
16 Climate change policies and the WTO: Greening the GATT, revisited

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The thrust of our argument in this chapter is that the present WTO ‘negative contract’ is a legal constraint that does not suffice to promote climate change-friendly policies, as WTO members do not have to adopt similar policies. Moreover, some of their policies might be judged inconsistent with the WTO, even if adopted in order to address externalities and distortions. To illustrate, we assume that Home, a WTO member, wishes to employ one of three instruments of different ‘intensity’ (labelling, domestic tax, and subsidy) to mitigate climate change. Can it do so while respecting its obligations under the WTO contract? Our response is affirmative when Home chooses the second option, and negative when it uses the first and the third options. The negative response is due to the bizarre manner in which the WTO Appellate Body, the highest court in the WTO infrastructure, has understood non-discrimination in the context of the Technical Barriers to Trade (TBT) Agreement, and the inertia/lack of foresight by trade delegates who did not extend the carve-out for ‘green subsidies’ that had been agreed in 1995 beyond 2000. Needed changes at the multilateral level require delegation of sovereignty to move towards a contract that would require positive steps from the WTO membership in order to avert climate change. As an immediate amendment, the reinsertion of the clause of non-actionable subsidies should be considered. Until greater delegation of sovereignty is accepted, the fight against climate change on the trade front will be substantially aided if the WTO were to embrace and accommodate clubs that have endorsed this objective.

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1 Introduction

Up until the launch of the Doha Round, the climate change and trade regimes evolved separately through stand-alone negotiations. Trade policy and the WTO enter the design of the upcoming climate regime architecture once one accepts that the first-best option of global carbon pricing is unachievable because of non-participation by a subset of countries. From a *Realpolitik* perspective, one must first understand how climate change policies fare under the current WTO mandate and ensuing legal discipline. The focus of the framers of the GATT was on tariff protection, leaving to members the freedom to design all domestic policies (including environmental) to their liking. Once a social preference had been revealed, it would apply in non-discriminatory terms, that is, without distinguishing between domestic and imported goods. Protection could take one form only (tariffs), and it became negotiable. This is why the GATT is often referred to as a ‘negative integration’ contract. As discussed in the working paper version of this chapter (Mavroidis and de Melo 2015), environmental policies have changed little from the GATT to the WTO.

Section 2 reviews how the three main instruments to address climate change mitigation objectives (labelling, taxes, and subsidies) fare under the current WTO regime. Section 3 discusses needed changes in the WTO, emphasising implementable improvements inspired by existing and former elements of the world trade architecture.

2 Instruments to deal with trade-related conflicts

Quantitative restrictions are illegal in the WTO. Hence, members cannot, in principle, block imports of products that pollute the environment unless they apply similar measures to domestic products. Again in principle, WTO members can also differentiate the customs treatment of imports depending on whether they fight climate change or not, but this is an instrument of limited effectiveness as tariffs are mostly bound and applied tariffs are, on average, in the range of 1-5%. Moreover, the Harmonized System (HS) that provides the basis for tariff classifications does not contain classifications that distinguish between goods based on whether they avert climate change or not. Classifications to this effect are thus ‘national’ (i.e. decided unilaterally), so that if a WTO member adds its own classification i.e. at the 8 and 8+ digit level, it is at the

risk of a legal challenge (a potential complainant could argue that renewable and non-renewable energy are like products, and hence by imposing a lower customs duty on the former than that imposed on the latter, a WTO member would be violating the most-favoured-nation, or MFN, obligation). There is no case law that directly addresses this issue, but there is the risk of litigation.

Reversing a decision under US-Tuna (Mexico) in US-Shrimp, the Appellate Body (AB), the highest judicial organ of the WTO, held that unilateral policies are not illegal simply because they are unilateral. If they meet the relevant statutory criteria, then unilateral policies, including climate change policies, can perfectly well exist within the WTO regime. The Uruguay Round agreements reproduced the negative integration ‘spirit’ of the GATT. The WTO did strengthen the disciplines towards subsidies, making subsidies (i.e. every government intervention that confers benefits to specific recipients rather than to the public at large) either prohibited or ‘actionable’. Only two categories of subsidies are prohibited – namely, export and local content subsidies – while a third category that included environmental subsidies was classified as ‘non-actionable’ over a five-year period up to 1 January 2000 (Art. 31 of the Agreement on Subsidies and Countervailing Measures, or SCM). All other subsidies are ‘countervailable’, e.g. either through unilateral (imposition of countervailing duties) or multilateral action (dispute before a Panel), whereby affected member states will impose a burden on the subsidising member equal to the benefit granted through the scheme. As the agreement on a non-actionable category was not renewed, a scheme that qualifies as a subsidy under the SCM Agreement is nowadays either a prohibited or an actionable subsidy. As a result, WTO members cannot subsidise producers in order to change their process and production methods (PPMs) to produce in a way that will avert climate change. They can, of course, always subsidise consumers. Political economy-related transaction costs often explain why similar measures do not see the light of day.

Against this background, three challenges facing the upcoming climate regime involve the WTO: first, a predictable time path for the price of carbon that would involve reforms of the subsidy code to handle the removal of fossil fuel subsidies and the application of subsidies at the international level to develop abatement technologies; second, border tax adjustments to tackle the different forms of carbon leakage, especially that related to the ‘competitiveness channel’ for energy-intensive, trade-exposed manufacturing

(see the chapter by Fischer in this book); and third, labelling to distinguish PPMs that avert climate change from those that do not.

Acknowledging that climate change subsidies are no longer allowed, we consider three instruments to mitigate climate change.

2.1 Environmental labels

Home adopts a labelling scheme distinguishing between products that are not produced in manner that causes climate change and products that are. This is particularly important in the current climate negotiations, as the IPCC estimates that 38% of the reductions in CO₂ emissions to hit the 2°C target will have to come from the use of energy-efficient (EE) products (energy-saving products that minimise economy-wide energy consumption, and energy-efficient products in a performance-based sense). Along with minimum energy performance standards, comparative labelling to distinguish goods according to their PPMs is the most common policy instrument to promote EE.

Home then sets a ceiling on CO₂ emissions of cement clinkers (HS 252321), with products whose emissions exceed the ceiling not allowed to be sold lawfully sold in its market. Here it is irrelevant whether the PPM has been incorporated in the traded good or not. The Agreement on Technical Barriers to Trade (TBT) that applies to labelling schemes covers both incorporated inputs (termed ‘physical characteristics’) as well as non-incorporated PPMs. It is further irrelevant whether compliance with the scheme is mandatory for goods to be traded (‘technical regulation’) or not (‘standard’). The substantive obligations are identical irrespective of the ‘intensity’ of the measure, and case law has anyway blurred this distinction.² Finally, note that this is a domestic, not a trade instrument so, *prima facie*, the test of likeness will not revolve around the Harmonized System (HS) classification of the product but, as discussed below, on consumers’ reactions.

Foreign complains that the labelling scheme is unnecessary and discriminatory. The recent AB report on US-Tuna II (Mexico) reflects the current state of affairs. Labelling schemes must be *necessary* and applied in a non-discriminatory manner. The term

² Mavroidis (2015) discusses this issue in detail.

“necessary” has been consistently interpreted to denote the least restrictive option to achieve an objective unilaterally set by the regulating state, which is not justiciable. In the example, if the regulating state cannot afford to subsidise, it could still use the tariff. In light of the above, it is hard to imagine how a labelling scheme cannot be judged necessary. As in *US-Tuna II (Mexico)*, where a labelling scheme was found to be TBT-consistent on similar grounds, we expect the measure to pass muster in this respect. The costly part of the endeavour will be conformity assessment falling on exporters.

Assuming that Foreign cannot pass this first test, Foreign can still attack Home’s measure and argue that it is discriminatory since, irrespective of emissions released, a widget is a widget is a widget. The problems for Home then come when reviewing the consistency of the measure with non-discrimination. In *US-Tuna II (Mexico)*, the AB held that consumers would decide on likeness. If so, most likely they will be purchasing the cheaper of the two goods, i.e. the one with highest embodied CO₂ emissions. By not conditioning purchasing decisions on the volume of CO₂ emissions, the two goods will be judged ‘like’ goods. By treating two like goods in an unlike manner, Home will be violating its obligation to not discriminate. This is what the AB decided in *US-Tuna II (Mexico)*.

Why not compare climate change-averting domestic to climate change-averting imported goods (i.e. labelling schemes in Home and Foreign)? In the *Chile-Alcoholic Beverages* case (and later in the *EC-Asbestos* case), the AB established that this comparison is not the right one. Case law has thus upheld that it is up to consumers to decide whether regulatory distinctions that create submarkets are legitimate or not. The measure cannot be saved through recourse to GATT Article XX, as consistent case law suggests that this defence is not available to violations of the TBT Agreement.

This is a deplorable state of affairs for climate change mitigation endeavours. Mavroidis (2013) explains why likeness should be a question of policy – not market-likeness (as perceived by consumers) in the TBT context. Governments will intervene only when they disagree with the behaviour of private agents; otherwise, why intervene in the first place? Similar statutes should thus pass the test of legality with flying colours. Alas, this is not what happens. In the end, the problem here is not major, since all that is required is a change in case law. Since the law as it stands does not prejudice the outcome at all, it leaves the question of establishing likeness in the hands of adjudicators.

2.2 Environmental taxes

Here we are dealing with a border measure, and the likeness test will revolve around the (inadequate) HS classification of the product. Horn and Mavroidis (2011) discuss this issue in substantial detail. Now, Home opts to adjust the level of taxation on the content of CO₂, such as a tax of \$10 per tonne of CO₂ released in the production of cement clinkers (HS 252321). Here we shift from the TBT Agreement to the GATT, since we are dealing with a tax collected at the border and the legal test is not identical, although consumers, yet again, are kings. If consumers prefer the more CO₂-intensive imported cement, the treatment will be judged 'less favourable' for imported goods, and hence GATT-inconsistent (in EC-Seals, the AB ruled that producers of seal bags could not market their bags in the EU market, whereas producers of other bags could). The treatment will be judged less favourable, since 'like' goods will be paying 'unlike' taxes.

Unlike what happens in the TBT labelling case, though, Home will be in a position to justify its measures under GATT Article XX(g). Clean air is an 'exhaustible natural resource' (US-Gasoline, AB), and the measure must simply 'relate to' its protection. This means that Home must demonstrate a rational connection between the tax differential and the protection of clean air, a rather easy-to-meet standard. CO₂ does pollute the air, and the less air is polluted, the cleaner it is. Tax disincentives to pollute 'relate to' the objective sought (the protection of clean air); hence, Home would prevail under the GATT.

Home could impose higher customs duties against polluting goods instead of adjusting domestic taxes at the border, as discussed by Fischer in her chapter in this book. But to do so, it would have to enter sub-classifications in the headings at the 10- or 12-digit level to distinguish the tariff treatment of goods made using renewable energy from those 'same' same goods when made using fossil fuels – a difficult exercise. The consistency of similar sub-classifications with the WTO is currently an open issue. Moreover, since tariffs are at an all-time low, the potential for 'meaningful' tariff advantages through similar schemes is limited.

2.3 Subsidies

Under the current WTO regime, ‘green’ subsidies are prohibited. The elimination of such subsidies signalled the end of the distinction between ‘good’ and ‘bad’ subsidies, thus defying economic logic that calls for the removal of market failures. Subsidies to consumers that are not specific are available, but they are accompanied by higher transaction costs than subsidies to producers (more transactions and higher verification costs). Moreover, even though there is no case so far, a complainant might be in position to show that, in spite of a subsidy having been paid to consumers, *de facto*, only a few companies have profited. In this case, a complainant could request withdrawal of the scheme. In the end, the limits to addressing climate change through subsidies are quickly understood when one takes on board the negative integration character of the WTO

3 Is the WTO a hindrance to environmental protection?

With foresight, Esty (1994) argued 20 years ago that the WTO was being negotiated without paying sufficient attention to environmental concerns. While some problems WTO members face when wishing to adopt measures to mitigate climate change can be dealt with by pre-empting the discretion of WTO ‘courts’ (e.g. labelling), most derive from the overall attitude of the WTO legal regime towards global public goods. The framers of the WTO focused on improving a series of pre-existing agreements and did not consider the need to internalise the growing transnational externalities. A few scattered initiatives, like the ongoing negotiation of environmental goods, are a step in the right direction, but are insufficient. A total recall – call it a WTO 2.0 – that would not *allow* but would *oblige* WTO members to adopt a different attitude towards protecting and serving public goods, and give priority to this objective when and if conflicts with trade obligations arise, is what is needed. Consider, then, implementable reforms at the multilateral and plurilateral levels.

3.1 Reforms at the multilateral level

Two improvements are necessary. Monitoring of subsidies for fossil fuels is the starting point. Collins-Williams and Wolfe (2010) have adequately explained why WTO members are disincentivised from providing information about their subsidies, since supply of similar information is self-incriminating. Note, though, that as Aldy (2015) explains in detail, the G20 Fossils Subsidies Agreement call for external review is a step forward. Hence, this is an area where the wishes of the G20 and the reality at the WTO are in conflict. Here, the WTO (the common agent) could be mandated by members to play a more active role in marshalling evidence worldwide on similar subsidies. Second, the provision on non-actionable subsidies needs to be re-inserted in the WTO, and this time improved so as to correspond to whatever is needed to fight climate change. Those who fear that the frontier between green policies and ‘blue’ industrial policies is more of a line in the sand than a distinction set in stone will be comforted to know that local content subsidies are prohibited. Assuming effective monitoring of schemes along the lines discussed by Wiener in his chapter in this book, subsidisers will find it hard to help domestic producers sell their technology through subsidies allegedly aimed at averting climate change.

Furthermore, assuming that a generic category of non-actionable subsidies has been re-introduced, the WTO legal regime could preempt the wrong exercise of discretion by Panels and the AB by including illustrations of the type of subsidies that should qualify as ‘green’, and therefore as non-actionable subsidies. For example, it could be spelled out that all subsidies paid to consumers to purchase renewable energy are non-actionable. The WTO membership could go further and, inspired by practice, exonerate other types of subsidies as well. Indeed, in the same way that it has been possible to include an indicative list of schemes that qualify as export subsidies in the SCM Agreement, the WTO membership should be in a position to agree on a list of schemes that should qualify as non-actionable.

3.2 Reforms at the plurilateral level

Plurilateral agreements that bind a subset of the WTO membership – assuming authorisation by the plenum – is another route to address the climate mitigation

objective. The ongoing negotiation on environmental goods, where a subset of the WTO membership is willing to reduce tariffs on goods that address climate change-related concerns, will eventually take the form of a plurilateral agreement. Hoekman and Mavroidis (2015) and de Melo and Vijil (2015) both forcefully argue why this avenue should be encouraged in the future functioning of the WTO. Mentioning six tasks that have eluded multilateral negotiations, Victor (2015) also advocates the ‘climate club’ approach.³

Climate clubs should not be viewed as attempts to curb multilateralism. Both critical mass and plurilateral agreements share one feature in common: they keep the umbilical cord to the WTO intact, as MFN is observed in the former case, while accessions are open to non-original members in the latter. A combination of the two could be of particular interest in the fight against climate change. WTO members could agree, for example, that a certain threshold of world production of energy-intensive goods are particularly harmful towards the environment and incite climate change. Assume, for example, that cement production, which accounts for 5-7% of global CO₂ emissions, has been singled out. Signatories to a critical mass plurilateral agreement could agree to the staged reduction of CO₂ emissions. They could further agree that, before the agreement has entered into force, WTO members representing, say, 80% of world cement production will have ratified it.

Punishing non-participants is not envisioned in the critical mass and plurilateral approaches discussed above. Nordhaus (2015) explains and shows how a set of climate amendments to international law that would “explicitly allow for uniform tariffs on non-participants within the confines of a climate treaty... [and] prohibit retaliation against countries who will invoke the mechanism” could entice participation by non-members (p. 1349). He then shows that the use of ‘carbon duties’ is an effective sanction to prevent leakage only, but that uniform tariffs on imports are more effective in preventing free-riding. This penalty turns out to be reasonably well targeted and it is also incentive-compatible (it imposes costs on the defectors and confers benefits to the

3 The tasks best-suited for being addressed in a climate club include enticing reluctant countries to participate using carrots and sticks, designing smart border measures, crafting conditional commitments, crafting and demonstrating technology strategies and tackling easier problems like short-lived climate pollutants.

punisher). In conclusion, the huge benefits of belonging to the WTO in terms of MFN access could be made an effective enticement for participation.

Nordhaus does not go into the details of the legal amendments required. The problem is that under the current negative integration contract, countries cannot be told to adopt climate-mitigation policies, and nor can a club of countries raise their bound tariffs – even in a non-discriminatory manner – against non-members, since under a preferential trade arrangement (PTA) members are only allowed to reduce tariffs against outsiders. Moreover, as we have explained above, there is more promise in pushing outsiders to join the club through domestic taxes (which are unbound) than through customs tariff differentiations, the overall level of which is very low. And of course, the credibility of similar threats will depend on whether the WTO ‘courts’, in case of litigation, adopt our approach regarding the relevance of Article XX(g) of GATT. As discussed above, re-inserting Article 8 SCM might help, but it would have little effect in tackling the immensity of the problem, as the punisher is being punished while the free-rider benefits from abatement by club members.

A more promising approach would be for club members to adopt a regime of mutual recognition/equivalence (which is easier to do among club members who have relatively high within-group trust). Then, a coalition of the willing could agree on ‘optimal’ regulatory standards that should be followed and that would be implemented via conformity assessments.⁴ In this case, outsiders would have to demonstrate that their production processes are equivalent to those prevailing among club members to profit from market access.

While it is unrealistic to expect that WTO members will have similar preferences in mitigating climate change, legislators need to ensure that both a defence by those willing to defend is provided through the WTO legal arsenal while at the same time, proactive behaviour is condoned. The former is the case indeed, as our discussion of border tax adjustments above shows. The latter remains to be seen under the current legal contract where members are reluctant to transfer sovereignty even when it is quite obvious that absent multilateral action, distortions will not be addressed. In this setting,

⁴ In Nordhaus’ model, the tariff punishment is credible because it acts like an optimal tariff. Achieving credibility would be even harder for regulatory standards.

re-inserting Article 8 SCM and allowing ‘coalitions of the willing’ seems the most promising way to move forward. The GATT was not ‘greened’ and we have paid the price – one that the WTO, alas, cannot afford to pay anymore.

References

Aldy, J. (2015), “Policy Surveillance in the G-20 Fossil Subsidy Agreement: Lessons for Climate Policy”, Belfer Center for Science and International Affairs Discussion Paper No. 15-70, Harvard University.

Collins-Williams, T. and R. Wolfe (2010), “Transparency as Trade Policy Tool: The WTO’s Cloudy Windows”, *The World Trade Review* 9(4): 551–581.

De Melo, J. and M. Vijil (2015), “The Critical Mass Approach to Achieve a Deal on Green Goods and Services: What is on the Table? How Much to Expect?”, FERDI Working Paper No. P107, Clermont-Ferrand, France (also forthcoming in *Environment and Development Economics*).

Esty, D. C. (1994), *Greening the GATT, Trade, Environment and the Future*, Washington, DC: Peterson Institute

Fischer, C. (2015), “Options for avoiding carbon leakage”, Chapter XX in this volume.

Grossman, G. M., H. Horn and P. C. Mavroidis (2013), “Domestic Instruments”, in H. Horn and P. C. Mavroidis (eds), *Legal and Economic Principles of World Trade Law*, New York: Cambridge University Press, pp. 205-345

Hoekman, B. M. and P. C. Mavroidis (2015), “Embracing Diversity: Plurilateral Agreements and the Trading System”, *World Trade Review* 14(1): 101-116.

Horn, H. and P. C. Mavroidis (2011), “To B(TA) or Not to B(TA)? On the Legality and Desirability of Border Tax Adjustments from a Trade Perspective”, *The World Economy* 34(11): 1911-1937.

Mavroidis, P. C. (2013), “Driftin’ too far from shore – Why the test for compliance with the TBT Agreement developed by the WTO Appellate Body is wrong, and what should the AB have done instead”, *The World Trade Review* 12(3): 509-531.

Mavroidis, P. C. (2015), *The Regulation of International Trade*, Cambridge, MA: MIT Press.

Mavroidis, P. C. and J. de Melo (2015), “Climate Change Policies and the WTO: From Negative to Positive Integration”, forthcoming FERDI Working Paper, Clermont-Ferrand, France.

Nordhaus, W. (2015), “Climate Clubs: Overcoming Free Riding in International Climate Policy”, *American Economic Review* 105(4): 1339-70

Victor, D. (2015), “The Case for Climate Clubs”, E15 Initiative, ICSTD, Geneva.

Wiener, J. (2015), “Towards an effective system of monitoring, reporting, and verification”, Chapter XX in this volume.

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