

# AIN'T WASTIN' TIME NO MORE: SUBSIDIES FOR RENEWABLE ENERGY, THE SCM AGREEMENT, POLICY SPACE, AND LAW REFORM

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## ABSTRACT

Assuming that certain subsidies to support renewable energy may be ‘good’, the central question of this article is whether World Trade Organization (WTO) subsidy disciplines recognize this and offer appropriate policy space to Members. The analysis reveals that the situation is one of diffuse legal uncertainty, if not outright conflict between policy prescriptions and trade law requirements. The argument of the article is that the uncertainty of the legal assessment in itself produces a constraint on policy space. Some issues may be clarified through litigation but this is not the optimal approach since disputes are subject to many vagaries and may offer, at best, piece-meal and partial solutions. The pressure put on the judiciary should also not be underestimated. The analysis of the credible but controversial possibility of resorting to GATT Article XX to justify certain subsidies is the best example in point. The unsatisfactory nature of the legal framework is not merely hypothetical since subsidies for renewable energy are increasingly subject to disputes at both WTO and national levels. Against this scenario of inadequate legal framework and increasing litigiousness, law reform emerges as

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the first-best alternative. It is claimed that what is needed is a legal shelter that, in a clear and positive way, defines what types of subsidies supporting renewable energy are legitimate and permitted.

## I. INTRODUCTION: RENEWABLE ENERGY AND ITS SUBSIDIES

Since almost two-thirds of greenhouse gasses (GHGs) are energy-related,<sup>1</sup> any strategy to mitigate GHGs emissions needs to be centered on a shift from high-carbon to low-carbon energy production and use. Energy produced from renewable sources plays a key role in this regard.

The projections of energy trends into the future dramatically depend on the ambition of government policies. According to the International Energy Agency (IEA), in all scenarios, fossil fuels (oil, coal, and natural gas) will remain the dominant source of energy in 2035, but their share in the energy mix may vary, decreasing from 81% of world primary energy supply in 2009 to—depending on the scenario—80%, 75%, or 62%. Always depending on the scenario, which, as said, is largely policy-contingent, renewable energy demand may increase in 2035 by an amount ranging from 14 to 27%. In its New Policies Scenario (in which recent policy commitments by governments are assumed to be implemented in a cautious manner) the IEA estimated that in 2035 the share of renewable energy in primary energy demand would rise to 23% in the EU, 20% in India, 16% in the USA, and 13% in China.

China's case is indeed most interesting, not only because of the magnitude of its energy figures, but also because, with its emerging paradoxes, it is paradigmatic of the energy and environmental challenges that modern economies face. China is already the world's largest energy consumer and energy-related CO<sub>2</sub> emitter, having overtaken the USA. In the IEA's New Policies Scenario, by 2035, China would become the larger oil consumer in the world and would still account for 48% of cumulative world coal consumption. At the same time, most significantly, China would also lead the world in the supply of renewable energy. Furthermore, already in 2010, China was leading in several indicators of the renewable energy market. It was the top installer of wind turbines and solar thermal systems and was the top hydropower producer.<sup>2</sup>

Energy-related policy action to mitigate carbon emissions should take various and simultaneous forms. On the one hand, the phase-out of subsidies for heavily polluting fossil fuels is regarded as one of the best steps towards GHGs emissions mitigation. Recent estimates suggest that worldwide consumption subsidies amount to more than US\$400 billion, with the larger

<sup>1</sup> In its latest World Energy Outlook 2011 report (210), the International Energy Agency (IEA) notes that in 2009, energy-related CO<sub>2</sub> emissions contributed 61% to total GHGs.

<sup>2</sup> Renewable Energy Policy Network, *Renewables 2011 Global Status Report*, September 2010.

share in non-OECD countries.<sup>3</sup> On the other hand, alternative forms of energy, in particular renewable energy and/or nuclear power, should be encouraged.<sup>4</sup> It is thus argued that renewable energy still faces various obstacles and that, under certain conditions, public action may be necessary to support and complement the market. The IEA has estimated that global renewable-energy subsidies increased from \$39 billion in 2007 to \$66 billion in 2010.<sup>5</sup> Together the EU and the USA account for almost 80% of all global support (with the European \$35 billion being almost double of the American share). In the New Policies Scenario subsidies to renewables reach almost \$250 billion in 2035.<sup>6</sup>

Support of renewable energy and technology can take various forms. A tax can be imposed on the use of energy (energy tax) or on the emissions caused by this use (carbon tax). The disincentive to emit, and hence the incentive to be more efficient and invest in more cost-effective green technologies, can also be achieved through market-based instruments like cap-and-trade systems where a price is put on emissions and linked to tradable permits. Alternatively, economic resources can be transferred through subsidies to firms or consumers and thereby support R&D, production or consumption. Governments thus use grants and loan schemes, tax incentives, and regulations to achieve their aims.

This article attempts to answer various questions. It starts by asking whether renewable energy is in need of public support, and, if so, what guidelines should be followed to ensure its effectiveness in relation to its goals. Assuming that certain subsidies in support to renewable energy may be 'good', the central question, which occupies much of the analysis, is whether the current World

<sup>3</sup> Benjamin Sovacool, 'The Importance of Comprehensiveness in Renewable Electricity and Energy-Efficiency Policy', 37 *Energy Policy* 1529 (2009). Fossil-fuel consumption subsidies worldwide have been estimated to US \$409 billion in 2010, \$300 billion in 2009, \$558 billion in 2008, and \$342 billion in 2007, with changes in international fuel prices being chiefly responsible for differences from year to year (IEA, *World Energy Outlook 2011*, 508). For the first time, in October 2011, the OECD compiled a partial inventory of over 250 measures in support of fossil fuel production and consumption in 24 industrialized countries. Support was estimated at between US\$45 and 75 billions per year in the 2005–10 period, with production support amounting about one-fifth to one-fourth of the total in most years (see OECD Inventory of Estimated Budgetary Support and Tax Expenditure for Fossil Fuels, <http://www.oecd.org/dataoecd/40/35/48805150.pdf>, visited 20 October 2011). Making allowance for different methodologies, a very superficial comparison between these figures seems to indicate that non-OECD countries subsidize more (at least with respect to the consumption side).

<sup>4</sup> Energy efficiency and other supplementary emission abatement options, like carbon capture and storage (CCS), are also important. CCS (which refers to the technologies preventing large quantities of carbon emissions from being released into the atmosphere in the power generation and other industries) has an emission reduction potential of 18% (IEA, *World Energy Outlook 2011*, 237).

<sup>5</sup> These data refer only to direct or indirect support to the production of renewable energy, not to the technology used to generate this energy.

<sup>6</sup> It is clear that, although important, any parallel between these figures and those on fossil fuel support cited in n 3 above should be made with extra care. Comparisons should not be done only on the basis of gross values but considering per unit of energy supplied.

Trade Organization (WTO) regulatory framework recognizes appropriate autonomy.<sup>7</sup> Insofar as the answer to this question is negative, the possible directions that law reform could take are then explored.

## II. ARE SUBSIDIES FOR RENEWABLE ENERGY GOOD OR BAD? ECONOMICS, INDUSTRIAL POLICY, AND POLITICAL ECONOMY

Whilst support for energy saving and energy efficiency is readily endorsed by experts,<sup>8</sup> the issue of whether renewable energy needs support is much more controversial.

Economic theory posits that public intervention may be warranted whenever the market fails to provide desirable public goods or to tackle externalities. Climate change has been dubbed the ‘greatest and widest-ranging market failure ever seen’.<sup>9</sup> More specifically, renewable energy faces various barriers related to the financial markets, infrastructure, regulation, and information,<sup>10</sup> which may, at least in principle, justify the use of subsidies. In truth, ‘[i]n theory from an efficiency viewpoint, the ideal approach for encouraging clean energy would be the elimination of distortions in terms of support for conventional energy plus a charge on pollution at a socially optimum level’.<sup>11</sup> The implementation of these actions would allegedly put alternative energy on an equal competitive footing with competing (and often under-priced) conventional sources, making public support unnecessary. The problem is, however, that these actions are difficult fully to implement: ‘even in the most environmentally friendly countries in the world, there might be a level of existing distortion or regulatory bias in favor of conventional energy and the level of carbon taxes are not nearly optimal’.<sup>12</sup> Furthermore, as Howse recently noted,

[y]et even if all these measures [supporting fossil fuel] were removed at once [...] the market distortions and consequent environmental harm

<sup>7</sup> The analysis is limited to the disciplines of subsidies to industrial goods and does not extend to consider the impact of the regulation of subsidies to agricultural products, which may be relevant for certain biofuel subsidies. For an examination of these issues see Luca Rubini, ‘Subsidies for Emissions Mitigations in WTO Law’, in Geert Van Calster, Wim Vanderberghen, Denise Prévost (eds), *Research Handbook on Environment, Health, and the WTO* (Edward Elgar, forthcoming September 2012).

<sup>8</sup> Sadeq Z. Bigdeli, ‘Resurrecting the Dead? The Expired Non-Actionable Subsidies and the Lingering Question of “Green Space”’ 2 *Manchester Journal of International Economic Law* 27 (2011).

<sup>9</sup> Nicholas Stern, *The Economics of Climate Change: Stern Review* (Cambridge: Cambridge University Press, 2007), executive summary, i.

<sup>10</sup> See, e.g. Christopher Beaton and Tom Moerenhout, ‘A Literature Review on Subsidies to Electricity from Renewable Energy Sources’, NCCR Working Paper 2011/63, 7, 8-10 (2011); see also Sovacool, above n 3, 1530-1; Miguel Mendonça, David Jacobs, and Benjamin Sovacool, *Powering the Green Economy – The Feed-in Tariff Handbook* (London: Earthscan, 2010) chapter 8.

<sup>11</sup> Bigdeli, above n 8, 28.

<sup>12</sup> Ibid.

flowing from past investment decisions and established patterns of producer and consumer behavior based on these decisions could hardly be eliminated in the short term. Thus, there is a clear need for proactive interventions to correct market failures, such as subsidies that favor the use of alternative energy sources.<sup>13</sup>

In addition to these level playing field considerations, what makes the case for (even imperfect) subsidies in support of renewable energy stronger is the dramatic action needed to tackle the massive and urgent challenge of reducing GHGs emissions substantially—80% by 2050 if the target of preventing a temperature rise of 2°C is to be achieved.

That said, however, it has on numerous occasions been noted that, rather than correcting distortions, purportedly ‘green’ subsidies have often introduced them, have encouraged inefficiency, rent-seeking, and protection; when introduced have been difficult to remove; and may ultimately have been ineffective towards their stated aims, or, more simply, may not have been needed given the presence of altruistic and environmental friendly behavior.<sup>14</sup> Practical examples where one or more of these circumstances were present abound.<sup>15</sup> If the arguments above may in some cases lead to the rejection of the subsidy option, nevertheless, when the decision to grant subsidies is taken, the same concerns should always force policy-makers to design the subsidies properly in relation to their objectives so that the desired incentive effect is maximized and their costs and distortions are kept to a minimum.

Whether public support for renewable energy is needed is often determined by a mix of policy objectives: environmental, social, and economic goals (such as job creation and industry support) and energy security. As will be seen, this variety of goals is important in the context of the legal assessment of subsidies. The question of the desirability and effectiveness of public support is increasingly framed as one of *green industrial policy*.<sup>16</sup> While recent research seems to indicate that ‘soft’ industrial policy (e.g. standards, infrastructure, and export promotion) has a higher success rate than ‘hard’ industrial policy (e.g. tariffs, subsidies, tax breaks, and domestic content

<sup>13</sup> Robert Howse, *Climate Change Mitigation Subsidies and the WTO Legal Framework: A Policy Analysis* (Winnipeg, Manitoba: International Institute for Sustainable Development, 2010) 6.

<sup>14</sup> For a literature review see Bigdeli, above n. 8.

<sup>15</sup> For an account of feed-in tariffs (FITs) in the solar photovoltaic sector, see Mike Scott, ‘Subsidy Cut Puts Heat on Solar Panel Installers’, *The Financial Times*, 27 November 2011. To be true, the definitive assessment of specific cases of support is quite often difficult to make. The interesting debate spurred by the recent collapse of the US solar-panel maker Solyndra, which had received a \$535 million worth of loan guarantees, is a good example in point. See, e.g. Brad Plumer, ‘Five Myths about the Solyndra Collapse’, *The Washington Post*, 15 September 2011.

<sup>16</sup> See, e.g. Aaron Cosbey, ‘Renewable Energy Subsidies and the WTO: The Wrong Law and the Wrong Venue’, 44 *Subsidy Watch* 1 (June 2011).

requirements),<sup>17</sup> contemporary industrial policy discourse in trade-and-environment circles has been influenced by recent disputes on renewable energy support that concern subsidies with local content requirements<sup>18</sup> (i.e. where the grant is subject to the use of local inputs). Some note that the obligation to source certain inputs locally is clearly protectionist and cannot really be justified on environmental grounds. Any beneficial green impact deriving from domestic industry support would be compensated by a detrimental green impact for the competing industries of other countries. At best, it would be a ‘green vs. green’ conflict, with no obvious decider in favor of domestic support. Others, by contrast, suggest that import substitution would not only create competitive domestic players in the sector but ultimately, if it meant ‘more agents of innovation’ internationally, increase global competition, and this ‘at a time when innovation in renewable energy technology is a critically important global public good’.<sup>19</sup>

In the light of these considerations, it is clear that the issue of whether subsidies are needed is not a ‘black-and-white’ one and that the answer is necessarily nuanced. The key question is whether public support is *cost-effective in relation to the goals pursued* by public action.<sup>20</sup> In the context of scarce resources and competing priorities, a proper methodology that analyzes and compares benefits and costs in relation to the intended goals is crucial. The quest for better policy is continuous. The effectiveness of a particular measure of support ultimately depends on the specifics of the case and, crucially, on the design of the measure and its synergy with other policies.<sup>21</sup> Furthermore, subsidies can operate at different stages and have different targets. Governments may decide to subsidize consumers or instead firms, supporting, for example, their R&D or production. Depending on the circumstances, the effects of these subsidies are different. The competitive position of domestic and foreign producers is not necessarily affected unless,

<sup>17</sup> Ann E. Harrison and Andrés Rodriguez-Clare, ‘Trade, Foreign Investment, and Industrial Policy for Developing Countries’, in Dani Rodrik and Mark Rosenzweig (eds), *Handbook of Development Economics, Volume 5* (Amsterdam: North Holland, 2010) 4039–214.

<sup>18</sup> *China – Measures Concerning Wind Power Equipment* (DS 419); *Canada – Certain Measures Affecting the Renewable Energy Sector* (DS 412); *Canada – Measures Relating to the Feed-In Tariff Program* (DS 426).

<sup>19</sup> Cosbey, above n 16, 2.

<sup>20</sup> Beaton and Moernhout, above n 10, have recently highlighted how most studies analyze the cost-effectiveness of renewable energy subsidies with respect to deployment, as opposed to their ultimate objectives, which does not seem to be fully appropriate. See also Richard Bridle and Christopher Beaton, ‘The Cost-effectiveness of Solar PV Deployment Subsidies’, NCCR Working Paper 2011/31 (2011); Christopher Beaton and Tom Moerenhout, ‘Assessing the Cost-Effectiveness of Renewable Energy Deployment Subsidies: Biomass in the United Kingdom and Germany’, NCCR Working Paper 2011/73 (2011); Tom Moerenhout, Tilmann Liebert and Christopher Beaton, ‘Assessing the Cost-Effectiveness of Renewable Energy Deployment Subsidies: Wind Power in Germany and China’, NCCR Working Paper 2012/03 (2012).

<sup>21</sup> IPCC Special Report on Renewable Energy Sources (SRRES), May 2011, Summary for Policy-makers, 24. See also Sovacool, above n 3, 1537–9.

in law or in fact, the incentive discriminates in favor of domestic production, a preference that may well be a policy decision.<sup>22</sup>

A common policy prescription is that subsidies should be as targeted as possible, with a preference for activities rather than sectors.<sup>23</sup> Further principles for a ‘smart’ industrial policy, which are also applicable to subsidies, include the following: policy, institutional and cost elements in the value chain, limiting production and export, should be removed; the measure should be as transparent as possible; the goals pursued should be spelt out with clear criteria for success and failure; incentives should be provided only for ‘new’ activities; the impairment of competition should be avoided; the project should entail private risks commensurate to public risks; the government agency administering the policy should have demonstrated competence, with clear political oversight and accountability; and the project should be subject to regular external valuations.<sup>24</sup> It is also suggested that, since market failures (and hence the policies to target them) may be difficult to identify and quantify, private and public sector should cooperate in a ‘discovery process—one where firms and the government learn about underlying costs and opportunities and engage in strategic coordination’.<sup>25</sup> This continuous—necessary but certainly difficult—process should assist in attuning the subsidy to changing needs and removing it when it becomes unnecessary. Furthermore, in order to avoid opportunistic behavior, unnecessary distortions and excessive spending, subsidies should be granted only insofar as they are necessary to produce the incentive effect and only until the obstacle justifying them is present. It is in this respect even noted that, as a general rule, subsidies should only be temporary and subject to a sunset clause.

Two final remarks may shed some light on the political economy of subsidy decisions.

First, if properly designed, carbon taxes or market-based mechanisms seem to be more cost-effective in terms of GHG offset. Why then do governments find it so difficult to implement these options and instead resort to the ‘second-best’ solution of subsidies? The answer is predominantly a political economy one, and almost intuitive. Subsidies are often easier to implement because, rather than imposing a cost on emissions and on the polluting activity, they confer an economic advantage.

Second, it is worth noting that, even if the previous guidelines are followed, it does not follow that the subsidy will not cause any distortions, including trade ones. From a policy-making angle, however, trade distortion

<sup>22</sup> The possible justification and status of discriminatory subsidies are analyzed at length below.

<sup>23</sup> Dani Rodrik, *Industrial Policy for the XXIst Century* (Cambridge MA: Harvard John F. Kennedy School of Government: September 2004).

<sup>24</sup> From the ‘10 Principles for Smart Industrial Policy’ outlined by Richard Newfarmer in his paper at the IISD’s Trade, Investment and Climate Change: Searching for Progress and Key Issues conference. Geneva, 18 October 2011.

<sup>25</sup> Rodrik, above n 23, 3–4.

is not necessarily the ultimate baseline consideration. If it is accepted that public support is needed to complement the market and that certain subsidies are cost-effective in achieving the desired goal, certain distortions can be accepted. What underlies any policy decision and any legal compromise is a *trade-off*. Economic distortions are accepted if, in view of the preferences and choices of the granting government, it is expected that the benefits will be greater. There is no precision or inevitability in where the line is drawn. The main difficulty, however, comes when negative and positive effects are produced in different countries, since it is not easy to make and to gain acceptance for transnational trade-offs. In these cases, the policy discourse clearly transcends the domestic and local level to reach the international and global one. Complex issues of settlement of conflicts of interests and multi-level regulation enter into play.

### III. UNCERTAINTY, PARADOX, AND INCONSISTENCY: THE SUBSIDIZATION OF RENEWABLE ENERGY AND WTO SUBSIDY DISCIPLINES

Having outlined the economic and policy background of the measures of support of renewable energy, in this section we assume that some of them may be ‘good’ and accordingly analyze the current subsidy disciplines in order to assess the degree of autonomy or policy space that they offer.

It is worth at this point sketching how the Agreement on Subsidies and Countervailing Measures (SCM Agreement), the main set of rules applicable to subsidies, operates. Under the definition of SCM Article 1, a subsidy shall be deemed to exist if there is a ‘financial contribution’ by the government or ‘any form of income or price support’, as a result of which a ‘benefit’ is conferred. The subsidy must then be ‘specific’ to certain enterprises or industries. Once it has been established that the measure constitutes a specific subsidy, it is necessary to determine whether it causes ‘adverse effects’ to the interests of one Member or ‘material injury’ to the domestic industry of a Member.<sup>26</sup> If this is the case, the subsidy will be actionable before WTO dispute settlement (and should be withdrawn or its effects removed) or subject to countervailing duties in the affected domestic jurisdiction. Subsidies that are contingent on exportation or on the use of domestic inputs (called local-content or import-substitution subsidies) are simply prohibited.<sup>27</sup>

The key legal questions are the following. What type of public action supporting renewable energy is covered by WTO rules applicable to subsidies? How does the regulatory framework cope with the distorted nature of

<sup>26</sup> The SCM Agreement identifies three types of adverse effects: injury, serious prejudice (arising in case of various forms of displacement and price effects in various markets, or in the case of an effect on world market shares) and nullification and impairment of benefits, in particular tariff concessions.

<sup>27</sup> Unless prohibited subsidies are subject to countervailing duty action, there is no need to prove specificity or negative effects. If granted, the only alternative is withdrawal.

energy markets? Are the guidelines originating from the legal disciplines in line with the policy prescriptions? Is the legal framework coherent? Is it sufficiently or appropriately friendly towards the use of desirable subsidies to support renewable energy?

In order to answer these questions we must first address the issue of whether tax incentives and quantitative and pricing requirements can constitute a form of financial contribution or of income or price support. The focus then shifts to the difficulties of the determination of the benefit in the energy sector. We finally address jointly the specificity test and the adverse effects. A section on the legal status of discriminatory subsidies concludes.

### A. The puzzles of energy and environmental taxation

The subsidy status of tax incentives<sup>28</sup> is perplexing. The following analysis first outlines a few conceptual matters, which may be useful as a framework for analysis, and then applies this framework to real and hypothetical cases of environmental, energy and carbon taxation (with a couple of significant examples of emission trading systems).

#### *1. The inherent instability of the ‘otherwise due’ determination*

According to item (ii) of Article 1.1(a)(1) of the SCM Agreement, the determination of whether a tax incentive constitutes a form of financial contribution depends on a positive finding that the measure involves the foregoing of government revenue that would otherwise be due. As shown by the *US – FSC* litigation, this determination is inherently unstable because of the difficulties of the ‘otherwise due’ language.<sup>29</sup> To determine what is ‘otherwise due’ requires a complex counterfactual analysis that ultimately rests on whether the measure under examination is a derogation from the otherwise applicable benchmark norm.<sup>30</sup>

But how can we identify the relevant norm in the field? How can we determine what is general and what is an exception? Taxation, in particular, is notorious for targeted interventions and a fast-changing pace. Complexity is pervasive, coherency rarely reached. The search for the general tax norm is therefore often difficult.<sup>31</sup>

<sup>28</sup> While tax exemptions involve a dispensation from tax liability, tax credits operate as offsets against tax owed.

<sup>29</sup> The panels and the Appellate Body used no less than four different tests to approach this language. See Luca Rubini, *The Definition of Subsidy and State Aid – WTO Law and EC Law in Comparative Perspective* (Oxford: Oxford University Press, 2009) 263–74.

<sup>30</sup> For an analysis of this ‘derogation test’ see Rubini, above n 29, Chapter 9.

<sup>31</sup> For an excellent conceptual analysis of all these issues, see Liam B Murphy and Thomas Nagel, *The Myth of Ownership: Taxes and Justice* (Oxford: Oxford University Press, 2002). See also Edward J. McCaffery, ‘The Holy Grail of Tax Simplification’, 66 Wisconsin Law Review 1267 (1990).

If mechanical approaches and formalistic tests are to be avoided,<sup>32</sup> what should be looked at is the *substance*. Only a substantive analysis can show whether the tax incentive under examination is in line with the relevant general tax norm or in fact constitutes a deviation from it. But, and this is the crucial point, to look at the substance of tax rules means to consider their *objectives* and evaluate how they actually relate to the tax measure at issue and to the broader tax system. If a tax incentive is designed and applied in such a way that it is fully in line with and implements, without exceeding, the objectives of the relevant general tax norm, there is no financial contribution. There are no ‘otherwise’ applicable alternative scenarios that have not been considered or have been deviated from. This is the kind of analysis that, in our view, the Appellate Body report in *US – Boeing* naturally drives at. To require a Panel to examine ‘the *structure of the domestic tax regime* and its *organizing principles*’,<sup>33</sup> is nothing but asking to entertain with the objectives informing the tax system and consequently the tax measure at issue.

The reference to the objectives of the domestic measure when it comes to assess whether a certain WTO provision has been breached is not new. It can be found in provisions that establish obligations, such as non-discrimination, and in justification provisions.<sup>34</sup> The controversy surrounding the ill-fated ‘aims-and-effects’ doctrine under Article III of the GATT is well known.<sup>35</sup> The understandable fear of the critics of this approach is that *any* allegation based on the legitimacy of the public policy goals of the tax (and regulatory) measure could pass muster, with the risk of excluding protectionist conduct from the scope of a crucial GATT obligation. Despite being aware of this danger, the Appellate Body has not, however, rejected the idea that objectives can play a useful role in the analysis of differential treatment under Article III of the GATT. This is the message famously conveyed in the early *Japan – Alcohol II* dispute: [w]e believe it is possible to examine objectively the underlying criteria used in a particular tax measure, its structure, and its overall application to ascertain whether it is applied in a way that

<sup>32</sup> The Appellate Body warned that, apart from the possibility of giving wrong results, a formalistic test like the ‘but for’ test may be easy to circumvent. See Appellate Body Report, *United States – Tax Treatment for “Foreign Sales Corporations” – Recourse to Article 21.5 of the DSU by the European Communities*, WT/DS108/AB/RW, adopted 29 January 2002, para 91.

<sup>33</sup> Appellate Body, *US – Measures Affecting Trade in Large Civil Aircraft (Second Complaint)*, WT/DS353/AB/R, para 815 (emphasis added).

<sup>34</sup> A recent insight into the role of the objectives of the measure under the national treatment obligation of Article 2.1 of the TBT Agreement can be found in the recent *United States – Measures Affecting the Production and Sale of Clove Cigarettes* (DS406), Panel Report para 7.80 ff; Appellate Body Report, para 166 ff.

<sup>35</sup> See e.g. Robert Hudec, ‘GATT/WTO Constraints on National Regulation: Requiem for an “Aims and Effects Test”’, 32 *International Lawyer* 619 (1998).

affords protection to domestic products'.<sup>36</sup> What the Appellate Body is doing is simply to ring-fence such analysis and to deny that each and every argument based on any objective could be relevant. The key is to distinguish amongst objectives, taking into account only those that relate inherently to the general norm (e.g. the 'polluter pays principle') underlying the measure, and assessing the relation between those objectives and the same measure. These remarks can be transposed safely to the context of subsidy rules. Objectives are thus a useful indicator of whether differential taxation is in fact justified.

At the time of writing, there is no WTO case-law on the role played by objectives in the subsidy analysis of tax measures (as noted, the recent Appellate Body report in *US – Boeing* may have taken this path). It can however be safely expected that future litigation will have to focus on this issue. Since analysis of the 'otherwise due' jargon unveils tests and issues that are essential when it comes to establish whether a tax incentive is a tax subsidy, a foretaste of what we can expect can be found in the rich EU case-law and practice in the State aid field.

## *2. Examples from the EU case-law on the 'logic of the system'*

Since the seminal *Italy v. Commission* case of the European Court of Justice of 1974, the same tensions in the GATT 'aims-and-effect' debate can be found in the case law on the definition of State aid (which is the EU law jargon for 'subsidy'). On the one hand, it is consistently repeated that the guiding notion of State aid is objective. In order to define a State aid one does not need to look at aims or causes but only at the effects. On the other hand, and often at the same time, the analysis seems more subjective, being substantially focused on the rationality of measure in terms of its goals. A finding of differential treatment does not necessarily lead to a State aid determination if it can be explained by the 'logic of the system'. This language significantly echoes that recently used by the Appellate Body when talking of the 'structure of the domestic tax regime and its organizing principles'.<sup>37</sup> The Court of Justice noted that to conclude that a State aid exists, we have to establish whether a State measure favors certain undertakings 'in comparison with other undertakings that are in a legal and factual situation that is comparable in the light of the objective pursued by the measure in question'.<sup>38</sup> This is the same application of the principle of equality that was followed also by the Appellate Body in the *US – FSC* case when it concluded

<sup>36</sup> Appellate Body Report, *Japan – Taxes on Alcoholic Beverages*, WT/DS8/AB/R, WT/DS10/AB/R, WT/DS11/AB/R, adopted 1 November 1996, 29. See also WTO Appellate Body Report, *Chile – Taxes on Alcoholic Beverages*, WT/DS87/AB/R, WT/DS110/AB/R, adopted 12 January 2000, para 62.

<sup>37</sup> Appellate Body, *US – Measures Affecting Trade in Large Civil Aircraft (Second Complaint)*, WT/DS353/AB/R, para 815.

<sup>38</sup> Case C-143/99 *Adria-Wien* [2001] ECR I-8365, para 41.

that, in order to determine whether a tax measure involves the foregoing of revenue otherwise due, it is necessary ‘to compare the fiscal treatment of legitimately comparable income’.<sup>39</sup>

The EU jurisprudence highlights two points. First, only those objectives that are *inherent* in the type of measure at issue, their true justification, matter in this assessment. By contrast, the objectives that are not directly connected to the natural purpose of the tax but rather pursue different policy goals are not taken into account.<sup>40</sup> Second, the assessment of the objective at the level of the definition of State aid involves what is essentially a *proportionality* test. The discipline must be designed in true pursuit of that objective and any distinction should be capable of being objectively explained in its light.

We can illustrate these principles with the analysis of a few cases that focus on environmental taxation and emission trading systems.

In *Adria-Wien* the European Court of Justice concluded that an exemption from an energy tax in favor of undertakings of the manufacturing sector (and excluding those in the service sector) was not justified by the alleged environmental goal of the tax.<sup>41</sup> Service undertakings may, just like undertakings manufacturing goods, be major consumers of energy, and energy consumption, whatever its origin, is damaging to the environment. The fundamental distinction of the tax was thus not tenable—from an environmental perspective.<sup>42</sup>

Two more recent cases show the tension between a very deferential and a more rigorous approach. The core issue is the same and revolves around the definition of the material scope of the state measures under review—an environmental tax in one case, a cap-and-trade system in the other. The *British Aggregates* case concerned a UK environmental levy on aggregates with the aim of reducing and rationalizing the extraction of minerals commonly used as aggregates. To incentivize the replacement of virgin materials, an exemption was ostensibly granted to recycled products or by-products or waste products from other processes. Furthermore, the tax did not apply to the same minerals if they were not used as aggregates. The first exemption was allegedly justified by the contribution of the use of those materials to the environmental rationalization of the sector, the second by the sectoral approach of the tax (motivated by the desire to maintain the international competitiveness of other extractive sectors). In the *Dutch NO<sub>x</sub>* case the issue was whether the Dutch emission trading system for nitrogen

<sup>39</sup> Appellate Body, *US – FSC* (Article 21.5 DSU), above n 32, para 91.

<sup>40</sup> The distinction between ‘internal’ and ‘external’ objectives can be found in the Commission Notice on the application of the State aid rules to measures relating to direct business taxation, OJ C384, 10 December 1998, 3.

<sup>41</sup> Case C-143/99, *Adria-Wien*, above n 38, paras 50 and 52.

<sup>42</sup> In fact what emerged from the statement of reasons for the bill was that the advantageous treatment of manufacturing firms was intended to preserve their competitiveness.

oxides ( $\text{NO}_x$ ) constituted State aid. In particular, the key question was whether the installations with total thermal capacity of more than 20 thermal megawatts (MWth), to which the emission trading system was applicable, were comparable with those with lower thermal capacity, which were excluded.

In the two appeal decisions, the European Court of Justice heavily criticized the General Court for concluding that the relevant measures did not confer State aid.<sup>43</sup> The thrust of the criticism is that the General Court had essentially approved the measures loosely on the basis of their stated environmental objective, without scrutinizing whether the coverage of the tax exemptions in one case and the cap-and-trade system in the other were properly structured around and justified by that objective. Once a certain objective is chosen, for example, the prevention of a certain type of environmental damage, a degree of rationality is required, and this should first of all be reflected in the *scope* of the measure. It may, for example, look dubious to consider relevant for the application of the environmental tax the use of certain minerals as aggregates, as opposed to their extraction. It is the latter, not the former, that has an impact on the environment. Equally, any differentiation between installations that produce emissions in the design of cap-and-trade systems requires a legitimate justification. The simple fact that the system covers only those installations that produce ‘substantial’  $\text{NO}_x$  emissions is not as such enough to justify the exclusion of other installations.

The question of coverage is key for the policy space and the proper design of tax incentives under subsidy laws. How far should a tax go in covering comparable situations? What differentiations can be reasonably introduced without defeating the generality of the measure? On what basis? The case-law has not clearly answered these key questions yet.<sup>44</sup> Arguably, without conferring an arbitrary discretion, a selective, sectoral or progressive approach may be justifiable in light of *objective* considerations such as the nature or source of damage, the type or degree of risk, or even practical considerations such as the novelty of the scheme or the difficulty of its application. Despite these limitations the measure could still be considered general, self-contained, and balanced.<sup>45</sup>

<sup>43</sup> C-487/06P *British Aggregates v Commission* [2008] ECR I-10515; Case C-279/08P, *Netherlands v Commission*, Judgment of 8 September 2011, not yet reported.

<sup>44</sup> A good example is the recent remand decision in *British Aggregates*. The General Court did not really discuss the UK prerogative to limit the scope of the environmental levy to the aggregate sector only, simply calling for the latter’s coherent definition. See T-102/02 RENV *British Aggregates v Commission*, Judgment of 7 March 2012.

<sup>45</sup> It is interesting to read the analysis of the Court of Justice in Case C-127/07 *Arcelor* [2008] ECR I-09895, where the issue was whether the step-by-step approach of the EU emission trading system under Directive 2003/87/EC, OJ 2003 L275/32, which excluded the chemical and the non-ferrous metal sectors from its application, breached the general principle of equal treatment or could be justified by the objectives, complexity and novelty of the mechanism.

*3. Two hypothetical applications: the US ‘black liquor’ tax credit and the Swiss Climate Cent tax biofuel exemption*

The application of the conceptual analysis to two examples concerning an energy tax and a carbon tax, which have not been subject to litigation, can further illustrate the subsidy status of tax incentives.

*The US ‘black liquor’ tax credit.* The 2005 US Federal Highway Bill introduced a fuel tax credit to promote the use of ethanol and other biofuels in vehicles. Companies were eligible for a US\$0.50 tax credit for every gallon (3.7854 liters) of gasoline or diesel they used if they blended an alternative fuel with it. In 2007 the coverage of the tax credit was expanded to include non-mobile uses of liquid alternative fuel derived from biomass. For more than 30 years the US pulp industry has been using a carbon-rich byproduct of the wood pulping process (known as ‘black liquor’) as fuel to power its mills. In a 2008 ruling the Internal Revenue Service concluded that black liquor was an alternative fuel eligible for the Highway Bill tax credit and that, to qualify for the tax credit, alternative fuels only needed to contain 0.1% of a taxable fuel. The economic impact of this extension was massive in a period of crisis for the paper industry.<sup>46</sup> In 2009 alone, the US pulp industry received billions of US dollars from this tax credit (estimates indicate benefits of up to US\$8 billion), more than any other industry apart from the auto sector. One company alone, International Paper, received as much as US\$3.7 billion. The frequent assimilation of ‘black liquor’ with ‘gold’ can thus be understood.<sup>47</sup>

This is an example of how, whether owing to sloppiness of legal drafting, political pressure and/or unwarranted administrative interpretation, the broadening of the eligibility to a tax credit resulted in a paradoxical result that clearly went beyond, indeed *against the purpose* of the tax incentive. The

<sup>46</sup> ‘Papermakers Dig Deep in Highway Bill To Hit Gold’, *The Washington Post*, 28 March 2009, <http://www.washingtonpost.com/wp-dyn/content/article/2009/03/27/AR2009032703116.html> (visited 13 April 2012). Since this tax credit is refundable, money-losing companies could qualify for direct payments from the US Treasury. A little gloss here. Although tax credits are expressly named as one example of a tax incentive under Article 1.1(a)(1)(ii) of the SCM Agreement, if a payment is involved they could be likened to a direct transfer of funds under letter (i) with the consequence that the ‘otherwise due’ counterfactual analysis would not apply.

<sup>47</sup> One further element can show the financial dimension of this ‘black liquor’ tax credit. The eligibility of the pulp industry to the Highway Bill tax credit expired on 31 December 2009, thus helping to cover the costs of the Healthcare law of January 2010. This was not the end of support however, since the pulp industry could *inter alia* benefit from a different tax credit for cellulosic biofuel for transportation for which it was eligible according to another ruling of the Internal Revenue Service. See ‘Paper Industry Pushed Further into the Black by “Black Liquor” Tax Credits’, *The Washington Post*, 27 April 2011, [http://www.washingtonpost.com/business/economy/paper-industry-pushed-further-into-the-black-by-black-liquor-tax-credits/2011/04/19/AFdkrMtE\\_story.html](http://www.washingtonpost.com/business/economy/paper-industry-pushed-further-into-the-black-by-black-liquor-tax-credits/2011/04/19/AFdkrMtE_story.html) (visited 13 April 2012). The ‘black liquor’ subsidy not only caused controversy within the USA, but also prompted Canada to grant \$882 million to their domestic paper industry. See ‘The Black Liquor War’, *The Wall Street Journal*, 30 June 2009, <http://online.wsj.com/article/SB124623488607866601.html#articleTabs%3Darticle> (visited 13 April 2012).

original goal of the Highway Bill tax credit was to boost the use of biofuels in the transport sector, and this was later extended to cover non-mobile uses. The tax credit created the incentive to do this by requiring companies to blend biofuels with their fossil fuels. Having used their own kind of biofuel—the ‘black liquor’—for decades, pulp companies did not need any incentive to replace fossil fuels, even partially. Not only was the subsidy unnecessary. It even created a perverse incentive to use fossil fuels. To qualify for the tax credit paper manufacturers had to add some fossil fuel, even in a negligible quantity (0.1%), to their alternative fuel. They were therefore induced to alter their behavior but exactly in the opposite direction than that envisaged by the logic of the tax incentive and stated goal of the subsidy. Ultimately, the perverse effect of the extension of the Highway Bill tax credit to black liquor meant that a *more polluting conduct was rewarded*.

Whilst the Highway Bill alternative fuel tax credit may well not have constituted a subsidy, particularly if it could have been considered an integral part of a general scheme to promote biofuels, the extension of the incentive to the pulp industry was clearly contrary to the purpose of the scheme. It could not easily escape the determination that it deviated from the logic of the scheme and that, by granting it, the US government was ‘foregoing or not collecting’ revenue otherwise due under Article 1.1(a)(1) of the SCM Agreement. It did not therefore come as a surprise that a joint letter from Canada, the EU, Brazil, and Chile demanded that the USA end the tax incentive and threatened to commence a dispute before the WTO because ‘[f]rom a legal perspective, it is clear that these credits amount to actionable subsidies and that any adverse effects caused by them could be subject to remedies in the WTO or through domestic countervailing duty investigations’.<sup>48</sup>

*The Swiss Climate Cent tax biofuel exemption.* Carbon taxes are one way to put a cost on GHG emissions. Quite often the tax liability is limited through tax exemptions that specifically recognize that certain goods or activities do not emit or emit less. The use of exemptions reinforces the incentive to use those desirable goods or activities or, from another perspective, the disincentive to use others more polluting. As the review of EU case-law shows, this is indeed a common technique in environmental taxation. However, ‘a fully-fledged carbon taxation system need not entail a tax exemption. In such a system, any emitter would pay a consistent rate of carbon tax according to the amount of CO<sub>2</sub> they emit’.<sup>49</sup> In other words, a carbon tax properly

<sup>48</sup> Communication reported in ‘Black Liquor, Schott’s Vocab’, *The New York Times*, 11 June 2009, <http://schott.blogs.nytimes.com/2009/06/11/black-liquor/> (visited 13 April 2011). As regards the alleged adverse effects, it was noted that the tax credit encouraged US companies to overproduce in a depressed market.

<sup>49</sup> Sadeq Z. Bigdeli, ‘Incentive Schemes to Promote Renewables and the WTO Law of Subsidies’ in Sadeq Z. Bigdeli, Thomas Cottier, and Olga Nartova (eds), *International Trade Regulation and the Mitigation of Climate Change* (Cambridge: Cambridge University Press, 2009) 166.

designed should already reflect the different impact on the environment of goods or activities by providing a different tax liability.

But different liability does not mean no liability. It is indeed difficult to identify goods or activities that do not produce CO<sub>2</sub> or other GHGs emissions at all over their life cycles. Consequently, strictly speaking, no goods or activity should be exempt from the tax.

This is why tax exemptions are troublesome from a subsidy perspective.<sup>50</sup> The marked differential treatment of a full exemption cannot be easily justified. Inasmuch as the mischief of the carbon tax—carbon pollution—is present, irrespective to its extent, an explicit and complete carve-out would clearly constitute a derogation from the underlying norm that ‘the polluter must pay’. Biggeli analyzed the case of the Swiss Climate Cent tax where CHF 0.0015 per liter were paid on gasoline and diesel with a full exemption for biofuels, and made comments along the previous lines.<sup>51</sup> If we consider the emissions generated during the life cycle of biofuels, the Swiss tax exemption led to a contradictory result.<sup>52</sup> If the exemption were a subsidy, this would be greater for biofuels with a bigger life cycle and hence more polluting.

#### *4. Conclusions*

The subsidy status of tax incentives is inherently uncertain. This conclusion does not depend on how the relevant rules are drafted. The laconic wording of the ‘otherwise due’ test is the simple and pure reproduction of the logical test that underlies any subsidy determination, and which in essence calls for an analysis of the measure’s rationality in light of its objectives. If it is difficult to conceive a better formulation,<sup>53</sup> it should at least be recognized that legal uncertainty is inherently inimical to policy space.

### **B. Regulatory subsidies? Quantitative and pricing requirements**

Regulatory incentives are particularly common in the renewable energy sector. For example, governments use mandates, containing quantity- or price-based minimum requirements, to raise the demand for, or the price of, renewable energy.<sup>54</sup> Can these mandates amount to subsidies?

<sup>50</sup> Policy-wise, it may be desirable to increase the incentive (or disincentive) effect of an environmental tax by resorting to blunt techniques like exemptions. Furthermore, other reasons of a pragmatic or political nature, not strictly linked to the environmental discourse may justify a differential approach and contribute to the effectiveness and acceptability of the measure. But the legal framework may not be so responsive, at least at the level of the definition of what is and what is not a subsidy.

<sup>51</sup> Ibid 166–7.

<sup>52</sup> Like in the ‘Black Liquor’ tax credit saga.

<sup>53</sup> EU State aid law has progressed on a much more laconic textual language which forbids ‘any aid granted in any form whatsoever’. The test used by the Commission and the Community Courts has however been the same.

<sup>54</sup> Notable examples are respectively renewable portfolio standards or blending requirements and FITs.

The issue of whether regulatory measures can give rise to subsidies has always been very controversial, representing a true ‘elusive frontier’ of subsidy law and policy.<sup>55</sup> This is one of the cases where legal discourse is most clearly affected by broader constitutional and policy considerations. Regulation is often linked to the inner prerogatives of countries to define their domestic policies according to societal choices and preferences. This explains why international trade law tries to avoid interference with governmental regulatory-making powers unless there are elements of discrimination that would impair competition. This notion of deference also explains why, in the context of subsidy laws, the possibility of including certain types of regulation in the definition of ‘subsidy’ is rejected based on legal arguments of seemingly technical nature—for example, the given language of subsidy definition—which are, however, in our view, largely based on justifications of policy or even principle.

The need to answer the question, ‘Where and how should we draw the line with regulation?’, shows the divide between economic and legal analyses. From an economic perspective, regulatory measures are instruments of subsidization if they produce similar effects to subsidies, i.e. interfere with costs and prices, reallocating resources from one sector to another. The legal notion of subsidy, however, is usually less inclusive and is the result of the balancing of various rationales—economic, systemic and policy ones—ultimately based on the *telos* of subsidy disciplines within the broader *teloi* of the trade system.

According to Article 1 of the SCM Agreement, a subsidy exists if, apart from conferring a benefit, there is a financial contribution by the government. This contribution may come about through the purchase of goods or services by the government itself or by a third party entrusted or directed by it.<sup>56</sup> In the latter case, item (iv) hastens to add that the ‘function’ of purchasing goods or services must be one ‘which would normally be vested in the government and the practice, in no real sense, differs from practices normally followed by governments’. As an alternative to the notion of ‘financial contribution’, Article 1.1(b) provides that a subsidy is present if there is ‘any form of income or price support’.

As regards the concept of financial contribution, there has been some discussion on the meaning of ‘entrust’ and ‘direct’, with a progressively more liberal approach prevailing.<sup>57</sup> It is however the construction of the two largely elliptical sentences that require that ‘function’ and ‘practice’ should correspond to ‘normal’ governmental conduct that ultimately

<sup>55</sup> For an analysis of EU law, see Luca Rubini, ‘The Elusive Frontier: Regulation under EC State Aid Law’, 8 European State Aid Law Quarterly 277 (2009).

<sup>56</sup> Under the combined application of letters (ii) and (iv) of Article 1.1(a)(1).

<sup>57</sup> See WTO Appellate Body Report, *Japan – Countervailing Duties on Dynamic Random Access Memories from Korea*, WT/DS336/AB/R, adopted 17 December 2007.

determines whether certain regulatory measures are apt to qualify as subsidy under WTO law. Now, it is argued, the crux of the problem is that the interpretation of these two provisos is decisively influenced by broader policy—we could say teleological—considerations that revolve around the question: ‘Is it appropriate that regulation, or this type of regulation, be caught?’

It is in this light that Howse’s suggestion that a feed-in tariff (FIT) for renewable energy should not constitute a subsidy can be appreciated. He noted that the minimum price purchase requirements of a FIT (in the instant case the German laws discussed in the EU *PreussenElektra* case)

do not represent a delegation of a governmental function to any private body; rather they represent a *regulation* of the electricity market, and their directive character goes to regulating market behavior and transactions, not imposing a governmental function on a private body.<sup>58</sup>

If we look for a moment at the economic consequences of FIT schemes, however, it is not difficult to see that these measures may produce similar if not identical effects to more traditional forms of subsidies and in that sense are comparable to them. Although appealing, Howse’s abstract distinction between ‘delegation of function’ and ‘market regulation’ is not an easy legal test to apply in order to classify public conduct under subsidy laws. Its value is more in its ability to describe rather than to prescribe. What is, for example, the element, or the elements, telling us that a FIT scheme is ‘market regulation’ rather than ‘delegation of function’? In the common version of FIT schemes, the fixing of the price is often combined with a purchase obligation. In the context of the legal analysis of subsidy, it is this mandate to buy energy that comes into play as candidate for the financial contribution.<sup>59</sup> But—crucially—what distinguishes this mandate to buy from any other mandate to buy?

If it is true that the legal definition of subsidy does not rest only on the economic effects of the measure and does not encompass *all* types of conduct

<sup>58</sup> Robert Howse, ‘Post-Hearing Submission to the International Trade Commission: World Trade Law and Renewable Energy: The Case of Non-Tariff Measures’, 22 Renewable Energy and International Law Project (5 May 2005). With an even clearer policy-informed language it was concluded that FIT’s pricing law could not constitute ‘price support’ either: ‘In my view, price regulation by government, in the context of utilities as well as network industries more generally, ought not to be considered price support under Article 1.1(a)(2). Because such utilities are often characterized by elements of monopoly provision, and price regulation reflects a variety of public policy goals, including universal service and incentives for appropriate investment in infrastructure, it would be difficult and very intrusive into the operation of the democratic regulatory state for the WTO dispute settlement organs to assess whether, against some hypothetical model of a perfect market, the tariffs in question constitute price support.’ (Howse, above n 13, footnote 6).

<sup>59</sup> The fixing of the tariff is only relevant in so far as it confers an economic benefit to the sellers. An additional element of advantage may derive from the support of demand through the purchase obligation.

liable to produce similar effects,<sup>60</sup> too restrictive and formalistic an interpretation would appear unreasonably to distinguish like measures, as well as to offer an easy incentive to circumvent the law. Although it is not easy to draw the line, it could be suggested that measures that constitute *equally direct* and *immediate forms of support*—like FITs and purchase mandates—should be covered by a legal definition of subsidy.<sup>61</sup>

Although, ultimately, it is argued, the subsidy status of FITs, and more generally regulation, is a policy issue, it is clear that from a legal standpoint a positive finding must find some textual basis in Article 1 of the SCM Agreement.

In the context of the financial contribution, what eventually determines whether a mandate is a subsidy is the possibility of classifying the mandated purchase of goods or services as ‘normal’ governmental function or practice.<sup>62</sup> The notion of *normality* is however an uncertain criterion that may be interpreted in various ways. In a brief paragraph, the Appellate Body has recently shed some light on its reading of the two final sentences of letter (iv) by referring to ‘*what would ordinarily be considered part of governmental practice in the legal order of the relevant Member*’ and ‘*within WTO Members generally*’.<sup>63</sup> This seems to apparently dispose of more abstract or philosophical approaches about what government is or should be in favor of a more factual one. Crucial issues remain open though. How does one define ‘ordinarily’? What is the relevant baseline? Is there a minimum recurrence or a certain pattern that makes something ‘ordinary’? Furthermore, moving to the interpretation of ‘practices normally followed by governments’, how do we define what ‘WTO Members generally’ do? Does this mean ‘what most governments do’? If so, is there a minimum number of governments that is required to satisfy the evidential burden? In our view, the open-ended nature of these questions shows the inherent flexibility of the concept of ‘normality’ that cannot rest on a simple examination of legal systems or on empirical surveys. A qualitative judgment is eventually called for, one that is (more) prone to conclusions based (also) on policy preferences.<sup>64</sup>

<sup>60</sup> This is the main point of the fundamental Panel Report, *United States – Measures Treating Exports Restraints as Subsidies*, WT/DS194/R, adopted 23 August 2001.

<sup>61</sup> See Rubini, above n 29, 121. This reading would, in our view, explain why tariffs and export restraints, and in general other border measures, are not considered subsidies. *Ibid* 95.

<sup>62</sup> See Arie Reich, ‘Privately Subsidized Recycling Schemes and their Potential Harm to the Environment of Developing Countries: Does International Trade Law Have a Solution?’, Bar Ilan University Public Law Working Paper No 2–5, 12–13 (4 March 2004).

<sup>63</sup> See Appellate Body Report, *United States — Definitive Anti-Dumping and Countervailing Duties on Certain Products from China*, WT/DS379/AB/R, adopted 11 March 2011, para 297.

<sup>64</sup> What is arguably clear, however, is that the two final sentences of letter (iv) cannot be equated to the exercise of the prerogatives of taxation and expenditure, since this construction would by necessity imply that a financial contribution always requires a cost to government which has been rejected by the Appellate Body (Appellate Body Report, *Canada – Measures Affecting the Export of Civilian Aircraft*, WT/DS70/AB/R, adopted 20 August 1999, para 161). See Rubini, above n 29, 144–5.

Against the uncertainties of the concept of normality, the easiest technical route for including regulation, and in particular FITs, in the definition of subsidy is the notion of ‘any price support’, the language of which is broad and unqualified.<sup>65</sup> In the context of the definition of subsidy, this limb clearly goes beyond what may amount to a financial contribution. The Appellate Body expressly confirmed that this provision should be taken to regulate measures *different from*, and in particular *additional to*, those considered as financial contributions when, after outlining the various forms of governmental action regulated therein, it noted that the ‘range of government measures capable of providing subsidies is *broadened still further* by the concept of “income or price support” in paragraph (2) of Article 1.1(a).<sup>66</sup>

The pending *Canada – Renewable Energy* and *Canada – Feed-In Tariff Program* disputes may provide an answer to these crucial issues. Although the element challenged in these cases is the local content requirement attached to the subsidy, the success of the case under the SCM Agreement depends initially on the determination that the FIT is a subsidy. Hence, unless the parties are in agreement on the existence of a subsidy, the Panel will have to first establish whether the FIT is a subsidy and then determine whether it is prohibited because it is contingent on the use of local inputs.

In the previous exposition, we have tested the scope of the concept of ‘financial contribution’ and ‘price support’ using the example of FITs for renewables. Broadly similar considerations apply also to quantity purchase mandates, such as renewable portfolio standards or fuel blending requirements, whereby green producers are assured that all or part of their production will be purchased. A mandate to buy is also a crucial element of FIT schemes and, as seen, is a key element for the legal analysis. As before, the key issues would be whether the mandate to purchase does represent the ‘entrustment’ or ‘direction’ on private parties to ‘purchase goods’ and, crucially, whether this would be a ‘normal’ governmental practice. The same difficulties outlined above would appear here. Alternatively, the mandate to buy energy, or indeed technology, could be more easily construed as a form of ‘income support’ (as opposed to the ‘price support’ of pricing requirements) inasmuch as its intended goal is to ensure a market for the relevant goods.

### *Conclusions*

It seems that some of the most common measures of support of renewable energy (tax incentives, minimum quantitative requirements and pricing requirements) still have an unclear status under the legal definition of

<sup>65</sup> Bigdeli, above n 48, 171–172. *Contra* Robert Howse, above n 13, footnote 6. For an analysis of this notion see Rubini, above n 29, 123–5.

<sup>66</sup> Appellate Body Report, *United States – Final Countervailing Duty Determination with Respect to Certain Softwood Lumber from Canada*, WT/DS257/AB/R, adopted 17 February 2004, para 52 (emphasis added).

subsidy of the SCM Agreement. This either depends on the inherent nature of the measure (tax) or the uncertainty of the legal standard (regulation). Either way, from a policy space perspective, this results in a serious situation of legal uncertainty.

### C. Benefit analysis in a distorted market: benchmarking conduct, correcting failures

To qualify as a subsidy under the SCM Agreement, a financial contribution or a measure of income or price support has to confer a benefit. This requires establishing that the recipient is ‘better off’ than it would have been absent the alleged measure of support.<sup>67</sup>

In some cases the benefit analysis is straightforward. It is, for example, almost intuitive that if the government is foregoing government revenue which, under normal conditions, the recipient should have paid, this, by nature, confers a benefit.

In other cases, however, if the government is acting in the market, the determination of whether this conduct is conferring a benefit may not be easy. The Appellate Body has repeated various times that the benchmark in this case is the ‘marketplace’.<sup>68</sup> This benchmarking process may, however, face difficulties in the case of energy markets that have for years been heavily distorted by various forms of government intervention with the result that price and other market signals are not fully reliable. Howse recently noted:

The ‘market’ into which subsidies to address climate change are intervening is one that has historically been pervasively distorted by subsidies, including fiscal advantages, provided to producers and consumers of (greenhouse gas-emitting) fossil fuels. It is also a market in which existing networks for the distribution and retailing of energy—whether electricity grids or chains of service stations—have been largely designed to favor fossil fuels. In addition, subsidies schemes and tax systems have often, apart from distorting choices among energy sources, led to a reduction in incentives for energy efficiency in that they relieve users from paying the full marginal cost of an additional unit of energy.<sup>69</sup>

If the ‘market’ is significantly distorted, the identification and determination of the actual benchmark to test the advantage allegedly conferred by a subsidy may thus be elusive.<sup>70</sup>

<sup>67</sup> Appellate Body Report, *Canada – Aircraft*, above n 63, para 157.

<sup>68</sup> Ibid; Appellate Body Report, *Japan – DRAMS*, above n 56, para 172; Appellate Body Report, *European Communities and Certain Member States – Measures Affecting Trade in Large Civil Aircraft*, WT/DS316/AB/R, adopted 18 May 2011, paras 974–6.

<sup>69</sup> Howse, above n 13, 6.

<sup>70</sup> The Appellate Body has addressed difficulties of this nature in those cases where the heavy public intervention in the economy made the benefit analysis difficult. The solution was the use of other proxies, like costs. See Appellate Body Report, *Canada – Measures Affecting the Importation of Milk and the Exportation of Dairy Products – Recourse to Article 21.5 of the DSU by*

Whilst a crucial objective of subsidy disciplines is to determine whether the subsidy confers a competitive benefit, the benefit analysis at this stage is more limited. Its goal is to ascertain whether, by virtue of the governmental action, the recipient of the subsidy finds itself in a more advantageous position than before the subsidy. This assessment should emerge from what is merely a preliminary and limited (and, possibly, using Sykes' words, 'myopic')<sup>71</sup> counterfactual analysis that operates by reference to a positive alteration of the *status quo*. Whether the subsidy ultimately affects the competitive position of the recipient and its relation with competitors is analyzed subsequently and separately when the actual effects of the subsidy on trade are determined. If the subsidy is not really conferring a competitive advantage but is just compensating a disadvantage faced by the recipient (e.g. a renewable energy producer or a provider of energy efficiency technology<sup>72</sup>), in all likelihood this will result in a no-negative-effects determination. Any residual negative effect may be taken into account, and discounted for, when the positive impact of the subsidy is considered, and balanced with, at the justification level.<sup>73</sup>

Far from being a deficiency of the legal framework, this simplification is necessary to avoid an otherwise daunting assessment.<sup>74</sup> As the energy markets demonstrate, a simplified benefit determination may itself be difficult in respect of the identification and application of the appropriate baseline. To charge it with too complex an analytical framework, potentially encompassing *any* action, or indeed omission, that might affect the matrix of positive and negative effects for the subsidy recipient, would result in impracticability (where do we stop?) and potentially—a dooming effect for subsidy control—a series of invariably negative (no-benefit) determinations.<sup>75</sup>

For these reasons, in our view, any type of compensatory or corrective logic at this stage of the benefit analysis is ultimately unwarranted.<sup>76</sup> A common temptation is to distinguish between scenarios. In some cases the

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*New Zealand and the United States*, WT/DS103/AB/RW, WT/DS113/AB/RW, adopted 18 December 2001, and, more controversially, Appellate Body, *US – Lumber IV*, above n 65. See Rubini, above n 29, 226–33.

<sup>71</sup> Alan O. Sykes, 'The Questionable Case for Subsidies Regulation: A Comparative Perspective', 2 *Journal of Legal Analysis* 473 (2010), 502.

<sup>72</sup> It is also obvious that a crucial and preliminary issue for any subsidy discipline is to determine what kind of disadvantages should be relevant for the analysis, which is eminently a policy choice.

<sup>73</sup> The existence of justification provisions already covering these considerations may be an additional argument to support the rejection of a too comprehensive benefit analysis. Its lack, however, cannot be used as argument to include a compensation logic in the benefit determination. It may simply highlight a lacuna in the system.

<sup>74</sup> The different notions of 'benefit' in economic and legal analysis are a good example of the different operation of the two disciplines.

<sup>75</sup> Contra Sykes, above n 70, 502–3, who crucially questions 'the utility of any system of disciplines that ignores the myriad of potentially offsetting government measures'.

<sup>76</sup> The various versions of this logic are extensively analyzed in Bigdely, above n 8, 28–30.

exclusion of a benefit would immediately emerge from a situation where we have the clear and simple compensation of a cost, burden or disadvantage.<sup>77</sup> For the reasons noted above, this temptation should be resisted.<sup>78</sup>

This brief exposition suggests a significant degree of complexity for many cases of benefit determinations in the energy field.

#### D. The paradox of specificity and adverse effects: policy and law at variance

Unless we are dealing with a prohibited subsidy, the next steps of the legal analysis require a determination of whether the subsidy is specific and whether it causes certain negative trade effects. Although separate, these two steps are examined together because they share the same paradox.

##### 1. Specificity

According to Article 2 of the SCM Agreement, a subsidy must be specific to certain enterprises or industries. This provision encompasses multiple tests that can be used in a determination, in a way that is flexible, unclear and in the end expansionist.<sup>79</sup> Apart from the relatively easy cases where the granting authority or the legislation explicitly limits access to a subsidy to certain enterprises (in law or *de jure* specificity), the outcome of the analysis depends on a comprehensive examination of the factual scenario relating to the criteria of eligibility of the subsidy and its actual impact.

Under Article 2.1(b) of the SCM Agreement, the subsidy cannot be specific if the eligibility of the subsidy depends on ‘objective criteria or conditions’, that is ‘criteria or conditions which are neutral, which do not favor certain enterprises over others, and which are economic in nature and horizontal in application, such as number of employees or size of enterprises’. Bigdeli has recently suggested that these criteria could offer some policy space, particularly if the subsidy is *designed* using them as guidelines of

<sup>77</sup> Howse (above n 13, 13) offers a good example of this argumentation: ‘Measures that merely defray the cost of businesses acquiring renewable energy systems or that compensate enterprises for providing renewable energy in remote locations do not necessarily, for instance, confer a benefit on the recipient enterprise. They simply reimburse or compensate the enterprise for taking some action that it would otherwise not take, and the enterprise has not necessarily acquired any competitive advantage over other enterprises that neither take the subsidy nor have to perform these actions’.

<sup>78</sup> This is the approach followed in the EU, the only exception being the compensation of the costs of a public service obligation. After fluctuations, the European Court of Justice accepted in the *Altmark* decision (Case C-280/00, *Altmark Trans GmbH, Regierungspräsidium Magdeburg v Nahverkehrsgesellschaft Altmark GmbH* [2003] I-7747) that, in presence of certain conditions of transparency and strict proportionality, there should be no advantage and hence no State aid. For an early commentary, see Andrea Biondi and Luca Rubini, ‘Aims, Effects and Justifications: EC State Aid Law and its Impact on National Social Policies’, in Michael Dougan and Eleanor Spaventa (eds), *Social Welfare and EU Law* (Oxford: Hart Publishing, 2005) 79.

<sup>79</sup> Rubini, above n 29, Chapter 13.

neutrality and non-discrimination.<sup>80</sup> As examples he referred to energy saving subsidies or subsidies for consumers of renewable energy. Both these subsidies would be non-specific inasmuch as they would be technology-neutral, horizontal, and non-discriminatory (i.e. not favoring domestically produced green energy or technology over imported one).

There are two obstacles here, one policy-based and one legal.

Assuming a climate change subsidy could be designed to comply with the said guidelines, a paradox would emerge. If, as noted in section II, sound economic and environmental policy requires the measure to be as targeted as possible in order to be effective, this means that there is clearly a preference for precise, probably non-neutral and, perhaps in some cases, even discriminatory (read: favoring domestic producers or products) measures of support. This would mean that the policy prescription and the legal requirements are at variance with each other. Insofar as this conflict cannot be reconciled, the room for policy space will be seriously compromised.

From a legal perspective, despite formal adherence to the principles of neutrality and non-discrimination of Article 2.1(b), the subsidy may still be found to be specific under Article 2.1(c) if it can be shown that, in fact, the subsidy mainly benefits certain enterprises.<sup>81</sup> What should be proven is not ‘a rigid quantitative definition’ but that the subsidy is ‘sufficiently limited’, or, with a negative formulation, that is not ‘sufficiently broadly available throughout the economy’.<sup>82</sup> It is clear from the case-law that the large number of undertakings or even sectors affected by a measure is not sufficient to establish that the subsidy is general and not specific.<sup>83</sup> Consequently, the specificity test may be very easy to fulfill in the case of subsidies in support of renewable energy, and, in this context, the design and breadth of the measures in question do not really seem relevant. Whether a subsidy targets only a certain technology (e.g. wind or solar, or fluorescent lighting) or certain uses (e.g. transport, electricity, heat, insulation), or is rather more generally available across the broad spectrum of renewable energy sources and applications or technologies; whether it focuses on investment or R&D; whether it operates at the levels of supply or demand of

<sup>80</sup> Bigdeli, above n 8, 23–7.

<sup>81</sup> The factors to consider are: ‘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’.

<sup>82</sup> Panel Report, *United States – Subsidies on Upland Cotton*, WT/DS267/R, adopted 21 March 2005, para 7.1142.

<sup>83</sup> See Panel Report, *United States – Final Countervailing Duty Determination with Respect to Certain Softwood Lumber from Canada*, WT/DS257/R, adopted 17 February 2004, paras 7.115–7.122. The Panel Report, *US – Measures Affecting Trade in Large Civil Aircraft (Second Complaint)*, WT/DS353/R, noted that the Panel in *US – Cotton* even indicated that ‘something less than universal availability can lead to a finding of non-specificity’ (para 7.762).

renewable energy, the fact remains that the ‘clean energy’ industry is still a small, albeit increasingly significant, player in the energy market. Furthermore, even if it were to expand and become the dominant or even the exclusive actor in the energy field, it would still be one industry in the broader economy.

What is crucial for the purposes of our analysis is the relationship between this test of *de facto* specificity and its particular considerations on the one hand, and the previous ‘objectivity criteria’ on the other. Although the Appellate Body has recently underlined that the principles outlined in paragraphs (a), (b), and (c) should be applied concurrently,<sup>84</sup> the language of Article 2 seems to give ultimate significance to *de facto* specificity.<sup>85</sup> This ultimately means that designing certain climate change subsidies in a neutral and non-discriminatory way may not be enough to escape a finding of specificity.

## *2. Adverse effects*

Specific subsidies may be actionable only if they cause adverse effects to the interests of other countries. This, on its face, seems to recognize a reasonable leeway to governments granting subsidies. On the one hand, this is a notoriously difficult legal hurdle for complainants to prove. On the other hand, if the granting government could reduce or even eliminate the negative effects of the subsidy, the measure of support would be safe. On a closer scrutiny, however, the same paradox of the specificity test emerges.

The various tests of adverse effects can be found in Articles 5 and 6 of the SCM Agreement: (i) injury to the domestic industry,<sup>86</sup> (ii) nullification and impairment of benefits, i.e. tariff concessions, and (iii) serious prejudice in various forms mainly of displacement and price effects in various markets. Subsidies can thus cause harm in different ways that substantially reflect the impact of the benefit of the subsidy on competitors. Subsidy laws are not concerned with simple financial benefits but with competitive benefits.<sup>87</sup>

Clearly, any assessment of the adverse impact on trade must be based on each concrete scenario and take into account the various elements of the various legal tests. Since each measure differs from another, generalizations are not easy. It is therefore necessary to look at the terms and effects of each one individually. That said, it is clear that some predictions are possible, in

<sup>84</sup> Appellate Body Report, *US – AD/CVD*, above n 62, paras 363 ff.

<sup>85</sup> ‘If, notwithstanding any appearance of non specificity resulting from the application of the principles laid down in subparagraphs. (a) and (b), there are reasons to believe that the subsidy may in fact be specific, other factors may be considered. Such factors are:...’. See Appellate Body, *US – Measures Affecting Trade in Large Civil Aircraft (Second Complaint)*, WT/DS353/AB/R, para 796.

<sup>86</sup> Subsidized imports causing material injury to the domestic industry of another country may also be subject to countervailing duty actions.

<sup>87</sup> See Richard Diamond, ‘Privatization and the Definition of Subsidy: A Critical Study of Appellate Body Texturalism’, 11 *Journal of International Economic Law* 649 (2008).

particular with respect to the impact of subsidy design on the likelihood of a finding of adverse effects. Thus, for example, subsidies that do not discriminate against imported renewable energy and technology, like consumption subsidies and purchase obligations with no discrimination as to the origin of energy or technology, are less likely to cause adverse effects. Furthermore, unless the subsidies are fully technology-neutral, adverse effects may be alleged by any competitor, irrespective of whether he deals with conventional or renewable energy or technologies. The likelihood of adverse effects can also significantly depend on trade patterns, which seem to show more trade with respect to technology or fuel rather than actual electricity.<sup>88</sup> A general difficulty in determining and attributing adverse effects may derive from the already noted heavy regulation of energy markets and from the subsidization of fossil fuels.

From a policy perspective, even assuming a subsidy could be adapted—in its design phase or during litigation compliance—so as to minimize its adverse effects, the fact remains that, if this means that a distinct policy benefit has to be renounced to comply with subsidy guidelines, the constraint on policy space may be significant.

### *3. Conclusions*

To conclude (with remarks that are equally valid for the specificity and adverse effects tests) the guidelines of trade law, which are informed by the fundamental principles of neutrality and non-discrimination, are not fully consistent with the guidelines that come out from best economic and environmental policy practice. The most effective measures of support of renewable energy should be targeted, specific and encompass a differential—in some cases possibly even a discriminatory (i.e. one favoring domestically produced energy or equipment)—approach.

## **E. Discriminatory subsidies: prohibited or permitted?**

In this section we address one puzzle. One would expect that measures that produce the same or similar effects be assessed in the same or similar way. This is not what happens with various types of discriminatory subsidies that are a very common and broad category of subsidies—substantially encompassing any subsidy that directly or indirectly favors domestic producers or products.

<sup>88</sup> Thus the focus of current trade litigation is on renewable energy inputs, like wind turbines, or biofuels, and much less on electricity. One therefore wonders whether scenarios like those of the EU PreussenElektra (Case C-379/98, *PreussenElektra AG v Schleswag AG* [2001] ECR I-02099) case are likely to be controversial in a WTO trade context. For an analysis, see sections III.E.3 and V.A.4. below.

### 1. Local-content subsidies

The most recent disputes on renewable energy support—*China – Wind* (DS 419), *Canada – Renewable Energy* (DS 412) and *Canada – Feed-In Tariff Program* (DS 419)—concern local-content subsidies. Local-content requirements are often considered as a very effective tool of industrial policy, particularly in certain settings, inasmuch as they can ensure the steady and fast development of a crucial domestic industry.<sup>89</sup> The green energy sector is one of those, with China being a notable example.<sup>90</sup> Cosbey crucially noted how, in the cases above, '[t]he disputed measures are clearly designed to pursue both *environmental* objectives (reducing the environmental impact of generating electricity) and *industrial* policy objectives (fostering a competitive domestic renewables sector), and they will either succeed or fail on both objectives in tandem'.<sup>91</sup> If they succeed

in creating competitive domestic players in the sector, there are obvious domestic economic benefits, direct and indirect, in terms of jobs and foreign exchange. Environmentally, a viable new player means more competition in the sector, which inevitably speeds up dissemination. From a global perspective, it may also mean more agents of innovation, at a time when innovation in renewable energy technology is a critically important global public good.<sup>92</sup>

More generally, discriminatory subsidies, including local-content subsidies, may have a role in winning domestic resistance against enhancing environmental standards and may indeed constitute the only political way to do so.<sup>93</sup>

The appraisal of local-content subsidies has changed over time, together with that of import substitution industrialization (tellingly, local-content subsidies are also known as import-substitution subsidies). In legal terms, in the GATT, they were subject to action only in presence of negative effects, as

<sup>89</sup> See, e.g. Dani Rodrik, *One Economics, Many Recipes – Globalization, Institutions, and Economic Growth* (Princeton: Princeton University Press, 2008); Ha-Joon Chang, *Kicking Away the Ladder – Development Strategy in Historical Perspective* (London: Anthem Press, 2003).

<sup>90</sup> It is interesting to note that the *China – Wind* dispute (above n 18) has been settled during the consultation phase. Although it looks like the subsidy has been withdrawn, the reason why China decided to withdraw the subsidy seems to depend on the fact that support was simply no longer needed, and not on the recognition of the clear illegality of domestic content. See 'US Proclaims Victory in Wind Power Case; China Ends Challenged Subsidies', 15(21) *Bridges Weekly Trade News Digest* (8 June 2011). On the effectiveness of China's local content policies of support of wind energy sector, particularly in terms of establishing a manufacturing base, see Moerenhout, Liebert, and Beaton, above n 10, 9–10.

<sup>91</sup> Cosbey, above n 16, 2.

<sup>92</sup> Ibid. This is certainly a plausible scenario, not an unqualified endorsement of import substitution subsidization. It cannot be excluded that aggressive subsidization may generate a subsidy race, leading to over-supply, cut-rate prices, collapse of all but a handful of companies and, in the longer run, consolidation.

<sup>93</sup> Bigdeli, above n 8, 29.

with any other domestic subsidy.<sup>94</sup> The scenario changed during the Uruguay Round as a sign of the more pronounced free trade *credo* of the new times. Local-content subsidies are likened to export subsidies and subject *in all circumstances* to a harsher discipline. According to Article 3 of the SCM Agreement, if a subsidy is ‘contingent, whether solely or as one of several other conditions, upon the use of domestic over imported goods’, it is simply prohibited, without there being any need to prove a specific impact and adverse effects.<sup>95</sup>

## 2. ... and production subsidies

Another type of subsidy that is common in the support of renewable energy is production subsidies.<sup>96</sup> As with other measures of domestic support, these are generally permitted unless they cause adverse effects, in which case they are actionable.

If we now consider local-content and production subsidies together, a significant inconsistency emerges. From an economic perspective, they *may be* exactly the same, or they *may* produce the same effects. Sykes notes:

a per unit subsidy to *all domestic buyers* of a good can be completely equivalent in its effects to an equal per unit subsidy to *all domestic sellers* – net output of domestic producers, net imports, and the net price to buyers will be exactly the same under competitive conditions.<sup>97</sup>

Assuming there is an equivalence in economic effects, this is not reflected in the legal treatment. As seen, whilst production subsidies are permitted unless a negative impact is proved, local-content subsidies are just prohibited.<sup>98</sup> The implications for countries’ policy space are noticeable. Should, once

<sup>94</sup> A different discipline was however already present with respect to the national treatment obligation. See n 97 below.

<sup>95</sup> There is still a need to prove specificity and material injury to the domestic industry in order to apply countervailing duties.

<sup>96</sup> Subsidies that support demand for technology and energy, at both distribution and final consumption level, or their price, can in effect support production. See Ronald Steenblik, ‘Subsidies in the Traditional Energy Sector’, in Joost Pauwelyn (ed.), *Global Challenges at the Intersection of Trade, Energy and the Environment* (Geneva: Centre for Trade and Economic Integration, 2010) 186, who uses a broad concept of production subsidies, broad enough to cover most of the measures of support currently used.

<sup>97</sup> Alan O. Sykes, ‘The Economics of WTO Rules on Subsidies and Countervailing Measures’, Chicago John M. Olin Law and Economics Working Paper No. 186 (2nd Series) May 2003, 19. In fact the percentage production subsidy (expressed, say, as a payment per unit produced) that is equivalent to a local-content obligation will differ both according to the percentage local-content and the current market circumstances.

<sup>98</sup> Quite similarly, Article III of the GATT distinguishes subsidies to domestic producers, which are not subject to the obligation of national treatment (para 8:(b)) and regulation that require that a ‘specified amount or proportion of any product... must be supplied from domestic sources’, which is prohibited. Along this line the early GATT Italian Agricultural Machinery Panel found that, unlike producer subsidies, purchasers’ subsidies were prohibited. For commentary see Sykes, above n 78, 518–19.

again, a different legal treatment depend on how the measure of support is designed? Is it reasonable to attach a completely different, indeed opposite, legal status to measures on the basis of what seems to be a mere formal consideration? Or—rather—is there any justification for this different regulatory treatment? Could it be that there is in fact some distinction in economic terms? For example, by expressly tying a subsidy to industry A to support to industry B, the protectionist impact of the measure seems to be more marked, particularly because two domestic constituencies could end up being benefited as a result of one single measure. It could further be argued that the stifling effect on imports of the requirement to source locally is more defined than that of a production subsidy to the same local industry. Assuming this is correct, might this be enough to justify the strictest sanction of prohibition in any case and without qualifications? Is this the best regulatory arrangement to enable, at the same time and in a balanced way, industry development, environmental protection and trade? Or, from a law reform perspective, should subsidies with local-content requirements be re-classed as simply actionable, maybe recognizing their higher danger (if there is such a danger) with the use of a simple rebuttable presumption of adverse effects?<sup>99</sup>

### *3. . . and purchase obligations in FITs*

The analysis of the relation between economic effects and legal consequences, and their impact on policy options, can be extended even further to consider FITs.

The fixed tariff is just the pricing element of the FIT incentive. These schemes include other terms either to reinforce their incentive effect or to impact on other related markets.<sup>100</sup> The obligation to buy all renewable energy produced nearby the grid is a very common, even essential, element of FITs because it provides investment security. Inasmuch as this purchase obligation affords a privileged access on locally sourced electricity, it is equivalent in economic effects to a local content requirement. It certainly operates differently since the obligation is not on the (first) recipient of the subsidy but on a third-party (the distributor) but the effect—from the producer's end—is the same. One implies that you must buy all or a certain proportion of renewable energy produced in your area, the other that you must buy inputs or other goods necessary for renewable energy deployment in your country.

Both of these requirements are discriminatory, in the sense that they favor domestic production, but—and this is the second inconsistency—their assessment seems to be different.

<sup>99</sup> Similar to those of the now expired Article 6.1 of the SCM Agreement.

<sup>100</sup> The 'local content' requirement at issue in *Canada – Renewable Energy* (above n 18) and *Canada – Feed-In Tariff Program* (above n 18) is an example of the latter.

FITs are widely praised as one of the most, if not the most, cost-effective tools to support renewable energy.<sup>101</sup> This praise extends to purchase obligations, with seemingly no real effort in distinguishing those with a discriminatory effect from those with a neutral impact.<sup>102</sup> Frequent reference is, for example, made to the German system, which includes a purchase obligation on locally sourced energy, as a good example of a well-designed FIT that significantly contributed to the German success in deploying renewable energy.<sup>103</sup> By contrast, local-content requirements attached to FITs are more controversial and, as the pending *Canada – Renewable Energy* and *Canada – Feed-In Tariff Program* disputes show, are being challenged.

What do we make of this discrepancy in judgment? One good explanation could be that, at least with respect to energy, the two obligations apply to different economic products and markets (technology vs. energy), for which we still have a different degree of international competition and trade. This depends on technical considerations and on the difficulty of tracing the origin of electricity in the absence of an established and widespread system of certification. But these circumstances may change and with them trade patterns, making the availability of cross-border energy easier and more common. If so, what will be the legal implication of the equivalence in effect between local-content and FITs' purchase obligation? Can the (discriminatory) purchase obligation of FITs be legally assimilated to a local-content subsidy and be objected to as a prohibited subsidy under Article 3 of the SCM Agreement?<sup>104</sup> If so, can it be justified?<sup>105</sup>

#### *4. Conclusions*

This section has attempted to show that the legal analysis of subsidies supporting *production* is not fully coherent or definite. The focus has been on the first level of analysis where the determination is on whether there is a breach of subsidy rules. The framework within which policy-makers have to operate offers contradictory or still uncertain indications. It remains to be seen whether the analysis at the justification level can offer the opportunity for resolution and clarity.

#### IV. A PRACTICAL POINT: IS THERE REALLY A POLICY SPACE PROBLEM?

The previous analysis has shown that, at the level of plain legal analysis, the current WTO subsidy disciplines are not, on balance, favorable to

<sup>101</sup> See, e.g. Beaton and Moernhout, above n 10, 27.

<sup>102</sup> See, e.g. Mendonça, Jacobs and Sovacool, above n 10.

<sup>103</sup> Ibid.

<sup>104</sup> Andrew Lang, LSE, called my attention to the fact that there might be an even stronger case in investment law. Suppose you have a FIT in one region of the country only and a foreign renewable energy power company sets up in another region and cannot benefit from the purchase obligation. Is this a national treatment claim under a possible investment treaty?

<sup>105</sup> This important question is analyzed in section V.A.4. below.

governmental autonomy to adopt and design subsidies supporting renewable energy that may be desirable.<sup>106</sup> Whether because of legal uncertainty (deriving from the complexity of support measures, like tax incentives, or lack of clarity of the legal text, for regulatory measures), or because of the typical, but not always consistent, trade law prescription of neutrality and non-discrimination (with respect to the specificity and adverse effects tests, and discriminatory subsidies), policy space with respect to certain measures of support that can be assumed as desirable may end up being significantly impaired.

### A. A tacit agreement

There is one important argument though, which would dispel any sort of anxiety. Irrespective of the legal question of whether some measures of support of renewable energy amount to a subsidy objectionable under WTO rules, what really matters is whether somebody is going to file a complaint. Who is going to challenge these measures if, as has been seen, they are so widespread? If the answer is that nobody does or will do this, then, pragmatically, we may fairly conclude that there is no real problem with policy space.

We have had many and important subsidy disputes in the WTO, making the SCM Agreement one of the most litigated covered instruments before WTO dispute settlement. Equally, countervailing duties are among the most used tools of the domestic trade toolbox and are subject to significant review in WTO disputes.

That said, energy subsidies in general (which include both subsidies to fossil fuels and to renewable energy) are laconically absent from the register of cases or administrative proceedings. We have a typical ‘glasshouse’ situation here. Who is going to throw stones that could eventually damage the thrower too? Everybody gives subsidies in support of energy. Nobody has an interest in raising a claim and risking a highly probable counter-claim.<sup>107</sup>

Subsidization of energy is tolerated, the only exceptions largely being those cases where we have more obvious breaches (like export subsidies or subsidy measures with local content requirements). Furthermore, even in

<sup>106</sup> The determination of the actual impact and proportions of the policy constraints emerged from the legal analysis can however only become fully clear through empirical analysis. It may well be, for example, that, due to the minimal size of the support, certain measures are ‘below the radar’ of WTO subsidies disciplines.

<sup>107</sup> The risk-aversion described in the text is substantially the same, which explains why, during its five years of application, the disciplines of non-actionable subsidies under Articles 8 and 9 of the SCM Agreement were never used. There are many reasons for this, including the limited scope of these exceptions. To a large extent, however, this is, in our view, a second indication of silent acquiescence. On the history of the rules on non-actionable subsidies see Bigdeli, above n 8, 4–10.

these cases, the strategic element inherent in litigation is particularly marked. The strong impression is that negative statements and official complaints escalate to the level of formal disputes only when litigation is necessary to reassert the ‘rules of engagement’ and the tacit agreement that public support to energy be allowed, provided that the most overt protectionist tendencies are kept at bay.

### B. Shall we litigate now?

The existence of substantial real or expected trade interests is the main catalyst of trade litigation. For example, renewable energy production and trade are increasingly significant. The magnitude of the economic and political interests is high and on the rise. The technology of renewable energy (e.g. wind turbines, solar PV cells) is developing fast and, far from being merely limited to satisfying domestic needs, is exported. There are several examples. The annual turnover of Germany’s renewable energy industry amounts to €30 billion, of which a large part is due to exports of goods. Renewable energy itself is increasingly traded too. Brazil is the second biggest producer of fuel ethanol (the first being the USA) and the world’s largest exporter. These technological and commercial successes are often attributable to various forms of sustained, present or past, public support. This is known and accepted. When the stakes of international intra-industry competition become high, however, policies that interfere too defiantly with the trade process may not be accepted.

It may be useful to consider the recent litigation on renewable energy support. In September 2010, Japan, immediately joined by the EU and USA, entered into consultations with Canada, challenging the local content requirement of Ontario’s FIT system (*Canada – RE*, DS 412). Interestingly, according to practitioners active in the field, this legal action, still pending, has been perceived in trade circles as a ‘mistake’, somewhat altering the previous equilibrium. Whether this is correct or not, in August 2011, the EU decided to initiate a separate litigation (DS 426). Again in September 2010, the US Steelworkers Union filed a petition with the United States Trade Representative (USTR) claiming that various measures of support of the Chinese green technology sector were WTO illegal. What is interesting is that the complaint was lodged in the context of a ‘section 301’ procedure<sup>108</sup> which, strategically, opens up a wide range of possibilities for the USTR,

<sup>108</sup> US Trade Act of 1974. After a petition is filed, the USTR—who can also act *ex officio*—has 45 days to decide whether to initiate an investigation. The investigation is intended to establish whether any foreign government practice breaches or jeopardizes US benefits under a trade agreement. In case of positive determination, various types of unilateral action are possible. For an analysis of section 301 see John H. Jackson, William J. Davey and Alan O. Sykes, *Legal Problems of International Economic Relations – Cases, Materials, Texts* (St Paul: West Publishing Co, 2008) chapter 7.

including the filing of a dispute at the WTO.<sup>109</sup> In October 2011 Solarworld Inc., a solar cell and panel manufacturer (and the US-based arm of the German company Solarworld AG), filed a petition with the US Department of Commerce (DOC) asking for the imposition of anti-dumping and countervailing-duties on solar cells and panels imported from China.<sup>110</sup> In late March 2012 the US DOC preliminarily found that the Chinese imports had been subsidized and that countervailing duties could be imposed at rates of between 2.9 to 4.73 percent.<sup>111</sup> What makes this case interesting is that, for the first time, what is challenged are not local-content requirements but domestic subsidies, like cash grants and subsidized loans.<sup>112</sup>

### C. Unstable equilibrium?

The big question is whether, in a few years, with hindsight, these few disputes will just be viewed as skirmishes that served to reinstate the international ‘rules of engagement’ of public support for renewable energy. Or whether they will pave the way to a dramatic readjustment of these rules with a substantial lowering of the tolerance level.<sup>113</sup> Various factors may contribute to this change of balance. The obstacles to renewable energy, and market failures, may disappear or in any event diminish. At the same time, if current trends continue, production and trade in renewable energy will increase. The markets will become larger, competition greater and the distortions caused by subsidies more evident. Complaints from aggrieved industries and action by governments, in the form of trade remedies and WTO litigation, will thus increase. A good case in point of these dynamics is the solar panels market.<sup>114</sup>

We now reach a conundrum. If there are no challenges, then although the rules do not formally provide enough policy space, such space is *de facto* ensured by the tolerance that governments show. The justification for supporting the renewable energy industry is recognized in practical terms, albeit

<sup>109</sup> This is indeed what happened with the China – Wind (DS 419) dispute (above n 18), filed in December 2010 and, as noted above, recently settled.

<sup>110</sup> Alan Beattie and Ed Crooks, ‘Call for US tariffs on solar panel imports’, *The Financial Times*, 19 October 2011.

<sup>111</sup> Interestingly, for the first time the US DOC made a ‘critical circumstances’ finding resulting in the retroactive application of duties (90 days before the determination, i.e., in the instant case, since December 2011).

<sup>112</sup> According to press reports, following the US DOC investigation, the Chinese solar panel industry was seeking legal advice on filing its own antidumping and antisubsidy case against the USA, with respect to American exports of polysilicon, the main material used in making conventional solar panels, to China. Keith Bradsher, ‘China Bends to US Complaint on Solar Panels but Plans Retaliation’, *New York Times*, 21 November 2011.

<sup>113</sup> It is interesting in this regard to note the more general trend in WTO subsidy litigation which seems to be followed in the renewable energy sector as well. In the first disputes, only prohibited support and import substitution were challenged. This soon enlarged to encompass more complex litigation on domestic subsidies.

<sup>114</sup> See Scott, above n 15. See also Beattie and Crooks, above n 109.

not in formal normative terms. It can thus be reasonably argued that there is no issue to fix. When challenges become more frequent, because the market has been substantially freed from hindrances and distortions, and the technology and commercial practices are mature, the justification for supporting the industry is far less evident. It can therefore equally be argued that the legal framework, which offers the possibility to challenge these measures of support, is still appropriate and no change is needed.

Whilst this conclusion is sound—undesirable subsidies should be restrained—the first account—one of tacit agreement and equilibrium—is not necessarily accurate. Another narrative is possible. The possibility cannot be excluded that the substantial acquiescence to subsidies observed so far might turn into a more aggressive stance even before the market has become—if it will ever be—fully competitive. The magnitude of public support used to ensure the steady deployment of renewable energy is already large, and on the rise. Governments may want to ensure—or challenge—first-mover advantages. It is exactly when market conditions are more difficult that the fight to emerge is fierce. Moreover, the vagaries of litigation cannot be fully predicted since unexpected exogenous factors can take place and spark trade rows.

The equilibrium may be less stable than it appears. If this is correct, (by definition volatile) tacit tolerance does not suffice to ensure legal certainty. In other words, it is argued, in unstable conditions, the lack of a formal and positive recognition that some forms of support for renewable energy are justifiable and should be legitimate will cause problems for international relations and the business community alike. Legal certainty must be reinstated, possibly in new ways.

## V. EXPLORING THE LEGAL JUSTIFICATIONS FOR SUBSIDIES FOR RENEWABLE ENERGY IN THE WTO

The previous analysis has shown that, with all their uncertainties, current subsidy rules can offer only limited shelter to subsidies for renewable energy which may be desirable. Dispute settlement interpretations may provide some clarification and relief in this regard, but the vagaries and piece-meal nature of the case-law make this a sub-optimal solution. The most promising route would be the use of legal justifications. In this respect, the possibility of justifying an otherwise objectionable subsidy by resorting to general exceptions provisions available in the broader legal system, like GATT Article XX, is an important hypothesis to test. Although this is also likely to happen in a litigation scenario, the recognition to domestic autonomy that could result is potentially significant. If the conclusion is that this is not a viable path, the only remaining option is law reform—i.e. the introduction of a specific legal shelter for certain subsidies. We now explore these two avenues of justification.

## A. Article XX of the GATT: a credible but troublesome possibility

In the absence of specific environmental justifications for subsidies (see section V.B below), the possibility of using other justification provisions available in the WTO legal systems should be tested, Article XX of the GATT being the prominent one.

### 1. Article XX of the GATT: first notes

*Content.* Article XX of the GATT includes two ‘exceptions’ with environmental relevance, paragraphs (b) and (g). Paragraph (b) concerns measures that are ‘necessary to protect human, animal or plant life or health’. This covers not only public health policy measures but also ‘environmental’ ones. The Appellate Body has already found in *Brazil – Tyres* that paragraph (b) could also cover climate change.<sup>115</sup> Paragraph (g), on the other hand, refers to ‘measures relating to the conservation of exhaustible natural resources’.<sup>116</sup> Importantly, the Appellate Body in *US – Gasoline* has concluded that clean air can be protected under this exception.<sup>117</sup>

The key terms are ‘necessary to’ in paragraph (b) and ‘relating to’ in paragraph (g), which invoke different tests, the former being stricter than the latter.<sup>118</sup> The current interpretation of the ‘necessity’ test is that of a ‘weighing and balancing exercise’ where a considerable degree of deference is given to Members particularly with respect to the level of protection decided. The ‘relating to’ test is admittedly lower than the ‘necessity’ test, but this does not exclude the need to establish a ‘real and close’ relationship between ‘means and end’. Crucially, the Appellate Body has acknowledged that the contribution of certain environmental measures, like climate change measures that often operate within a comprehensive set of policy actions, cannot be evaluated in the short term, but only with the ‘benefit of time’.<sup>119</sup>

In *US – Gasoline* the Appellate Body presented the two-tiered approach that should be used under Article XX of the GATT.<sup>120</sup> According to this

<sup>115</sup> Appellate Body Report, *Brazil – Measures Affecting Imports of Retreaded Tyres*, WT/DS332/AB/R, adopted 17 December 2007, para 151.

<sup>116</sup> Although partly overlapping, the focus of the two exceptions differs slightly. Due to its language, reliance on para (b) in order to justify climate change measures is likely to require evidence of the contribution of the measures to the protection of human, animal or plant life or health specifically. See Panel Report, *Brazil – Measures Affecting Imports of Retreaded Tyres*, WT/DS332/R, adopted 17 December 2007, para 7.46 where it is noted that a party invoking an environmental justification under Article XX(b) of the GATT ‘has to establish the existence not just of risks to “the environment” generally, but specifically of risks to animal or plant life or health’.

<sup>117</sup> Appellate Body Report, *United States – Standards for Reformulated and Conventional Gasoline*, WT/DS2/AB/R, adopted 20 May 1996, 18.

<sup>118</sup> See Appellate Body Report, *Brazil – Tyres*, above n 114, para 178 for a good formulation of the ‘necessity’ test, and Appellate Body Report, *United States – Import Prohibition of Certain Shrimp and Shrimp Products*, WT/DS58/AB/R, adopted 6 November 1998, para 141 for the ‘relating to’ language.

<sup>119</sup> Appellate Body Report, *Brazil – Tyres*, above n 114, para 151.

<sup>120</sup> Appellate Body Report, *US – Gasoline*, above n 116, 20.

test, first, the existence of a provisional justification of the measure at issue will have to be determined under one of the subparagraphs of Article XX. Second, if such a provisional justification is established, the application of the measure will have to be considered under the chapeau. While the first step would analyze the measure itself, in the second step it is the application of this same measure that is under scrutiny. More specifically, the chapeau of Article XX requires that the measure is ‘not applied in a manner which would constitute a means of *arbitrary or unjustifiable discrimination between countries where the same conditions prevail*, or a *disguised restriction on international trade*’.<sup>121</sup>

The Appellate Body established that the purpose and object of the chapeau is ‘the prevention of abuse of the exceptions’ of Article XX.<sup>122</sup> What is then proscribed is the *arbitrary and unjustifiable discrimination* with regard to how the measure is applied, not discrimination *per se*.<sup>123</sup> The *chapeau* thus requires an analysis—and justification—of the ‘causes and the rationale of the discrimination’.<sup>124</sup> This ultimately turns on the final and comprehensive assessment of the legitimacy of the objective of the measure.<sup>125</sup>

*Significance.* Article XX is a crucial provision for the functioning of the GATT with a distinct *normative value*. Since its inception in 1947, it provides the express recognition of other-than-trade concerns and the possibility for these to trump trade under certain circumstances. Indeed, ‘[t]hese exceptions clearly allow Members, under specific conditions, to give *priority* to certain societal values and interests over trade liberalization’.<sup>126</sup> These values prominently feature the environment, thus giving full significance and practical shape, in the WTO context, to the reference of the preamble of the WTO Agreement to ‘sustainable development’.

There is therefore a double significance for policy space. On the one hand, there is an express recognition of Members’ autonomy (subject to certain conditions of necessity and non-justifiable discrimination). On the other hand, this express recognition means that, when we move to Article XX, the trade-only perspective of provisions like subsidy rules, which protect market access and competition, makes room for a more comprehensive

<sup>121</sup> Emphasis added. Joost Pauwelyn ‘US Federal Climate Policy and Competitiveness Concerns: The Limits and Options of International Trade’, Nicholas Institute Working Paper NI-WP 07/02, Duke University (2007), defined the chapeau as ‘the most important provision in the entire GATT agreement’.

<sup>122</sup> Appellate Body Report, *US – Gasoline*, above n 116, 20.

<sup>123</sup> The requirement that the measure should not be applied so as to arbitrarily and unjustifiably discriminate cannot be equated to the test of inconsistency of the most-favored-nation and national treatment provisions. They must and do have a different meaning.

<sup>124</sup> Appellate Body Report, *Brazil – Tyres*, above n 114, para 225.

<sup>125</sup> After this has been initially considered in the first step of the ‘relating to’ or ‘necessity’ analysis of the exceptions.

<sup>126</sup> Peter Van den Bossche, *The Law and Policy of the World Trade Organization: Text, Cases and Materials* (Cambridge: Cambridge University Press, 2008) 616.

trade-and-environment, trade-and-health, etc. perspective.<sup>127</sup> This entails a significant shift of setting and framework of analysis, so that the interests and expectations of consumers and citizens are engaged and matter as much as, in fact even more than, those of producers.<sup>128</sup>

It is arguably for this special role that, despite the name of ‘general exceptions’, the justifications of Article XX have consistently and increasingly been interpreted broadly, rather than like ‘exceptions’.<sup>129</sup> The Appellate Body already showed in its early case law that Article XX is about balancing the ‘general rule’ that is breached and the ‘exception’ that is invoked as defense.<sup>130</sup> There truly is a ‘weighing and balancing exercise’ of different values central to the operation of this provision in each of its steps.<sup>131</sup> Ultimately, this is the typical hermeneutic process of general clauses where the protection of different values has to be assessed on a case-by-case basis.<sup>132</sup>

## *2. The applicability of GATT Article XX beyond the GATT: the SCM Agreement*

Over the recent years a lively discussion has emerged on the applicability of Article XX of the GATT to WTO agreements other than the GATT. Thus far, there is no clear answer. The relevance for environmental-protection measures is, however, clear, and there are numerous scenarios in which the availability of the broad exceptions of Article XX would make a difference.<sup>133</sup>

<sup>127</sup> If, as has been seen above, non-trade objectives (like environmental protection) are important to establish the existence of a subsidy, this is limited to the question of whether there is an exceptional or discriminatory treatment. By contrast, as we will see soon, the operation of GATT Article XX assumes the latter’s presence. What has to be determined is whether this exceptional or discriminatory treatment can be nonetheless justified in the light of the objectives pursued by the measure.

<sup>128</sup> On the current and potential focus of WTO regulation, see Petros C. Mavroidis, ‘Come Together? Producer Welfare, Consumer Welfare, and WTO Rules’ in Ernst-Ulrich Petersmann and James Harrison (eds) *Reforming the World Trading System—Legitimacy, Efficiency and Democratic Governance* (Oxford: Oxford University Press, 2003) 277; Joost Pauwelyn, ‘New Trade Politics After the Doha Round’, Center for Trade and Economic Integration, Working Paper 1/2008.

<sup>129</sup> Van den Bossche, above n 125, 618.

<sup>130</sup> Appellate Body Report, *US – Gasoline*, above n 116, 16–17.

<sup>131</sup> Piet Eeckhout, ‘The Scales of Trade – Reflections on the Growth and Functions of the WTO Adjudicative Branch’, 13 *Journal of International Economic Law* 3 (2010).

<sup>132</sup> This process does not necessarily require a precise cost–benefit analysis, but what is, in substance, a proportionality assessment. An informative taxonomy of ‘trade-off’ adjudicative ‘devices’ can be found in Joel Trachtman, *The Economic Structure of International Law* (Cambridge, Mass.: Harvard University Press, 2008) 222–3.

<sup>133</sup> For example: Can Article XX of the GATT justify duties that are imposed in breach of the Anti-Dumping Agreement (ADA) or SCM Agreement? What about technical regulations, standards or sanitary or phytosanitary measures that are not fully in line with respectively the provisions of the Agreement on Technical Barriers to Trade or the Agreement on Sanitary and Phytosanitary Measures? In absence of specific provisions on legitimate environmental subsidies, can Article XX of the GATT provide protection for subsidies to mitigate climate change, support renewable energy or energy efficiency?

*The arguments in favor and against applicability.* With respect to the case of the applicability to the SCM Agreement, it may be useful briefly to outline the arguments put forward by the opposing camps. Views differ dramatically. On the one hand we have those, quite numerous, who object fiercely to beyond-the-GATT applicability of Article XX. The core of the argument is that this applicability would undermine the ‘inner balance of the rights and obligations’ of the SCM Agreement, which already had a category of (also environmental) justifications—non-actionable subsidies—that has now expired (see section V.B). A finding that Article XX can apply to the SCM Agreement would alter this balance—against the intention of the Members—and could potentially have broader negative systemic implications, opening such claims of applicability for all other covered agreements and ultimately undermining market access to a significant extent. When Members wanted a justification to be available they made this clear. Contrary to the SCM Agreement, other agreements, like Sanitary and Phytosanitary Measures (SPS), do refer to GATT Article XX. Finally, the wording of the *chapeau*, whereby ‘*nothing in this Agreement* shall be construed to prevent the adoption or enforcement by any contracting party of measures . . .’,<sup>134</sup> would clearly limit its scope of application.

On the other hand there are those, less numerous, who are more positive about Article XX of the GATT justifying breaches of other-than-the-GATT covered agreements. They put forward various arguments.

First, the applicability of Article XX beyond the GATT cannot be excluded altogether, almost as a matter of principle. It is an issue that has to be assessed case-by-case, instrument-by-instrument and provision-by-provision. The spirit of this approach is that Article XX does have a natural expansiveness because of its central position in the GATT, its general and broad wording, and its policy (one would even be tempted to say ‘constitutional’) value. Its applicability to other WTO provisions is accordingly a serious hypothesis to test.

Second, the foundational legal argument supporting this hypothesis is that the WTO is a single undertaking and that the GATT is clearly developed in various covered agreements. This comes out from the General Interpretative Note to Annex 1A of the WTO Agreement and from the language or subject matter of various provisions scattered in the covered agreements on trade in goods.<sup>135</sup> In this regard, it is undisputed that the SCM Agreement develops the GATT with respect to subsidies to industrial goods.<sup>136</sup>

<sup>134</sup> Emphasis added.

<sup>135</sup> Analyzing the ‘double-remedy’ issue in the US – AD/CVD dispute (above n 62), the Appellate Body recently reminded the fact that the WTO is one single legal system and consequently the covered agreements cannot be read in clinical isolation.

<sup>136</sup> See Appellate Body Report, *Brazil – Measures Affecting Desiccated Coconut*, WT/DS22/AB/R, adopted 20 March 1997, paras 11–14, on the different normative framework between GATT and WTO, and on the relationship between GATT and SCM provisions on subsidies.

Third, the rise and fall of the fairly limited category of non-actionable subsidies can provide arguments either way, but certainly do not represent a clear-cut legal obstacle, quite the contrary. The narrow scope of these past exceptions is read by this camp as confirmation of the ongoing authority of GATT XX—an influence untouched by the *lex specialis* principle of the General Interpretative Note mentioned above. It could be contended that, even when Article 8 was in force, there was not really any common purpose or subject matter between the broad ‘environmental exceptions’ of Article XX and the confined remit of Article 8, with the result that Article XX could in principle have applied to subsidies not specifically permissible under the SCM Agreement. In other words, while it is clear that the SCM Agreement develops Articles VI and XVI of the GATT, it is not fully clear that Article 8 of the SCM Agreement was developing Article XX of the GATT in the context of subsidy discipline.

Fourth, there are no major textual barriers. The language of the chapeau of Article XX (‘nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures . . .’) cannot be read to imply more than what it says expressly: there are no obstacles *in the GATT* to the application of Article XX exceptions. This, of course, is not determinative of *what other applicable agreements* (the existence of which was not even contemplated at the time GATT 1947 was drafted) provide, or what general principles of interpretation indicate.<sup>137</sup> In this respect, there does not seem to be any language in the SCM Agreement (or elsewhere) directly interfering with the application of GATT Article XX to subsidies. Fifth, if no textual obstacles can be found, conversely and as a matter of general interpretation, there is no need for an express reference to give way to the application of a provision, particularly if it has a general nature.

Moreover, the negotiating history does not offer clear indications that the non-actionable category was supposed to be the only avenue of justification of certain ‘good’ subsidies, and that GATT XX either could or should not apply to subsidies. Finally, if we do not accept that GATT XX applies to subsidies, we may have an unjustified inconsistency.<sup>138</sup> Certain (more distorting) measures, like quotas, would be justifiable, while other (less distorting) measures, like subsidies, would not.

In conclusion, according to this front, there would be no major technical obstacles to the applicability of Article GATT XX to subsidies, the issue thus being eminently of *policy* (do we have a gap in the system?) or *political* (where

<sup>137</sup> It is interesting, even ironical, to note that the historical meaning of the language of the chapeau dates back to the willingness to guarantee a ‘universal’ application of the ‘general’ exceptions to breaches of any GATT provision. See John H. Jackson, *World Trade and the Law of the GATT* (Indianapolis: Bobbs-Merrill, 1969) 743–4; Douglas A. Irwin, Petros C. Mavroidis and Alan O. Sykes, *The Genesis of the GATT* (Cambridge: Cambridge University Press, 2009) 164.

<sup>138</sup> Howse, above n 13, 17.

do Members stand on this issue?) nature. This political dimension is also clearly present in the position of those that reject the applicability. To alter the ‘balance of the rights and obligations’ of the SCM Agreement is in legal jargon what to ‘breach the WTO bargain’ is in political discourse.

*What does the case-law say?*

The issue of the applicability of Article XX of the GATT to other WTO agreements is appearing more frequently before the WTO dispute settlement system. However, the indications of the case-law are unclear so far. We have *obiter dicta*, which do not represent more than slips of the pen (Panel, *Colombia – Ports of Entry*),<sup>139</sup> *arguendo analysis* where the issue is substantially avoided (Appellate Body, *US – Shrimp/Customs Bond*), and special cases whose significance beyond their specific context is not fully clear (Appellate Body, *China – Periodicals; China – Raw Materials*).

Two recent decisions merit closer scrutiny. The decision in *China – Periodicals* seems to offer ammunition to the pro-applicability camp because the Appellate Body concluded that Article XX of the GATT could apply to China’s Accession Protocol.<sup>140</sup> It could well be argued that, although providing the first example of beyond-the-GATT application, this finding’s significance is limited to the specific legal circumstances of the case, particularly the language of Article 5.1 of the Protocol recognizing ‘China’s right to regulate trade in a manner consistent with the WTO Agreement’.<sup>141</sup> There are, however, good arguments that the significance of this report goes beyond the case-specific circumstances of the dispute. On the one hand, the Appellate Body shows a positive attitude towards the need to consider the hypothesis that GATT XX is applicable beyond the GATT. This comes out, for example, in the resolute rejection of the *arguendo analysis* used by the Panel (and, significantly, by the Appellate Body itself in previous decisions).<sup>142</sup> On the other hand, we find a sweeping recognition of the Members’ power to regulate:

we see the ‘right to regulate’, in the abstract, as an *inherent power* enjoyed by a Member’s government, rather than a right bestowed by international treaties such as the WTO Agreement.<sup>143</sup>

<sup>139</sup> This was confirmed by a private conversation with one of the panelists.

<sup>140</sup> On the important Appellate Body decision in *China – Periodicals* (WTO Appellate Body Report, *Canada – Certain Measures Concerning Periodicals*, WT/DS31/AB/R, adopted 30 July 1997) see Joost Pauwelyn, ‘Squaring Free Trade in Culture with Chinese Censorship: The WTO Appellate Body Report on “China – Audiovisuals”’, 11 Melbourne Journal of International Law 119 (2010); Julia Qin, ‘Pushing the Limits of Global Governance: Trading Rights, Censorship and WTO Jurisprudence – A Commentary on the China – Publications Case’ 10(2) Chinese Journal of International Law 271 (2011) 292–5.

<sup>141</sup> The linking factor here was the expression ‘consistent with the WTO Agreement,’ representing a clear gateway to the GATT.

<sup>142</sup> Appellate Body Report, *China – Periodicals*, above n 139, paras 213–15.

<sup>143</sup> Para 222 (emphasis added).

Furthermore:

With respect to trade, the WTO Agreement and its Annexes instead operate to, among other things, *discipline the exercise* of each Member's inherent power to regulate by requiring WTO Members to comply with the obligations that they have assumed thereunder.<sup>144</sup>

The framework of analysis is clear. The 'power to regulate' is 'inherent' and, as such, does not—cannot—find its origin in treaty language that instead merely acts as a 'discipline' to its 'exercise'. Clearly, these general statements reach beyond the language of the Protocol. It remains to be seen, however, whether the recognition of the 'abstract right to regulate' can constitute the future normative foundation for the applicability of GATT Article XX to other WTO Agreements, particularly by embedding the mindset where the power to regulate is inherent and treaty language can only operate to constrain this built-in prerogative and, arguably, must do so in a clear fashion. An ancillary effect of this ruling could be the rooting of another hermeneutic attitude, that of a two-step analysis where following a breach determination there should always be a serious enquiry of a possibility of justification.<sup>145</sup>

What these findings certainly represent, more simply but no less importantly, is the Appellate Body's intellectual disposition to consider attentively any such claim in the future.

This can perhaps be contrasted with the recent (Panel and Appellate Body) reports in the *China – Raw Materials* case which, if they were taken to suggest that 'express language' referring to, or in any case connecting to, GATT Article XX would be necessary for its applicability beyond the GATT,<sup>146</sup> would be unduly restrictive and, most importantly, clearly wrong under general principles of interpretation.<sup>147</sup> The application of rules does not depend (only) on their express *renvoi*—unless one wishes to

<sup>144</sup> Ibid (emphasis added).

<sup>145</sup> The Appellate Body noted, in this regard, that a Member may be compliant with WTO law not only by not contravening it, but also when it is justified under an applicable exception (see para 223). The Geneva-based body then went on to elaborate on the justification alternative, noting that its availability 'may also depend on whether the measure has a clearly discernable, objective link to the regulation of trade in the goods at issue' (para 230).

<sup>146</sup> Panel Report, *China – Measures Related to the Exportation of Various Raw Materials*, WT/DS394/R, WT/DS395/R, WT/DS398/R, adopted 5 July 2011, para 7.154 notes that, were GATT Article XX intended to apply the China's Accession Protocol (and particularly to para 11.3), 'language would have been inserted to suggest this relationship'. Along the same lines see Appellate Body Report, WT/DS394/AB/R, WT/DS395/AB/R, WT/DS398/AB/R, adopted 30 January 2012, para 303.

<sup>147</sup> This is not to say that the finding of no applicability of GATT Article XX to para 11.3 of China's Accession Protocol was not correct. The latter provision seems indeed to be quite specific with respect to the available exceptions to its obligation, thus seemingly excluding other more general avenues of justification.

consider the WTO legal system unique in this respect. That being said, it has recently been suggested that a significant textual connection between the GATT and the SCM Agreement could be found. In the *China – Periodical* decision, the gateway for the applicability of GATT Article XX to the Protocol of Accession of China was the phrase ‘in conformity with the WTO Agreement’ in the Protocol’s Article 5.1. Article 32.1 of the SCM Agreement would similarly provide a strong link when reading that ‘[n]o specific action against a subsidy of another Member can be taken except in accordance with the provisions of GATT 1994, as interpreted by this [i.e. the SCM] Agreement’ (emphasis added).<sup>148</sup>

The issue of whether GATT Article XX could apply beyond the GATT, and in particular to measures that were breaching the SPS Agreement, was also recently addressed in *US – Poultry*.<sup>149</sup> The panel concluded that a measure already found to be inconsistent with various provisions of the SPS Agreement, which expressly elaborates Article XX (b) of the GATT, could not be justified by then having direct recourse to that general exception. This conclusion is a natural consequence of the fact that the SPS Agreement develops Article XX (b) of the GATT exhaustively.<sup>150</sup>

### *3. The justification of subsidies for renewable energy*

Assuming GATT Article XX is applicable to the SCM Agreement, we can briefly analyze the issues that would arise from its application to renewable energy subsidies.

The key argument would be that a subsidy that supports cleaner energy and technology does contribute to the objective of reducing GHGs emissions and hence to fighting climate change. Although the issue is clearly one of evidence and has to be assessed on a case-by-case basis, arguably, no great difficulties can be thought of in this respect.

On the one hand, while the beneficial impact of energy saving measures is self-evident, renewable energy also has a less negative environmental impact in terms of emissions than conventional sources. On the other hand, the necessity test of paragraph (b) requires the environmental objective pursued and the contribution of the measure to that objective to be balanced with the restrictions on trade. Climate change is certainly an important objective, which would lower the standard of proof. Furthermore, as noted above, the Appellate Body crucially acknowledged that the evaluation of the

<sup>148</sup> Appellate Body Reports, *China – Raw Materials*, above n.145, WorldTradeLaw.net Dispute Settlement Commentary, 6 February 2012, 17.

<sup>149</sup> Panel Report, *United States – Certain Measures Affecting Imports of Poultry from China*, WT/DS392/R, adopted 29 September 2010.

<sup>150</sup> But only Article XX (b). It may well be that a defense could be raised under another Article XX exception, such as the one on public morals (para (a)). See Pauwelyn, above n 127, 137, drawing this argument from Panel Report, *European Communities – Measures Affecting the Approval and Marketing of Biotech Products*, WT/DS291/R, WT/DS292/R, WT/DS293/R, adopted 21 November 2006.

contribution of climate change measures can be made only with the ‘benefit of time’.<sup>151</sup> Finally, the existence of less trade-restrictive alternatives to achieve the same aim can negate the necessity only if these are ‘reasonably available’, a qualification that adds to the deference to the country adopting the measure. Broadly analogous considerations can be made if the exception of paragraph (g) is considered.

The application of the *chapeau* does raise interesting issues with respect to the broad category of discriminatory subsidies.

#### *4. The justification of discriminatory subsidies*

One key question is whether those forms of discriminatory subsidies analyzed above, that is, those subsidies that directly or indirectly support domestic producers or products, could pass muster with both the ‘necessity’ test and the criteria of lack of ‘unjust or arbitrary discrimination’ in the *chapeau*. Although the Appellate Body neatly distinguished the two levels of analysis in *US – Gasoline*, there is a significant overlap between them since they both closely scrutinize the objective of the measure. They are therefore treated together here.

It has been noted that measures of support with differential—often discriminatory—impact are indeed common in the renewable energy sector, and are also, quite often, particularly effective because of their targeting. We have also seen how their treatment is not fully consistent, with production subsidies being permitted (unless they cause adverse effects) and local content subsidies being prohibited. With respect to local-content subsidies, it has been suggested that it may be difficult for them to be justified, mainly at the stage of proportionality.<sup>152</sup> The assessment would be somewhat more favorable for production subsidies.<sup>153</sup> Although local content requirements and production subsidies may have the same effects from an economic standpoint, we have speculated on whether a subsidy *including* a local content requirement could produce more markedly negative effects. If this is correct, this may well have an impact at the level of the necessity test.

That said, there is no subsidy that, at least in principle, is not capable of being justified. Talking of the *China – Wind* case at a conference at Columbia University,<sup>154</sup> Howse, for example, suggested that China might have had ‘a plausible argument’, based on environmental grounds, justifying their local content subsidies under GATT Article XX. He noted in particular that the local content obligation could have been found ‘necessary’ for three reasons:

<sup>151</sup> Ibid.

<sup>152</sup> Bigdeli, above n 8, 32.

<sup>153</sup> Ibid.

<sup>154</sup> ‘Climate Change, China and the WTO’, 30 March 2011, Panel Discussion with Joseph Stiglitz, Rob Howse, and Andrew Shoyer. A blog discussion, with comments of Rob Howse, following the Panel is available at <http://worldtradelaw.typepad.com/ielpblog/2011/04/article-xx-domestic-production-of-environmental-goods.html> (visited 4 July 2011).

limited possibility of technology transfer, exceptionally great demands for alternative energy, and the ‘life and death’ environmental situation behind those needs.

A key point of the necessity analysis is the determination of whether there are less trade restrictive alternatives available to achieve the same aim. It could thus be counter-argued that, if a measure less trade restrictive than a local-content requirement could be envisaged, quite possibly achieving the same result, the previous analysis would become mere academic speculation.

A few comments can be made. First, it should be reiterated that the fact that local content subsidies are prohibited is not conclusive of their final legal assessment. GATT Article XX justifies ‘any measure’ within its scope, including those, like quotas, that are prohibited and, most significantly, are more distorting than subsidies. Even assuming that a local-content requirement would have a more distinct impact on imports than a simple production subsidy to a competing product, it would still be less distorting than an outright ban. Second, the assessment turns on the specifics of the case. Howse’s comments on the plausibility of a Chinese defense to local content requirements in the *China – Wind* case is a good example in point. It will be the specific factual and legal circumstances and conditions of the scenario prevailing in the granting country that establish (or not) the ‘necessity’ and the ‘justification’ of the discriminatory subsidy, and the local content element in particular.<sup>155</sup> Furthermore, the existence of alternative less trade restrictive measures should not be assessed in the abstract but should be ‘reasonably available’ to the granting country.<sup>156</sup> This qualification, which calls for a comprehensive assessment of various conditions,<sup>157</sup> adds to the deference of the country adopting the measure.

Finally, the fact that measures of support for renewable energy, and of the green economy more in general, pursue a combination of objectives should not be determinative. Howse recently noted:

simply excluding subsidies from WTO compatibility because they have industrial policy as well as environmental goals is unrealistic, especially in the current economic and financial crisis, where support for climate measures may be inadequate unless such measures also serve economic recovery or reconstruction goals.<sup>158</sup>

<sup>155</sup> What is subject to analysis under GATT Article XX is the justification of the violative aspect of a measure, in the instant case the discriminatory impact of the subsidy caused by the local content obligation, naturally set within its broader factual and legal context. Cf. Appellate Body Report, *Thailand - Customs and Fiscal Measures on Cigarettes from the Philippines*, WT/DS371/AB/R, adopted 17 June 2006, para 177.

<sup>156</sup> Appellate Body Report, *Brazil – Tyres*, above n 112, para 156. See Eeckhout, above n 130, 18.

<sup>157</sup> Which are arguably not limited to the ‘technical’ or ‘financial’ considerations the Appellate Body use as examples.

<sup>158</sup> Howse, above n 13, 17.

Far from giving the green light to any kind of measure, whatever its justification, this comment calls for a circumstantial and pragmatic resolution of the balancing of the various objectives that typically underlie green subsidies. More radically, as was highlighted above for some cases of support to renewable energy, the objectives of environmental and industrial policy may be in line with and reinforce each other.<sup>159</sup> Finally, other—less targeted or discriminatory—measures might be chosen but there is then the question on whether they would be (equally) effective in relation to the proposed goals, which have been analyzed extensively above.<sup>160</sup>

Assuming now that the assessment of a simple production subsidy would be more positive than that of a local-content subsidy, we cannot escape two alternatives. If, besides both being discriminatory production and local content subsidies are also, as Sykes suggests, economically the same, their legal treatment should accordingly be the same, at least at the justification level, where the analysis seems to be more focused on substance and effects. By contrast, if, as we suggested tentatively, local content subsidies are more dangerous because they would have a clearer impact on trade and would in substance amount to a ‘double’ measure of support (i.e. one favoring two different recipients), the question is again a matter of context surrounding the measure. But logic requires coherence. Would the assessment be different if we formally had two separate production subsidies rather than a subsidy-with-local-content tie? In principle, it should not.

Some food for thought is offered by the famous EU *PreussenElektra* case that concerned a discriminatory subsidy.<sup>161</sup> What is known in WTO circles is that the European Court of Justice concluded that a German FIT law—which combined a pricing requirement with the obligation to buy all renewable energy electricity produced in the area—was not a State aid because there was no cost to government. What is less known is that the Court analyzed the purchase obligation also from another perspective and concluded quite easily that this obligation amounted to a measure equivalent to a quota because it restricted, potentially, the market access for renewable energy electricity coming from outside Germany. Like in the GATT, EU law prohibits quotas and equivalent measures. Even these measures can be justified, however, using a provision (Article 36 TFEU), which was introduced in the 1957 Treaty of Rome using as its model GATT Article XX. To cut matters short, the Court concluded that the German purchase obligation was justified because it was in line with the protection of the environment and because of the nature of the electricity market in the EU (the certification of origin of renewable energy electricity was under-developed). One is left to

<sup>159</sup> Cosbey, above n 16.

<sup>160</sup> See Sections II, III.D and III.E.

<sup>161</sup> *PreussenElektra v Schleswag*, above n 87.

wonder whether, in the future, we will enjoy an alignment of WTO and EU jurisprudence in this regard.

### *5. Conclusions on the justification promise of GATT Article XX*

Article XX of the GATT can potentially offer a significant answer to the request for policy space. Its application is, however, politically troublesome for the same reasons that support its invocation. It is flexible and its potential reach cannot be fully predicted. The strain put on the WTO dispute settlement system may be significant, as it would have to deal with uncertain language and perform difficult and sensitive balancing acts. That said, the applicability of Article XX to climate change or renewable subsidies is both credible and possible in practice. The protection of the environment and the fight against climate change are crucial objectives and various policy measures, including subsidies, may be adopted to pursue them. As repeatedly noted above, it would be incoherent if certain measures restricting trade were justifiable and others not, this differential treatment depending on arbitrary distinctions concerning the type of measure chosen. Furthermore, in the governmental policy arsenal, subsidies are not certainly the most trade distortive measures. If the perception of a lacuna in the system intensifies, and inaction in climate and trade negotiations persists, the Appellate Body may be persuaded of the need to take the lead.

In the presence of the various uncertainties raised by the application of a general justification provision, however, law reform is the first-best option since it would allow WTO members to negotiate new language, to tailor the exceptions to the needs of justification and to accommodate the required policy space in the most appropriate way. A blueprint for law reform is analyzed briefly in the following section.

### **B. Ain't wastin' time no more: law reform**

The original version of the SCM Agreement did provide that, in presence of certain substantive and procedural conditions, certain regional, environmental and R&D subsidies were non-actionable and were sheltered from countervailing duty action.<sup>162</sup> The introduction of an express shelter for certain subsidies was, however, very controversial,<sup>163</sup> with the result that the non-actionability exception was only provisional. Without the necessary support to maintain it, even in amended form, it expired at the end of 1999.<sup>164</sup>

Albeit not perfect, the original scheme of the SCM Agreement was certainly *balanced*. On the one hand, it shed some light on what constitutes a

<sup>162</sup> Articles 8 and 9 of the SCM Agreement.

<sup>163</sup> For a detailed account see Bigdeli, above n 8, 4–8.

<sup>164</sup> Furthermore, the discipline of non-actionable subsidies was never used. In above n 106 we explain this as further indication of the tacit acquiescence of Members to a widespread scenario of subsidization.

subsidy. On the other hand, subsidies were divided according to a tripartite taxonomy depending on their real or perceived effects: prohibited, (permitted but) actionable, and (permitted and) non-actionable.

The idea of reviving a shelter for certain ‘good’ subsidies is increasingly aired,<sup>165</sup> and the most likely candidate is certainly climate change subsidies, with subsidies in support of renewable energy as prominent example. What follows is a blueprint for a possible law reform.<sup>166</sup>

First, the prerequisite and cornerstone of any subsidy discipline is *transparency*. Collins-Williams and Wolfe recently noted:

The most general observation is that transparency mechanisms too often seem to have been an afterthought in the negotiations. Transparency is a fundamental WTO norm, but few agreements are designed from the ground up to make significant use of transparency as a tool. Transparency does not work as a tool if it is thought to be merely an elegant appendage to third-party ‘enforcement’. It does not work if negotiators do not think carefully about the government behavior they wish to modify using transparency.<sup>167</sup>

Notification and transparency are key elements for both tracks of the governance approach suggested below, and should offer a clear picture of the measures of support.<sup>168</sup> The current WTO system is deficient in this respect. Many Members do not notify subsidies, or do so inconsistently.<sup>169</sup> To be effective, the system should be designed with the proper *incentives* to

<sup>165</sup> See, e.g. Robert Howse, ‘Do the World Organization Disciplines on Domestic Subsidies Make Sense? The Case for Legalizing Some Subsidies’, in Kyle W. Bagwell, George A. Bernmann and Petros C. Mavroidis (eds), *Law and Economics of Contingent Protection in International Trade* (Cambridge: Cambridge University Press, 2009); Howse, above n 13; Bigdeli, above n 8; Gary N. Horlick and Peggy A. Clarke, ‘WTO Subsidies Disciplines During and After the Crisis’, 13 *Journal of International Economic Law* 859 (2010); Philipp Aerni et al., ‘Climate Change, Human Rights and International Economic Law: Exploring the Linkages between Human Rights, Trade and Investment’, 53 *German Yearbook of International Law* 139 (2010); Rubini, above n 29, Chapter 2; Debra Steger, ‘The Subsidies and Countervailing Measures Agreement: Ahead of its Time or Time for Reform?’, 44 *Journal of World Trade* 779 (2010).

<sup>166</sup> These are the initial thoughts of a broader project on the future regulation of climate change subsidies in the WTO.

<sup>167</sup> Terry Collins-Williams and Robert Wolfe, ‘Transparency as a Trade Policy Tool: the WTO’s Cloudy Windows’, *World Trade Review* 551 (2010) 573.

<sup>168</sup> A good analysis of the importance of monitoring subsidies is Steenblik, above n 95, 190–1. See also Collins-Williams and Wolfe, above n 166, 575.

<sup>169</sup> Writing in 2001, but with conclusions still valid today: Gary N. Horlick, ‘Subsidies Discipline under WTO and US Rules’, in Claus-Dieter Ehlermann and Michelle Everson (eds), *European Competition Law Annual 1999: Selected Issues in the Field of State Aids* (Oxford: Hart, 2001) 593, at 601. See also WTO, *World Trade Report 2006*, Geneva, 111. The Committee on Subsidies and Countervailing Measures, meeting on 26–27 October 2011, focused on improving the timeliness and completeness of notifications (see [http://www.wto.org/english/news\\_e/news11\\_e/scm\\_26oct11\\_e.htm](http://www.wto.org/english/news_e/news11_e/scm_26oct11_e.htm)).

notify, coupled with appropriate sanctions for non-compliance.<sup>170</sup> The issues and options are various. We just name a few here. A crucial element is the creation of a useful template of subsidies notification.<sup>171</sup> The use of presumptions and standstill obligations could represent a powerful device to improve compliance. The benefit of non-actionability could, for example, be subject to the complete notification of the subsidy measure (as occurred under the now-expired SCM Article 8). More generally, it could even be provided that the subsidy cannot be implemented at all if not duly notified.<sup>172</sup> If granted, it should be withdrawn (retroactively) or, at least, the interest accrued on the sums granted be paid back. Recourse to third-party notification, from other international organizations and NGOs, and perhaps even from affected private parties should be considered too, and subject to verification.<sup>173</sup> The system of transparency should also be open at its ‘output’ end with both ‘raw’ and ‘processed’ information made available to the wider public, which could in turn exert control on and influence governments.<sup>174</sup>

Second, renewed disciplines on subsidies should be based on a system of governance with *two interconnected tracks*.

On the one hand, we would have the usual set of detailed conditions outlining what is permitted and what is not permitted—the *legal positive* side. This should be implemented through a more effective institutional and procedural system, and become more entrenched and internalized through litigation and discussions within the Committee of Subsidies and Countervailing Measures.

<sup>170</sup> During the current Doha Round of negotiations the EC proposed ‘to explore the possibility of penalising partial or non-notifications’. It further suggested to ‘devise a mechanism through which the quality and scope of notifications could be scrutinized and if failings were found or suspected a review procedure could be generated through an expedited WTO dispute settlement procedure similar to the one envisaged for spurious initiations or by referring the matter to an empowered Permanent Group of Experts’ (European Communities, submission to the WTO Rules Group, TN/RL/W/30, 21 November 2002, para 4).

<sup>171</sup> For a proposal of a new template for subsidies notification, see Ronald Steenblik and Juan Simón, *A New Template for Notifying Subsidies to the WTO* (Geneva: IISD, 2011). Clearly, the most important—but at the same time most controversial—information concerns the trade impact of the subsidy. This may be considered as sensitive information, apt to constitute some form of ‘self-incrimination’, and thus attract litigation, or in any event negatively affect the complexity of negotiating positions.

<sup>172</sup> Following a proposal of the EC during the Uruguay Round. See Horlick, above n 168, 603.

<sup>173</sup> Along these lines, Collins-Williams and Wolfe, above n 166, 575–6. At Article 25.10, the SCM Agreement provides for counter-notifications, i.e. Members can notify subsidies granted by other Members. This power has never been used until very recently when, in October 2011, the USA acted on its basis, notifying 200 programs implemented by China and 50 by India.

<sup>174</sup> Ibid, 576. This should be set in the context of the more general discussion on the governance of subsidies, briefly examined in the next paragraph.

In parallel and in close interaction with this ‘hard law’ track, a soft governance track should be introduced (or, better, reinforced). This is the place where information on subsidies is exchanged and evaluated (with no prejudice to legal assessment), thus representing the *knowledge-enhancing* side of the system.<sup>175</sup> This forum would ultimately help to create a positive climate, to embed open discussion, and to generate, share, test and develop ideas and values, ‘symbols’ and ‘legal images’ on what constitutes normal and legitimate governmental practice and what does not.<sup>176</sup> This process, it is hoped, may reinforce mutual trust and trust in the system, reducing tensions and conflict and, eventually and crucially, improving the effectiveness of the ‘hard law’ track of the system (via interpretation or amendment).

The institutional settings for this double-track system can be various, can involve a redesign of current bodies like the (more-used) Secretariat or the (never-used) Group of Experts, or the creation of ad hoc bodies. More generally, the possibility of resorting to external ‘experts’, perhaps based in other international organizations with jurisdiction on public subsidization, should be considered and designed so as to render their participation particularly effective as an input to the political side of the discussion.<sup>177</sup> A crucial issue is the relation and interplay of the Committee on Subsidies and Countervailing Measures—where the representatives of the Members convene—with these other bodies. What should certainly be implemented is a sense of regularity and continuity in the meetings and exchange between the various actors, in order to make the whole process productive.

Third, the glue keeping the whole system together should be an entrenched ‘sense of community’.<sup>178</sup> This refers to the real or perceived presence of shared interests and goals, to the belief and confidence in the system as a shared resource towards the attainment of public goods.<sup>179</sup>

The sense of community is the determining factor in giving shape to the system and maintaining it, in deciding how ambitious—or more simply effective—it is and in making it acceptable and valuable to its participants.

<sup>175</sup> When we write these notes we clearly have in mind the positive experience of the SPS and TBT Committees, and also the Committee on Trade and Environment.

<sup>176</sup> This process has been recently and effectively analyzed by Andrew Lang in *World Trade Law after Neo-Liberalism: Reimaging the Global Economic Order* (Oxford: OUP, 2011).

<sup>177</sup> The possibility of entrusting to an independent body the role of evaluation and analysis of the information and data on subsidies, in terms of cost-effectiveness and best practice in relation to the stated objectives, could be a plausible option. The results of this independent review could then also feed back to a revamped, and more frequent, Trade Policy Review Mechanism, and constitute additional material for governments to share and discuss in the Committee on Subsidies and Countervailing Measures.

<sup>178</sup> See Sungjoon Cho, ‘The WTO’s Gemeinschaft’, 56 Alabama Law Review 483 (2004); Cho, ‘Reconstructing an International Organization: A Paradigm Shift in the World Trade Organization’, SSRN, draft of 26 April 2011.

<sup>179</sup> Rubini, above n 29, 33–7.

Arguably, the main ingredients of this narrative include nothing novel or revolutionary but belong to the core of the rule of law ethos and good governance (transparency, accountability, fairness, inclusiveness, effectiveness), which inform the other two guidelines that we have just suggested. This community understanding should inform every step of the life of the system of subsidy control—from its negotiation and design up to its various levels of operation. From an operational perspective, it is *good norm and regime design*, with the creation of the right incentives to co-operate, that can foster this sense of Community.

The narrative of community plays a crucial role also for the acceptability of the GATT Article XX defense. The main finding of the analysis was that the issue of the applicability of this crucial provision is not technical. The more we leave a *contractual* approach and shift towards a *community* one,<sup>180</sup> the easier the acceptability of trade-with-non-trade balances, with the possible outcome that trade interests do not indeed prevail, becomes acceptable. This process, it is argued, is inevitable. The increasing pressure of the various challenges of the current era<sup>181</sup> make a mere contractual approach insufficient to solve issues and disputes that, although inextricably linked to the trade discourse, go beyond it.<sup>182</sup>

Fourth, when designing new rules on legitimate subsidies, the first principle is that the guidelines coming from *economic and policy analysis* should be adhered to as much as possible (see section II above).

Fifth, the existence of a system of justifications from which to draw direction is also useful. In this regard the *EU system of State aid control* can offer valuable inspiration in terms of rule and regime design.<sup>183</sup>

EU law has a very sophisticated system of justifications for State aid, including environmental and energy subsidies. These justifications find their textual basis in the very broad language of a few clauses introduced in 1957 in the Treaty of Rome. Over time, the normative development of this area of the law has been robust, passing from case-by-case interpretation of the clauses to policy definition and consolidation, often tested before the EU Courts and after consultations with the relevant stakeholders, to eventually reach the more recent stage of secondary legislation. Individual

<sup>180</sup> This is a progressive movement, through stages. It is also more than likely that elements of both approaches do coexist. For a description of contractual and community approaches see Cho, 'Reconstructing an International Organization', above n 177.

<sup>181</sup> Thomas Cottier, 'Challenges Ahead in International Economic Law', 12 *Journal of International Economic Law* 3 (2009).

<sup>182</sup> The step to what few years ago was dubbed 'constitutionalism in a modest sense' is short. See Thomas Cottier, 'Limits to International Trade: The Constitutional Challenge', *American Society of International Law Proceedings*, 220 (2000) 221.

<sup>183</sup> The European model of State aid justifications played already an important part in the design of the category of non-actionable subsidies.

decisions built up a practice that was first codified into ‘soft’ law but eventually became, in virtually all State aid areas, ‘hard’ law. Procedurally, the system is based on two cornerstones that aim to guarantee effective control by the EU Commission, which has exclusive power to authorize planned State aid. Members must notify all planned aid in advance and refrain from implementing it before authorization.<sup>184</sup>

A crucial development took place in 2008 with the introduction of the ‘General Block Exemption Regulation’ (GBER).<sup>185</sup> The underlying concept is that State aid measures pursuing horizontal—not sectoral—objectives that satisfy the precise conditions of the regulation are automatically permissible, without any need for prior authorization.<sup>186</sup> The benefit of the exemption applies only if certain conditions, mainly referring to cost-eligibility, aid intensity, transparency, and incentive effect, are present. The GBER covers numerous types of State aid including several instances of environmental aid.<sup>187</sup> One of these is aid for the production of fuels, heat or electricity derived from renewable-energy sources.<sup>188</sup>

If the conditions of the GBER are not satisfied, the planned measure of support is subject to individual scrutiny and authorization by the Commission. In the environmental area, the Commission applies the principles of the 2008 Guidelines on State aid for Environmental Protection (‘Guidelines’).<sup>189</sup> In general, although very similar to the GBER, the Guidelines are more generous with higher levels of aid intensity permitted.<sup>190</sup> This can happen because it is ultimately for the Commission, which enjoys wide discretion in this regard, to decide whether the State aid measure should eventually be permitted or not. The process through which this

<sup>184</sup> National courts of the EU Member States have ensured the respect of these obligations with far-reaching powers, including most notably that to order the repayment of any aid granted in contravention of these two procedural obligations.

<sup>185</sup> Commission Regulation (EC) No. 800/2008 of 6 August 2008 declaring certain categories of aid compatible with the common market in application of Articles 87 and 88 of the Treaty, OJ L214, 9 August 2008, 3.

<sup>186</sup> There are still however reporting and monitoring provisions.

<sup>187</sup> These refer to (i) investment aid for environmental protection beyond Community standards; (ii) aid for the acquisition of transport vehicles beyond Community standards; (iii) aid for early adaptation to future Community standards for SMEs; (iv) aid for investment in energy saving; (v) aid for investment in high efficiency cogeneration; (vi) aid for investments to exploit renewable energy sources; (vii) aid for environmental studies; and (viii) aid in the form of tax reductions.

<sup>188</sup> In this regard the eligible costs are the additional costs compared with production from conventional power plant or heating system with equivalent capacity. The maximum aid intensity is 45% for large enterprises, 55% for medium-sized enterprises and 65% for small enterprises.

<sup>189</sup> OJ C82 of 01 April 2008, 1.

<sup>190</sup> For investment in renewable energy, we have 60% for large enterprises, 70% for medium-sized enterprises, 80% for small enterprises. If the aid is granted through a competitive bidding process on non-discriminatory criteria the intensity can reach even 100%.

decision is reached involves the execution of a flexible balancing test largely centered on a proportionality assessment.<sup>191</sup>

If we now compare the normative approach of the GBER and the Guidelines with that of the GATT/WTO, strikingly, we see a similar development. At the beginning there were only general clauses (see the Treaty of Rome) or statements (see Article 11 of the Tokyo Round Subsidies Code). With time, however, the general recognition that certain subsidies may be legitimate has generated, through practice and experience, a more detailed discipline.<sup>192</sup>

This trend *from general to specific* is significant. In the politically sensitive area of subsidies, the anti-abuse goal is clear. It is in this light that we therefore have some misgivings with the suggestion that a ‘much simpler, principle-based approach’ would be needed, whereby a climate change subsidy would *simply* not be actionable if included in one of the policies of the Kyoto Protocol, contributes to its goals (like technology transfer and equitable allocation of responsibilities) and, to the extent possible, respects fundamental principles of the WTO such as non-discrimination and transparency.<sup>193</sup> While the reference to an important multilateral instrument has clear advantages, particularly by ensuring coherency of action, the problem with this approach is the same of the GATT Article XX option. Guidelines such as those of the Kyoto Protocol (notably Article 2.1(a)) are too general and too non-prescriptive. Detailed rules are certainly less flexible, liable to be over- or under-inclusive and more prone to ‘micro-management’. The noticeable benefits of precision are, however, its capacity to reduce the potential for abuse and to improve the acceptability of the idea of a ‘resurrection’ of non-actionability.

How do the conditions of the EU regulation embodied in the GBER/Guidelines compare with the previous criteria of non-actionability? From an initial assessment,<sup>194</sup> it emerges that, not only do they share the same general approach, but they also ‘follow the same logic’ based on what has been called the ‘polluter shares principle’ of cost allocation. Admittedly, there are significant differences that show a more generous scope for justification

<sup>191</sup> The three steps are as follows: (i) Is the aid aimed at a well-defined objective of common interest, for example environmental protection? (ii) Is the aid well designed to achieve that objective (is the aid appropriate, does it produce an incentive effect, is it proportional)? (iii) Are the distortions on competition and effect on intra-EU trade limited, so that the overall balance is positive? For an analysis, see also Hans W. Friederischick, Lars-Hendrik Röller, and Vincent Verouden, ‘European State Aid Control: An Economic Framework’, in Paolo Bucirossi (ed.), *Handbook of Antitrust Economics* (Cambridge MA: MIT Press, 2008) 625.

<sup>192</sup> In a sense, we could even say that the first substantial global and multilateral discipline on subsidies (the SCM Agreement) started from the point of arrival of the older and more established EU system.

<sup>193</sup> Howse, above n 13, 21.

<sup>194</sup> See Bigdeli, above n 8, 12–17.

under EU rules. This depends on the complexity and comprehensiveness of the EU system, which combines accurate pre-defined rules of justification with a flexible individual scrutiny by the Commission.

From the perspective of someone seeking inspiration or guidance on subsidy governance, the EU system of State aid does not represent a ‘single package’. Some elements, notably those related to the case-by-case scrutiny and authorization of a supranational adjudicatory body, are not easily transposable beyond the EU.<sup>195</sup> What the EU experience can certainly offer, however, is a good point of reference for the substantive design of justifications,<sup>196</sup> for the mechanisms to enforce transparency,<sup>197</sup> and, if necessary, the amendment of the rules<sup>198</sup> or the adjustment of the measure.<sup>199</sup>

## VI. CONCLUSIONS

The previous analysis has shown that the general scenario with respect to the status of subsidies for renewable energy under WTO subsidy disciplines is one of significant legal uncertainty and even conflict between legal requirements and policy prescriptions. This situation, in itself, produces a constraint on policy space. The possibility that some issues may be clarified through litigation, through friendly interpretation of current rules and justifications,

<sup>195</sup> For example, the balancing test cannot be imported at the global level for the simple reason that it needs to be administered and applied on a case-by-case basis, which does not seem practicable. In the WTO, the necessity-proportionality assessment would need to be ‘pre-made’, embodied in precise rules subject to clear and automatic application. In this context it is notable that a mechanism whereby subsidies could not be considered ‘non-actionable’ until approved by the Committee on Subsidies and Countervailing Measures was deleted at the very last minute of the Uruguay Negotiations. See Peggy A. Clarke, Jacques Bourgeois, and Gary Horlick, ‘WTO Dispute Settlement Practice Relating to Subsidies and Countervailing Measures’, in Federico Ortino and Ernst-Ulrich Petersmann (eds), *The WTO Dispute Settlement System* (The Hague: Kluwer, 2004) 353, 378.

<sup>196</sup> The EU permits aid intensities much further than the 20% of Article 8.2(c) of the SCM Agreement. Furthermore, while under the chapeau of Article 8.2(c) of the SCM Agreement, only ‘existing facilities’ can benefit from the exemption, under the EU regulation aid can be granted for investment in renewable energy production. Another example of the difference refers to the possibility for EU State aid to cover operating costs, which is excluded in the SCM Agreement.

<sup>197</sup> The procedural obligations of notification and ‘standstill’ before a positive authorization are strictly enforced in the EU, mainly through the remedy of retroactive repayment.

<sup>198</sup> The fast development of both EU State aid soft and hard law, often following public consultations, is very instructive.

<sup>199</sup> In this regard, the ‘safety-valve’ of Article 9 of the SCM Agreement, whereby non-actionable subsidies would be subject to closer scrutiny if causing ‘serious adverse effects’, with the possibility of removing the negative effects, should be revived. This device would operate in a similar way to what happens in the EU where—at the stage of the assessment of the compatibility with the internal market—the Commission has the power to require various forms of changes to the planned aid in order to reduce the negative distorting effects of the measures.

does not improve the situation since disputes are subject to many vagaries and may offer, at best, a piece-meal and partial solution. The pressure put on the judiciary should also not be underestimated. The analysis of the possible application of GATT Article XX to subsidies is the best example in point.

The unsatisfactory nature of the scenario is more than merely hypothetical. As the market is getting larger and competition fiercer, the stability of the tacit agreement not to challenge one another's subsidies is put into question. The various trade disputes on support to renewable energy that have recently been filed at both the WTO and national level are evidence of this.

Against this scenario we have made an invitation—*ain't wastin' time no more*. An inadequate legal framework, and increasing litigiousness, support the case for a legal shelter that defines what types of government interventions are legitimate and what are not in a clear and positive way. The first-best solution is new rules that would expressly permit certain subsidies for renewable energy. Only law reform would enable the new rules to be tailored to the need for justification and to accommodate the required policy space in the most appropriate way.

The answer to the problem is therefore better regulation, which does not necessarily mean less regulation. We do not share the view that *laissez-faire* is the answer to the deficiencies of subsidy disciplines.<sup>200</sup> The way to achieve rationality and policy space is not through a substantial downgrade of the current rules and a reliance on non-violation nullification and impairment remedies to tackle subsidies frustrating negotiated market access. Subsidy rules undoubtedly present incoherencies and difficulties but this is the case in many regulatory areas, in the trade context and beyond.<sup>201</sup> Subsidy rules certainly require a good amount of simplification and approximation too but, again, this is not new.

The bottom line is that a better international regulation of subsidies can be a valuable asset. This is particularly so when the regulation can simultaneously act as a control on the negative spillovers of many subsidies, a transparency-enhancing mechanism and a forum for the discussion and advancement of shared knowledge on the question of what is and what is

<sup>200</sup> As suggested by Sykes, above n 70. The following notes are just the first reaction to Sykes' comprehensive criticism which certainly deserves a more developed response.

<sup>201</sup> Key trade law provisions rely on the determination of whether a certain conduct is discriminatory, protectionist or otherwise, which are notoriously difficult questions. Similarly, complex economic determinations are pervasive in antitrust laws and crucial questions, like the assessment of unilateral conduct, are still subject to great uncertainty and dramatic fluctuations. Most significantly, returning to the regulation of subsidies, even the route of non-violation nullification and impairment, which is suggested as a desirable remedy to rely on, is fraught with several uncertainties, which probably explains the scarcity of its use.

not a legitimate government intervention. All this can—it is hoped—result in better practice, better regulation and, ultimately, better subsidization. This would indeed represent a good result for the governance of subsidies generally, and of subsidies for renewable energy in particular.<sup>202</sup>

<sup>202</sup> Other suggested options for policy space have been advanced. Some are alternative to a new discipline of justifications, others can indeed be applied in conjunction with or as a preliminary step towards a new WTO discipline. It has for example been suggested that a temporary truce or waiver with respect to action to fight climate change be introduced, conditional on various transparency obligations and on the respect of fundamental WTO principles like non-discrimination. Another possibility is a plurilateral solution, either within or outside the WTO, whose attractiveness would be to alleged capacity to garner consensus among the willing countries. This alternative may indeed constitute the starting point for a future multilateral solution. A ‘negotiation’ sectoral approach has also been suggested which would be based on the method of operation of the Agreement on Agriculture (with negotiated reduction commitments) or on the EGS liberalization, and in particular in the commitment to remove fossil fuel subsidies as non-tariff barriers to renewable energy goods and services, possibly coupled with the scheduling of permitted measures of support of renewable energy. For discussion of these options see Gary Hufbauer, Steve Charnovitz, and Jisun Kim, *Global Warming and the World Trading System* (Washington DC: Peterson Institute of International Economics, 2009); Howse, above n 13; Aerni, above n 164, Sykes, above n 70.