

The Subsidization of Renewable Energy in the WTO: Issues and Perspectives.

Luca Rubini – Birmingham Law School

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Abstract:

The fast deployment of renewable energy is crucial in the fight against climate change. While there are significant advances from the technological, commercial and even public opinion perspective, renewable energy still faces significant obstacles and barriers which justify a significant public support. The issue is not ‘if’ but ‘how’. Subsidies are part of this policy tool-box. Economics and empirical research are telling us that design is crucial, and so is the synergy of the various instruments of support. The proper and continuous exchange of information between private and public actors is also of the essence. Against this background, the key question for those dealing with systems of rules and governance, is to ask whether the current discipline, particularly that of subsidies, offers sufficient policy space to accommodate the said needs of public support. The goal of this paper is therefore to analyze issues and perspectives coming out from this question of policy space. This paper has thoroughly analyzed the current rules applicable to subsidies in the WTO and has come to the conclusion that, for various reasons, depending either on the nature of the subsidies themselves or on the uncertainty of the legal texts, on the heavily distorted nature of energy markets or on the inconsistency of trade and environmental perspectives, the current discipline is not tipped in favour of an acceptable and certain degree of ‘green policy space’. This has led to extend the analysis to the typical second step of legal assessment, to consider whether there are any exceptions or justifications that could apply and, through their shelter, guarantee the required amount of policy space. While there are currently no rules recognizing that subsidies for environmental purposes and more specifically for renewable energy support may be desirable and legitimate, the focus has shifted to what has emerged as a troublesome but credible hypothesis: the applicability of the general exceptions of GATT Article XX. Since this is not however the first-best solution, we have provided a blueprint for law reform, outlining the main principles and traits of a would-be new system of governance of legitimate subsidies in the WTO. The focus has been on the concept of community, the combination of mechanisms of hard and soft governance, the reinforcement of transparency and of the institutional frameworks, and the possibility of using the fairly developed system of justifications in EU State aid law for a model, particularly with respect to the design and possibly the content of the specific exceptions.

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IRREVOCABILITY AND CHANGE

Climate change is one of the great emergencies of the current era. While climate has always changed in world history, what makes this variation unique is not the unprecedented rise in temperature in the last decades but the fact that these are substantially attributable to greenhouse gasses (GHGs) produced by human activity.¹ Another key characteristic of climate change is that it is irrevocable. It is a continuous process that can be slowed, if not stopped, but never reversed. The gravity and irreversibility of the impact should all be enough to prompt action and change in human behaviour.² But, as in many other areas, change is difficult.

Quite subtly, as Desmond Tutu recently noted, the realization of the cause-effect link between the prevailing model of growth and climate is out of sight: '[w]e have developed a temporal and physical disconnection from the resources that sustain us, and from our impact on them . . . In short, the consequences of our actions are delayed or hidden, so we assume they are waived'.³ A dramatic change of production and consumption patterns – a true *metanoia* – may be required. A 'change of mind', where utilitarian considerations (what we need for ourselves) meet ethical obligations (what we owe to the others). And this change does not happen only in the aseptic rooms and murky corridors of intergovernmental negotiations. Praise and blame are not only for plenipotentiaries. Since responsibility and consequences are diffuse so is the engine of change. Consumption as well as production patterns need to transform. To be effective the governance of climate change must be open, participative and comprehensive, and requires that both decision and action rest on all levels involved.⁴

If human behaviour cannot find in itself the forces of change, if markets do not produce results through their normal working, public impulse is needed. Climate change has indeed been defined as the 'greatest and widest-ranging market failure ever seen'.⁵ Incentives and disincentives must be deployed, support carried out.⁶ The big issue is then not 'if' but 'how'.

Climate change is inextricably linked to energy issues. The insatiable pursuit of growth – which is indeed essential in large parts of the planet – needs energy. But energy generation and use produce GHGs.⁷ The dependency of the modern economy on the (heavily polluting) fossil fuels is crucial in this regard. Although a complex problem like climate change can only be addressed with the synergy of a mix of policies, which combine cleaner energy use and energy efficiency, it is clear that the

¹ The IPCC Fourth Assessment Report concluded that 'Most of the observed increase in global average temperature since the mid-20th century is very likely due to the observed increase in anthropogenic greenhouse gas (GHG) concentrations.' According to the terminology used in the report, 'very likely' means to a > 90% assessed probability of occurrence.

² As well as define as conceptual and practical benchmark of change a new notion of human welfare where environmental sustainability features prominently.

³ Foreword to *100 Places to Go Before They Disappear* (Abrams, 2011)

⁴ P. Aerni et al, 'Climate Change, Human Rights and International Economic Law: Exploring the Linkages between Human Rights, Trade and Investment' (2010) *German Yearbook of International Law*, Volume 53, 139.

While the intricate interest tangle makes it particularly difficult to find the momentum for concertation at the international level (where the key actors are the US and China), action must repose at the national and sub-national levels. In a globalized world, the differences of independent domestic actions can cause interface problems and economic frictions.

⁵ N Stern, *The Economics of Climate Change: Stern Review* (Cambridge: Cambridge University Press, 2007).

⁶ Among the latest authoritative statements, see the *IPCC Special Report on Renewable Energy Sources (SRRES)*, 31st May 2011. See also the *World Energy Outlook 2010*, International Energy Agency.

⁷ According to a recent report of the American National Academy of Science (May 2011), 83% of US emissions come from energy. The Stern Report shows that, as of the year 2000, showed that of global GHGs emissions, mostly CO₂, 65% were attributable to energy (with the remaining 35% deriving from agriculture, 14%, land use, 18%, and waste, 3%).

possibility of reducing and eventually replacing this dependency is a crucial element of any rational and effective action. A recent study of the IPCC suggests that, if sustained by the right policies, energy from renewable sources could satisfy all needs.⁸ The development of a renewable energy economy is probably the greatest opportunity for a global growth that is sustainable.

There are indeed some recent events which seem to hail the momentum. First, the financial and economic crisis has led to massive governmental investment worldwide with significant funds directed to the green economy and renewable energy in particular.⁹ On the other hand, the recent nuclear incidents in Japan are leading to a shift of public opinion and policy away from nuclear power, with potentially massive resources available for investment into renewable energy as alternatives to fossil fuel. Third, in September 2009 the G20 recognized that 'inefficient fossil fuel subsidies encourage wasteful consumption, distort markets, impede investment in clean energy sources and undermine efforts to deal with climate change' and committed to the reduction of fossil fuel in the medium term.¹⁰ The first assessment seems positive but there is still a long way to go.¹¹ Tackling climate change is difficult for both the massive magnitude of the problem and the strength of the conflicting interests affected by change. China's paradox is an excellent example. China is at the same time the biggest polluter (through its use of coal) and the biggest investor in clean energy, and it is not fully clear what, if any, will be capable of tipping the balance in favour of the latter.¹²

Trade and trade rules play a crucial role in the climate change and energy context. More trade in renewable technology and energy entails more efficiency to the ultimate benefit of the environment. On the other hand, as already noted, the development and deployment of renewable energy face significant obstacles that may warrant various forms of public support to sustain and complement the market. And these forms of support may run counter current WTO rules, particularly subsidy rules.

It is therefore crucial to assess whether WTO law is friendly towards these measures of support of renewable energy. The goal of this paper is to examine the current discipline of subsidies in the WTO to assess the degree of policy space or autonomy they confer Members. Against this goal, should it emerge that the current rules are too restrictive, options for law reform will be considered.

II. ARE RENEWABLE ENERGY SUBSIDIES GOOD OR BAD?

Renewable energy comes from renewable natural sources. The definition of renewable energy is broad, encompassing a varied and heterogenous group of

⁸ IPCC *Special Report on Renewable Energy Sources (SRRES)*, 31st May 2011. See also M Mendonça, *Feed-in Tariffs – Accelerating the Deployment of Renewable Energy* (London: Earthscan, 2007) xiv.

⁹ According to a UNEP report of September 2009, US\$3.1 trillion has been spent in global stimulus packages with approximately 15 percent green in nature. Although US\$250 billion in spending still identified as perverse subsidies to fossil fuels, a slightly lower amount (US\$ 200 billion) has been committed for the development of new technologies (Deutsche Bank Report, February 2009) with more than 250 policies adopted in support of alternative energy.

¹⁰ G-20 Leaders. *Leaders' statement: The Pittsburgh Summit*. Pittsburgh, PA, 24–25 September, 2009, available at <http://www.pittsburghsummit.gov/mediacenter/129639.htm> (last visited 3rd July 2011).

¹¹ K. Lang, 'The First Year of the G20-Commitment on Fossil-Fuel Subsidies: A commentary on lessons learned and path forward', January 2011, Global Subsidy Initiative for the International Institute for Sustainable Development.

¹² 'Can China go Green?', *The National Geographic*, June 2011 issue.

technologies.¹³ Several policies can be deployed to support a greener economy and renewable energy in particular.

The usual policy tool-box of incentive and disincentive measures comes into play. A tax can be imposed on carbon emissions. The disincentive to emit, and hence the incentive to be more efficient and invest in more cost-effective technologies (including renewable energy technologies) can also be achieved through market-based instruments where a price is put on emissions and linked to tradable permits. There are also various types of measures where economic resources are transferred to firms that invest in renewable energy or to consumers that buy it. Governments use grants, loans and loan guarantees, a variety of tax incentives (eg investment and production tax credits) and regulatory systems, particularly minimum quantitative requirements (like Renewable Portfolio Standards, fuel mandates or blending requirements) or pricing support (like Feed-In Tariffs), tendering and net metering.¹⁴ But is public support, in general and more specifically in the form of subsidization, needed? What are its effects? Is the desired goal to support renewable energy deployment achieved? In simple terms, are renewable energy subsidies 'good' or 'bad'?

Critics argue, often in general terms or sometimes distinguishing between measures, that subsidies, rather than removing distortions to the market functioning, add new ones, can encourage inefficiency and rent-seeking behaviour, when introduced are difficult to be removed, and are ultimately ineffective towards their stated aim to support renewable energy deployment, or more simply not needed in presence of altruistic and environmental friendly behaviour.¹⁵

The minimum lesson that can be drawn from this array of criticism is that, if granted, subsidies should be properly designed in relation to its objectives so that their incentive effect is maximized and its costs and distortions are kept to the minimum. But, more radically, there is a need to enquire with more precision, also on the basis of empirical results, such a negative stance towards renewable energy subsidies.

Standard economic analysis posits that public intervention is warranted whenever the market fails to provide desirable public goods or to tackle externalities of various kind. According to the Stern Report, climate change is the 'greatest and widest-ranging market failure ever seen'.¹⁶ It is indeed known that the development and deployment of renewable energy faces various obstacles which may justify the use of subsidies. With a common taxonomy, Wooders has recently summed up these in financial and market barriers, infrastructural and regulatory barriers, information-related barriers.¹⁷ These obstacles encompass the typical externality scenario of R&D and the relevant disincentive of firms from investing in innovation because other firms could free-ride and reap the benefits without sharing the costs. With the exception of biomass, another financial barrier is the high capital investment (as

¹³ According to the classification of the recent *IPCC Special Report on Renewable Energy Sources (SRRES)*, 31st May 2011, renewable energy, grouped by source, would comprise bioenergy, direct solar energy, geothermal energy, ocean energy and wind energy. In terms of use, these sources of renewable energy are used to produce electricity, thermal or mechanical energy and generate fuel.

¹⁴ For an explanation of these policies of support see M Mendonça, D Jacobs, and B Sovacool, *Powering the Green Economy – The feed-in tariff handbook* (London: Earthscan, 2010).

¹⁵ For a review of this literature see SZ Bidgeli, 'Resurrecting the dead? The Expired Non-Actionable Subsidies and the lingering question of "green space"' (2011) *Manchester Journal of International Economic Law*, forthcoming.

¹⁶ N Stern, *The Economics of Climate Change: Stern Review* (Cambridge: Cambridge University Press, 2007).

¹⁷ P. Wooders, 'Literature Review: Subsidies to Renewable Energy' (2011) NCCR Working Paper, 7; see also BJ Sovacool, 'The importance of comprehensiveness in renewable electricity and energy-efficiency policy' (2009) *Energy Policy*, 1529, 1530.

opposed to low input cost) required by renewable energy plants. The centralized character of existing grid-infrastructure is also a structural obstacle to the deployment of renewable energy which often requires small-scale technology, in remote locations and capable of handling large fluctuations of electricity generation. Lack of or incorrect information, as well as lack of social acceptance, are among other hindrances. Further, some renewable energy technologies, like some types of bioenergy or geothermal energy, are not technically mature or commercially available yet.¹⁸

One of the most significant obstacles to the development of renewable energy is constituted of the pricing externalities of renewable energy and fossil fuel. Indeed, neither the benefits of [renewable energy technologies] nor the true costs of fossil fuels are included in their prices, making [renewable energy electricity] relatively expensive and fossil fuel relatively cheap from a perspective of net societal good.¹⁹ In this regard, apart from the costs of high GHGs emissions, the costs of the massive and long-standing subsidization of fossil fuels should be considered.²⁰ In other words, it is the lack of internalization of these positive and negative externalities that is often making renewable energy less competitive than fossil fuel. Subsidies are thus granted to level the playing field. Any analysis of the various costs and effects of fossil fuels and their subsidization goes beyond the scope of this paper. Suffice underlining that one of the best policies in support of renewable energy, and to the more general benefit of the mitigation of climate change, would consist in the dramatic reduction – if not elimination – of the support to fossil fuel.²¹

This brief overview shows the quantity and complexity of the barriers to the steady deployment of renewable energy. All this justifies, at least in principle, public support. Certainly, however, it does indicate what type of support is best. Further, the complexity of the obstacles requires a comprehensive approach. Carefully designed and targeted subsidies can play a significant but only a partial role. The policy action in support of renewable energy should have a programmatic character where all individual policy tools work in synergy with each other.

It should also be noted that often, if not always, public action finds its justification in a mix of policy reasons. Three orders of policy objectives are generally put forward to support renewable energy: environmental goals connected to the mitigation of climate change, social and economic goals (like job creation and industry support), energy security. This complexity of goals is of importance not only when it comes to test the cost-effectiveness of the policy in relation to its aims but also in the context of its legal assessment.

The question of the desirability and effectiveness of public support to renewable energy is a question of *industrial policy*. Harvard economist Dani Rodrik has noted how in many respects the institutional framework is more important than the specific policy tool chosen.²² This does not certainly mean that the choice and design of the

¹⁸ IPCC Special Report on Renewable Energy Sources (SRRES), 31st May 2011.

¹⁹ P. Wooders, 'Literature Review: Subsidies to Renewable Energy' (2011) NCCR Working Paper, 8.

²⁰ See *Untold Billions: Fossil-fuel subsidies, their impacts and the path to reform*, a series of papers produced in April 2010 by the Global Subsidy Initiative of the International Institute for Sustainable Development.

²¹ See, inter alia, BJ Sovacool, 'The importance of comprehensiveness in renewable electricity and energy-efficiency policy' (2009) *Energy Policy*, 1529, 1532. In this regard it is interesting to note the proposal to link the issue of fossil fuel subsidization to the negotiations on Environmental Good or Service (EGS), considering fossil fuel subsidies as non-tariff barriers to the circulation of renewable energy as an EGS. See R. Howse, 'Climate Change Mitigation Subsidies and the WTO Legal Framework: A Policy Analysis', 2010, International Institute for Sustainable Development, 22-23.

²² D. Rodrik, *Industrial Policy for the XXIst century*, September 2004 version.

instrument of intervention is not relevant.²³ But that certain conditions of the institutional and procedural framework are of essential importance for the success of *any* policy intervention. Rodrik identified information and coordination externalities as the two biggest obstacles to industrial policy. This is certainly true for renewable energy too. Two of the policy prescriptions indicated are that policies should be targeted on activities rather than sectors, and that, since market failures (and hence the policies to target them) may be difficult to identify and quantify, private and public should cooperate in a discovery process.²⁴

In sum, the main guidelines for a sound and effective policy of support of renewable energy are *proper institutional framework, comprehensive and synergetic policy programme and careful design of the measures of support* (including subsidies).

After laying down the more conceptual and framework analysis, we can now make more specific comments on the measures of support of renewable energy, largely based on their empirical results.

If properly designed, carbon taxes or market-based mechanisms are more cost-effective in terms of GHGs offset.²⁵ The second-best solution of subsidies is however often more attractive. Rather than imposing a cost on emissions and on the polluting activity, subsidies confer an economic advantage. Industry consultants note that quite often it is not return on investment that determines whether to invest in the green economy or not but the existence of public support.²⁶

Subsidies to renewable energy can operate at different stages, supporting capital and research and development (R&D), or production (at the level of equipment, inputs, installation, generation, etc). R&D subsidies are generally viewed positively, provided that they are subject to conditions that ensure they are not distracted from their intended use and the research results are disseminated.²⁷ Subsidies in support of production, which may take various forms, are subject to most criticism, being regarded as the most economically distorting.²⁸ There is however good evidence that they may be important in ensuring the steady deployment of renewable energy technology and energy.²⁹

²³ The quest for better policy is continuous. In this regard, the ultimate choice is not between incentive or disincentive schemes. Whatever its classification, each and every policy tool should incorporate a 'stick' as well as a 'carrot' to ensure that the proposed goal is achieved.

²⁴ 'Hence the right way of thinking of industrial policy is as a discovery process—one where firms and the government learn about underlying costs and opportunities and engage in strategic coordination. The traditional arguments against industrial policy lose much of their force when we view industrial policy in these terms. For example, the typical riposte about governments' inability to pick winners becomes irrelevant. Yes, the government has imperfect information, but as I shall argue, so does the private sector. It is the information externalities generated by ignorance in the private sector that creates a useful public role—even when the public sector has worse information than the private sector. Similarly, the idea that governments need to keep private firms at arms' length to minimize corruption and rent-seeking gets turned on its head. Yes, the government needs to maintain its autonomy from private interests. But it can elicit useful information from the private sector only when it is engaged in an ongoing relationship with it—a situation that has been termed "embedded autonomy" by the sociologist Peter Evans (1995)': D Rodrik, *Industrial Policy for the XXIst century*, 3-4.

²⁵ See, eg, P Wooders, 'Literature Review: Subsidies to Renewable Energy' (2011) NCCR Working Paper, para 3.2.i. See *ibid* for a review of the literature on the cost-effectiveness of various measures of support of renewable energy.

²⁶ Comment of Peter Hsiao, partner at Morrisson and Foerster LLP at the ABA-LSE conference on 'Navigating the new green economy: the challenges of climate change and the opportunities for clean energy', London, 23 May 2011.

²⁷ It is noted that money is fungible and there is no guarantee that it will be used for the desired objective. Further, results should be disseminated to maximize the positive spillovers. AO Sykes, 'The Economics of WTO Rules on Subsidies and Countervailing Measures', May 2003, John M. Olin Law and Economics Working Paper No. 186 (2d series), 22-23.

²⁸ In effect subsidies that support demand for technology and energy, at both distribution and final consumption, support production.

²⁹ IPCC *Special Report on Renewable Energy Sources (SRRES)*, 31st May 2011.

With respect to the effectiveness of specific types of support measures, feed-in tariffs (FITs), which provide for a fixed minimum price for renewable energy electricity, often combined with a purchase obligation, seems to be particularly cost-effective.³⁰ They are the policy tool behind the success of the renewable energy sector in Germany, Spain, Denmark and other countries.³¹ Other types of support, like tax incentives and minimum quantitative requirements, also seems to have produced commendable results in boosting renewable energy but, overall, it seems to early to provide definite conclusions.³²

The main lesson coming from empirical studies is that the effectiveness of the measure of support seems to ultimately depend on the specifics of the case, and crucially on the design of the measure and its synergy with other policies.³³ It does not seem correct therefore to predicate in general terms that one type of subsidy is better (or worse) than another if crucial factors like its actual design, the context in which it operates and the interaction with other policy instruments are not factored in.³⁴ What in theory and isolation may seem distorting, may turn desirable in the actual context of the real scenario.

What comes out from the practice and studies is that, to be cost-effective, subsidies should be *as much targeted as possible*. The precision of the target (activity, technology, etc), subject to continuous monitoring and adjustment, is pivotal in addressing the relevant market failure. Using legalese, this means that policy prescriptions point in favour of using discriminatory measures of support. This, it can be anticipated, will result crucial in the legal assessment and in the determination of the policy autonomy left by the normative framework.

Subsidies in support to renewable energy can also be evaluated in terms of the *distortions* they produce. It has been noted how economic theory teaches that production subsidies are the most economically distortive, followed by subsidies for capital and R&D, and finally subsidies supporting demand.³⁵ But trade distortion is

³⁰ See P. Wooders, 'Literature Review: Subsidies to Renewable Energy' (2011) NCCR Working Paper, para 3.2.i.

³¹ The pioneering case of Germany is instructive. The use of renewables prevented the emission of 83 million tonnes of CO₂ in 2005 only. Official figures (German Federal Environment Ministry) show that in 2006 renewable's share of total electricity consumed in the country amounted to 11,8 %. In the same year, the renewable energy industry generated a turnover of €21.6 billion and employed 214,000 people. Figures in relation to following years are higher (in 2008 the sector's turnover rose to €30 billion and employment to almost 300,000). These figures, which are set to rise continuously, show how a sound renewable energy policy can be good for both the environment and the economy.

Spain and Denmark are two other good examples. Denmark, for example, generates 20% of its electricity from wind power only. See Mendonça, *Feed-In Tariffs: Accelerating the Deployment of Renewable Energy* (EarthScan, 2007).

³² P. Wooders, 'Literature Review: Subsidies to Renewable Energy' (2011) NCCR Working Paper, conclusions.

³³ *Ibid.*

³⁴ Hence, to say that production subsidies are more economically distorting than capital formation or R&D is partial. Context, broadly intended, matters, much more than the effects of a measure considered in isolation. In the bigger picture, any measure in support of renewable energy should also be coupled with reduction of fossil fuel subsidies and promotion of energy efficiency. See *IPCC Special Report on Renewable Energy Sources (SRRES)*, 31st May 2011.

³⁵ See Steenblink, 'Subsidies in the traditional energy sector' in J. Pauwelyn (ed), *Global Challenges at the Intersection of Trade, Energy and the Environment* (Geneva: Centre for Trade and Economic Integration, 2010) 186, who seems to be using a quite broad concept of production subsidies, broad enough to cover many of the measures of support currently used: 'In terms of producer subsidies, the most economically distorting are those that are directly linked to production, or that support the price of the commodity itself, and that are linked to the use of an input. Included among these policies are government requirements that particular classes of domestic users, usually electric utilities, consume a minimum amount of a particular fuel. Such forms of support are generally provided to producers that have higher cost structures than their foreign competitors. They used to be common for coal in Europe and Japan, and are now more common for renewable energy. Somewhat less distorting are government policies that support capital formation in an industry. ... Many countries also spend public money on R&D supporting their domestic fossil-fuel industries, and on geological surveys to help identify new hydrocarbon deposits. Support for capital formation, through subsidised credit and direct subsidies for capital equipment, and government expenditure on R&D, are also among the two categories of subsidies most commonly provided to the nuclear power industry.'

not necessarily the ultimate baseline. If it is accepted that public support is needed to complement market and that certain subsidies are cost-effective in achieving the desired goal, certain distortions should be accepted. Subsidies do come at a price. The question is whether this price is worth being paid. What underlies any policy decision and any legal compromise is a *trade-off*. Economic distortions are accepted if it is expected that the benefits will be greater. Clearly, there is no precision or inevitability in where the line is drawn. Sound policy practice requires regular monitoring of the effects of the measure and, if necessary, changes and adjustment. The main difficulty however comes when negative and positive effects are produced in different countries since transnational trade-offs are difficult to be made and accepted.

Finally, subsidies should be *transitional*. To avoid opportunistic behaviour, unnecessary distortions and spending, they should be granted only insofar as they are necessary to produce the incentive effect and only until the market failure justifying them is present.³⁶ Clearly, this is not a science, particularly if what is at issue is the determination of the exact amount of the subsidy. The good practice of continuous monitoring outlined above will assist in tuning the subsidy to the changing needs and removing it when it becomes unnecessary.

III. WTO SUBSIDY DISCIPLINE AND THE QUESTION OF POLICY SPACE

After outlining the economic background of the measures of support of renewable energy, in this section we analyze the current subsidy discipline and seek to assess the degree of autonomy, or policy space, they leave to Members.

After a brief exposition of the main rules applying to subsidies in the WTO, we analyze the steps of the legal analysis that need to be followed to determine whether a certain form of renewable energy support does amount to an objectionable subsidy. We first address the issue of whether tax incentives and quantitative and pricing requirements can constitute a form of financial contribution or of price support. For its complexity and relevance, this will constitute the main part of the section. The focus then shifts to the difficulties of the determination of the benefit in the (renewable) energy sector. We finally jointly address the specificity test and the adverse effects. We conclude the section with a paragraph delving on the case of discriminatory subsidies.

A. An overview of the rules

The Agreement on Subsidies and Countervailing Measures (SCM Agreement) develops the 'unilateral' and 'multilateral tracks' of Articles VI and XVI of the General Agreement on Tariffs and Trade (GATT) by providing detailed rules on i) the power to unilaterally impose duties to counteract subsidized imports, and ii) the obligations on WTO Members when granting subsidies that cause cross-border effects.

The legal analysis of a measure of support under WTO subsidy rules follows certain steps.

It is first necessary to determine whether the measure is a subsidy. It is important to immediately note that this legal definition does not necessarily coincide with any economic notion of subsidy, predicated on the basis of the economic effects of the

³⁶ The recent US debate on ethanol subsidies is instructive. Eventually Senate voted to keep them but there were dissenting voices, the main motive was budget pressure but arguments were made on whether there was a real need to provide extra support to ethanol which already benefits from quantitative requirements and import tariff. See <http://www.nationaljournal.com/energy/insiders-say-ethanol-subsidies-should-go-split-on-how-quickly-20110614?page=1>, last access 29th June 2011.

conduct of the government, but rests on the presence of well-identifiable (albeit not always clear) legal requirements.³⁷ The definition of subsidy can be found in Article 1 of the SCM Agreement which provides that a subsidy shall be deemed to exist if there is a 'financial contribution' by the government or 'any form of income or price support' and, as a result, a 'benefit' is conferred.

The second step of the analysis is the specificity test under Article 2 of the ASCM. This means that, in order to be actionable or countervailable, the subsidy needs to be 'specific' to certain enterprises or industries. Once it has been established that the measure constitutes a specific subsidy, it is necessary to assess whether it causes 'adverse effects' to the interests of one Member or 'material injury' to the domestic industry of a Member (the third step).³⁸ If this is the case, the subsidy will respectively be actionable before the WTO dispute settlement (and should be withdrawn or its effects removed) or countervailable 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. There is no need to prove specificity or negative effects, and, if granted, the only alternative is withdrawal.

This is not the final step of the analysis though. An otherwise objectionable subsidy could crucially be justified if the legal system provides some form of exception or carve-out. We analyze this issue below in sections IV and V.

B. Form of governmental action: the case of tax incentives and regulatory measures

The first question is the determination of whether the measure of support at issue constitutes a subsidy under the SCM Agreement. The first step of the legal analysis is whether this measure does constitute 'a financial contribution by a government or any public body' (which should be intended to include any public body with regulatory powers)³⁹ or 'any form of income or price support'.

According to Article 1.1(a)(1), a financial contribution exists if

- (i) a government practice involves a direct transfer of funds (e.g. grants, loans, and equity infusion), potential direct transfers of funds or liabilities (e.g. loan guarantees);
- (ii) government revenue that is otherwise due is foregone or not collected (e.g. fiscal incentives such as tax credits) [footnote omitted];
- (iii) a government provides goods or services other than general infrastructure, or purchases goods;
- (iv) a government makes payments to a funding mechanism, or entrusts or directs a private body to carry out one or more of the type of functions illustrated in (i) to (iii) above which would normally be vested in the government and the practice, in no real sense, differs from practices normally followed by governments; While forms of support of renewable energy like grants, loans or guarantees do not raise any particular issue, and readily amount to 'transfer of funds' under letter (i), it is the legal classification of tax incentives and regulatory measures that poses more problems and thus deserves more attention. These represent indeed two good case-studies to test the amount of policy space granted by the definition of subsidy for renewable energy measures.

³⁷ See Panel, *US – Export Restraints*. On the various issues raised by the definition of a subsidy, see Rubini (2009).

³⁸ 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.

³⁹ See Appellate Body, *US – AD/CVD*, paras. 282 et seq.

Tax incentives: the quest for the general norm, the role of the objectives

We commence with tax incentives, which include tax exemptions, tax credits and any other form of favourable tax treatment,⁴⁰ by firstly outlining the conceptual framework of analysis and then testing it with few examples.

What is 'otherwise due'? Inherent instability and objectives scrutiny

According to letter (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 which would otherwise be due. As shown by the famous *US – Foreign Sales Corporation (FSC)* litigation, this determination is inherently unstable because of the difficulties of the 'otherwise due' language. (It has even been suggested that, in *US – FSC*, the panels and the Appellate Body used no less than four different tests to approach this language.⁴¹) The fact is that determining what is 'otherwise due' requires a complex counterfactual analysis that ultimately rests on whether the measure under examination is a derogation⁴⁰ from the otherwise (sic) applicable benchmark norm. This is a two-step analysis. First, the normative benchmark has to be identified – which is the real crux of the problem. Second, the tax measure has to be compared against this benchmark. It is the convergence with or divergence from this baseline that will eventually tell whether there is a financial contribution.

But how can we identify the relevant norm in the field? How can we determine what is general and what is exception? Taxation, in particular, is notorious for targeted interventions and fast-changing pace. As a result, complexity is pervasive and coherency is rarely reached. The search for the general tax rule is therefore often difficult. That said, what should be avoided are mechanical approaches and formalistic tests. This is the crux of the criticism of the 'but for' test. As the Appellate Body warned in *US – FSC*, apart from the possibility to give wrong results, a formalistic test like the 'but for' test may be easy to circumvent.⁴²

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 rule or in fact constitutes a deviation from it. Only a substantive analysis does justice to the counterfactual analysis of the 'otherwise due' criterion. Now, to look at the substance of norms crucially 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 rule, there are no alternative scenarios which have not been considered or have been deviated

⁴⁰ While tax exemptions involve a dispensation from tax liability, tax credits operate as offsets against tax owed. Although they operate differently they both result in the collection of less fiscal revenue, the only exception being refundable tax credits (see note 54 below). Tax incentives can affect direct taxation (like income tax) or indirect taxation (like VAT, sales or excise taxes) alike.

⁴¹ Rubini (2009) 263-274.

⁴² Appellate Body, *US – FSC*, paragraph 91: 'we would have particular misgivings about using a 'but for' test if its application were limited to situations where there actually existed an alternative measure, under which the revenues in question would be taxed, absent the contested measure. It would, we believe, not be difficult to circumvent such a test by designing a tax regime under which there would be no general rule that applied formally to the revenues in question, absent the contested measures'. See also Appellate Body, *US – FSC (Article 21.5 DSU)*, paragraph 91. In a nutshell, the crucial warning is that the 'otherwise due' analysis should not rely only on a mechanical process of exclusion which would work only if there is a clear alternative in the system which would formally have applied in the absence of the contested measure.

from (this is what the 'otherwise due' terminology indicates), and there is no financial contribution.

The reference to the objectives of the measure when it comes to assess whether a certain provision has been breached or not is not new. The controversy surrounding the ill-fated 'aims-and-effects' doctrine under Article III of the GATT is known.⁴³ The understandable fear of the critics of this approach was that *any* allegation based on the legitimacy of the public policy goals of the tax and regulatory measure could pass muster and totally exclude discriminatory conduct from the scope of a crucial GATT obligation. Despite the awareness of this danger, the Appellate Body has not rejected that objectives can play a useful role in the analysis of the differential treatment under Article III of the GATT. It has simply ring-fenced such analysis and excluded that each and every argument based on any objective could be relevant. The key is distinguishing. The consideration of certain objectives may be appropriate, that of others not. And this distinction crucially depends on the relation between objective and measure.

This is the message conveyed in *Japan - Alcohol II* and *Chile - Alcohol* when the Appellate Body famously noted that [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 affords protection to domestic products. Although it is true that the aim of a measure may not be easily ascertained, nevertheless its protective application can most often be discerned from the design, the architecture, and the revealing structure of a measure⁴⁴ and that [t]he *subjective* intentions inhabiting the minds of individual legislators or regulators do not bear upon the inquiry, if only because they are not accessible to treaty interpreters. It does not follow, however, that the statutory purposes or objectives - that is, the purpose or objectives of a Member's legislature and government as a whole - to the extent that they are given *objective* expression in the statute itself, are not pertinent.⁴⁵ Interestingly, as a true testament of how the role of the objectives is controversial in the analysis of various provisions, in *EC - Aircraft* the Appellate Body has recently confirmed its approach in the context of the interpretation of the specificity standard of *de facto* export contingency. While rejecting the Panel's emphasis on the reasons for the measure to prove export contingency, the Appellate Body however noted that while the standard for *de facto* export contingency cannot be satisfied by the subjective motivation of the granting government, objectively reviewable expressions of a government's policy objectives for granting a subsidy may, however, constitute relevant evidence in an inquiry into whether a subsidy is geared to induce the promotion of future export performance by the recipient.⁴⁶

Indeed, the examination of the objectives of the measure is present in several GATT/WTO provisions. In some cases, it does constitute the subject matter itself of the analysis. This occurs with justifications, like Article XX of the GATT and its progeny. In other cases, like Article III of the GATT, the analysis of the objectives constitutes one important but circumscribed aspect of a broader assessment.

⁴³ See eg R Hudec, 'GATT/WTO Constraints on National Regulation: Requiem for an "Aims and Effects Test"' (1998) International Lawyer 619.

See DS 381, US - Tuna Labeling - 8th June 2011 (<http://worldtradelaw.typepad.com/ielpblog/2011/01/the-role-of-intent-in-wto-non-discrimination-obligations.html>)

⁴⁴ Appellate Body, *Japan - Alcohol II*, page 29.

⁴⁵ Appellate Body, *Chile - Alcohol*, paragraph 62.

⁴⁶ Paragraphs 1050. See also, L. Rubini, *The Definition of Subsidy and State Aid - WTO and EC Law in Comparative Perspective* (Oxford: Oxford University Press, 2009) 375.

In subsidy law, in common with other provisions regulating economic conduct, much turns on the specific provisions and their elements and on the steps of the analysis. As noted above, the objectives pursued by the measure may be a useful indicator of whether differential taxation is in fact justified or of whether a subsidy is specific or not. By contrast, as we are about to see, the assessment of market scenarios, which is typical of the determination of whether the subsidy confers a benefit, does not seem to leave room to non-commercial considerations, the only relevant perspective being that of a comparable private investor in the same circumstances. Even more strictly, the evaluation of the effects on trade does fully abstract from aims and expectations of whatever, even commercial, nature, and is just limited to the actual, potential or presumed effects of the subsidy – and, crucially, to the negative ones only. The natural place for assessing a potentially broad group of socio-economic objectives, and balancing them with the detrimental effects on trade, then becomes that of any exception or justification provision.

Some inspiration from the EU

At the time of writing, in the WTO, there is no case law on the role played by objectives in the subsidy analysis of tax measures. It is therefore difficult to provide any guidance on how this issue will be approached when testing tax incentives in support of renewable energy. It can however be safely expected that future litigation on the ‘otherwise due’ requirement will have to focus on this issue. Indeed the kind of analysis evoked by 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 thus be found in the rich EU case-law and practice in the State aid field. Reference is in particular made to the justification of the ‘logic of the system’ for tax and (some) regulatory measures.

Since the seminal *Italy v Commission* case of the European Court of Justice of 1974, the same tension of the GATT ‘aims-and-effect’ debate can be found in the case law on the definition of State aid (which, in EU law jargon, corresponds to subsidy in the WTO). On the one hand, it is consistently repeated that the 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. It is thus noted that a finding of differential treatment does not necessarily lead to a State aid determination if it can be explained by the ‘logic on the system’. As an application of the general principle of equality, this requires the analysis of whether, in light of the objective of the measure, situations that are in law and in fact comparable are treated in a comparable manner.⁴⁷ This principle has been arguably followed also by the Appellate Body in the *US – FSC* case when it concluded 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’.⁴⁸

The EU jurisprudence on the justification of the logic of the system highlights two points. First, only those objectives that are inherent in the type of measure at issue,

⁴⁷ The Court noted that to conclude that we have a State aid, we have to establish whether a State measure favours certain undertakings ‘in comparison with other undertakings which are in a legal and factual situation that is comparable in the light of the objective pursued by the measure in question’ (Case C-143/99, *Adria-Wien*, paragraph 41).

⁴⁸ Appellate Body, *US – FSC (Article 21.5 DSU)*, para. 91.

their true justification, can matter in a State aid determination. So, for example, any distinction or differential treatment introduced by an energy tax should be assessed only on the basis of the environmental objective it pursues, ie pollution reduction. This is not the case for those objectives that are not directly linked to the natural purpose of the tax but rather pursue different policy objectives, that are, so to speak, externally assigned. Following the previous energy tax example, exemptions from the tax burden justified by competitiveness concerns would clearly be extraneous to this assessment. This distinction between 'internal' and 'external' objectives is the fundamental divide to determine whether a tax measure with a differential treatment or impact is ultimately a subsidy or not.⁴⁹ Second, the assessment of the objective at the level of the definition of State aid involves what is essentially a *proportionality* test. This means that it does not suffice to plead the objective of the measure to justify any sort of differential treatment, design or coverage. The discipline must be designed in true pursuit of that objective and any distinction should be capable of being objectively explained in its light.

Thus, in *Adria-Wien* the Court of Justice concluded that an exemption from an energy tax in favour of undertakings of the manufacturing sector (and excluding those in the service sector) was not justified by the alleged environmental goal of the tax. In light of the environmental objective of the energy tax at issue, the distinction between manufacturing and service sectors was not tenable.⁵⁰ On the one hand, service undertakings may, just like undertakings manufacturing goods, be major consumers of energy. On the other hand, energy consumption, whether it originates from manufacturing or service activities, is equally damaging to the environment. 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.

In the *British Aggregates* decision the Court of Justice clarified its case-law further. What was at issue was a UK environmental levy on aggregates which had as main objective the reduction and rationalization of the extraction of mineral commonly used as aggregates. To incentivize the replacement of virgin materials, an exemption was granted to recycled products or by-products or waste products from other processes. Crucially, the tax did not apply also to the same minerals if they were not used as aggregates. The first exemption was justified by 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 extracting sectors). The Court of First Instance concluded that these exemptions did not constitute State aid. What is interesting though is not the conclusion but the reasoning used by the Court to reach it. After saying that in the absence of coordination, it is for Member States to act in the field of environmental law, the Court noted:

Member States are free, in balancing the various interests involved, to set their priorities as regards the protection of the environment and, as a result, to determine which goods or services they are to decide to subject to an environmental levy. It follows that, in principle, the mere fact that an environmental levy constitutes a specific measure, which extends to certain designated goods or services, and cannot be seen as part of an overall system of taxation which applies to all similar activities which have a comparable impact on the environment, does not mean that similar activities, which are not subject to the levy, benefit from a selective advantage.⁵¹

⁴⁹ The distinction can be found in the Commission Notice on the application of the State aid rules to measures relating to direct business taxation, OJ C384, 10.12.1998, 3.

⁵⁰ *Ibi*, paragraphs 50 and 52.

⁵¹ Case T-210/02 *British Aggregates*, paragraph 115.

What the Court is saying is not simply that, in the absence of measures of harmonization, Member States may set their priorities with respect to environmental protection. The Court of First Instance is more fundamentally entitling Member States to design their environmental tax system in a selective way, to discriminate which goods or services are covered by the tax and which are excluded. This means that, although the objective of the tax is to tackle a certain damage to the environment, an environmental tax should not necessarily have to apply to all situations that similarly produce a comparable negative impact on the environment. In the British Aggregates case, this for example meant that what was relevant to the application of the environmental tax was not the extraction of certain minerals but rather their following use as aggregates or not.

This conclusion, which grants a considerable, virtually unlimited, autonomy in the design of environmental taxation, was on appeal heavily criticized by both Advocate General Mengozzi and the Court of Justice. The essence of the criticism is that the Court of First Instance had abandoned an objective approach to the notion of State aid, approving the tax solely on the basis of its stated environmental objective and granting an undue discretion to Member States and the Commission to define what constitutes a State aid. The tax should have rather been scrutinized to determine whether it was properly structured around that objective. The finding that Member States are free to set their priorities and balance all various interests concerned is to a large extent correct. What is more troublesome is that they can introduce a tax measure that does not apply to all similar activities that are comparable. Once a certain objective has been chosen a certain degree of rationality is requested, and this should first of all be reflected in the coverage of the measure.

What, in our opinion, is not however fully warranted, and is crucial for the actual definition of policy space, is the step that would logically follow from a simple *a contrario* argument:

if an environmental tax that does not apply to all similar activities that have a comparable impact on the environment is not acceptable, this then means that it should apply to all such activities, without distinctions and qualifications.

In other words, one could be tempted into concluding that the statements 'you cannot discriminate' and 'you must always treat all comparable situations equally' are one and the same. This is not correct however. There is a slight but crucial difference. The meaning of general coverage or application is ambiguous. Without conferring an arbitrary discretion, which was chastized in *British Aggregates*, a selective, sectoral or progressive approach may be justifiable in light of *objective* considerations such as degree of risk or source of damage 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.

The question of coverage is key for policy space and a proper design of tax incentives under subsidy laws. How far shall 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 does not answer these key questions. We do not find a comprehensive analysis of the factual and legal scenario affecting all similar activities that produce a similar impact targeted by the broad objective of the measure. The cases usually focus on whether the exclusion from the coverage of the system of certain defined goods, services or activities identified in the complaint was legitimate. Claims and defences are specific thus delimiting the boundaries of litigation and the resulting findings.

Further, the other parameters of the measure which delimit its application, such as the limitation of a cap-and-trade system to certain GHGs only, are not questioned.

Crucially, we do not find a *positive and sweeping statement* that *all* comparable situations *must be treated equally*. One thus wonders whether it could be argued that *comparable* treatment does not necessarily mean *equal* treatment. From a broader perspective, going beyond the tax or regulation under examination, it may be that certain comparable goods, services, activities are already subject to a comparable tax or regulation producing a similar effect.

The design of emission trading systems have provided interesting case-law in this respect. In the *Dutch NOx* case the Court of First Instance had to decide whether the Dutch emission trading system for nitrogen oxides (NOx) did constitute State aid.⁵² The core issue is similar to *British Aggregates* and revolves around the definition of the material scope of the state measures – a cap-and-trade system here, an environmental tax there. The 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 *Dutch Nox* we see the same difference of positions of *British Aggregates*. The Court of First Instance concluded that the significant emissions of Nox produced by the undertakings consuming more than 20 MWth and the fact only them had to comply with a strict emission standard, on pain of fine, was sufficient to distinguish them from those undertakings which were not covered by the system. This conclusion was rejected by Advocate General Mengozzi which noted that, from the perspective of the environmental objective of the scheme, ie the reduction of NOx emissions, all installations based in the Netherlands are comparable. NOx emissions pollute irrespective of the size of the installations that produce them.

These cases (*British Aggregates* and *Dutch NOx*) are instructive because they show the tension between two different approaches. On the one hand, a very deferential and flexible one, where a vague reference to the objective of environmental protection is sufficient to justify differentiations. On the other one, a more rigorous approach which would like to see a clearer link between objective and scope of the measure. As has been suggested, however, important questions on the possibility to define the scope of application of a tax remain open.

The coverage of emissions trading system, and in particular of the criteria that can be legitimately used to determine which activities are covered and which not, was under examination in the *Arcelor* case. This is not a State aid case but a judicial review action where what was under scrutiny was the legality of the EU, and not a national, emission trading system under Directive 2003/87/EC was at issue. The EU emission trading system is credited for being very innovative being probably the first of its type in the world. The Directive adopted a step-by-step approach and excluded the chemical and the non-ferrous metal sectors from its application. Did this exclusion amount to a breach of the general principle of equal treatment or could be justified by the objectives of the Directive? Both Advocate General Maduro and the Court provided a thorough analysis of the scope of the measure, in light of its objective (environmental protection) and the principle of equal treatment. In particular, it was crucially noted that, the complexity and novelty of the allowance trading scheme fully justified a step-by-step approach and, in this regard, certain sectors could be excluded provided however that these decisions were based on ‘objective criteria’

⁵² Case T-233/04 *Netherlands v Commission* (‘Dutch Nox’) [2008] ECR II-591 (on appeal, Case C-279/08P, see Opinion of the Advocate General delivered on 22 December 2010)

based on technical and scientific information available at the time of adoption of the measure, the impact of the greenhouse effect certainly being one of them.⁵³

Further applications

We have outlined the conceptual and practical difficulties of the determination of whether a tax incentive represents a financial contribution, also by resorting to the EU case-law on the notion of State aid. It can be expected that the same issues, arguments and possibly solutions will soon appear before the WTO dispute settlement. We now apply the results of the analysis to a couple of examples of tax incentives in the renewable energy sector. This exercise will enrich our understanding of the subsidy status of tax incentives for policy space.

One good example of the role played by the objectives of the tax measure to determine whether a given incentive is a subsidy is that of the US 'black liquor' tax credit. The 2005 Federal Highway Bill introduced a fuel tax credit to promote the use of ethanol and other biofuels in vehicles. Companies were eligible to a US\$ 0.50 tax credit for every gallon 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 as fuel to power its mills, known as 'black liquor'. In a 2008 ruling the Internal Revenue Service concluded that black liquor as an alternative fuel eligible to the Highway Bill tax credit and that, to qualify for the tax credit, alternative fuels only need to contain 0.1 percent of a taxable fuel. The economic impact of this extension was massive with paper companies receiving millions of dollars and this happening in a period of crisis for the industry.⁵⁴ In 2009 alone, the US pulp industry received billions of US dollars from this tax credit (estimates indicate benefits of up to US\$8 billions), more than any other industry apart from the auto sector.⁵⁵ One company alone, International Paper, received as much as US\$3.7 billions.⁵⁶ The frequent assimilation of 'black liquor' with 'gold' can be understood.

⁵³ Case C-127/07 *Arcelor*, para 63. In particular Advocate General Maduro noted: 'It is, then, in the very nature of legislative experimentation that tension with the principle of equal treatment should arise. The very idea of "learning by doing" requires that the new policy be applied to only a limited number of its potential subjects to begin with. As a result, the scope of the policy is artificially circumscribed so that its consequences can be tested before its rules are extended, if appropriate, to all operators who might, in the light of its objectives, be subject to it. That said, recognition of the legitimacy of legislative experimentation cannot invalidate any criticism that might be levelled against it from the point of view of the principle of equal treatment. The discrimination which experimental legislation inevitably entails is compatible with the principle of equal treatment only if certain conditions are satisfied' (para 46 of the Opinion). These conditions are: the transitory nature of the experimental measures and the respect of objective criteria (the impact on the greenhouse effect certainly being an objective benchmark in this regard).

⁵⁴ *Papermakers Dig Deep in Highway Bill To Hit Gold*, The Washington Post, 28 March 2009, available at: <http://www.washingtonpost.com/wp-dyn/content/article/2009/03/27/AR2009032703116.html> (last access 20th June 2011). Since this tax credit is refundable, money-losing companies could qualify for direct payments from the US revenue. Although tax credits are expressly named as one example of 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.

⁵⁵ 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, available at: http://www.washingtonpost.com/business/economy/paper-industry-pushed-further-into-the-black-by-black-liquor-tax-credits/2011/04/19/AFdkrMtE_story.html (last access 20th June 2011). The 'black liquor' subsidy not only caused controversy within the US but prompted Canada to grant a \$882 million to their domestic paper industry. See *The Black Liquor War*, The Wall Street Journal, 30th June 2009, available at: <http://online.wsj.com/article/SB124623488607866601.html#articleTabs%3Darticle> (last access 20th June 2011).

⁵⁶ *Papermakers Dig Deep in Highway Bill To Hit Gold*, see note 54 above.

This is an example of how the broadening of the eligibility to a tax credit, whether due to sloppiness of legal drafting or unwarranted administrative interpretation, resulted in a paradoxical result which clearly went beyond, indeed against the purpose of the tax incentive. The original goal of the Highway Bill tax credit was to boost the use of biofuels in the transport sector, later extended to cover non-mobile uses. The tax credit operated to create the necessary incentive to do this by requiring companies to blend biofuels with their fossil fuels. By using their own kind of biofuel – the ‘black liquor’ – for decades, pulp companies did not need any incentive to replace, even partially, fossil fuels. Not only the subsidy was not necessary. 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 percent), to their alternative fuel. They were therefore induced to alter their behaviour 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.⁵⁷

While the Highway Bill alternative fuel tax credit may well not have constituted a subsidy, particularly if it could be considered *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 escape the determination that it deviated from its logic 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.⁵⁸

Carbon taxes are one way to put a cost on GHGs emissions. Quite often the tax liability is limited through tax exemptions which should specifically/markedly 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 other more polluting. As the *British Aggregates* case show, this is indeed a common technique in environmental taxation, and beyond. However, Bigdeli noted that ‘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 CO₂ they emit’.⁵⁹ In other words, a carbon tax properly 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

⁵⁷ It has however been noted that ‘if the subsidy is taken away from the pulp producers, you end up with a policy that rewards (with subsidies) companies who were polluting a lot but improved a bit, whereas companies who were polluting very little, on their own accord, get no subsidies’, Simon Lester, ‘Trade and the Environment and Subsidies’, International Economic Law and Policy Blog, Worldtradelaw.net, 21 April 2009, available at <http://worldtradelaw.typepad.com/ielpblog/2009/04/trade-and-the-environment-and-subsidies-and-a-lot-more.html#comments> (last access 20th June 2011). It is however exactly the fact that these companies already ‘pollute very little’ which should make it difficult, from an environmental perspective, to justify public support. Lester predicted that the subsidy might simply change shape with the result that the final scenario would have begged the key question of this paper: ‘do subsidies to promote a cleaner environment violate trade rules?’.

⁵⁸ It did not therefore come as a surprise that a joint letter of Canada, the EU, Brazil and Chile demanded the US to end the tax incentive threatening 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’. As regards the alleged adverse effects, it was noted that the tax credit encouraged US companies to overproduce in a depressed market. *Black Liquor*, Schott’s Vocab, The New York Times, 11 June 2009, available at: <http://schott.blogs.nytimes.com/2009/06/11/black-liquor/> (last access 20th June 2011).

⁵⁹ S. Bigdeli, ‘Incentive Schemes to Promote Renewables and the WTO Law of Subsidies’ In S. Bigdeli, T. Cottier, and O. Nartova (eds.), *International trade regulation and the mitigation of climate change* (Cambridge: Cambridge University Press, 2009) 166.

that do not produce CO₂ or other GHGs emissions at all. Consequently, strictly speaking, no goods or activity should be exempt from the tax.

This is why tax exemptions are troublesome from a subsidy perspective. The marked differential treatment of a full exemption cannot be easily justified. Inasmuch as the mischief of the carbon tax – carbon pollution – is present, albeit to a more limited extent, an explicit and complete carve-out would be clearly found to constitute a derogation from the underlying norm that ‘the polluter must pay’. Bigdeli analyzed the case of the Swiss Climate Cent tax where CHF 0.0015 per litre were paid on gasoline and diesel with a full exemption for biofuels, and made comments along the previous line.⁶⁰ He also interestingly noted that, if we consider the emissions generated during the life cycle of biofuels, the Swiss tax exemption lead to a contradictory result. If the exemption is a subsidy this would be greater for biofuels with a bigger life cycle and hence more polluting.

Conclusive remarks

The previous analysis prompts few conclusive remarks. First, the subsidy status of renewable energy tax incentives is inherently uncertain. This does not ultimately depend on how the current WTO subsidy rules are drafted. Indeed, the laconic wording of the ‘otherwise due’ test is the simple and pure reproduction of the test which arguably underlies any subsidy determination.⁶¹ Arguably, it is difficult to think of a better formulation which could have been used. EU law on State aid 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.

Second, a determination of whether a given tax incentive constitutes a subsidy cannot escape the analysis and interplay of general rules and exceptions and, as has been explained, if this exercise pretends to be meaningful and look at the substance of things, it must interrogate the objectives underlying the measure and assess their relation with the design of the measure and the broader tax system. If the previous lengthy analysis could show something, it is that this is an ‘uncertain exercise with an uncertain outcome’,⁶² and one which may – inevitably – undermine the policy space Members have when decide to resort to (inherently complex) tax incentives.

Third, the design of a tax incentive can be difficult from the policy perspective of the attainment of the proposed objective. The analysis of the EU case-law and the examples above have also shown that the legal framework does arguably perform a disciplining function inasmuch as it ensures that the environmental goals of the tax are truly attained. In this regard, there is an interesting confluence between trade and environmental perspective.

Fourth, the legal assesement may be different from policy one. From a policy perspective, it may well be desirable to increase the incentive (and disincentive)

⁶⁰ Ibid, 166-167.

⁶¹ Which could be dubbed ‘derogation test’. See L. Rubini, *The Definition of Subsidy and State Aid – WTO and EC Law in Comparative Perspective* (Oxford: Oxford University Press, 2009), Chapter 9.

⁶² I am here paraphrasing the expression ‘difficult exercise with an uncertain outcome’ used by Advocate General Francis Jacobs in his Opinion in Case C-379/98 *PreussenElektra*, paragraph 157, when he justified the need to keep regulation outside the scope of State aid.

effects of tax by resorting to blunt techniques like tax exemptions. This is what economic analysis of section II above tells us. To be cost-effective, subsidies should be as much targeted and tailored to the objective as possible. Further, other reasons 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 a subsidy and what is not. This is undoubtedly a constraint on policy space.

Quantitative and pricing requirements: regulatory subsidies?

Some of the most common incentives for renewable energy are based on regulatory measures. For example, Members may decide to introduce *quantitative requirements*, such as renewable energy standards or blending requirements, or *pricing requirements*, such as feed-in tariffs. The goal of these *minimum* requirements is to raise demand for or prices of renewable energy sustaining its deployment.⁶³

The issue of whether regulatory measures do amount to subsidies has always been very controversial, representing a true 'elusive frontier'.⁶⁴ This is one of the cases where legal discourse is most clearly affected by broader constitutional and policy considerations. To define something as a subsidy means subjecting it to a certain type of control, rules, procedures, etc. Power allocation is dramatically affected. The need to answer the question 'Where and how should we draw the line with regulation?' also shows the divide between economic and legal analyses. From an economic perspective, regulatory measures do amount to subsidies if they produce the effects of subsidies, ie interfere with costs and prices to the benefit of a certain category. The legal notion of subsidy, however, is usually less inclusive and is the result of the balancing of various rationales: economic (what distorts), systemic (what are other applicable provisions) and policy (what is appropriate or not).

Regulation is often linked to the inner prerogatives of countries to define their domestic policies according to societal choices and preferences. This explains why trade laws are usually more deferential towards it, not interfering if foreign actors or factors are not discriminated against or if certain guidelines of rationality and proportionality are satisfied. This general deference explains why, in the context of subsidy laws, the possibility of including certain types of regulation in the concept of subsidy is rejected with arguments which only start from technical ground, for example the given language of subsidy definition, but then largely depend on justifications of policy or even principle.

As noted above, according to Article 1 of the SCM Agreement, a subsidy exists if there is a financial contribution by the government. This in turn may consist of the purchase of goods or services by the government itself or by a third party entrusted with or directed by the government (under the combined application of letters (ii) and (iv) of Article 1.1(a)(1) of the SCM Agreement). In the latter case, letter (iv) hastens to add that the 'function' of purchasing goods or services should be one 'which would normally be vested in the government and the practice, in no real sense, differs from practices normally followed by governments'.

⁶³ This type of regulation can therefore be contrasted with for example lax environmental or labour standards which, as maximum ceilings, act to lower business costs.

⁶⁴ The question itself of what is regulation is far than clear. For an attempt to distinguish measures of 'financial assistance' from 'regulation', based on the complexity of the action and financial dimension, and on the prerogatives involved, c see L. Rubini, *The definition of subsidy and State aid*, 94-96.

While there has been some debate on the meaning of 'entrust' and 'direct', with a progressively more liberal approach prevailing,⁶⁵ the real gateway to regulation under the subsidy definition is represented by the interpretation of the two final provisos that require that 'function' and 'practice' should correspond to 'normal' governmental conduct. What is clear is the goal of limitation of these two provisions. Not everything which can be directed or entrusted can amount to a financial contribution.⁶⁶ These two sentences, however, do not indicate the boundaries with precision, quite the contrary. The construction of these two largely elliptical sentences *cannot* rest on arguments of *technical hermeneutics* but rather *policy hermeneutics*.⁶⁷ If the language of the provision highlights the need for limitation, logic prescribes *coherency*.⁶⁸ But, ultimately, the search for what is normal – first in the jurisdiction of the granting government, then in what governments generally do – is flexible enough to give precedence to decisions informed by broader *policy* – we could say *teleological* – considerations. 'Is it appropriate that regulation, or this type of regulation, be covered?' This judgment is not arbitrary. It depends, as noted above, on various considerations - economic, constitutional, systemic, etc – ultimately based on the *telos* of subsidy discipline within the broader *teloi* of the trade system.

In our view, it is this *policy hermeneutics* that underpins Howse's suggestion that the minimum price purchase requirement of a feed-in-tariff (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'.⁶⁹ Accepting the conclusion that the pricing law of feed-in-tariffs may not easily be caught under the precise concept of financial contribution of Article 1 of the SCM Agreement, Bigdeli then suggested that such a regulation could well constitute 'any form of price support' under the same provision.⁷⁰ With a clear expression of the said teleological hermeneutics, Howse replied:

*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.*⁷¹

This statement clearly shows the various policy arguments which outline the unique nature of regulatory measures such as feed-in tariffs, quotas and blending

⁶⁵ See Appellate Body, *US – DRAMS*.

⁶⁶ This has been masterfully expressed by Howse: '[t]he requirement that a private body be performing a normally governmental function guards against the possibility that *all* 'command-and-control' regulation, which directs private bodies and which always has *some* distributive effect as between different private economic actors, could be deemed as subsidy'; 'Post-Hearing Submission to the International Trade Commission: World Trade Law and Renewable Energy: The Case of Non-Tariff Measures', 5 May 2005, Renewable Energy and International Law Project, 22.

⁶⁷ We assume that technical and policy arguments can in fact be distinguished in interpretation, which is not necessarily the case.

⁶⁸ Thus, if the premise is that conduct under letter (iv) does not require a 'cost to government' (see Appellate Body, *Canada – Aircraft*, para 161), it is not then possible to interpret the two provisos with a language ('expenditure of revenue') which refers to the public origin of financing. See L. Rubini, *The definition of subsidy and State aid*, 144-145.

⁶⁹ R. Howse, 'Post-Hearing Submission to the International Trade Commission: World Trade Law and Renewable Energy: The Case of Non-Tariff Measures', 5 May 2005, Renewable Energy and International Law Project, 22 (emphasis in the original).

⁷⁰ S. Bigdeli, 'Incentive Schemes to Promote Renewables and the WTO Law of Subsidies' In S. Bigdeli, T. Cottier, and O. Nartova (eds.), *International trade regulation and the mitigation of climate change* (Cambridge: Cambridge University Press, 2009) 166,

⁷¹ R. Howse, 'Climate Change Mitigation Subsidies and the WTO Legal Framework: A Policy Analysis', 2010, International Institute for Sustainable Development, footnote 6.

requirements, which would justify their shelter from the intrusiveness of subsidy laws.

That said, it is clear that these measures are very similar to more traditional forms of subsidies and produce similar if not identical effects. Although appealing, Howse's distinction between 'delegation of function' and 'market regulation' is not, in our view, always an easy test to distinguish and classify public conduct.⁷² In the common version of FIT schemes, price regulation is strictly combined with a purchase obligation. In the context of the legal analysis of subsidy, it is however the mandate to buy energy that comes into play as candidate for the financial contribution.⁷³ What eventually determines whether this mandate is a subsidy is the possibility of classifying it as 'normal governmental practice of government'. This is an uncertain criterion which seems however to simply depend on the assessment of what governments commonly do.⁷⁴ It is this assessment - the argument would go - which defines whether we have a 'delegation of function' covered by subsidy rules or rather 'market regulation' not covered by subsidy rules.

Although the legal definition of subsidy does not rest only on the economic effects of the measure and does not encompass *any* type of conduct liable to produce similar effects,⁷⁵ a too restrictive and formalistic interpretation would appear to unreasonably distinguish like measures as well as 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* should be covered.⁷⁶ It is therefore reasonable to conclude that feed-in tariffs and quantitative purchase requirements should, and could, amount to subsidies under WTO law.

In the EU, where the debate on regulatory State aids has been alive since the 1970s, it has been repeatedly suggested that the correct sieve to distinguish what is subject to subsidy discipline and what is not, should not revolve around definitions of the action of the government but rather the assessment of specificity of the measure. This conclusion takes stock of the difficulties and inconsistencies to operate such selection only on the basis of the *form* or *nature* of subsidy, or indeed its *financing*, with the risk of excluding courses of governmental action that are equally distorting.⁷⁷ The European Court of Justice, however, has not accepted to postpone the decision of which measures of support are covered to the determination of specificity, and insists in referring to the use of 'State resources' as key distinguishing factor.⁷⁸

⁷² For the same reasons why it is difficult to distinguish financial support from regulation. See note 64 above.

⁷³ 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.

⁷⁴ What is not fully clear is whether the word 'practice' should be distinguished by 'function' and thus refer to the scenario of delegation of the function of purchase (see L. Rubini, *The definition of subsidy and State aid*, 116-122). The Appellate Body does refer to them indifferently and construes both as referring to the purchase of goods or services (*US - AD/CVD*, para. 297).

What is arguably clear, however, is that 'normal governmental practice' cannot be equated to the exercise of the prerogatives of taxation and expenditure, as seems to happen in the case-law. The main reason being that, in so doing, we would by necessity imply that financial contribution always requires a cost to government which has been rejected by the Appellate Body itself (see note 68 above). Once we put aside the clear equation with taxation/expenditure we however end up in the uncertain territory where the boundaries between delegation of function and market regulation are blurred. See L. Rubini, *The definition of subsidy and State aid*, 116-122.

⁷⁵ This is the main point of the fundamental report of the Panel, *US - Export Restraints*.

⁷⁶ See L. Rubini, *The definition of subsidy and State aid*, 121. This would, in our view, explain why tariffs and export restraints, and in general other border measures, are not considered subsidies. *Ibid*, 95.

⁷⁷ See the Opinion of Advocate General Maduro in Case C-237/04 *Enirisorse II*, in particular paras. 43 et seq.

⁷⁸ For the paradoxes to which this case-law has led see L. Rubini, 'The elusive frontier: Regulation under EC State aid law' (2009) *ESTAL* 277; *id*, *The definition of subsidy and State aid*, chapter 5.

Although ultimately the subsidy status of regulation is a policy issue, it is clear that a positive finding must find a textual basis in Article 1 of the SCM Agreement. As noted, the conclusion that there is a financial contribution depends on the existence of a normal governmental function/practice. These are flexible concepts which have to be assessed on a case-by-case basis. For example, the broad popularity of FIT systems, with at least 50 countries and 25 states or provinces using it in the world, may make a good candidate. Equally, quantitative requirements of various types are very common and the question of whether they could constitute a financial contribution is certainly not unjustified.

The easiest route is however the notion of 'any price support' whose language is broad and unqualified.⁷⁹ In the context of the definition of subsidy, this limb has a clear extensive function going beyond what may amount to a financial contribution. The Appellate Body expressly confirmed that this provision should regulate measures *different from*, and in particular *additional to*, those considered as financial contribution when, after outlining the various forms of governmental action discipline 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)'.⁸⁰

The pending *Canada - RE* dispute may provide an answer. Although the element challenged is the local content requirement, the subsidy is a FIT. 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.

Conclusions on forms of governmental action: legal uncertainty

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 subsidy of the SCM Agreement. This either depends on the inherent nature of the measure (tax) or on the uncertainty of the language (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

D.

To qualify as a subsidy under the SCM Agreement, a financial contribution or a measure of income/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.⁸¹

In some cases the benefit analysis is quite 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

⁷⁹ The argument that 'any income or price support' would only refer to agricultural support is not convincing. This might well have been the origin of this language but there are no indications that it should be limited to this sector. Equally, it can be reasonably argued that, in the absence of specific language, the early and only 1961 GATT Panel Report 'Review pursuant to Article XVI:5', BISD 9th Supp. (1961), 188, para 11, which a 'loss to the government' would be required by these forms of action, is not good law anymore. On these two aspects of Article 1.1(a)(2) of the SCM Agreement, see L. Rubini, *The Definition of Subsidy and State Aid - WTO and EC Law in Comparative Perspective* (Oxford: Oxford University Press, 2009) 123-125.

⁸⁰ Appellate Body, *US - Lumber IV*, para 52 (emphasis added).

⁸¹ Appellate Body, *Canada - Aircraft*, para. 157.

on the latter. In other cases, however, if the government is acting on 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'.⁸² This market-benchmarking process may face difficulties in the determination of whether a subsidy to support renewable energy confers a benefit. If the market is already heavily distorted the price or otherwise signals it issue are not fully reliable. The identification and determination of the actual benchmark may thus be elusive. These difficulties have been addressed by the Appellate Body in various cases where the interfering factor was represented by a heavy public intervention in the economy which made the benefit analysis difficult.⁸³ The Appellate Body had thus to resort to other proxies, like costs.⁸⁴

Now, the various energy markets are heavily distorted by various forms of government intervention, the most significant certainly being the noted massive and long-standing subsidization of the main competitor of renewable energy, ie fossil fuels. As noted above, this is indeed one of the main obstacles to the effective deployment of renewable energy and the main justification for supporting it. While a crucial objective of subsidy discipline is to determine whether the subsidy confers a *competitive* benefit, this does not necessarily takes place when the benefit is determined. The benefit analysis is not this ambitious. As Bigdeli puts it:

"what is crucial in the decisions of the [Appellate Body] ... is that in determining whether a benefit is conferred, the relevant analysis should not focus on whether the recipient is better off than its competitors in a market-place. Rather, the question is whether a recipient is better off than it would otherwise have been absent the financial contribution."

But, far than being a deficiency of the legal framework, this simplification is just the way to deal with what could otherwise become a daunting assessment.⁸⁵ As energy markets show, the simplified process of the benefit analysis may already be difficult for the identification and application of the appropriate baseline. To charge it with a too complex analytical framework, potentially encompassing *any* action, or indeed omission, that could affect the matrix of positive/negative effects, would mean unpracticability (where do we stop?) and - a dooming effect for subsidy control - a sequence of invariably negative (no-benefit) determinations.⁸⁶

The limited scope of the benefit analysis is indeed to ascertain whether, by virtue of the governmental action, the recipient of the subsidy finds itself in a more advantageous position. This should crucially emerge from what is merely a preliminary and limited (possibly 'myopic') counterfactual analysis which refers 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 are determined. Thus, if the subsidy is not really conferring a competitive advantage but is just compensating a disadvantage faced by the recipient, in all likelihood this should result in a no-negative-effects determination. Any residual negative effect may be

⁸² Appellate Body, *Canada – Aircraft*, para 157; *Japan – DRAMS*, para. 172; *EC – Aircraft*, paras. 974-976.

⁸³ See L. Rubini, *The Definition of Subsidy and State Aid – WTO and EC Law in Comparative Perspective* (Oxford: Oxford University Press, 2009) 226-233.

⁸⁴ See Appellate Body, *Canada – Dairy (Article 21(5) DSU) I*, and, more controversially, Appellate Body, *US – Lumber IV*.

⁸⁵ The different notions of 'benefit' in economic and legal analysis are a good example of the different operation of the two disciplines.

⁸⁶ Although Sykes notes that this may seem 'myopic' he has to concede that a comprehensive economic analysis such as the one hinted at would not be practicable. See AO Sykes, 'The Questionable Case for Subsidies Regulation: A Comparative Perspective' (2010) *Journal of Legal Analysis* 473, 502-503.

taken into account, and discounted for, when the positive impact of the subsidy is considered, and balanced with, at the justification level.⁸⁷

For these reasons, any type of compensatory or corrective logic at the level of the benefit analysis is ultimately unwarranted.⁸⁸ One is tempted to distinguish between different scenarios, with some where the mere compensation, lack of advantage and link between subsidy and handicap are so clear to make the benefit analysis a foregone conclusion.⁸⁹ It is argued that this temptation should be resisted, for the systemic reasons noted above.⁹⁰ If the lack of advantage is that evident, it will almost invariably result in a negative determination of adverse effects. Interestingly, this is also the approach followed in the EU. The debate mainly focused on whether the simple compensation of the costs of a public service obligation does amount to a State aid. After fluctuations in the case-law, the European Court of Justice accepted in the *Altmark* decision that, in presence of certain conditions of transparency and (strict) proportionality, there should not be an advantage and hence a State aid.⁹¹

The implications for policy space of the analysis above are ambivalent. On the one hand, other things being equal, the enlargement of the benefit analysis to recognize that the subsidy does not in fact grant any a real benefit but merely corrects a market failure or compensate another disadvantage would acknowledge the autonomy of countries already at a preliminary level of the subsidy examination. On the other hand, this extension could have the potential of rendering the benefit determination in energy markets even more complex than it actually is, particularly if the scrutiny were extended to consider all possible interventions affecting the competitive position of the recipient company.⁹²

Ultimately, whatever option is chosen a varying but always significant degree of complexity and legal uncertainty cannot be avoided. This feature, which is common with the conclusions on the legal uncertainty of the financial contribution / price support analysis, may equally have a stifling effect on policy space.

D. The paradox of specificity and adverse effects: ‘good for policy! good for law?’

⁸⁷ The existence of justification provisions already covering these considerations may be an additional argument to support the rejection of a too comprehensive benefit analysis. The lack of such justifications, however, cannot be used as argument to include a compensation logic in the benefit determination. It can however highlight a lacuna in the system and a serious lack of recognition of policy space.

⁸⁸ The various versions of this logic are extensively analyzed in S. Bigdeli, “Resurrecting the Dead? The Expired Non-Actionable Subsidies and the Lingering Question of ‘Green Space’” (2011) *Manchester Journal of International Economic Law*, forthcoming.

⁸⁹ A good example is offered by Howse: ‘We have already alluded to some of the complexities of ascertaining whether the subsidy has conferred a benefit on the recipient, that is, a competitive advantage over and above general market conditions. Some programs for renewable energy may not confer a benefit in this sense. 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’. See R Howse, ‘Climate Change Mitigation Subsidies and the WTO Legal Framework: A Policy Analysis’, 2010, *International Institute for Sustainable Development* 13.

⁹⁰ For the application of this analysis to the distribution of free emission allowances see I. Jegou and L. Rubini, ‘The allocation of emission allowances free of charge: legal and economic considerations’, *International Centre for Trade and Sustainable Development*, Issue paper No 18, 2011, 33-45.

⁹¹ Quite interestingly, however, the conditions are so rigorous that the Commission has virtually never found them present and concluded that there was no State aid. For an early commentary on the significance of the *Altmark* decision see A. Biondi and L. Rubini, ‘Aims, Effects and Justifications: EC State Aid Law and its Impact on National Social Policies’, in M. Dougan and E. Spaventa (eds) *Social Welfare and EU Law* (Hart Publishing, 2005) 79.

⁹² Complexity means uncertainty, and if eventually may lead to negative determinations (ie, no benefit and no subsidy), it could certainly increase the cost of administrative investigations and litigation.

Unless we are dealing with a prohibited subsidy (see section E), the next steps of the legal analysis require to determine whether the subsidy is specific and causes certain negative trade effects. These two steps of the analysis, although clearly separate, are dealt with together because, from the perspective of policy space, they share the same paradox.

Specificity

According to Article 2 of the SCM Agreement, a subsidy need to be specific to certain enterprises or industries. This provision encompasses multiple tests which can be used in this determination which is flexible, unclear and ultimately expansionist.⁹³ 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 analysis of the factual scenario which refers to, notably, 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 favour 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* following them as guidelines of neutrality and non-discrimination.⁹⁴ 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 (not favouring domestic renewable energy over imported one).

There are two obstacles here, one policy-based and one legal. Assuming a renewable energy could be designed to comply with the said guidelines, a paradox would emerge. If, as noted above in section II, sound policy requires the measure to be as much targeted as possible in order to be cost-effective, this means that economic policy clearly gives preference to non-neutral and discriminatory measures of support. This would mean that there is a direct clash between policy prescription and legal requirements. In so far as this conflict cannot be reconciled, the room for policy space would be seriously compromised. From a legal perspective, despite the 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 enterprise.⁹⁵ What should be proved is not 'a rigid quantitative definition' but that the subsidy is not 'sufficiently broadly available throughout the economy', ie 'sufficiently limited'.⁹⁶ It is clear from the case-law that the large number of the undertakings and even of the sectors affected is not sufficient to conclude that the subsidy is general and not specific.⁹⁷ In this regard, it seems that

⁹³ For an analysis of the various legal and policy issues of the specificity test in WTO subsidy law and the similar 'selectivity' requirement in EU State aid law see L. Rubini, *The Definition of Subsidy and State Aid - WTO and EC Law in Comparative Perspective* (Oxford: Oxford University Press, 2009), Chapter 13.

⁹⁴ S. Bigdeli, "Resurrecting the Dead? The Expired Non-Actionable Subsidies and the Lingering Question of 'Green Space'" (2011) *Manchester Journal of International Economic Law*, forthcoming.

⁹⁵ More specifically, the factors to consider are: the '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'.

⁹⁶ Panel, *US - Cotton*, para. 7.1142.

⁹⁷ See Panel, *US - Softwood Lumber IV*, paras 7.115-7.122.

the specificity test may be very easy to fulfil in the case of subsidies in support of renewable energy, and, in this regard, the design and breadth of the measure do not seem really relevant. Whether the subsidy targets only a certain technology (eg wind or solar) and certain uses (eg transport, electricity or heat) or is rather more generally available across the broad spectrum of renewable energy sources and applications, whether it operates at the levels of supply or demand of renewable energy, the fact remains that the latter is still a small, albeit increasingly significant, player in the energy markets. Further, even if it were to expand and become the dominant if not even the exclusive energy source, it would still be one industry in the broader economy. And, in this respect, we do not believe that the fact that account should be taken of the degree of diversification of the economy (Article 2.1(c)) could detract from this conclusion.

What is crucial for the purposes of our analysis is the relationship between this test of *de facto* specificity, and its factors, and the previous 'objectivity criteria'. Although the Appellate Body has recently underlined that the principles outlined in paragraphs (a), (b) and (c) should be applied concurrently⁹⁸, the language of Article 2 seems to give ultimate significance to *de facto* specificity.⁹⁹ This means that the possibility to design certain renewable energy subsidies in a neutral and non-discriminatory way may not be enough to escape a finding of specificity.

Adverse Effects

The finding that a subsidy is specific does not make it objectionable under WTO subsidy law if no negative effect on the trading interests of other Members is caused. This, on its face, seems to recognize a reasonable leeway to policy space. On a closer scrutiny, however, the same paradox of the specificity test emerges. We first outline the legal requirements and then briefly comment on this paradox.

Specific subsidies may be actionable if they cause adverse effects to the interest of other countries. The various tests of adverse effects can be found in Articles 5 and 6 of the SCM Agreement: i) injury to the domestic industry, in the same sense as in the countervailing duty context,¹⁰⁰ ii) nullification and impairment of benefits, mainly 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 which 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.

Clearly, any assessment of the adverse impact on trade must be based on the actual scenario and must take into account the various elements of the various legal tests. Generalizations are not easy since each measure differs from another. 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 particular with respect to the impact of subsidy design on the likelihood of a finding of adverse effects. These

⁹⁸ Appellate Body, *US – AD/CVD*, paras. 363 et seq.

⁹⁹ '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: ...'.

¹⁰⁰ Subsidized imports causing material injury to the domestic industry of another country may be subject to countervailing duty actions.

predictions, which partly follow what has been found in the context of specificity, are however limited. Thus, for example, subsidies which do not discriminate against imported renewable energy and technology are less likely to cause adverse effects. This is the case for consumption subsidies and purchase obligations with no differentiation as to the origin of renewable energy. Further, unless they are fully technology neutral, adverse effects may be claimed by producers and distributors of conventional energy and technology as well as by different renewable energy producers. Current trade patterns, which seem to show more commerce with respect to technology or fuel rather than actual electricity, may have an impact on the likelihood of adverse effects. Thus, while we see litigation on trade in renewable energy inputs, like wind turbines, or biofuels, we see less controversy surrounding discriminatory measures on electricity.¹⁰¹

More importantly, from a policy perspective, even assuming you could adapt your subsidy so as to minimize its adverse effects – in the design phase or during litigation compliance – the fact remains that, if this means that you have to renounce to a distinct policy benefit to comply with subsidy guidelines, there is a significant constraint on policy space.

To conclude, with remarks which are equally valid for the specificity and adverse effects tests, even if practicable, the guidelines of trade law, which are informed by the fundamental principles of neutrality and non-discrimination, are not consistent with the guidelines which come out from best policy practice, based on standard economic theory and empirical results. The most cost-effective measures of support of renewable energy should be targeted, specific and encompass a differential – in some cases discriminatory – approach.

E. Discriminatory subsidies: prohibited or permitted?

F.

In this section we address one puzzle. One would expect that measures which produce the same or similar effects are assessed in the same or similar way. Probably, beside being a matter of sound policy and legal judgment, even common sense would demand this.

This is not however what happens with the various types of subsidies of discriminatory subsidies which are very common and credited to be significantly successful in the renewable energy field.

The most recent disputes on renewable energy support – *China – Wind* (DS 419); *Canada – Renewable Energy* (DS 412) – 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.¹⁰² And, significantly, the green energy sector seems to be one of those, with China being a notable example.¹⁰³ The appraisal of

¹⁰¹ It is therefore sometimes wondered whether scenarios like those of the EU *PreussenElektra* case are likely to result in a controversial WTO trade context. See section E below for an analysis.

¹⁰² D. Rodrik, *One Economics, Many Recipes – Globalization, Institutions, and Economic Growth* (Princeton: Princeton University Press, 2008).

¹⁰³ It is interesting to note that the *China – Wind* dispute has been recently settled during the consultation phase. What emerges from the press is that the subsidy complained has been withdrawn. What is however not fully clear, and is definitely more significant, is the reason why China decided to withdraw the subsidy, which does not seem to depend on the recognition of the clear illegality of domestic content but rather on the fact that support was simply no longer needed. In this respect, Zou Ji, China Director at the World Resources Institute in Washington DC noted: ‘The cancellation of the subsidies should not be interpreted as a shift in the policy to support the green industry’. See ‘US

local-content subsidies has changed over time, together with that of import substitution industrialization (tellingly, local-content subsidies are also known as import-substitution). In legal terms, in the GATT they were considered as domestic subsidies, being subject to action only in presence of negative effects. The scenario changed with the advent of the WTO as a sign of the new times and of a more pronounced free trade credo. During the Uruguay Round, local-content subsidies were likened to export subsidies and subject to their harsher discipline. They were simply prohibited without there being any need to prove a specific impact and adverse effects.¹⁰⁴ Thus, 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 cannot be granted or maintained.

Another type of subsidies which is common in the support of renewable energy are production subsidies of various type and, which, as the previous economic analysis noted, do represent a large part of renewable energy subsidiess. As other measures of domestic support, these subsidies are thus substantially 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 are exactly the same, they 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."¹⁰⁵

This equivalence in economic effects is not reflected in the legal treatment. As we have seen, while production subsidies are permitted, unless a negative impact is proved, local-content subsidies are just prohibited. The implications for countries' policy space are noticeable. Should, once again, a different legal treatment rest on how the subsidy 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 device? Is there any justification, which goes beyond the consideration of identical economic effects, to this differential treatment? Or could it be that there is some difference 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, as a result of one single measure, two domestic constitutencies end up being benefited. Further, it could 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, can it be enough to justify the strictest sanction of a prohibition? Or, in a law reform perspective, and sticking to the taxonomy approach of the SCM Agreement, shall subsidies with local-content return to the category of actionable categories together with other production subsidies, maybe recognizing their higher danger with the use of a simple rebuttable presumption of adverse effects?

Our analysis of economic effects and legal consequences, with an impact on policy options, can be extended even further to consider feed-in tariffs (FITs).¹⁰⁶ The fixed

Proclaims Victory in Wind Power Case; China Ends Challenged Subsidies' in Bridges Weekly Trade News Digest, Volume 15, Number 21, 8th June 2011.

¹⁰⁴ There is still a need to prove material injury to the domestic industry in order to apply countervailing duties.

¹⁰⁵ AO 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.

tariff is just the pricing element of the FIT incentive. FIT schemes include other terms either to reinforce their incentive effect or to impact on other related markets (like 'local content' requirements in *Canada – RE*). This 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 beneficiary of the subsidy (the producer) 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 these requirements are discriminatory but – and this is the second inconsistency – their assessment seems to be different. FITs are widely praised as one of the most – if not the most – cost-effective tools to support renewable energy. This praise extends to the purchase obligation, with no real effort in distinguishing those with a discriminatory effect from those with a neutral impact. Frequent reference is for example made to the German FIT system, which includes a purchase obligation on locally sourced energy, as a good example of well-designed FIT system which significantly contributed to the success of Germany in deploying renewable energy. By contrast, local-content requirements attached to FITs are more controversial and, as the pending *Canada – Renewable Energy* dispute shows, 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/markets (technological products vs electricity), for which we still have a different degree of international competition and trade. This would depend on technical reasons or in the difficulty of tracing the origin of electricity in the absence of an established and wide-spread 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 effects between local-content and FITs' purchase obligation? Can the (discriminatory) purchase obligation of FITs legally assimilated to a local-content subsidy and be objected as prohibited subsidy under Article 3 of the SCM Agreement?¹⁰⁷ If so, can it be justified?¹⁰⁸

This section has attempted to show that the legal analysis of subsidies supporting *production* is not fully coherent or definite. The analysis has concentrated on the first level of analysis when it comes to determine 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. PRELIMINARY CONCLUSIONS: IS THERE REALLY A POLICY SPACE PROBLEM?

The previous analysis has shown that, at the level of plain legal analysis, the current WTO subsidy discipline is not indeed friendly with countries' policy space when

¹⁰⁶ For a comprehensive analysis of FITs see M Mendonça, *Feed-in Tariffs – Accelerating the Deployment of Renewable Energy* (London: Earthscan, 2007); M. Mendonça, D. Jacobs and B. Sovacool, *Powering the Green Economy – The feed-in tariff handbook* (London-Washington: Earthscan, 2010).

¹⁰⁷ Andrew Lang (LSE) called the attention of the author 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 RE power company sets up in another region and cannot benefit from the the purchase obligation. Is this a national treatment claim under a possible investment treaty?

¹⁰⁸ This important question is analyzed below.

adopting measures in support renewable energy. Whether because of legal uncertainty (deriving from the complexity of support measure, like tax incentives, or lack of clarity of the legal text, for regulatory measures), or because of the typical, but not always consistent, trade prescription of neutrality and non-discrimination (with respect to the specificity/adverse effects tests and discriminatory subsidies), policy autonomy ends up significantly impaired.

There is one important argument though, which would empty any sort of preoccupation. 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 wide-spread? If the answer is that nobody does or will do this, then, pragmatically, we may fairly conclude that there is no 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 dispute settlement. Equally, countervailing duties are among the most used tools of the domestic trade toolbox. That said, energy subsidies in general (which include both subsidies to fossil fuel and 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 which could eventually damage the flinger too? Everybody gives subsidies in support of energy. Nobody has an interest in raising a claim and risk a probable counter-claim.¹⁰⁹

Subsidization of energy is tolerated, the only exceptions being those cases where we have more obvious breaches (like export subsidies or subsidy measures with local content requirements). Further, even in these cases, the strategic element inherent in litigation is particularly marked. The strong impression is that negative statements and official complaints do escalate to the level of formal disputes only when litigation is necessary to reassert the rules of the game/engagement. The tacit agreement was that public support to energy be allowed provided that the most overt protectionist tendencies be kept at bay.

The existence of real or expected substantial trade interests is the main catalyzer of trade litigation. As we have seen, renewable energy production and trade are increasingly significant. The magnitude of the economic and political interests is high and on the rise. Technology (for example wind, solar etc) is developing fast and, far from merely limited to satisfying domestic needs, is exported. There are several examples. It has, for instance, been recently noted that German renewable energy industry's turnover amounts to €30 billions of which a large part is due to technology exports.¹¹⁰ Brazil is the second biggest producer of ethanol biofuel (the first being the US) and the world's largest exporter. This technological and commercial success owes significantly to various forms of sustained public support. This is known and

¹⁰⁹ With similar arguments see SJ. Orava, 'Incentives to Stimulate Renewable Energy' in J. Pauwelyn (ed), *Global Challenges at the Intersection of Trade, Energy and the Environment* (Geneva: Centre for Trade and Economic Integration, 2010) 198.

The risk-aversion described in the text is substantially the same which explains why, during its five years of application, the discipline of non-actionable subsidies was never used. There are many reasons for this, including the limited scope of these exceptions. To a large extent, however, this is a second indication of silent acquiescence. On the history of the rules on non-actionable subsidies see S. Bigdeli, "Resurrecting the Dead? The Expired Non-Actionable Subsidies and the Lingering Question of 'Green Space'" (2011) *Manchester Journal of International Economic Law*.

¹¹⁰ Hans Josef Fell (member of the German Parliament and author of the proposal of the renewable energy legislation of 2000) in the foreword to M. Mendonça, D. Jacobs and B. Sovacool, *Powering the Green Economy – The feed-in tariff handbook* (London-Washington: Earthscan, 2010) xiii.

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 frictions surrounding renewable energy support. In September 2010, Japan, joined by the EU and US, sue Canada, challenging the local content requirement of Ontario's FIT system (*Canada - RE*, DS 412). Interestingly, according to practitioners active in the field, this action, still pending, has been perceived in the trade circles as a 'mistake', somewhat altering the previous equilibrium. In the same month 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, including unlawful subsidies. What is interesting that the complaint was lodged in the context of a 'section 301' procedure¹¹¹ which, strategically, opens up a wide range of possibility for the USTR, including the filing of a dispute at the WTO. This is indeed what happened with the *China - Wind* (DS 419) dispute, filed in December 2010 and, as noted above, recently settled.

The big question is whether, in a few years, with hindsight, these few disputes on local-content will just be viewed as wise or unwise skirmishes which 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. 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 the trend is confirmed, production and trade in renewable energy will increase. The markets will become larger, competition unleashed and the distortions of subsidies more evident. Complaints from aggrieved industries to act and action by governments, in the form of trade remedies and WTO litigation, will thus increase.\$

We now reach a conundrum. If there is no action, although the rules do not provide enough policy space, this is *de facto* ensured by the tolerance governments show. The justification for supporting the renewable energy industry is recognized - albeit not in formal normative terms. It could thus be reasonably argued that there is no issue to fix. When challenges become more frequent, because the market has been 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 settlement is still appropriate and no change is needed.

While the second scenario is sound - 'if it ain't broke don't fix it' - the first scenario is not necessarily accurate. It 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 necessary to ensure the steady deployment of renewable energy is already large. 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 captured since unexpected exogenous factors can take place and spark trade rows. If these are the traits of a

¹¹¹ 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 JH Jackson, WJ Davey and AO Sykes, *Legal Problems of International Economic Relations - Cases, Materials, Texts* (West Publishing Co, 2008) chapter 7.

realistic or likely scenario, tacit tolerance does not ensure legal certainty any more. In other words, in unstable conditions, the lack of a formal and positive recognition that some forms of support for renewable energy is justifiable and should be legitimate would cause problems for international relations and the business community alike. Legal certainty must be reinstated but in new ways. While the room for clarification of the rules on the definition, specificity and adverse effects essentially depends on litigation, the most comprehensive route would be to explore the use of justifications. A solution could be found in the existing rules, perhaps resorting to general exceptions available in the broader legal system. Alternatively, Members may be convinced to sit around the negotiating table and introduce a specific legal shelter for certain renewable energy subsidies. We now explore these two avenues of justification.

V. THE FIRST JUSTIFICATION OPTION: ARTICLE XX OF THE GATT¹¹²

Orava noted that 'given the shared climate change interests of most countries around the world, a dispute settlement panel may be reluctant to find that WTO provisions should restrict efforts to develop renewable energy, absent clear evidence of protectionism'.¹¹³ While it is doubtful that the consideration of the existence of these 'shared climate change interests' may be enough to avoid a finding that a subsidy satisfying the relevant requirements does not breach WTO subsidy rules, it should be seriously asked whether, in the absence of specific justifications for environmental subsidies in general and climate change-renewable energy subsidies in particular, this need to tackle a common challenge may find recognition a general provision like GATT Article XX.

Indeed the only possibility for justifying an otherwise objectionable subsidy relies on the applicability of Article XX of the GATT to the ASCM. This is a very controversial and topical possibility, subject to increasing debate.¹¹⁴ Assuming the need of an additional layer of protection of 'green policy space', going beyond the vagaries and uncertainties of the current subsidies rules described above, this is an important hypothesis to test. If the conclusion is that this is not a viable path, the only remaining option is law reform.

Article XX of the GATT 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 values and the possibility for these values 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.'¹¹⁵ 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-discrimination). On the other hand, this express recognition means that, when we move to Article XX (and indeed provisions of similar type), the only-trade perspective of those provisions, like the subsidy rules analyzed so far, that protect market access makes room to a more comprehensive

¹¹² This section partly draws on I Jegou and L Rubini *The Allocation of Emission Allowances Free of Charge: Legal and Economic Considerations*, International Centre for Trade and Sustainable Development (ICTSD), Issue Paper 14/2011, Programme on Competitiveness and Sustainable Development, Geneva.

¹¹³ SJ. Orava, 'Incentives to Stimulate Renewable Energy' in J. Pauwelyn (ed), *Global Challenges at the Intersection of Trade, Energy and the Environment* (Geneva: Centre for Trade and Economic Integration, 2010) 198.

¹¹⁴ For a detailed analysis of the applicability of GATT Article XX beyond the GATT see S. Bigdeli and L. Rubini, *Article XX of the GATT in the WTO: The case and challenge of beyond-the-GATT applicability* (forthcoming).

¹¹⁵ P. 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.¹¹⁶ This entails a shift of setting and framework of analysis where the interests and expectations of consumers and citizens engage with those of producers.¹¹⁷

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.'¹¹⁸ 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 defence.¹¹⁹ There truly is a 'weighing and balancing exercise' of different values central to the operation of this provision in each of its steps.¹²⁰ 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.¹²¹

Over the past decade a lively discussion on the applicability of Article XX to WTO agreements other than the GATT has emerged. Thus far, neither law nor jurisprudence provides a final answer. The relevance for environmental protection measures is however clear with numerous scenarios where the availability of the broad exceptions of Article XX would make a difference.¹²²

With respect to the case of the applicability to the SCM Agreement, it may be useful to briefly outline the arguments put forward by the opposing camps. Views differ on this point – even dramatically. On the one hand, we have those, quite numerous, that fiercely object this approach. The core of the argument is the following. The applicability of GATT Article XX would undermine the 'inner balance of the rights and obligations' of the SCM Agreement which already had a category of justifications – non-actionable subsidies – that is now expired. A finding that Article XX can apply to the ASCM 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 significantly undermining market access.

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

¹¹⁶ 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.

¹¹⁷ P. Mavroidis, 'Come Together? Producer Welfare, Consumer Welfare, and WTO Rules' in Petersmann, EU and Harrison, J (eds) *Reforming the World Trading System – Legitimacy, Efficiency and Democratic Governance* (Oxford: Oxford University Press, 2003) 277; J. Pauwelyn, 'New Trade Politics After the Doha Round', *Center for Trade and Economic Integration, Working Paper 1/2008*.

¹¹⁸ P. Van den Bossche, *The Law and Policy of the World Trade Organization: Text, Cases and Materials* (Cambridge: Cambridge University Press, 2008) 618.

¹¹⁹ Appellate Body, *US – Gasoline*, p. 16-17.

¹²⁰ P. Eeckhout, 'The Scales of Trade – Reflections on the Growth and Functions of the WTO Adjudicative Branch', *Journal of International Economic Law* 3.

¹²¹ 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 J. Trachtmann, *The Economic Structure of International Law* (Harvard University Press, 2008) 222-223.

¹²² These are some of the scenarios which raise a GATT XX question. Can Article XX of the GATT justify such measures 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?

First, the applicability of GATT 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 hermeneutic hypothesis. Second, the foundational legal argument supporting this hypothesis is that the WTO is a single-undertaking and 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.¹²³ In this regard, it is undisputed that the ASCM develops the GATT with respect to subsidies to industrial goods.¹²⁴ Third, the rise and fall of the category of non-actionable subsidies can provide arguments either way, but not certainly a clear-cut legal obstacle. There are no major textual barriers, no clear indications from the negotiating history that non-actionable categories were supposed to be the only avenue of justification of certain 'good' subsidies', and that GATT XX could/should not apply to subsidies. Finally, as noted by Howse, if we do not accept that GATT XX applies to subsidies, we may have an unjustified policy inconsistency.¹²⁵ Certain (more distorting) measures, like quotas, would be justifiable, 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 GATT XX to subsidies, the issue thus being eminently of *policy* (do we have a gap in the system?) or *political* (where 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.

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*),¹²⁶ *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*).

Two recent decisions merit closer scrutiny. The decision in *China - Periodicals* seems to offer ammunition to the pro-applicability camp relevant because the Appellate Body concluded that Article XX of the GATT could apply to China's Accession Protocol. 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'.¹²⁷ 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

¹²³ Analysing the 'double-remedy' issue, the Appellate Body recently reminds the fact that the WTO is one single legal system and consequently the covered agreements cannot be read in clinical isolation.

¹²⁴ See Appellate Body, *Brazil - Desiccated Coconut*, paras 11-14, on the different normative framework between GATT and WTO, and on the relationship between GATT and SCM provisions on subsidies.

¹²⁵ R. Howse, 'Climate Change Mitigation Subsidies and the WTO Legal Framework: A Policy Analysis', 2010, International Institute for Sustainable Development, 17.

¹²⁶ This was confirmed by a private conversation with one of the panelists.

¹²⁷ The linking factor here was the expression 'consistent with the WTO Agreement,' representing a clear gateway to the GATT.

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 *arguendo analysis* used by the Panel (and, significantly, by the Appellate Body itself in previous decisions). On the other hand, we find a sweeping recognition on 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.¹²⁸"

Clearly, this incidental (?) statement reaches 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 of a two-step analysis where following a breach determination there should always be a scrutiny of a possible justification. What it certainly, more simply but no less importantly, represents is the Appellate Body's intellectual disposition to consider attentively any such claim in the future.¹²⁹

The issue of whether GATT Article XX could apply beyond the GATT, and in particular to measures that were breaching the Sanitary and Phytosanitary Measures (SPS) Agreement, was also recently addressed in *US – Poultry*.¹³⁰ 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 directly and admittedly develops Article XX (b) of the GATT exhaustively.¹³¹

Considering its controversial nature, we have spent quite some time on the analysis of the question of the applicability of GATT Article XX to the SCM Agreement. Assuming its applicability, it is now worth providing a brief analysis of the issues that would arise from its application to renewable energy subsidies.

Article XX of the GATT includes two 'exceptions' with environmental relevance, paragraphs (b) and (g) as quoted above. Paragraph (b) concerns measures that are 'necessary to protect human, animal or plant life or health'; thus, this covers not only public health policy measures but also 'environmental' ones. Paragraph (g), on the other hand, refers to 'measures relating to the conservation of exhaustible natural resources.'¹³² The key terms 'necessary to' in paragraph (b) and 'relating to' in paragraph (g) invoke different tests, and the former seems to be stricter than the latter.¹³³ However, the current interpretation of necessity as a 'weighing and

¹²⁸ Paragraph 222 (emphasis added).

¹²⁹ See J. Pauwelyn, 'Squaring Free Trade in Culture with Chinese Censorship: The WTO Appellate Body Report on "China – Audiovisuals"' (2010) *Melbourne Journal of International Law* 119.

¹³⁰ Panel, *US – Poultry*, DS 392.

¹³¹ But only Article XX (b). It may well be that a defence could be raised under another Article XX exception, such as the one on public morals (paragraph (a)). See Pauwelyn, 'Squaring Free Trade in Culture with Chinese Censorship: The WTO Appellate Body Report on "China – Audiovisuals"' (2010) *Melbourne Journal of International Law* 137, drawing this argument from Panel, *EC – Biotech*.

¹³² Although partly overlapping, the focus of the two exceptions differs slightly. Due to its language, reliance on paragraph (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, *Brazil – Retreaded Tyres*, 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.'

¹³³ See Appellate Body, *Brazil – Tyres*, paragraph 178 for a good expression of the 'necessity' test, and Appellate Body, *US – Shrimp*, para. 141 for the 'relating to' language. The 'relating to' test is admittedly lower than the 'necessity' test, but this does not exclude that a 'real and close' relationship between 'means and end' should be established.

balancing exercise’, where a considerable degree of deference is given to Members particularly with respect to the level of protection decided, does not seem to represent an excessive obstacle for the protection of the relevant values.

The key argument would be that the subsidy under examination does contribute to the objective of GHGs emissions reduction and hence to climate change.¹³⁴ The issue is one of evidence, although we do not see great difficulties in this regard, particularly because the necessity test of paragraph (b) requires balancing the environmental objective pursued and the contribution of the measure to that objective on the one hand with the restrictions on trade on the other. Climate change would certainly represent an important objective, thus lowering the standard of proof. 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’.¹³⁵ Broadly analogous considerations can be made if the exception of paragraph (g) is considered. Importantly, the Appellate Body in *US – Gasoline* has concluded that clean air can be protected under this exception.¹³⁶

Following the two-tier approach set out in *US – Gasoline*, the objectives of the measure are not only considered in a first step of the analysis of Article XX, but also in a second step where the measure’s application is considered under the chapeau. The chapeau requires an analysis of the ‘causes and the rationale of the discrimination.’¹³⁷ A measure may ultimately be justified only if it is applied in line with its legitimate objective. What is proscribed is the *arbitrary* and *unjustifiable* discrimination with regard to *how the measure is applied*, not discrimination *per se*.¹³⁸ Further, this discrimination should be established ‘between countries where the same conditions prevail’, not only between different exporting countries but also between importing and exporting countries. The Appellate Body has established that the phrases ‘arbitrary discrimination,’ ‘unjustifiable discrimination’ and a ‘disguised restriction on international trade’ impart meaning to one another and serve the same purpose of preventing abuse and illegitimate use of the exceptions.¹³⁹

The key question for our analysis is whether those forms of discriminatory subsidies supporting renewable energy could pass muster with both the ‘necessity’ test and the criteria of ‘unjust or arbitrary discrimination’ of the chapeau. It has been seen that measures of support with discriminatory impact are indeed common in the renewable energy sector, and, according to policy analysis, are also among the most cost-effective. We have also seen in section III. E. 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 the latter, it has been suggested that it may be difficult for them to be justified, mainly at the stage of

¹³⁴ The Appellate Body has already found in *Brazil – Tyres* that paragraph (b) on *inter alia* public health could also cover climate change. Appellate Body, *Brazil – Tyres*, para. 151.

¹³⁵ *Ibid.*

¹³⁶ Appellate Body, *US – Gasoline*, p. 18.

¹³⁷ Appellate Body, *Brazil – Tyres*, para. 225.

¹³⁸ The requirement that the measure should not be applied so as to arbitrarily and unjustifiably discriminate cannot be equalled to the test of inconsistency of the most-favoured-nation and national treatment provisions. They must and do have a different meaning. According to the Appellate Body in *US – Gasoline*, equalizing these two tests would ‘be both to empty the chapeau of its contents and to deprive the exceptions in paragraphs (a) to (i) of meaning. Such recourse would also confuse the question of whether inconsistency with a substantive rule existed, with the further and separate question arising under the chapeau of Article XX as to whether that inconsistency was nevertheless justified. One of the corollaries of the ‘general rule of interpretation’ in the *Vienna Convention* is that interpretation must give meaning and effect to all the terms of a treaty. An interpreter is not free to adopt a reading that would result in reducing whole clauses or paragraphs of a treaty to redundancy or inutility.’ (p. 21)

¹³⁹ Appellate Body, *US – Gasoline*, p. 22-23.

proportionality.¹⁴⁰ The situation would be somewhat more favourable towards production subsidies.¹⁴¹ Although ‘local content’ requirements and production subsidies are identical from an economic standpoint, we have speculated on whether a subsidy *including* a local content requirement could produce more markedly negative effects.¹⁴² If this is correct, this may well have an impact at the level of the necessity test.

But, at least in principle, no subsidy is not liable of being justified. Talking of the *China – Wind* case at a recent conference at Columbia University,¹⁴³ Rob Howse suggested that China might have had ‘a plausible argument’, based on environmental grounds, to justify 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: limited possibility of technology transfer, exceptionally great demands for alternative energy, and the life and death environmental situation behind those needs.

It could be counterargued that a measure least-trade restrictive than a local-content requirement, and quite possibly achieving the same result, could be envisaged, thus rendering the previous analysis a mere academic speculation. Two comments can be made. First, the eventual assessment turns – like the argument suggested by Howse – on the specifics of the case. It will be the specific factual and legal circumstances to justify or not the ‘necessity’ and the ‘justification’ of the discriminatory subsidy. Second, if the aversion of the counterargument refers to the simple prohibited nature of the subsidy, this does not prove much. GATT Article XX justifies ‘any measure’ within its scope, including measures more distorting than subsidies like quotas (as happened in *Brazil – Tyres*). Assuming then that the status of a simple production subsidy would be more favourable, we cannot escape two alternatives. If, as Sykes noted, production and local content subsidies are economically the same, their legal treatment should be, at least at the justification level, the same. If, as we tentatively suggested, local content subsidies are more dangerous because they would in substance amount to a ‘double’ production subsidy (in favour of two different recipients), the question is again a matter of context surrounding the measure. Would the assessment be different, or indeed the same, if we formally had two separate production subsidies rather than a subsidy-with-local-content?

Some food for thought is offered by the famous EU *PreussenElektra* case which concerned a discriminatory subsidy. 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 RE 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, even potentially, the market access for renewable energy electricity coming from outside Germany. Like in the GATT, quotas and equivalent measures are prohibited in EU law. Even these measures can however be justified, often using a provision which was expressly modelled on GATT Article XX. To cut it

¹⁴⁰ S. Bigdeli, ‘Resurrecting the dead? The Expired Non-Actionable Subsidies and the lingering question of “green space”’, 2011, *Manchester Journal of International Economic Law*, forthcoming, 28.

¹⁴¹ *Ibid.*

¹⁴² See section III. E above.

¹⁴³ ‘Climate Change, China and the WTO’, 30th March 2011, Panel Discussion with Joe 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> (last access 4th July 2011).

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

In conclusion, the application of GATT Article XX is politically troublesome for the same reasons that support its invocation. It is flexible and its potential reach cannot be fully predicted. Although it is not a tool to be used lightly, given all circumstances (increasing need of policy space, perception of a lacuna, slow negotiations, emergence of the defence in the ‘right’ case), its applicability to climate change or renewable subsidy subsidies is a credible argument and a significant possibility, and may constitute, in presence of the right factual circumstances, a successful defence. That said, law reform is the first-best scenario since it would allow to negotiate and tailor the exceptions to the needs of justification and accommodate the required policy space in the most appropriate way.

VI. THE SECOND JUSTIFICATION OPTION: A NEW DISCIPLINE

The idea of reviving a shelter for certain ‘good’ subsidies is increasingly aired in the scholarly and also in policy debate.¹⁴⁴ The biggest candidate is certainly represented by climate change and more specifically renewable energy subsidies. In this section we provide both few notes of background and what represents a blueprint for law reform.

A. Background

B.

The idea that subsidies are ambivalent because they can produce both negative and positive effects is not new.¹⁴⁵ In either case, clearly, the judgment is not absolute (ie ‘bad’ or ‘good’ subsidy) as everything turns on the design and circumstances of the measure and eventually on a balance. But, as also the previous review of economic analysis shows, the idea that subsidies are not necessarily and always bad or perverse should be the necessary starting point. If this is accepted, a legal discipline which does not recognize the ambivalence of subsidies and, importantly, that they should in certain circumstances be accepted is lacunous.¹⁴⁶

¹⁴⁴ See, eg, R. Howse, ‘Do the World Organization disciplines on domestic subsidies make sense? The case for legalizing some subsidies’ in Bagwell, KW, Bermann, GA and Mavroidis, PC (eds), *Law and Economics of Contingent Protection in International Trade* (Cambridge: Cambridge University Press, 2009); id, ‘Climate Change Mitigation Subsidies and the WTO Legal Framework: A Policy Analysis’ (2010), International Institute for Sustainable Development; SZ. Bigdeli, ‘Incentive Schemes to Promote Renewables and the WTO Law of Subsidies’, in S. Bigdeli, O. Nartova and T. Cottier (eds) *International Trade Regulation and the Mitigation of Climate Change* (Cambridge: Cambridge University Press, 2009); id, ‘Resurrecting the dead? The Expired Non-Actionable Subsidies and the lingering question of “green space”’, 2011, Manchester Journal of International Economic Law, forthcoming; G. Horlick, ‘The WTO and Climate Change “Incentives”’ in Cottier, T et al (eds) *International Trade Regulation and the Mitigation of Climate Change* (Cambridge: Cambridge University Press); G. Horlick and P. Clarke, ‘WTO Subsidies Disciplines During and After the Crisis’ (2010) *Journal of International Economic Law* 859; L. Rubini, *The Definition of Subsidy and State Aid – WTO and EC Law in Comparative Perspective* (Oxford: Oxford University Press, 2009) Chapter 2; P. Aerni et al, ‘Climate Change, Human Rights and International Economic Law: Exploring the Linkages between Human Rights, Trade and Investment’ (2010) *German Yearbook of International Law*, Volume 53, 139.

¹⁴⁵ See, eg, WF Schwartz and EW Harper Jr, ‘The Regulation of Subsidies Affecting International Trade’ (1972) *Michigan Law Review* 831; GC Hufbauer and J Shelton-Erb, *Subsidies in International Trade* (Cambridge MA: MIT Press, 1984) 19-21.

¹⁴⁶ See discussion above in Section ‘IV. Preliminary conclusions: is there really a policy space problem?’. It is worth noting that some economists believe that the GATT discipline was superior than the WTO one because its less stringent approach would have recognized more policy space. See, eg, AO Sykes, ‘The Questionable Case for Subsidies Regulation: A Comparative Perspective’ (2010) *Journal of Legal Analysis* 473.

Crucially both the GATT and the original WTO arrangement did recognize subsidies ambivalence and the fact that certain subsidies could also be positive and hence legitimate. Early GATT reports noted that subsidies could be used for important policy objectives.¹⁴⁷ Article 8.1 of the 1979 Tokyo Subsidies Code, the first comprehensive compact on subsidies, recognized that subsidies could be used to promote important objectives of social and economic policy but, at the same time, cause adverse effects to the interests of other signatories. This ambivalence in effects was evident in Article 11 which combined the recognition of the important policy goals pursued by governments with the use of domestic subsidies, providing a rich list of examples, with the invitation to avoid such practices that ‘adversely affect the conditions of normal competition.’ Crucially, however, where the balance was to be struck was not clear. The recognition that certain subsidies be legitimate was not thus followed by an actual discipline. This was the main contribution of the WTO SCM Agreement in this respect where the balance finds shape into more precise discipline. Legitimate subsidies left the limbo of the previous regulation to be included in a specific category of measures which, in presence of certain substantive conditions and procedural requirements of Articles 8 and 9 of the SCM Agreement, were non-actionable and sheltered from countervailing duty actions.¹⁴⁸

Albeit not perfect, the original scheme of the SCM Agreement was certainly balanced. On the one hand, some clarity on what constitutes a subsidy was conferred by the first-ever legal definition of subsidy. On the other hand, depending on their real or perceived effects, subsidies were categorized according to a tripartite taxonomy: prohibited, permitted/actionable, and permitted/non-actionable.

This brief exposition should not however generate the belief that the ‘upgrade’ from loose recognition of the legitimacy of certain subsidies to their actual regulation was a smooth process. Quite the contrary. What emerges from the negotiating history is that the insertion of an express shelter for certain regional, environmental and research and development subsidies was very much a last minute move, and a controversial one.¹⁴⁹ This is confirmed by the fact that the exception of non-actionability was only provisional and without the necessary support to maintain it, even in amended form, it expired at the end of 1999.¹⁵⁰ If a specific discipline lapsed, the underlying idea that certain subsidies should be legitimate did not completely go since it arguably reflects an almost natural perception of the repeated ambivalence of subsidies.¹⁵¹

B. A blueprint for a new discipline

What we do here is to suggest the main guiding principles of reform and traits of a possible new discipline of legitimate subsidies. This is approached not from the static view of formal amendments to the current regulation but rather from the more dynamic standpoint of governance.¹⁵²

¹⁴⁷ 1961 Panel.

¹⁴⁸ The Agreement on Agriculture further recognizes that certain non-distorting subsidies should be accepted. See Annex II. It is also interesting to refer to the fisheries subsidies negotiations where there is proposed that certain subsidies should be acceptable. See S Bigdeli, ‘Will the friends of climate emerge in the WTO? The prospects of applying the fisheries subsidies model to energy subsidies’ (2008) *Carbon and Climate Law Review* 78.

¹⁴⁹ For a detailed account see SZ Bidgeli, ‘Resurrecting the dead? The Expired Non-Actionable Subsidies and the lingering question of “green space”’ (2011) *Manchester Journal of International Economic Law*, forthcoming.

¹⁵⁰ Further, the discipline of non-actionable subsidies was never used. In note 109 above we explain this as further indication of the tacit acquiescence of members to a wide-spread scenario of subsidization.

¹⁵¹ This finds confirmation not only in various remarks in the minutes of the SCM committee that discussed the issue of renewal, but also in the proposals in the fisheries subsidy negotiations.

¹⁵² The argumentation is still very much based on initial thoughts that need development. This is being done in the context of a broader project on the governance of legitimate subsidies in the WTO.

1. Sense of community

The glue keeping the whole system together should be represented by an entrenched 'sense of community'.¹⁵³ 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. In the specific context of subsidy control all this translates in the sense that the system of control, in both its normative as well as procedural and institutional aspects, is a common value and asset.¹⁵⁴

The key is how this sociological concept and its traits become operational. In this respect, it is suggested that this can happen at various stages, from the negotiations phase of a new discipline, to the law process of its implementation, up to the softer forum of information exchange and discussion outlined below. And this can happen by resorting to ingredients that have nothing novel or revolutionary but should belong to the core of the rule of law ethos or to good governance. Through a transparent, fair and inclusive practice, producing effective results, the realization that the system of subsidy control is valuable will naturally emerge.

This approach may certainly be alternatively tagged as utterly aspirational or simply descriptive. It is our firm belief however that, although there are certainly aspirational (better normative) and descriptive features, it may more fundamentally play a crucial role as underlying guiding principle in giving shape to the system and maintaining it. The concept of community is the determining factor in deciding how ambitious – or more simply effective – a system of subsidy control could be and in making it acceptable to its participants, hence legitimate.

It is indeed argued that the concept of community plays a crucial role also in many of the cases of the acceptability of the GATT Article XX defence described above. One of the main findings 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,¹⁵⁵ the easier the acceptability of trade-non-trade balances, with the possible outcome that trade interests do not indeed prevail, becomes. Clearly, this process is not one that can or should be forced or imposed top-down. But, it is argued, is an inevitable one.

The increasing pressures to which the WTO system is subject to – deriving from the various challenges, like climate change, and social challenges, like development, of the current era¹⁵⁶ – make a mere contractual approach insufficient to solve issues and disputes that are inextricably linked to trade discourse but go beyond it. What can be done is to handle the shift to a community perspective by ensuring that – at every step of the legal and meta-legal process – the key factors of community (openness, consideration of all interests, fairness, etc) are duly considered. The step to 'constitutionalism in a modest sense'¹⁵⁷ is short.

2. A double-track system: the hard and soft sides of governance

¹⁵³ This sociological concept has been applied to the WTO context by S Cho in his work. See S Cho, 'The WTO's *Gemeinschaft*' (2004) *Alabama Law Review* 483; id, 'Reconstructing an International Organization: A Paradigm Shift in the World Trade Organization', SSRN, draft as of 26 April 2011.

¹⁵⁴ For a brief analysis in this respect see L. Rubini, *The definition of subsidy and State aid*, 33-37.

¹⁵⁵ 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 S. Cho, 'Reconstructing an International Organization: A Paradigm Shift in the World Trade Organization', SSRN, draft as of 26 April 2011.

¹⁵⁶ T Cottier, 'Challenges Ahead in International Economic Law' (2009) *Journal of International Economic Law* 3

¹⁵⁷ T Cottier, 'Limits to International Trade: The Constitutional Challenge' (2000) *American Society of International Law Proceedings*, 220, 221.

Having always in mind the few observations on the concept of community just outlined, a new discipline on legitimate subsidies should be based on a sophisticated system of governance based on a double-track approach.

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. As will be noted below, the need to evaluate and balance as much as possible the effects of subsidies already at the legislative level is particularly important in the WTO where it is unlikely that an administrative adjudicatory system like that present in the EU could be introduced. This track should nonetheless be implemented through a more effective institutional and procedural system, and become more entrenched and internalized through litigation and Committee of Subsidies' discussions.

On the other hand, in parallel with this 'hard law' track, and although a case-by-case adjudicatory power cannot be envisaged, a soft governance track should be introduced (or reinforced). This would be the place where information on subsidies would be exchanged and assessed but, crucially, with no prejudice to legal assessment and litigation thus representing the *knowledge-enhancing* side of the system. The consolidation of a shared knowledge would represent a key element of a system of subsidy control considered as a community.

The characteristic elements of these two tracks are broken down in all the points below and are both resting on and reinforcing the sense of the system of subsidy control as a common value and asset as outlined above.

3. Transparency: the key precondition

Transparency on subsidies – what is granted? By whom and for whom? – is the key precondition for justification. Subsidies are truly sensitive policy measures and any system of control should subject their protection from the otherwise applicable rules to commitments of prompt and full transparency from the granting authority. Notification and reporting were key requirements in the previous rules on non-actionable subsidies. Extensive notification obligations, with far-reaching consequences for their breach, are present in the EU system of State aid control as well. It is clear that notification and transparency are key elements for both tracks of the governance approach suggested above. There seems to be agreement, however, that the current WTO system is deficient in this respect.¹⁵⁸ Members do not notify, or do not do so consistently.

Lacking the necessary level of notification, it could be asked what kind of adjustments could be introduced to improve the situation. This is really a crucial area of improvement which goes well beyond the administration of what are possibly legitimate subsidies to affect the health of the system of subsidy control at large. We recently noted that [n]o country will cooperate *within* an enforcement framework if the others simply do not. To express it in economic jargon, there are many externalities, opportunities for moral hazard, and network effects, in the realm of enforcement. The proper incentives need to be put in place to make it work, and to do so efficiently.¹⁵⁹

¹⁵⁸ Writing in 2001, but with conclusions still valid today, see GN. Horlick, 'Subsidies Discipline under WTO and US Rules', in CD. Ehlermann and M. Everson (eds), *European Competition Law Annual 1999: Selected Issues in the Field of State Aids* (Oxford: Hart, 2001) 593, 601.

¹⁵⁹ L. Rubini, *The Definition of Subsidy and State Aid – WTO and EC Law in Comparative Perspective* (Oxford: Oxford University Press, 2009) 83.

Clearly, notification *obligations* are such if there is some sort of sanction for its breach.¹⁶⁰ This could be represented by an inversion of the burden of proof, with, for example, a (rebuttable) presumption that any subsidy that is not notified is prohibited. It should then be for the non-notifying party to show that it is not a subsidy, it is not specific and/or it is not causing negative effects across the border. Quite similarly, the time of notification could become crucial by providing for a duty to notify prior to the execution of the subsidy. Another possibility could be to strengthen the remedy side by expressly linking it to the notification obligation. Until notified any support is illegal and should be withdrawn (retroactively). Clearly, these are very intrusive devices but make the notification requirement effective. Other alternative technical devices can certainly be thought of, and be better than what has been tentatively proposed. What in any event they should all contribute to is the effectiveness of notification.

Notification, as means to transparency, is also key for the soft track of governance of the system. The objective here is not *legal or political* control but, as anticipated, *knowledge-gathering-and-enhancing*.¹⁶¹ While Members would provide information and data on subsidies, the role of evaluation and analysis, in terms of cost-effectiveness and best practice in relation to the stated objectives, would be left to some sort of independent review, resorting also to experts. A revamped, and more frequent, Trade Policy Review Mechanism could be one option. These reports would then feed back into the Committee of Subsidies and constitute additional material for governments to share and discuss. The main characteristics of the system (clear division but interaction of roles - information supply and evaluation; reliable and independent review; no legal consequences stemming from the assessment; continuous discussion) would all aim to create a useful forum for discussion. This - it is hoped - could ultimately contribute to generate a positive climate helping to embed and consolidate discussion, reinforcing mutual trust and trust in the system, and generating ideas, which may eventually reduce tensions and conflict and improve the effectiveness of the 'hard law' track of the system.¹⁶²

4. Rule and regime design: EU as model?

The EU system of State aid control can offer valuable inspiration in terms of rule and regime design. 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 few clauses introduced in 1957 in the Treaty of Rome. Along the years, both process and content of normative development have been robust. We passed from the interpretation of general treaty clauses to policy definition and consolidation, often tested before the EU Courts, to reach the more recent stage of secondary legislation. Individual decisions have built up a practice which, for the sake of good administration, transparency and legal certainty, has been increasingly and first codified in the form of 'soft law' to eventually reach, in virtually all areas of State aid, the stage of 'hard law'. Procedurally, the system has long been based on two cornerstones aimed to make the exclusive control and power of authorization of the Commission effective. The key objective is transparency. Members had to notify all planned State aid in advance (notification obligation) and

¹⁶⁰ For a discussion on these issues see L. Rubini, *ibid*, 82-85.

¹⁶¹ A good analysis of the importance of monitoring subsidies is R Steenbink, 'Subsidies in the traditional energy sector' in J. Pauwelyn (ed), *Global Challenges at the Intersection of Trade, Energy and the Environment* (Geneva: Centre for Trade and Economic Integration, 2010) 190-191.

¹⁶² If the above is correct, it could be wondered whether the benefit of this information sharing and evaluation system could already represent a sufficient incentive for Members to notify subsidies - without coercive devices. A strong system does not need strong enforcement.

had to refrain from implementing it before authorization (standstill obligation).¹⁶³ Clearly, these features, particularly those that more distinctly relate from the *sui generis* nature of the EU legal system and its integration with the legal systems of its Member States, cannot be transplanted, as they are, to the WTO context. This is clear for example for the centralized power of authorization of the EU Commission. What the EU can, however, certainly offer is good reference for the *substantive design of the justifications*, both in terms of techniques and solutions.

A crucial development of the EU State aid system took place in 2008 with the introduction of the 'General Block Exemption Regulation' (GBER).¹⁶⁴ The underlying concept is that State aid measures pursuing horizontal – not sectoral – objectives which satisfy the precise conditions of the regulation are automatically permissible, without any need of prior authorization.¹⁶⁵ 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.¹⁶⁶ One of these is aid for renewable energy production. 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.

If the conditions of the GBER are not satisfied we return to the old system of individual scrutiny and authorization by the Commission. In the area of environmental aid, the Commission will apply the principles of the 2008 Guidelines on State aid for Environmental Protection ('Guidelines').¹⁶⁷ In general, although the normative framework is very similar, the Guidelines are more generous with higher levels of aid intensity permitted (for investment for renewable energy, we have 60% for large enterprises, 70% for medium-sized enterprises, 80% for small enterprises).¹⁶⁸ 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 decision is reached is certainly not arbitrary but involves the execution of a flexible balancing test largely centred on a necessity-proportionality assessment.¹⁶⁹

If we now compare the normative approach of the GBER/Guidelines with that the GATT/WTO, what is striking is that we assist to a similar development. At the beginning there were only general clauses (see Treaty of Rome) or statements (see Article 11 of the Tokyo Round Subsidies Code). With time, however, the general

¹⁶³ National courts 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.

¹⁶⁴ 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, 9.8.2008, 3.

¹⁶⁵ There are still however reporting and monitoring provisions.

¹⁶⁶ 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.

¹⁶⁷ OJ C82 of 01.04.2008, 1.

¹⁶⁸ If the aid is granted through a competitive bidding process on non-discriminatory criteria the intensity can reach even 100%.

¹⁶⁹ 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? See K Bacon, *European Community Law of State Aid* (Oxford: Oxford University Press, 2009) chapter 3, para. 3.28. For an analysis, see also HW Friederiszick, LH Röller and V Verouden, *European State Aid Control: An Economic Framework*, in P Bucicrossi (ed) *Handbook of Antitrust Economics* (Cambridge MA: MIT Press, 2008) 625.

recognition that certain subsidies may be legitimate has generated, through practice and experience, a more detailed discipline.¹⁷⁰

This trend *from general to specific* is in our view quite significant. In such a politically sensitive area like that of public subsidies, the anti-abuse device is clear. It is in this light that we therefore have some misgivings with Howse 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, contribute to its goals (like technology transfer and equitable allocation of responsibilities) and, to the extent possible, respect fundamental principles of the WTO like non-discrimination and transparency.¹⁷¹ The problem with this approach is the same of a GATT Article XX option outlined above. All these guidelines are too general and too few prescriptive. Detailed rules are certainly less flexible, liable to be over- or under-inclusive and more prone to 'micro-management'. Clearly, at the level of the case-by-case implementation, policy space seems to be constrained, but this is not the case if the terms and conditions of these clauses are properly negotiated and drafted, and, if necessary, a beneficial by-product of the soft governance process outlined above, they are subsequently reconsidered. In our eyes, the noticeable benefit of precision is the capability of reducing the potential for abuse.

Now, how do the conditions of the EU regulation embodied in the GBER/Guidelines compare with the previous conditions of the non-actionability criteria? An initial comparison between the previous and EU law has been made by Bigdeli. What has emerged is that they both share from the very similar general approach, and indeed 'follow the same logic' based on what has been called the 'polluter *shares* principle' of pollution cost allocation.¹⁷² Most importantly, however, there are significant differences which mainly signal a more generous scope for justification under EU rules. This – it is argued – depends on the more complex system of control in the EU which combines stricter pre-defined rules of justification with more flexible individual scrutiny by the Commission.

Contrary to Bigdeli, it is however submitted that the various elements of the EU regulation can be distinguished. While some – most notably those related to the *case-by-case authorization* by a supranational adjudicatory body – are not easily transposable beyond the EU, both the *broad design and content of the substantive rules* of justification could indeed be put on the WTO table for discussion. In other words, from the perspective of someone seeking inspiration or guidance on subsidy governance, the EU system of State aid does not necessarily represent a 'single package'.

Thus, 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. The necessity-proportionality assessment will have to be carried out and embodied in precise rules subject to clear and automatic application. At the level of the substantive rules, by contrast, there are opportunities for reconsideration. For example, the aid intensities permitted in the EU go much further than the 20% of Article 8.2(c) of the

¹⁷⁰ 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 more established EU system.

¹⁷¹ R. Howse, 'Climate Change Mitigation Subsidies and the WTO Legal Framework: A Policy Analysis', 2010, International Institute for Sustainable Development, 21.

¹⁷² It is indeed clear that the European model of State aid justification played an important part in the design of the category of non-actionable subsidies. For a detailed review of the genesis of non-actionable subsidies see SZ Bigdeli, 'Resurrecting the dead? The Expired Non-Actionable Subsidies and the lingering question of "green space"' (2011) Manchester Journal of International Economic Law, forthcoming.

SCM Agreement. Further, 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 difference refers to the possibility for EU State aid to cover operating costs, which is excluded in the SCM Agreement.

Members may feel there is a justification for approaching the EU standards, particularly if this is done in conjunction with other devices to ensure transparency, monitoring, information exchange and, if necessary, adjustment of the rules or the measure. In this respect, the safety-valve originally provided in 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 common 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.

5. Institutional reform

The new discipline should not be limited to the rules substantively defining which subsidies are legitimate but should also significantly touch the institutional settings of the system. Although the system is not likely to trace the example of the EU, and its advanced system of *administrative* control and preventive authorization, significant changes should be made to enhance the management of transparency and to provide a smooth framework for the soft governance function outlined above.

The institutional settings for this double-track system can be various, can involve a re-design of current bodies like the (heavily-used) Secretariat or the (never-used) Group of Experts, or the creation of ad hoc bodies. More generally, the possibility of resorting to experts, which is now new in the WTO system, should be carefully pondered and designed in order to render their participation truly independent and effective. A crucial issue to define is the relation and interplay of the Committee on Subsidies - where the representative of the Members convene - with such other bodies, entrusted with information and data collection on the one hand and its analysis and evaluation on the other. What should certainly be implemented is a sense of regularity and continuity in the meetings and exchange between the various actors.

VII. CONCLUSIONS

The goal of this paper is to assess whether the current WTO rules applicable to subsidies grant policy autonomy to Members wishing to support the deployment of renewable energy. The answer is negative, for various reasons. On the one hand, the status of some of the most common measures of support (tax incentives, minimum quantitative requirements and pricing requirements) is unclear under the legal definition of subsidy of the SCM Agreement. Do they constitute a financial contribution or a form of price support? Either because of the inherent nature of the measure (tax) or the uncertainty of the language of the relevant provisions (regulation), policy makers are faced with a situation of uncertainty which makes the exercise of policy space unstable. On the other hand, the determination of whether a form of public support confers a benefit faces serious difficulties in a market which is already seriously distorted by various imperfections, first of all the massive and long-standing subsidization of the main competitor of renewable energy - fossil fuel. If we move to the analysis of the specificity of the subsidy and its adverse effects, we

confront a paradox which shows how trade and environment perspectives are at odds. The legal guidelines point towards neutrality and non-discrimination are good rule of thumbs for a negative finding of specificity and negative impact. As economic analysis and empirical results show, however, to be cost-effective in their aim to boost the deployment of renewable energy, subsidies need to be as much targeted and tailored as possible.

The picture coming out from the previous analysis is thus one which is not particularly positive from the point of view of policy space – at least at the level of formal legal analysis. We have thus asked ourselves whether, in practice, there is a really a problem, or whether the dearth of litigation and scarcity of discussion at the official level simply means that there is a sort of acquiescence to otherwise illegal practices based on a tacit agreement or equilibrium of some sort. We have suggested that, if this is the case, this equilibrium is unstable and the ensuing uncertainty uncovers again the problem with policy space of the current subsidy discipline.

If so, the presence of appropriate justifications is essential. While the current discipline does not feature any specific exception or carve-out which could be relevant to subsidies for renewable energy, we have considered whether, somewhere in the system, there is a general provision that could come to the aid. This has been found in GATT Article XX. Its applicability beyond the GATT, and particularly to the SCM Agreement, is however extremely controversial, and untested so far. After analysing the various arguments pro and cons of such applicability, the conclusion has been that there are no major technical obstacles. A positive finding does ultimately depend on the perception of a serious lacuna in the system and on the determination to recognize the legitimacy of certain policy measures. Whatever the argumentation and the circumstances of application, it is clear that this move would prove politically troublesome and put considerable strain on WTO dispute settlement.

We have therefore considered that first-best scenario, which is law reform. The point is about reviving the idea of non-actionability that was present in the original setting of the SCM Agreement making it balanced, if not perfect. In this regard, the paper has provided a brief blueprint indicating the main principles and traits of a new discipline for the governance of legitimate subsidies, leaving the full development of these principles and features to another research. Attention has been spent in particular to the entrenchment of the concept of community, to the combination of mechanisms of hard and soft governance, to the reinforcement of transparency and the institutional frameworks, and to the possibility of using the fairly developed system of justifications in EU State aid law for a model, particularly with respect to the design and possibly the content of the specific exceptions.

This paper has probably raised more issues than answers, and attempted to provide new perspectives, in an area which is crucially challenging for lawyers, economists, policy-makers and citizens of the world at large.

