Panama, Peru, and Uruguay suggest, *inter alia*, a flat prohibition on “subsidies for fishing that negatively affect fish stocks that are in an overfished condition.”<sup>15</sup> Similarly, in April 2017, New Zealand, Iceland, and Pakistan proposed prohibitions on “subsidies in connection with fishing and fishing related activities involving fish stocks that have not been assessed or have been assessed to be in an overfished condition.”<sup>16</sup> These proposals also include special notification requirements for fisheries subsidies.

12 WTO, Working Party Report, document WT/ACC/SAU/61, para. 33.

13 WTO, Working Party Report, document WT/ACC/RUS/70, para. 132.

14 Council Decision 2010/787/EU, published OJ L 336, 21.12.2010, pp. 24-9.

15 “Proposal for Disciplines on Fisheries Subsidies,” Communication from Argentina, Colombia, Costa Rica, Panama, Peru, and Uruguay, TN/RL/GEN/187, 29 May 2017.

16 “Proposed MC11 Fisheries Subsidies Disciplines: Implementing SDG Target 14.6,” Communication from Iceland, New Zealand, and Pakistan, TN/RL/GEN/186, 26 April 2017.

In addition, some preferential trade agreements contain restrictions on fisheries subsidies. For example, Article 20.16.5 of the Trans-Pacific Partnership prohibits subsidies as defined in the SCM Agreement that are specific and that negatively affect fish stocks that are in an overfished condition.

### **3.5 EU-Singapore Free Trade Agreement**

Article 13.11.3 of the EU-Singapore Free Trade Agreement specifically addresses FFS:

The Parties recognise the need to ensure that, when developing public support systems for fossil fuels, proper account is taken of the need to reduce greenhouse gas emissions and to limit distortions of trade as much as possible. While subparagraph (2)(b) of Article 12.7 (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. In addition, both Parties will actively promote the development of a sustainable and safe low-carbon economy, such as investment in renewable energies and energy efficient solutions.

### **3.6 Environmental Goods Agreement**

The negotiation of the proposed Environmental Goods Agreement represents another initiative that is related to the WTO, but that has as its principal purpose environmental protection, through the mechanism of differential trade liberalisation. This negotiation involves 46 WTO members, and, in its current phase, is focused on reducing tariffs on environmental goods.

## 4. COMPONENTS OF A FOSSIL FUEL REDUCTION REGIME

This section reviews some of the essential or likely components of an agreement to reduce FFS. As discussed in section 5, these components may be incorporated in various types of instruments, within or outside the WTO, binding or non-binding, and with various types of organisational support.

### 4.1 Definition of Actionable Fossil Fuel Subsidies

A definition of FFS will be required in any agreement to reduce FFS. There will be two core components to any definition of FFS: (i) whether there is a subsidy, and (ii) whether it promotes use of fossil fuels. Another question is (iii) the role of a “specificity” requirement for actionability, as applied in the SCM Agreement. An additional question is (iv) whether there is any purpose to a separate “injury” requirement for actionability. Another issue to be addressed (described earlier) would be the coverage of payments by certain state-owned enterprises or other entities that are owned by government but lack governmental authority.

#### 4.1.1 Definition of “subsidy” in the context of fossil fuels

In order to define “subsidy” for purposes of an agreement on FFS disciplines, it is appropriate to begin with the definition of subsidy under the SCM Agreement. However, as noted, the SCM Agreement definition of “subsidy” has important limitations that would undermine its usefulness in a mechanism restricting FFS.

Review of existing producer subsidies, focusing on tax benefits and other non-cash subsidies, will allow the development of a more detailed definition that includes tax benefits, with less reliance on a general definition. In addition, these types of tax expenditures do not necessarily appear in national budgets.

Specific language establishing benchmarks for fuel pricing, based on the work of the IEA, IMF, and OECD in this area, will provide a more

precise and reliable definition of “benefit.” For consumer subsidies, cost of production benchmarks will often fail to reflect the full opportunity costs of provision by oil-producing countries. Therefore, a reference to an international benchmark, to reflect opportunity costs to government, would be necessary.

#### 4.1.2 What are “fossil fuel” subsidies?

Once it is determined that a subsidy exists, it is necessary to determine whether the relevant subsidies promote the use of fossil fuels. This determination will set the scope of coverage of new FFS disciplines. This parameter asks whether there is a relevant nexus with fossil fuels or related carbon emissions, and asks about the magnitude of the effect.

The fundamental approach to definition should aim towards, without necessarily actually referencing, the additional carbon emissions expected to be caused by the subsidy (“carbon emission additionality,” or CEA). In defining the fossil fuel component, it is possible to examine actual effects or to use a proxy for actual effects, or a hybrid of the two approaches.

Studies of the additionality of Clean Development Mechanism (CDM) projects, responding to the CDM requirements that emissions reductions be measurable and additional, have shown that it is extremely difficult to determine whether particular carbon reduction projects would be carried out without the CDM (Schneider 2009; Olsen 2007). The difficulty of proving that these CDM projects would not have been undertaken but for the CDM may be greater than the difficulty of proving, or inferring based on estimation algorithms, the fuel use caused by subsidy programmes. Theory and practice suggest that subsidies themselves are generally designed to have additional effects.

The OECD began in 2010 to inventory all budgetary transfers and tax expenditures by

which its member states provide incentives for consumption or production of fossil fuels (OECD 2016b). This inventory will serve as a useful starting point for an inductive approach to defining fossil fuel subsidies.

The International Institute for Sustainable Development has produced a useful comparison of fossil fuel subsidy and support estimates, summarising some of the leading approaches to defining FFS (IISD 2014). These approaches, adopted in connection with attempts to estimate national FFS programmes, are not necessarily in a form that would be satisfactory for use in a legally binding limitation or prohibition. For another useful overview of methods of calculation of FFS, see Bárány and Grigonytė (2015).

#### **Definitions of FFS in existing informal commitments**

The IEA, G20 and APEC references to (i) inefficient subsidies that (ii) encourage wasteful consumption add a layer of uncertainty. The “inefficiency” parameter is insufficiently specified, and if it adds anything to “wasteful consumption” may be intended to refer to subsidies that respond elegantly to market failures. The US appears to interpret the “inefficiency” parameter as excluding means-tested consumption subsidies for low-income recipients, and subsidies to fossil fuel technologies that reduce carbon emissions. Neither of these parameters is precisely specified.

With respect to “inefficiency” as a general term, one problem is in defining and allocating the burden of proof as to inefficiency. Members may claim that their FFS are efficient, and it may be difficult to prove the absence of a market failure, or to determine when a subsidy is excessive or imprecise in relation to the identified market failure. The “encouragement of wasteful consumption” parameter is a particular type of inefficiency, and so it serves to limit the inefficiency parameter to those inefficiencies that cause wasteful consumption.

It is not clear how the wastefulness of consumption is to be determined. On a counterfactual basis, perhaps it is where consumption without the subsidy would fail a cost-benefit analysis. Here, one question is whether the full social costs are calculated within the cost-benefit analysis. Full internalisation of externalities would increase the possibility that a particular subsidy would be understood as wasteful. If full internalisation of externalities is not included, then this parameter would result in suboptimal disciplines on FFS.

The major problem with these types of definitions is the difficulty of applying them in practice. For example, the definition of efficiency, as well as of waste, is probably best calculated using cost-benefit analysis, which is notoriously sensitive to valuation of both the costs and the benefits.

#### **Consumption subsidies**

The approaches used by the IEA and IMF generally focus on “price gaps.” For example, the IEA estimates FFS on the basis of observed energy prices. “By comparing local fuel prices in different countries to a set of reference prices (either import-parity or export-parity prices), the IEA calculates a number of “price gaps” to estimate the extent to which fossil fuels are under-priced in various countries” (OECD 2016b, 21).

One limitation of the price gap approach is that it focuses on consumption subsidies. The price gap approach can be applied to production subsidies, by examining when prices are above the benchmark, but this does not account for all of the effects of production subsidies. Production subsidies may affect quantity produced as well as price. In fact, producers would be expected to pass on to consumers through the price of the fuel as little of the subsidy as possible, consistent with maximising profits.

The price gap approach may leave out subsidies that do not affect prices but that can have

other salient behavioural effects, for example through a fiscal channel (Koplow 2009). Another limitation is that indirect taxes, especially in wealthy countries, can raise prices above world prices, despite subsidies. Thus, a subsidy may exist, and may affect prices, without depressing the final price below benchmarks.

Furthermore, different fossil fuels have different carbon profiles, and so, for example, a subsidy for natural gas may be less problematic than a subsidy for coal.

Of course, one component of a well-targeted definition will need to account for the elasticity of demand for various fossil fuels. If, counterfactually, demand for a fossil fuel were fixed, then national subsidies that reduce prices would not increase use. Conversely, reduction of subsidies would not reduce use. In addition, the elimination of consumption subsidies may reduce world prices, and thereby cause increased consumption in other markets. Issues of elasticity of demand, and of supply, as well as of potential leakage, should be included in an assessment of a particular subsidy programme's CEA.

### **Production subsidies**

There are several parameters that could be used to determine which subsidies are production FFS.

First, FFS might be defined by reference to the recipient. While this may be workable with respect to certain producer subsidies, it may be overbroad, because some subsidies might be for non-fossil fuel promotion purposes. Some subsidies might flow, for example, to an oil company, but be used largely to promote workplace health, rather than to reduce the price of oil. Or they may be used to achieve reduced emissions. Furthermore, reference to the recipient might be under-inclusive, because subsidies provided to persons other than fossil fuel producers or consumers may affect the price of fossil fuel. Thus, a definition that referred to the nature of the recipient would require extensive and complex exceptions and supplements.

Second, FFS might be defined by reference to the activity being subsidised. This definition might or might not be congruent with additionality of carbon emissions.

Third, certain types of governmental programmes can be identified inductively for each relevant state, and included on a scheduled list of subsidies to be disciplined. The identification itself would begin with a deductive definition, perhaps focusing on recipients and activities, and would involve some research and negotiation as to the extent to which the relevant subsidy induces additional emissions.

Fourth, since the functional purpose of FFS disciplines is to reduce carbon emissions, certain types of subsidies might be assigned to categories or weights based on the average CEA of that type of subsidy, or some other simplified method.

In its calculations of FFS, the OECD uses an inventory-based method to calculate subsidies in its member states, based on budgetary expenditures and tax expenditures supporting either production or consumption (OECD 2016b). This approach has the limitation that it does not differentiate among different subsidy programmes by reference to the intensity of their effects on use of fossil fuels or carbon emissions.

Problems of calculation and administrability may require that simplified proxies for CEA are used. Since CEA is the target, subsidies for some fossil fuels would be treated differently from subsidies for other fossil fuels, and subsidies well targeted at increasing efficiency and thereby reducing carbon emissions should be exempted from limits.

With respect to tax subsidies, which is the form that most production subsidies take, the WTO definition of subsidies has been used to include as a subsidy circumstances where government revenue that is otherwise due is foregone. In the case of FFS, it would be important to revise the "otherwise due" element of this definition to refer to government revenue that

is generally due but is not due in the case of activities in the consumption or production of fossil fuels.

So, a deductive approach to definition that attempts to define the fossil fuel component based on effects on use of fossil fuels, carbon emissions, or inefficiency is probably best used simply as a starting point, and a guide, for more specific, inductive analysis of national programmes, calculation of likely CEA, and negotiations. An inductive approach would examine the related subsidies regimes of WTO members, beginning with the types of information included in the OECD Inventory, and would call for member by member reporting, discussion, negotiation and agreement on what subsidies would be included and how they would be weighted.

This type of inductive approach would support scheduling of existing FFS, enabling reduction over time, and making subsequent transparency and reporting more effective, as in the AoA, or even the Trade Facilitation Agreement. In the negotiation of the AoA during the Uruguay Round, the first step was to identify and quantify existing domestic support and export subsidies.

### **Anti-Pigovian subsidies**

The IMF approach to measuring production subsidies includes as a tax subsidy the difference between the efficient level and the actual level of taxation for a given fossil fuel. Importantly, the IMF's "efficient level" of taxation includes a Pigovian tax-based internalisation of externalities, including those resulting from carbon emissions (Clements et al. 2013,145). This approach requires estimation of the amount of carbon emitted from use of particular fuels, and of course is dependent on estimates of the social cost of carbon. It does not estimate CEA per se, but assumes that prices below the full social cost are subsidies. The failure to cause producers and users to take account of the full social cost of carbon results in greater carbon emissions, and so this measure could be included within CEA. Calculation of the efficient level of taxation requires calculation of CEA.

### **Aggregate limits**

For each type of consumption and production subsidy, the goal should be to calculate, directly, by estimate, or by proxy, a CEA for each existing programme. Once an approach to calculating the CEA for particular programmes is established, the next step is to establish a method for determining the "aggregate measure of carbon emission additionality" (AMCEA) for each state, and then negotiate reduction commitments to be effected over time. This AMCEA approach would also operate as a standstill on increases in FFS programmes, which would necessarily be defined using a deductive definition. The AMCEA approach would also provide incentives for subsidising states to reveal and schedule their FFS programmes, because it would set the AMCEA by reference to existing programmes.

The measure most congruent with the goal of an FFS regime would be AMCEA. A monetary limit might not capture variations in CEA among different types of subsidisation with sufficient precision. However, the advantage of a monetary amount is that it is more readily administered, monitored, and enforced.

One hybrid approach that could utilise a monetary amount would be to establish varying monetary limits for specific categories of subsidies, with the negotiation based on the estimated carbon intensity additionality of those categories. It is important that different types of subsidies, for different types of fuels, will have different levels of CEA. These categories might be established on the basis of the fuel used and the likelihood of additionality. Some categories might be prohibited. If categories of this type are utilised, it may be desirable to calculate the "exchange rates" between the different types of subsidies, and to establish the possibility for transferability of subsidies from one category to another. In effect, this approach would amount to an AMCEA test, with pre-established "deemed" amounts of carbon intensity additionality.

An AMCEA test has the advantage of flexibility, congruence with the goal of the regime, and

ability to commensurate among a wide range of possible subsidy programmes. It has the disadvantage of calling for analysis of the CEA of specific programmes, which of course can only be estimated. Thus, if this test were utilised, it would be best to develop also a reliable independent regime for calculating CEA. I will discuss the issue of regime design.

Whether a monetary amount as a proxy, calculated based on CEA, or a more direct AMCEA approach is used in formulating commitments, it would be necessary prior to negotiations for each member to determine and report, subject to verification, its existing relevant monetary amounts or AMCEAs. The next step would be to negotiate obligatory maxima in these categories, which would be reduced over time.

#### 4.1.3 Specificity

The SCM Agreement includes a requirement of specificity as a condition for actionability on subsidies in the multilateral trade regime. As a practical matter, a specificity condition was needed in order to avoid countervailing duties or other action against too wide a range of government activities, such as providing infrastructure, education, or other very generalised goods or services.

However, for the purposes of FFS, the specificity requirement may be unnecessary and counterproductive if the definition includes an effective requirement for linkage to fossil fuels or CEA. That is, if linkage to fossil fuels, or CEA, is a required part of the definition, that may be sufficient to limit the scope of actionability, with no requirement for a separate specificity test. Perhaps a *de minimis* threshold of causation of additional consumption or emissions, articulated as a ratio between the amount of subsidisation and the magnitude of additional consumption or emissions, would serve the purpose of avoiding disciplines on too great a range of government activities.

#### 4.1.4 Injury test

As discussed, a trade-based injury test as a condition for actionability is not apposite to a carbon emission reduction purpose, as opposed to a competitive injury purpose, and so should be discarded in the case of FFS disciplines. Rather, the degree of climate injury would be included sufficiently in a CEA or AMCEA concept. The AMCEA should be formulated to include additionality of emissions (regardless of whether the additional emissions occur inside or outside the borders of the subsidising state).

#### 4.2 Notification, Transparency, and Surveillance

Transparency alone can have significant behavioural effects (Aldy 2014). The G20 process has had problems of identification of FFS of members. In addition, the WTO SCM Agreement notification obligations are not reliably met. Finally, as already suggested, the clarity and ease of confirmation of obligations will be essential to a regime of notification, transparency, and surveillance.

The peer review mechanism of the G20, added at the 2012 Los Cabos Summit, may be modified to provide an effective system of surveillance. In addition, the WTO Trade Policy Review Mechanism, which does not currently include assessment of FFS, may be modified to do so. However, any mechanism will need to be devised with administrable definitions, requirements of sufficient transparency, appropriate incentives for accurate reporting, and independent reliable determinations.

For some countries, capacity-building may be a precondition for effective reporting.

#### 4.3 Transferability to Renewables

One of the problems with FFS is that they enhance the competitiveness of energy based on fossil fuels compared to energy based on renewables. The amount of FFS far exceeds that of renewable fuel subsidies. In order to

promote renewables, it may be desirable to allow states to transfer their FFS to RFS, and provide that any resulting RFS are deemed permitted under WTO law.

This type of mechanism would have the added advantage of providing a facility for states to compensate existing recipients of FFS, by replacing the FFS with WTO-permitted RFS. States that have not established significant FFS should not be disadvantaged by such a facility, so it may be appropriate to include in any agreement on FFS reduction a mechanism for permission for RFS for those states, independent of their prior FFS history.

#### 4.4 Compensating Measures

While swapping RFS in exchange for FFS in connection with consumption or production subsidies to the poor may be the most environmentally sound way to mitigate the effects of FFS reduction on the poor, such swaps may not always be feasible or effective. Therefore, other measures to mitigate the impact of change in FFS may be appropriate. Replacement of FFS with cash transfers would be a simple method of mitigation.

#### 4.5 Special and Differential Treatment/ Common but Differentiated Responsibilities

The burden of the costs of transition from FFS should not fall on poor individuals or poor states. Special and differential treatment would seem to call for greater burdens of reduction imposed on developed countries than on developing countries. Alternatively, a facility can be established to assist with the costs of transition, and on that basis greater reduction can be expected of developing countries. The WTO Trade Facilitation Agreement is an example of this type of mechanism, where wealthy countries agreed to support reforms in developing countries with technical and financial assistance.

#### 4.6 Dispute Settlement

Of course, an agreement of this type would be complex enough that there may be disagreements about the meaning of obligations, or circumstances in which states seek to defect from their obligations. It will also be important to provide an independent verification of compliance with limits on FFS. Clear independent determinations of compliance will reduce incentives to defect.

Therefore, an independent mechanism for interpretation, and more broadly for dispute settlement, would be appropriate. This is independent of the question of whether the obligations should be formally binding and subject to dispute settlement and remedies, or of a “soft” nature. The latter question, to be discussed, would depend on the incentives for compliance in the absence of formally binding obligations, and formal remedies.

If a concept such as CEA is utilised, a means of using expert analysis to determine CEA should be a part of the dispute settlement mechanism. The existing WTO dispute settlement mechanism contains the ability to utilise expert analysis of this type under Article 13 of the Dispute Settlement Understanding.

#### 4.7 Remedies

Given the carbon emissions reduction goal, any FFS that violates a state’s commitments should be withdrawn. Here, the ordinary (but not necessarily correct) WTO remedy of prospective withdrawal may be reconsidered, and an obligation to cause repayment of the excessive FFS, or to reduce future FFS by an amount that is, on a present value basis, equivalent to the excess, may be appropriate.

Under the SCM Agreement, a questionable interpretation of footnote 10 has established the possibility of imposing remedies that are greater than “equivalent” to nullification

or impairment in the case of illegal export subsidies. The concept of nullification or impairment—a mechanism for rebalancing after violation—seems inapposite to a FFS regime, and so it may be appropriate to consider a more compelling system of remedies in connection with enforcement of FFS reduction commitments.

Another remedy that applies under the SCM Agreement in connection with ordinary subsidies is the possibility for imposition of countervailing duties (CVDs) by importing states. This remedy is largely motivated by a “fair trade” idea that the importing state should be able to insulate its market from the effects of the subsidy. However, this idea is also largely inapposite in the context of FFS, where the concern is not with trade effects but with environmental effects.

One advantage of CVDs, however, is that they are a kind of remedy that can be applied fairly quickly and without multilateral authorisation. So, it seems appropriate to consider retaining the SCM Agreement permission for CVDs at least in connection with FFS that do cause the requisite trade effects, recognising the limited extent to which the SCM Agreement can realise the environmental goals of reducing FFS. Because the harm from FFS is to the global environment, it may be appropriate to consider transferring all or part of these CVDs to a national or international climate remediation fund.

In connection with the application of ordinary WTO dispute settlement with respect to breach of FFS commitments, it will be important to provide a facility for cross-retaliation in the event of non-compliance: it would be counterproductive and absurd for a complaining state to respond to a respondent state’s excessive FFS by breaching its own FFS commitments. Existing WTO law does a poor job of establishing “exchange rates” between one type of commitment and another: Should an excess FFS in a monetary amount be remedied by trade barriers of an equivalent amount? Should an excess FFS in a CEA amount be met by trade barriers in some

“exchange rate” calculated amount? In the existing WTO law context, other than in the field of remedies for export subsidies, the goal appears to be rebalancing. However, in connection with FFS, it may be appropriate to consider utilizing a remedy that would have a compelling effect on compliance, rather than one that seeks merely to rebalance commitments.

#### 4.8 Private Rights of Action

Due to the problem of identifying and calculating FFS in excess of overall commitments, it may be difficult to apply private rights of action in connection with FFS reduction obligations. Otherwise, private rights of action might be considered if it were thought that private individuals would have better information and stronger incentives to bring cases than other governments. Private individuals who are citizens of the subsidising state may have better information, and may have stronger incentives to bring cases, than foreign governments.

##### 4.8.1 Exceptions

Subsidies in relation to provision of energy aid to needy sections of the population may be exempted from limits.

If a concept similar to AMCEA is utilised, setting limits on the carbon emissions effect of subsidies, there is no need for an exception relating to minimally carbon-inducing subsidies. On the other hand, if other measures are used as a proxy for carbon emissions effects, then it may be appropriate to have exceptions where a particular subsidy programme is less carbon-inducing than was expected when that proxy was constructed.

Again, if a concept similar to AMCEA is not used, it may also be appropriate to have exceptions for transitional assistance that helps producers or consumers in transitioning from FFS support. Thus, even if support is provided to traditional recipients of FFS for production, so long as that support results in sufficient reduction of emissions, it may

be permitted. Decommissioning programmes for fossil fuel production capacity or plants fed by fossil fuel may fall within this type of transitional assistance. On the same basis, support for research on fossil fuel efficiency may similarly be exempted.

#### 4.9 Relations to Other International Law

FFS reform will not occur in a normative vacuum. The interaction between an FFS reduction regime and other areas of WTO law and other international law must be addressed.

##### 4.9.1 Relation to GATT and the SCM Agreement

An FFS discipline agreement of the type described here would best be structured as a cumulative obligation in the WTO context: compliance with the FFS reduction commitments would not exempt subsidies from the additional discipline of the SCM Agreement or GATT, and compliance with the SCM Agreement or GATT would not exempt subsidies from the FFS reduction commitments. These obligations have separate purposes. Thus, the FFS reduction commitments would operate

like the commitments under the AoA after the expiration of the “peace clause.” Of course, if countervailing duties were permitted, these should not duplicate countervailing duties under the SCM Agreement.

##### 4.9.2 Investor-state dispute settlement claims for FFS cessation

It is possible that reduction of FFS may require changes in existing national law, or other commitments, that might otherwise give rise to claims under international investment law for denial of “fair and equitable treatment,” or for expropriation, resulting in investor-state claims under international investment agreements.<sup>17</sup> It may be useful to address this issue in connection with the relevant commitments.

##### 4.9.3 Preferential trade agreement obligations

It is also possible that some of the RFS permitted under a new FFS regime would violate obligations under other trade agreements. Again, it may be useful to address this issue in connection with negotiation of the relevant commitments.

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<sup>17</sup> See, e.g. *Eiser Infrastructure Limited and Energía Solar Luxembourg S.à.r.l. v. Kingdom of Spain*, ICSID Case No. ARB/13/36 (2017).

## 5. VEHICLES AND INSTITUTIONAL ARRANGEMENTS

An international agreement on FFS reduction can stand alone, or be associated with an existing institutional structure, such as the WTO. As suggested, as to the WTO, the question is not so much one of categorical fit—whether FFS are a “trade” issue or not—but one of functional utility. As states determine the most useful vehicle or institutional arrangement for an FFS regime, they will consider economies of scale and scope, efficiency of arrangements, and effectiveness. This brief paper cannot engage in a full review of all alternatives, but it can suggest some of the parameters that may be considered, and how the WTO might be regarded in connection with those parameters.

### 5.1 What Does the WTO Offer?

The WTO has a number of features that may make it a desirable institutional home for a new agreement on FFS reduction.

First, in order for individual states to make progress on reducing FFS, they will need to coordinate with other states to reduce FFS in parallel, in order to avoid competitive distortion among producers.

Second, the WTO has analytical, reporting, surveillance (including the Trade Policy Review Mechanism), and dispute settlement capabilities that fit well with the institutional needs of an FFS reduction mechanism. With respect to dispute settlement in particular, the possibility for cross-retaliation may be needed to preserve cross-sectoral bargains struck to induce states to agree to FFS reduction.

Third, the WTO is the multilateral organisation that regulates national subsidies. Therefore, the WTO, and national representatives to the WTO, have broad experience in managing subsidies. In addition, the WTO has experience with negotiation in special sectoral subsidies fields: agriculture and fisheries.

Fourth, different states will have different interests in connection with FFS, and the

WTO offers opportunities to induce states to change their FFS policies in exchange for policy concessions in other fields by other states. The WTO is a forum for exchange of diverse commitments, making negotiation through cross-sectoral bargaining more likely to reach agreement. Conversely, it may be difficult to reach agreement in a freestanding agreement in which other forms of consideration cannot be given in exchange for FFS reduction commitments.

### 5.2 Plurilateral Agreement or Multilateral Agreement

In determining the necessary scope of membership for an FFS reduction regime, it is useful to consider the cooperation problem. Reduction of FFS is not a “weakest link” public good, in which all states must participate in order for a benefit to be realised. Furthermore, a relatively small number of states are the greatest grantors of FFS. So there may not be significant need or benefit derived from universality of obligation. Furthermore, the cooperation problem does not have a prisoner’s dilemma characteristic in which the benefits to any particular state depend on all other states complying with a particular norm. Therefore, a plurilateral agreement to which the major subsidising states adhere would be efficient and effective. However, note that the addition of a new plurilateral agreement to the WTO would require a consensus decision under Article X(9) of the Marrakesh Agreement.

### 5.3 Waiver/Interpretative Understanding/ Decision under the SCM Agreement

Within the WTO legal system, a waiver, interpretative understanding, or decision would not seem to be appropriate if formally binding rules are found desirable, because these vehicles are not plausibly capable of providing new binding rules of international law. These types of vehicles may be capable of providing rules that are not formally

binding. In addition, these types of vehicles may be appropriate for more modest initiatives involving slight adaptation of the SCM Agreement, for example, to waive the requirement of specificity in particular circumstances, or to interpret the term “subsidy” to include a broader range of FFS.

#### **5.4 A “WTO-Parallel” Agreement**

There are many options for agreements outside the WTO. It is also possible that through parallel negotiations, some of the negotiating benefits of broader exchange may be obtained even without a formal linkage to the WTO. Cross-retaliation may be more difficult to establish in a non-WTO agreement. One example of a WTO-parallel agreement is the proposed “Trade in Services Agreement,” which builds on WTO services commitments, but is intended to expand disciplines among a group of like-minded states.<sup>18</sup>

#### **5.5 United Nations Framework Convention on Climate Change**

Another option, of course, is to house an agreement on FFS disciplines within the United Nations Framework Convention on Climate Change. While the UNFCCC is the leading forum for addressing climate change, it has less experience with subsidies per se, and lacks some of the advantages of broader reciprocity and institutional depth that the WTO offers.

#### **5.6 Soft Rules**

Rules that are not formally binding (“soft” rules) are another possibility, and can be structured with the same substantive characteristics as formally binding law. Surveillance, notification, and dispute settlement are all possible. Soft rules have advantages in terms of ease of approval, with reduced national ratification processes. The behavioural question is whether soft rules will induce a sufficient level of compliance.

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<sup>18</sup> The Trade in Services Agreement is expected to be established as a preferential trade agreement under the WTO General Agreement on Trade in Services.

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