8 The role of international economic law in addressing climate change

Bradly J. Condon and Tapen Sinha*

8.1 Introduction

Low- and middle-income countries face supply-side constraints such as technical capacities, adequate hard infrastructure capacities, human capital (above all know-how), access to adequate credit, and access to environmental goods and services that affect their capacity to address climate change and other environmental issues. This chapter discusses how the existing framework of international economic law may constrain the ability of low- or middle-income countries to overcome such supply-side constraints in order to address their, or their trading partners’, environmental concerns regarding climate change and be included in global value chains. We will consider what should be done from a legal perspective, what might be achieved, and the likely implications of international economic law for acquiring and implementing environmentally friendly technologies and financing climate change mitigation and adaptation.

8.2 Acquiring and implementing environmentally friendly technologies

Providers of relevant technologies: industrialized vs. emerging economies

Traditionally, debates regarding climate change and financial and technology flows have been framed as North-South. However, this has changed, with the emergence of new low-carbon technology companies in developing countries, such as China and India, which could diffuse clean technology nationally and internationally. In addition, the financial crisis has limited the financial capacity of major developed countries, notably the European Union, Japan and the United States. Moreover,

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investment banks (such as the World Bank) can help to mobilize capital for low-carbon technology, making their own investments and structuring investments for classes of investors with different risk–reward profiles and return expectations (World Bank, 2009; 2010; 2013). This paradigm shift in financial and technology flows should inform debates regarding both climate finance and technology transfer.

National and international climate change response efforts have followed separate mitigation and adaptation paths, with a major focus on mitigation. However, some climate change impacts are unavoidable now, so adaptation efforts have begun. Nevertheless, the technological and financial capacity of countries to adapt to climate change differs significantly, as does their vulnerability to the effects of climate change (WTO and UNEP, 2009). Their greenhouse gas (GHG) emissions also differ greatly (WTO, 2013). These differences between countries are part of the reason for incorporating the principle of common but differentiated responsibilities into the United Nations Framework Convention on Climate Change (UNFCCC) (Stone, 2004).

Dividing the world into developed and developing countries, and using that categorization as a basis for addressing climate change, whether through adaptation or mitigation, is simplistic. Policy responses that depend on the maturity of financial markets or the robustness of national regulatory institutions may not work in all countries. Differences in levels of economic development influence the design of global solutions at both the negotiation stage and the implementation stage. The financial and technological endowments of countries are not frozen in time. It makes more sense to assign responsibility on a scale, based on objective criteria that are in accordance with the governing principles of international environmental law, and to determine responsibility for the cost of mitigation and adaptation on this basis.

Foreign investment is an important source of capital, technology and know-how. Governments need to strike a balance between regulation that discourages foreign investment and foreign investment protection that discourages regulation. If countries implement international agreements or domestic climate change policies in a way that violates the rights of foreign investors, they may have to pay compensation to the foreign investors. This risk can create disincentives to regulation, particularly in countries where the government officials responsible are unsure of the scope of their obligations to foreign investors. It is thus very important to understand the scope of these obligations when designing and implementing climate change regulation.

At the same time, foreign investment is an important source of knowledge and technology diffusion, together with trade in goods and services (Hoekman and Javorcik, 2006). Thus, it is important to create adequate incentives for foreign
investors to transfer best practices and technologies that can address climate change adaptation and mitigation. This means that governments must provide adequate protection to foreign investors, through international investment agreements and intellectual property rights (IPRs). If foreign investors’ rights are watered down in an effort to enhance access to technology, the effect could be to create disincentives to transfer technology and best practices through foreign investment (although IP policies do need to vary with the technology). In addition, international investment agreements can lower regulatory and political risks for foreign investors, and thus lower the cost of and create incentives for foreign investment in clean energy or carbon mitigation technologies (Boute, 2012; UNCTAD, 2010).

**Intellectual property rights and technology transfer**

IPRs may have a negative impact on innovation, competition and affordable access for some technologies (Boldrin and Levine, 2005; Condon and Sinha, 2005). However, it is not possible to analyse the subject of IPRs and international technology transfer in a generalized manner. In the case of clean energy technologies, which serve to mitigate climate change, the availability of competing technologies will diminish the impact of IPRs on their cost. In the case of new plant varieties, in contrast, the technology has no or few substitutes and the IPRs are concentrated in the hands of relatively few firms. For this technology, IPRs will increase costs due to monopoly pricing power. New plant varieties represent an important technology that developing countries, in particular, will need in order to adapt to the effects of climate change (Condon and Sinha, 2013; IPCC, 2001). The applicable IP laws and the technology transfer issues are, therefore, different for biotechnologies such as plant varieties, where IPRs may create barriers to access that are similar to those in the pharmaceutical sector (Condon, 2013; Louwaars et al., 2009; Strauss, 2009).

For clean energy technologies, the focus of the debate should not be on IPRs. First, achieving reforms to the international IP regime is likely to prove difficult. Secondly, IPRs do not represent the main obstacle to innovation, competition and affordable access for clean energy technologies (Barton, 2007). For example, the fact that the United States has applied countervailing duties on imports of solar panels from China indicates that IPRs are not a sufficient barrier to competition in this sector. Otherwise, countervailing duties would not be necessary to protect the United States solar panel industry from Chinese competition.

With respect to clean energy technologies, the debate over IPRs and the technology transfer from developed to developing countries is misplaced. This type of North-South debate distracts from the real issues: creating incentives for and removing
obstacles to clean energy development and dissemination. For example, fossil fuel subsidies need to be reallocated to clean energy technologies. Developing countries' fossil fuel subsidies are four times greater than the UNFCCC financing they seek for climate change mitigation and adaptation. The World Bank is prepared to provide technical assistance to developing countries to change these policies. Moreover, developing countries, and China in particular, are becoming an important source of clean energy technology. Dissemination of clean energy technologies can be facilitated by removing barriers to foreign investment and international trade in clean energy technology and related services. For these reasons, the analysis of clean energy technology transfer should focus on these issues, rather than an out-dated North-South debate over IPRs.

**Financing new technologies: multilateral institutions and private investors**

Multilateral cooperation and financing will continue to be an essential element in climate finance. The WTO will have to adapt subsidies rules, via judicial interpretations on a case-by-case basis, or via a negotiated response to agreements reached in other multilateral organizations. The increasing number of actors in climate finance activities will require more coordination and adaptation of roles among institutions such as the World Bank and the Green Climate Fund. The activities of these institutions will have to be coordinated with those of the private sector participants as well.

To stabilize GHG emissions would require a significant reduction of emissions in both the developed and developing world. This requires large-scale investment in energy infrastructure and other large-scale mitigation projects. Multilateral funding channels may be the best option for such large-scale financing in developing countries. However, private, bilateral and multilateral funding sources are not mutually exclusive. For example, the World Bank can play a role in creating incentives for private-sector investment, by investing in pilot projects and lowering political risk for private investors.

International investment agreements also play a role in reducing political risk for foreign investors, but should strike the right balance between the rights of foreign investors and the right of governments to regulate in the public interest. In relation to environmental regulation, there are some important differences between international trade agreements and international investment agreements. In particular, only governments have access to the dispute settlement system of the WTO (and comparable dispute settlement systems in free trade agreements). This can filter out challenges to some measures. In contrast, private investors can file claims directly against host governments under international investment agreements.
agreements. Private investors may be less likely to question the wisdom of challenging governments' right to regulate than are governments themselves. Moreover, the majority of international investment agreements do not contain references to environmental concerns. This highlights the importance of determining the extent to which environmental regulation is subject to the disciplines contained in these agreements.

International investment agreements do not eliminate a state's right to regulate in the public interest. Legitimate environmental measures should not be subject to international investment agreements, since they would not qualify as measures "relating to" investments. A key issue is the legitimacy of the disputed environmental measure. One way to define legitimacy is by asking whether the measure serves the public interest or a private interest. Of course, a measure can simultaneously serve both public and private interests. The real question here is whether the evidence demonstrates bad faith, protectionist intent or intent to harm foreign investors on the part of the legislator or the judiciary. The majority of state practice is consistent with the view that international investment agreements do not negate the right to regulate climate change.

Moreover, customary international law does not require a state to maintain a stable legal and business environment for investments. The customary international law standard does not prevent a public authority from changing the regulatory environment to take account of new policies and needs, even if some of those changes may have far-reaching consequences and effects, and even if they impose significant additional burdens on an investor. It does not provide a guarantee against regulatory change or entitle an investor to expect no material changes to the regulatory framework within which an investment is made. Governments can change, and policies and rules can change. The rules of customary international law only protect against egregious behaviour and do not require a legal and business environment to be set in concrete.

The minimum standard of treatment of foreign investors under customary international law has to be interpreted in accordance with evolving customary international environmental law. The obligation to avoid activities causing significant damage to the environment of another state is likely to encompass regulations to address climate change. Thus, legitimate climate change regulation would not be inconsistent with the minimum standard of treatment. To conclude otherwise would create a conflict between customary international investment law and customary international environmental law.

The general body of precedent usually does not treat regulatory action as amounting to expropriation, because expropriations tend to involve the deprivation of ownership
rights, and regulations a lesser interference. Under customary international law, where economic injury results from bona fide regulation within the police powers of a state, compensation is not required. Thus, as a general matter, states are not liable to compensate foreign investors for economic loss incurred as a result of a non-discriminatory action to protect the public interest. Once an expropriation has taken place, compensation is due even if it is for an environmental purpose. However, not all government regulatory activity that makes it difficult or impossible for an investor to carry out a particular business is an expropriation. Given the economic and environmental consequences of climate change, it seems that bona fide climate change regulation should take precedence over investors’ rights, though the correct balance likely will have to be decided on a case-by-case basis. It is also important to protect foreign investors from unfair or arbitrary treatment by governments who are motivated by short-term political interests rather than long-term environmental risks. For this reason, we emphasise that we are referring to bona fide climate change regulation.

Striking the right balance between the regulatory risks that investors face and the litigation risk that governments face is not the same for all markets. Larger markets can have a greater degree of regulatory risk and still attract foreign investors. In contrast, smaller, less economically attractive markets may need to strike a balance that reduces regulatory risk to a greater degree, in order to attract foreign investment. Larger markets are also a greater source of GHG emissions, so the balance should favour climate change regulations over compensation to foreign investors, in order to limit the risk of regulatory chill and to enhance the right to regulate. Science-based regulatory decisions should withstand scrutiny, even if the science was preliminary, when there is sufficient scientific evidence of the potentially serious environmental effects to support the regulation. There is sufficient scientific evidence of the potentially serious effects of climate change to justify climate change regulation, even if it also has the effect of diminishing the value of some foreign investments.

International investment law has the potential to have a chilling effect on climate change regulation, by raising issues regarding the risk that climate change regulation will expose host states to claims from foreign investors. Legitimate climate change regulation should not trigger liability to compensate foreign investors. However, this may not eliminate the chilling effect, since it is costly for states to defend against such claims even if they do not succeed. Awards of costs against investors who file such claims may discourage such claims, but this may not be sufficient to overcome the chilling effect in the short term. Moreover, the lack of a system of precedents for tribunals permits tribunals to reach different conclusions on similar issues, which increases the uncertainty regarding the outcome of litigation. Nevertheless, there is room in international investment law to strike an appropriate balance between the
right to regulate climate change and right of foreign investors to seek compensation for arbitrary and discriminatory governmental actions. Striking the right balance will facilitate the mobilization of foreign investment as a source of climate finance and technology dissemination.

8.3 Encouraging the production and consumption of environmentally-friendly goods taking into account UNFCCC and WTO agreements

WTO members are free to eliminate trade barriers unilaterally, as long as the most-favoured nation (MFN) rule is observed, and bilaterally, regionally or plurilaterally, as long as they comply with the exceptions for regional trade agreements in the General Agreement on Tariffs and Trade (GATT) Article XXIV and the General Agreement on Trade in Services (GATS) Article V. In the case of climate change, however, the regime is less developed and there is greater uncertainty regarding the WTO compatibility of unilateral and regional approaches to mitigation and adaptation. It might be useful to add explicit provisions to the UNFCCC, to reduce the uncertainty regarding the consistency of unilateral, bilateral and plurilateral approaches to climate change regulation. Unilateral, bilateral and plurilateral approaches can complement multilateral approaches by pushing other countries to follow suit multilaterally. The UNFCCC already incorporates the language of GATT Article XX regarding arbitrary or unjustifiable discrimination between countries, but this is insufficient to address this issue.

Regulatory capture creates risks that unilateral measures will serve as disguised restrictions on international trade rather than legitimate efforts to combat climate change (Condon and Sinha, 2013; de Lima-Campos, 2012; WTO, 2013; Yandle, 1989). For this reason, unilateral measures should be designed and applied in accordance with GATT Article XX, to minimize the risk of unilateral measures that constitute arbitrary or unjustifiable discrimination or disguised restrictions on international trade. In this regard, it is helpful that this same language has been incorporated into international environmental law and the UNFCCC. The political and economic context that has led to multilateral negotiation paralysis means that unilateralism may represent the future of climate change regulation, at least in the short to medium term. However, this does not mean that we cannot use the multilateral consensus that has been achieved so far to regulate the use of unilateral measures.

The ongoing implementation of climate change policies could raise several issues in WTO law. GATT Article XX will play an important part in determining the WTO consistency of climate change measures. The scope of paragraphs (b) and (g) in GATT Article XX still needs to be defined in many aspects, as does the relationship
between these two paragraphs. Multilateral environmental agreements on climate change will probably be relevant to determining the consistency of climate change measures with GATT Article XX and the provisions of the Agreement on Technical Barriers to Trade (TBT Agreement). However, it is unlikely that GATT Article XX will be applied to the Agreement on Subsidies and Countervailing Measures (SCM Agreement), the Agreement on Agriculture or the TBT Agreement (Condon, 2009). Its application to provisions in other multilateral agreements on trade in goods as per Annex 1A of the Agreement Establishing the WTO (WTO Agreement) will have to be analysed on a case-by-case basis.

If processing and production methods are relevant to determining the issue of “like products” in GATT Articles I and III, the SCM Agreement, the Agreement on Implementation of Article VI of the GATT 1994 (Anti-dumping Agreement) and the TBT Agreement, then this may provide an alternative analytical approach to determine the WTO consistency of climate change measures. Again, this will have to be analysed on a case-by-case basis in light of specific climate change measures. However, if environmental subsidies are designed so that they are not specific to certain enterprises, they will not be subject to multilateral action under Part III or unilateral action under Part V of the SCM Agreement. If the subsidies apply to agricultural products, they will have to comply with the commitments of members under the Agreement on Agriculture. In the case of export subsidies, compliance with the Agreement on Agriculture may shield subsidies on agricultural products from action under the SCM Agreement Article 3.1(a). However, opinion differs on this issue. In the case of subsidies contingent on the use of domestic products, it will be necessary to comply with the SCM Agreement and the Agreement on Agriculture (Condon, 2009), as well as GATT Article III and the Agreement on Trade-Related Investment Measures (TRIMS).

With respect to WTO non-discrimination obligations, “less favourable treatment” requires a determination of whether the contested measure modifies the conditions of competition to the detriment of imported products. However, the existence of such a detrimental effect is not sufficient to demonstrate less favourable treatment if the detrimental impact on imports stems exclusively from a legitimate regulatory distinction, provided that it is even handed. Thus, the “legitimate regulatory distinction” test serves as a defence to allegations of WTO-inconsistent discrimination, where risks are addressed in an even-handed way, for example where distinctions in treatment are based on evidence that the risks are different in different situations and therefore the different situations need to be addressed in different ways to achieve the ultimate policy goal (Condon and Sinha, 2013). With respect to climate change, emissions from different fuels could be subject to different taxes where the different emissions pose different risks, for example due to the nature and quantity of GHG emissions for each fuel or the GHG emissions from
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their production processes. Different treatment of products, based on their processing and production methods, also might not constitute less favourable treatment, for example due to differences in their carbon footprint. The difficulty is that carbon footprints may be difficult to measure and the design of carbon labelling programmes runs the risk of being distorted to benefit domestic industry lobbies. De facto discrimination, which creates incentives for private actors to choose domestic inputs over imported ones, could be incorporated into some element of the design of a regime of carbon taxes and border tax adjustments, for example where the taxes themselves do not discriminate but the reporting or filing requirements are more burdensome for the imported products.

8.4 Encouraging the use of environmentally-friendly processes by foreign establishments

Countries also need to remove barriers to trade in clean energy technologies, rather than erect such barriers. WTO law does not require countries to apply countervailing duties; it merely permits this practice as long as it is done in accordance with the requirements of the SCM Agreement. Dissemination of clean energy technologies can also be facilitated by removing barriers to foreign investment and international trade in services.

International investment agreements could prove problematic, not because of the substance but due to the lack of predictability in the outcomes of arbitrations. The language of international investment agreements is sufficiently flexible to accommodate climate change regulation. While international investment tribunals do not create precedent that is binding upon other tribunals, this jurisprudence does influence other tribunals. However, the approach of different international investment arbitrators to similar issues can vary considerably, which creates a degree of uncertainty regarding the outcome of international investment litigation. This introduces an element of litigation risk to the process of climate change regulation that affects foreign investors, including regulation that encourages the use of environmentally friendly processes by foreign establishments.

8.5 Conclusions and possible approaches to take to future trade and investment negotiations

International economic law has an important role to play in the regulation of climate change, in particular with respect to technology diffusion and unilateral, bilateral, regional and plurilateral responses to multilateral negotiation failure. It has not been possible to reach multilateral agreements with respect to climate change finance,
IPRs for plant varieties, a multilateral investment agreement, or international trade in environmental goods and services. Multilateral progress in all of these areas would facilitate technology diffusion and diminish the need for unilateral action.

Unilateral measures may be taken to address local or global concerns and may be used to create incentives for multilateral action. They may be consistent with international obligations or not, depending on the circumstances of each case. Unilateral measures can serve as catalysts for multilateral action on climate change, by prompting the affected economic actors to pressure their governments to seek a solution, through litigation or negotiation. Climate change agreements should either comply with or prompt modifications to international economic law and global models of economic governance.

Existing international economic law places limitations on the right of national and sub-national governments to regulate to address climate change. Given the current difficulty in reaching multilateral agreements, for the most part countries will have to develop climate change policy and law within the constraints of the existing legal, economic and financial framework. The shifting fortunes of developed and emerging economies have altered the dynamics of global governance (Jara, 2012). The ensuing multilateral negotiation paralysis means that unilateral action will be necessary to create incentives to address climate change. However, the risk of regulatory capture needs to be addressed to ensure that these unilateral measures are consistent with international law and are economically viable.

It is important to identify policy issues and options and ways to overcome negotiation obstacles. One proposal, with respect to WTO negotiations, is to make negotiations less ambitious, by abandoning the rule that “nothing is agreed until everything is agreed”, and to abandon decision-making by consensus. There are precedents for this approach at the WTO, in which a limited number of members agreed to liberalize specific sectors once enough members were on board to cover 90 per cent of trade in the sector. The MFN rule extends concessions to all WTO members and the resulting agreement is left open for other members to join. The same approach to environmental goods and services would reduce barriers to technology diffusion for climate change. A similar approach could be taken with respect to GHG emissions, by seeking agreement among the countries that account for the overwhelming majority of emissions, and by leaving it open for other countries to join. However, even this approach may be difficult to achieve in a reasonable period of time.

At the end of the day, multilateral climate change regulation will likely prove insufficient to tackle climate change effectively. This gives WTO members an argument to adopt unilateral technical regulations, since the international standards, if any exist, may prove to be ineffective, in light of the growing scientific evidence of
the urgency of addressing climate change. Multilateral negotiation paralysis, and the
dramatic changes in the economic growth, technological capacity and GHG
emissions of developing countries since 1992, has made the UNFCCC approach
out-dated and ineffective to address climate change adaptation and mitigation.
Moreover, new evidence indicates that the climate is changing faster than expected
(NAEAC, 2013). While multilateral approaches may be preferable in theory,
unilateral, bilateral, regional and plurilateral approaches may be required in practice.
In order to meet these different approaches to stricter international mitigation
requirements and to address their own adaptation needs, low- and middle-income
countries will have to overcome supply-side constraints in a manner that meets their
obligations in various areas of international economic law.

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