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Towards "Greening" Trade?

Tracking Environmental Provisions in the Preferential Trade Agreements of Emerging Markets

Axel Berger Clara Brandi Dominique Bruhn Manjiao Chi

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Abstract

With the adoption of the Sustainable Development Goals (SDGs) and the entry into force of the Paris Climate Agreement, the international community has inter alia pledged their commitment to economic development that is consistent with environmental sustainability. This paper focuses on the linkage between economic and environmental governance by tracking environmental provisions in preferential trade agreements (PTAs). While the United States and the European Union are frequently seen as innovators of "green" content in PTAs, systematic research on the role of emerging markets in promoting this development is scarce. For this reason, we develop an original, detailed dataset mapping the environmental content in 48 PTAs signed by the emerging markets China, India, Indonesia, Brazil and Mexico. Our findings clearly indicate a trend towards more environmental content in those countries' PTAs over time. At the same time, the data hint at patterns that suggest that these developments may at least be partly driven by Organisation for Economic Co-operation and Development (OECD) countries. The paper contributes to the literature on the design of PTAs, the linkage between trade and environment, as well as the role of emerging markets in global governance.

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Bonn, December 2016 Axel Berger, Clara Brandi, Dominique Bruhn and Manjiao Chi

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Abbreviations

ASEAN Association of Southeast Asian Nations

DIE German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE)

EU European Union

GATT General Agreement on Tariffs and Trade

MEA Multilateral Environmental Agreement

MERCOSUR Southern Common Market

NAFTA North American Free Trade Agreement

OECD Organisation for Economic Co-operation and Development

PTA Preferential Trade Agreement

TRIPS Agreement on Trade-Related Aspects of Intellectual Property Rights

US United States

WTO World Trade Organization

1 Introduction

The recently adopted Sustainable Development Goals (SDGs) of the United Nation's Agenda 2030 underscore the significance of reconciling economic, social and environmental objectives. Transforming our economic activity such that it is consistent with environmental sustainability is dependent not only on global environmental rules, but also hinges on the right regulatory framework for the world economy.

One important forum for regulating global economic activities is the World Trade Organization (WTO), responsible for providing, monitoring and enforcing rules for international trade flows. However, multilateral trade negotiations under the roof of the WTO have been sluggish over the last years and countries increasingly resort to bilateral or regional preferential trade agreements (PTAs) to negotiate trade rules. PTAs have not only become more numerous, they have also become bigger, covering larger volumes of world trade, and deeper as contracting parties go beyond the reduction of tariffs and have started negotiating issues such as services, investment, intellectual property rights, and standards. Due to their increasing role in shaping global trade rules, PTAs can potentially be used as leverage for promoting environmental issues in the global economy. The European Union and the United States already seem to promote "high-standard" PTAs to set a precedent and shape globalisation in their interest, presumably also with the aim of avoiding "unfair" competition and environmental dumping from emerging markets that could take advantage of lower levels of environmental and labour standards to keep production cost low (see, for example, Steinberg, 1997). The underlying assumption is that emerging markets have less interest in higher environmental and labour standards and would be cautious to promote them through their trade policies in order to remain costcompetitive with respect to lower value added tasks being offshored by multinational enterprises. However, there is little systematic evidence about the prevalence of environmental standards in the trade policies of emerging markets and their PTAs in particular.

This paper aims to address this question by assessing environmental provisions in emerging market PTAs and thus contributes to current policy debates about the "green" design of trade policy. We aim to complement the existing literature at the interface of economic and environmental governance and investigate how different countries drive and/or react to the trend of entangling trade and environmental issues. While the European Union and United States are seen as pioneers in including environmental matters in PTAs, we will explore whether emerging markets follow this trend and go "green" or whether they refrain from doing so. We thereby seek to contribute to the emerging literature on the design of PTAs and their non-trade dimensions (for instance, Baccini, Dür, & Elsig, 2015; Dür, Baccini, & Elsig, 2014; Gray, 2014; Kim, 2012; Kucik, 2012; Postnikov & Bastiaens, 2014) as well as to the growing literature on the role of rising powers such as China and other emerging economies in global governance (for example, Gray & Murphy 2013; Kahler, 2013; Kennedy & Cheng, 2012; Stephen, 2014; Wang & French, 2014).

We conduct our analysis on the basis of our original dataset mapping environmental provisions in emerging market PTAs. Our findings show that the PTAs of emerging markets incorporate more and more environmental provisions over time and that they tend to include slightly more environmental content when they have been negotiated and signed with Organisation for Economic Co-operation and Development (OECD) countries.

The remainder of the paper is structured as follows: Section 2 provides an overview over the existing literature on the nexus between trade and the environment, with a focus on environmental provisions in trade agreements. Section 3 outlines the methodology for generating and analysing the data used in this paper. In Section 4, we provide a bird's eye view of the different dimensions of environmental provisions of PTAs in emerging markets, as well as their development over time and in relation to partner countries. In Section 5, we focus our attention on specific country cases, namely China, India, Indonesia, Brazil and Mexico, to explore in more detail their stance towards "green" trade rules. Conclusions are offered in Section 6.

2 Background and related literature

The relationship between international trade and the environment has been the subject of debate for a long time (for example, Birdsall & Wheeler, 1993; Cole & Elliott, 2003; Copeland & Taylor, 1995; Levinson & Taylor, 2008). Critics have argued that trade liberalisation stands in conflict with environmental objectives while others have pointed to the potential of international trade to contribute to addressing environmental concerns. In general, the literature on trade and the environment distinguishes three effects (see for example Copeland & Taylor, 1994; for empirical results, see Cole & Elliott, 2003; John and Pecchenino, 1994; Managi, Hibiki, & Tsurumi, 2009; Selden and Song 1994; Stokey 1998). First, economic integration increases economic activity which results in higher environmental pressure (scale effect). However, if environmental quality is a normal good, then the increased income should lead to a higher demand for high environmental standards and the adoption of new technologies (technique effect). Finally, trade liberalisation may affect the distribution of pollution-intensive activities, shifting them to where preferences to adopt clean technologies are lowest. As a consequence, pollution intensities in high-income countries may decrease, while developing countries shoulder most of the environmental burden (composition effect). Indeed, recent research reveals that much of the carbon embodied in the developed world's consumption of goods is imported from the developing world, rather than being produced at home (see, for instance, Peters, 2008; Peters & Hertwich 2008). Other concerns relate to the impact of invasive species or transportation on the environment (Colver, 2011). Moreover, a discussion exists on whether trade liberalisation provokes a "race to the bottom" where countries keep environmental standards low in order to retain their low-cost competitive advantage over other countries in global value chains (see for example Sheldon, 2006). Irrespective of its direction, the bottom line is that there is a clear link between international trade and the environment - supporting the current trend towards regulating certain components of both areas jointly. But while scholars have long discussed the relationship between international trade and the environment, they have tended to overlook the potential implications of the design of trade policy for achieving environmental protection.

Even though the Marrakesh Agreement establishing the WTO names environmental protection and sustainable development explicitly as objectives of the organisation (Johnson, 2015), its main aim remains trade liberalisation. As a consequence, environmental issues mostly appear as exceptions to trade rules. More precisely, under certain circumstances, it is permitted to restrict trade liberalisation in order to avoid adverse effects on the environment. Such clauses are already contained in the GATT (General Agreement on Tariffs and Trade) Article XX, GATS (General Agreement on Trade in Services) Article

XXIV, as well as the later Agreement on Agriculture, Trade-Related Aspects of Intellectual Property Rights (TRIPS), the Sanitary and Phytosanitary Agreement (SPS Agreement) and on Technical Barriers to Trade (TBT). The idea behind these clauses is that committing to trade liberalisation should neither lead to a deterioration of environmental standards nor hinder environmental protection. However, a country applying trade-distorting environmental measures has to prove that a removal would indeed harm the environment. While this might not be easy to do and put the burden of proof on the country aiming to protect the environment, the procedure is meant to safeguard against protectionism under the veil of environmental concerns.

Beyond such "do no harm" clauses, efforts in the WTO include the liberalisation of environmental goods and services, the removal of subsidies on fossil fuels, and sustainable fisheries, among others. However, as with many other policy areas, the success of reform at the multilateral level is limited (George, 2014). As a consequence, many countries aiming to proceed on the agenda fall back upon negotiations on the plurilateral level (as in the case on environmental goods and services liberalisation) or the bilateral/regional level in the form of PTAs.

Throughout the last two decades, the number of PTAs that incorporate non-trade issues such as human rights and labour standards has risen notably (Hafner-Burton, 2009; Kim, 2012; Postnikov & Bastiaens, 2014). The same is true for the extent of environmental content included in PTAs (Morin & Beaumier, 2016). Our research contributes to this emerging literature on the design of PTAs, their implementation and their implications (for instance, Baccini et al., 2015; Dür et al., 2014; Gray, 2014; Kim, 2012; Kucik, 2012; Lechner, forthcoming; Postnikov & Bastiaens, 2014).

While the relationship between international trade and the environment has been the subject of scholarly research, until recently, scholars have often disregarded the role of PTA design. The empirical literature on environmental provisions in preferential trade agreements is still quite small, but gives important first insights. Jinnah and Morgera (2013) compare environmental provisions in three European Union and 11 United States trade agreements since the mid-2000s by coding their scope and legal dimension. They find that environmental rules in PTAs have successively moved from reproducing the environmental exemptions stipulated in the GATT to references to Multilateral Environmental Agreements (MEAs) and full stand-alone environmental chapters that address enforcement and implementation issues. Moreover, they classify the EU and US approaches to addressing environmental issues in PTAs as cooperative and confrontational, respectively. This is in line with the overview on PTAs and the environment given by Anuradha (2011) and with the methodology of Bastiaens and Postnikov (2015) who differentiate in their empirical analysis between sanctions (US) and dialogue (EU) as enforcement mechanisms used for environmental provisions in PTAs.

Empirical research suggests that that the total number of provisions covered in PTAs is highest for PTAs between industrialised and developing countries (subsequently referred to as "North-South" for convenience) (WTO [World Trade Organization], 2011). In general, developing countries among each other seem to prefer shallow agreements, focusing on the elimination of tariffs (Bruhn, 2014). A possible explanation for the great depth of North-South agreements is the bargaining power of developed countries that offer valuable market access in return for concessions regarding PTA content. If this pattern also holds for environmental rules, this would suggest that developing and emerging countries are

reluctant to regulate environmental issues in PTAs among each other, but are more likely to agree on environmental content when negotiating with industrialised partners.

Covering environmental issues within the international trading system can entail both advantages and disadvantages for different country groups: Compared to the relatively toothless international environmental law, the WTO has an enforcement mechanism at its disposal – namely the Dispute Settlement Body – that it can make, and has made use of to settle inter-country conflicts. This dispute settlement body has also been used with regard to disputes on trade-related environmental issues (Johnson, 2015). Equally, many PTAs include enforcement mechanisms that are applicable to environmental rules. On the one hand, this can be seen as an advantage since the availability of sanctions requires more commitment to agreements on environmental issues and increases their enforceability. On the other hand, some countries are concerned that the principle of "common but differentiated responsibilities" meant to adapt developing country commitments to their capacities is undermined by drawing on agreements that are based on reciprocity (Jinnah & Morgera, 2013, p. 338). Moreover, it is far from clear whether developing countries are capable of meeting high environmental standards. Their inability to do so could then be used by industrialised countries to prohibit market access of goods that do not meet these standards ("green protectionism").

It is equally uncertain whether incorporating environmental provisions in the WTO and in PTAs actually has positive environmental effects. According to a survey in OECD countries, a main objective of "green" PTAs is to prevent the relaxation of environmental standards which may result in a race to the bottom as a side effect of competition for trade and investment (George, 2014). Overall, the (scarce) empirical evidence is fairly inconclusive. Gallagher (2004) states that in Mexico, the environment deteriorated after the country's accession to NAFTA (North American Free Trade Agreement) in terms of soil erosion, municipal solid waste and urban air and water pollution, without claiming a causal relationship between trade liberalisation and environmental degradation. Baghdadi, Martinez-Zarzoso and Zitouna (2013) find a convergence of emissions levels and an overall reduction of emissions for country pairs that have signed a PTA with environmental provisions. A related study finds similar effects on air quality (Martínez-Zarzoso & Oueslati, 2016). Bastiaens and Postnikov (2015) show that PTAs which include sanctions improve environmental performance measured on the basis of the Environmental Performance Index (EPI), so do PTAs based on environmental cooperation when paired with a strong civil society in partner states. Rose (2016), however, does not find empirical evidence for positive environmental effects of PTAs when accounting for different environmental provisions. One could also imagine that countries having agreed to environmental standards on the bilateral/regional level are more inclined to also commit to multilateral environmental agreements. However, much more research is needed to clearly establish the links between trade rules, environmental governance and environmental performance. In the following, we contribute to filling some gaps in the literature and focus on the take-up of environmental content in PTAs in emerging market PTAs.

This paper turns the spotlight on the environmental provisions of emerging markets' PTAs and thereby adds to the emerging research on the content and design of PTAs and their

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¹ The EPI is an aggregation of both environmental health and ecosystem vitality measures including air quality, water and sanitation, health, water resources, agriculture, forests, fisheries, biodiversity and habitat, and climate and energy.

non-trade dimensions. It also contributes to the literature on the implications of rising powers like China and other emerging economies for the future of global governance (see, among others, Gray & Murphy, 2013; Kahler, 2013; Stephen, 2014), illustrating to what extent emerging economies are "rule-makers" or "rule-takers" in the world economy and when, and under which conditions, they are willing take over global responsibility (Berger, 2013; Kennedy & Cheng, 2012; Wang & French, 2014).

3 Measuring environmental provisions in PTAs

In the corresponding literature, PTAs have been largely treated as "black boxes", meaning that econometric analyses did not take their contents – and thus their heterogeneity – into account. This shortcoming is important to address, in particular in light of the fact that PTAs are becoming deeper and are covering more issue areas beyond the mere elimination of tariffs (Horn, Mavroidis, & Sapir, 2010). Some recent studies and projects try to remedy this situation by developing comprehensive datasets and providing numerical data measuring the variance of PTA design (Dür et al., 2014; Horn et al., 2010; Kohl, Brakman, & Garretsen, 2016). These databases, however, have the ambition to capture a large number of policy areas and therefore do not go into the details of a specific issue area. In these databases, therefore, environmental issues are covered in a very general way ignoring the details on the variation within "green" provisions. More recently, researchers are undertaking efforts to explore the environmental contents of PTAs in more detail (among them, Morin & Beaumier, 2016; Morin, Dür, & Lechner, forthcoming; Morin & Gauquelin, 2016; Morin, Michaud & Bialais, 2016).

For this paper, we developed a new dataset mapping environmental provisions to track and assess in more detail the environmental content in the PTAs of emerging markets. The dataset comprises detailed data on the design of environmental provisions along nine dimensions:

- 1. **Reference to environmental goals in the preamble or other chapters**: PTAs that cover environmental aspects in their main text often also include preambular language that highlights the intention of the contracting parties to protect the environment.
- 2. **Environmental exceptions**: PTAs often include a general exception clause that is modelled on GATT Art. XX and specifies that actions by the contracting parties "necessary to protect human, animal or plant life or health" are not inconsistent with the trade-related obligations of the treaty. In addition to these general exceptions, some PTAs include specific environmental exceptions in certain chapters, such as the investment chapter.
- 3. **References to multilateral environmental agreements**: Some countries use PTAs to refer to multilateral environmental agreements such as the Montreal Protocol for the protection of the ozone layer, or the Washington Convention on International Trade in Endangered Species of Wild Fauna and Flora. References to multilateral environmental agreements include, among others, commitments by the contracting parties to ratify or implement those agreements. At times, the multilateral environmental agreements are even made an integral part of the PTA.
- 4. **Inclusion of a whole chapter on environment or sustainable development**: Some recent PTAs include a dedicated chapter on the environment or sustainable development where the parties specify their commitment to the protection of the environment.

- 5. **Obligations to uphold environmental law**: Some PTAs include clauses that prevent the contracting parties from trying to increase trade and investment flows by weakening domestic environmental laws and regulations.
- 6. **Incorporation of the right to regulate in environmental matters**: With this set of provisions the contracting parties want to preserve their right to go beyond the existing level of environmental protection by introducing new, more far-reaching regulations in the area of the environment.
- 7. **Cooperation in environmental matters**: At times, PTAs include provisions that state the objective that the contracting parties cooperate on environmental issues, sometimes creating institutions such as intergovernmental committees.
- 8. **Transparency in environmental matters**: Certain PTAs require the contracting parties to provide public access to relevant information on environmental policies and policy-making processes.
- 9. **Public participation in environmental matters**: Often in connection with the prior dimension PTAs include provisions specifying how the public can participate in environmental policy-making processes.

For the purpose of this paper, we have coded and analysed all full free trade agreements and customs unions established by the emerging markets China (13), India (10), Indonesia (7), Brazil (4) and Mexico (16) from 1945 to 2015. The full list of agreements is provided in Annex I. The coding scheme that was used to analyse environmental provisions in emerging market PTAs builds on and extends the broad conceptualisation of environmental provisions in PTAs provided by the OECD (2007). The codebook has been tested on a smaller set of PTAs signed by various countries (not only emerging markets) to ensure general validity and has been revised accordingly. On the basis of the final version of the codebook, each text of emerging market PTAs was manually coded by two independent persons. If there were discrepancies in the coding results, a third person coded the respective treaty, acting as a referee. Annex II shows an extract of the codebook with text examples similar to the provisions coded.²

In order to compare the different agreements with one another, we have calculated an additive indicator ranging from 0-9 which captures the presence of the nine environmental dimensions in the PTA. The higher the indicator, the larger the number of dimensions covered in the respective agreement.³ We emphasise that this indicator only captures the *quantity* of environmental content, while not taking into account the *quality* and strength of different provisions (for instance, there is no weighting of different dimensions). We acknowledge that this generates only a rough picture of environmental issues in PTAs, but it is nevertheless a good initial instrument to study the environmental content in PTAs over time and across partners. Moreover, where information is available, we qualify the strength of the provisions against the background of their limitations and discuss issues of implementation and enforcement. Based on this dataset, we then investigate the question of how emerging market PTAs are designed in terms of environmental content and offer possible explanations for the variation in the data.

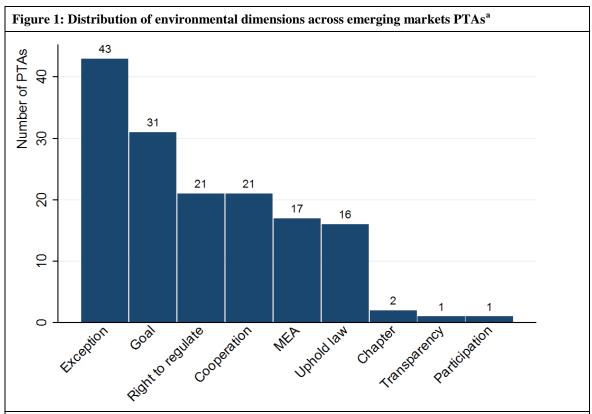
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² More information on the complete codebook and coding procedures may be obtained from the authors upon request.

Note that this indicator is highly correlated with the total number of environmental key words in the treaty, such as "environment", "plant health", "preservation of natural resources" or "sustainable development".

4 Emerging markets: a bird's eye view

In what follows, we provide a bird's eye view of environmental provisions in PTAs signed by the emerging markets China, India, Indonesia, Brazil and Mexico. Figure 1 illustrates how often the nine dimensions specified above occur in the PTAs of emerging markets. Almost all of the agreements coded (≈90%) include environmental exceptions. These exceptions, based on GATT Article XX, allow countries to violate the rules of the PTA if this is "necessary to protect human, animal or plant life". However, according to GATT Article XX, measures aimed at protecting human, animal or plant life have to be applied in a non-discriminatory manner and should not be used as "disguised restriction" on trade. This important qualification may be the reason why the dispute settlement body of the WTO has in the past tended to rule in favour of trade liberalisation rather than environmental protection. It remains to be seen which role environmental exceptions play in the context of PTAs.



^aAs explained in more detail in Annex II, "Exceptions" refers to general or specific exceptions that allow the contracting parties to pursue environmental policies; "Goal" refers to environmental objectives mentioned in the preamble of a PTA; "Right to regulate" refers to the right of the contracting parties to strengthen environmental laws and regulations; "Cooperation" refers to PTA clauses that institutionalise cooperative relations between the contracting parties in the environmental area; "MEA" are references in PTA texts to multilateral environmental agreements; "Uphold Law" refers to obligations to not weaken environmental laws; "Chapter" means that the PTA has a dedicated chapter on environmental or sustainability matters; "Transparency" refers to clauses that require the contracting parties to ensure transparency in environmental matters; and "Participation" refers to clauses that promote public participation in environmental matters.

Source: Illustration based on DIE dataset on environmental provisions in emerging market PTAs

Importantly, PTA signatories often go beyond the inclusion of exceptions modelled on the rules of the WTO and include other environment-related clauses. Roughly two-thirds of the agreements coded also include references to environmental goals. Most agreements signed

by the emerging markets in our analysis (75%) already contain such provisions that emphasise the countries commitment to environmental protection and sustainable development in the preamble. While these provisions are not of a substantive nature (that is, they do not imply any substantive rights or obligations in environmental matters to the parties), they may have an impact on how the PTA is interpreted in dispute settlement cases. References to multilateral environmental agreements, intended to renew the commitments already made elsewhere, are also frequently found in emerging market PTAs.

An important part of the debate on standards in the international trading system is focused on how international agreements interfere with domestic environmental law. Many critics are concerned about PTAs lowering environmental standards or limiting the right to pass new environmental legislation. As can be seen in Figure 1, 16 emerging market PTAs oblige the Parties to maintain, that is, not lower, existing standards and 21 even explicitly stress the countries' rights to regulate in environmental matters; this amounts to one-third and 44% of the PTAs, respectively. However, 14 treaties ($\approx 30\%$) limit the right to regulate to cases where measures are otherwise consistent with the respective chapter or full treaty, which could be interpreted as giving superiority to trade liberalisation objectives.

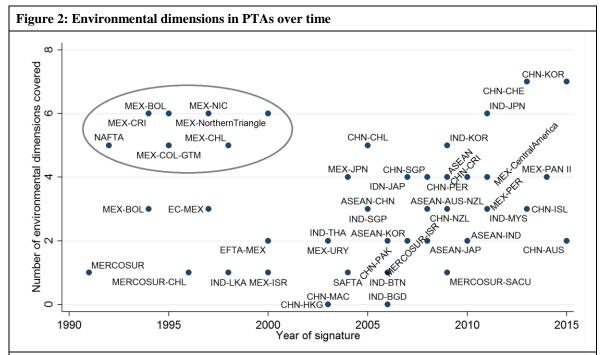
A total of 21 of the treaties analysed encourage cooperation between the Parties on environmental matters, some of them even laying out procedures to be followed (18) or institutions to be built (13) in order to promote such cooperation. While cooperation in environmental matters is quite commonly encouraged in PTAs, provisions on transparency and public participation hardly occur at all. An exception is the agreement between the European Union and Mexico of 1997, which includes a provision on public participation, as well as the agreement between Switzerland and China signed in 2013, which includes a whole chapter on the environment. Notably, both of these agreements were signed with industrialised OECD countries. The second PTA that has a full chapter on the environment is the very recent China-Korea agreement, signed in 2015.

Issues of implementation and enforcement of environmental provisions are difficult to assess on the basis of the treaty texts. Only the most recent PTA in our sample, China-Korea 2015, includes explicit obligations of the Parties to enforce domestic environmental law, but does not establish any mechanisms for achieving this. All but three agreements remain silent on how and under whose oversight environmental issues stipulated under the agreement should be implemented. For now, it is therefore an open question whether environmental content in PTAs leads towards "greening trade".

Nevertheless, it remains interesting to see which countries are more active in using PTAs to address environmental concerns and what patterns we see over time. In the following, we therefore investigate possible explanations for variations in the amount of environmental content in the emerging market PTAs. While the indicator can in principle range from 0-9, none of the emerging market agreements reaches the highest score. Annex I lists all PTAs from the lowest to the highest number of environmental dimensions covered, respectively. The agreements with most environmental content, achieving an indicator of 7 are the PTAs China-Switzerland 2013 and China-Korea 2015. Three agreements do not mention any environmental matters, namely China-Macao 2003, China-Hong Kong 2003 and India-Bangladesh 2006.

Table 1 gives the summary statistics for the variable of interest. On average, the 48 emerging market agreements score 3.19, meaning that roughly three out of the nine dimensions stated above are included in their PTAs. However, there is quite some variation between the agreements, as indicated by the standard deviation of 1.89. In the subsequent paragraphs, we use our original data to shed some light on where this variation comes from.

Table 1: Descriptive statistics							
Variable	Observations	Mean	Standard Deviation	Min.	Max.		
Number of environmental dimensions covered	48	3.19	1.89	0	7		



Notes: ASEAN (Association of Southeast Asian Nations); AUS (Australia); BGD (Bangladesh); BOL (Bolivia); BTN (Bhutan); CHL (Chile); CHE (Switzerland); CHN (China); COL (Colombia); CRI (Costa Rica); EFTA (European Free Trade Association); GTM (Guatemala); IND (India); IDN (Indonesia); LKA (Sri Lanka); NZL (New Zealand); HKG (Hong Kong, Special Administrative Region of China); ISR (Israel); JPN (Japan); KOR (Republic of Korea); MAC (Macao, Special Administrative Region of China); MEX (Mexico); MYS (Malaysia); NAFTA (North American Free Trade Agreement); NIC (Nicaragua); PAK (Pakistan); PAN (Panama); PER (Peru); SAFTA (South Asian Free Trade Area); SGP (Singapore); THA (Thailand); URY (Uruguay).

Source: Illustration based on DIE dataset on environmental provisions in emerging market PTAs

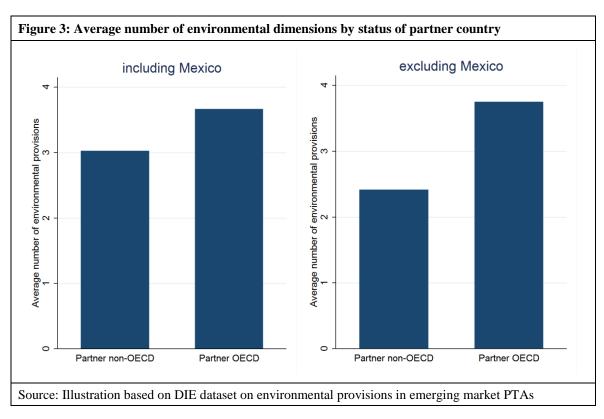
Environmental content over time

Figure 2 illustrates the temporal variation of the indicator in emerging market PTAs. At first glance, we cannot identify a clear time trend, although it seems that PTAs include more and more environmental content after the year 2000. An interesting observation is

that Mexico very early on signed PTAs with significant environmental content. We suspect that this development was initiated by the conclusion of NAFTA, signed in 1992 and entering into force in 1994, which was the first PTA that addressed environmental issues in a more comprehensive way. When Mexico is excluded from the sample of emerging markets, we see a clear upward trend of the indicator over time. This indicates that the aggregate picture masks significant trends on the country level which will be further investigated in Section 5.

Environmental content by partner country

Another explanation for the variation in the indicator could be found in the type of partner country, as suggested in Section 2. Based on our calculations for emerging market PTAs, Figure 3 illustrates that the indicator is slightly higher when emerging markets sign the agreement with an OECD country. However, the difference is not statistically significant at conventional significance levels. This finding is even more pronounced when excluding Mexico's agreements (which seems to be a rather special case, as explained above). We cautiously interpret this finding as an indication for some OECD countries pushing for more environmental content in PTAs which subsequently spreads towards emerging markets.



⁴ OECD status at time of PTA signature.

5 Emerging markets: taking a closer look

Based on an original dataset the previous section analysed the prevalence of various different environmental provisions in emerging market PTAs and concluded that these clauses have become more frequent over time. This subsequent section will analyse the trade policies of selected emerging markets, examining the drivers for the inclusion of environmental provisions in PTAs.

5.1 China

China has been a latecomer in negotiating PTAs, starting to negotiate them only after its succession to the WTO (Berger, 2013). While the first two PTAs concluded by China did not include environmental provisions, ⁵ all subsequent agreements did include environmental provisions, though to varying degrees. Some PTAs incorporate a standalone environmental clause or a chapter; others incorporate environmental provisions in various types, such as the clause of general exceptions.

Two general trends may be identified from the provisions of Chinese PTAs: First, while earlier PTAs contain few or no environmental provisions, more recent PTAs incorporate more. Second, environmental provisions are more frequently seen in Chinese PTAs concluded with more developed partners, since those appear to have stronger policy-making aspirations on environmental protection and sustainable investment. Such trends can be witnessed by the fact that the China-Switzerland PTA contains multiple environmental provisions and that the China-Korea PTA includes a chapter on the environment. China has experienced rapid economic growth in the past decades. Yet, in the meantime the environmental pollution in China got worse. One may conclude that environmental concerns have become an important consideration in China's PTA-making nowadays, partly to help address the environmental challenge. China has sped up its efforts in concluding PTAs recently, while the "Belt and Road" initiative that China has newly proposed will likely trigger the conclusion of more PTAs with the countries involved. It remains to be seen to what extent environmental issues will also feature in China's future South-South PTAs, where China can be expected to be the rule-maker.

5.2 India

India embarked on the path of economic liberalisation in the early 1990s. While first initiating national reforms, India has subsequently, slowly but steadily, removed barriers to international trade and foreign direct investment over the last two decades (Banga & Das, 2012). Even though India is carefully embracing liberalisation, the country takes the position that trade and investment agreements, be it under the roof of the WTO or within bilateral and regional PTAs, should not be mingled with issues not directly related to

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The absence of environmental provisions in the China-Macao and China-Hong Kong PTAs may be explained by the fact that these PTAs are not truly meant to be "international" agreements. They are aimed at promoting trade liberalisation between the different legal jurisdictions of China. Thus it is understandable that they exclude certain issues, especially sensitive ones such as environmental issues from the PTAs.

trade, such as human rights or the environment – rather, these topics should be discussed in other international fora (ICTSD [International Centre for Trade and Sustainable Development], 2010). In a 2001 government press release, India voiced concern that "[the] environment was being used as some sort of a Trojan horse to provide legitimacy to protectionist trends" on the part of the industrialised countries (Government of India, 2001). Similar concerns remain until today. India's reluctance to include environmental provisions in the EU-India PTA was a contentious issue during the negotiations and later one of the reasons for the temporary suspension of the negotiations (Khandekar, 2011; Singh, 2015).

However, experts argue that India, in order to be attractive and credible as a partner in global value chains, may need to rethink its strategy. Mega-regional trade deals – the Transpacific Partnership being of particular importance in this context – regulate not only trade but also many behind-the-border areas such as investment, intellectual property rights and the environment. Indian producers will have to adjust to these new standards if they wish to participate in the production networks governed by these agreements (Meltzer, 2015).

In fact, despite the strong national narrative of separating trade from environmental issues, the data show that the case of India reflects the global trend of PTAs becoming "greener" over time. The agreements with the largest environmental content are those with South Korea and Japan, signed in 2009 and 2011, respectively, which are among the most recently negotiated Indian PTAs. Moreover, South Korea and Japan both have a higher level of economic development and play a significant role in Asian and global production networks. However, so far, none of India's PTAs includes a whole chapter on trade and the environment or sustainable development. Therefore, whether India's stance towards mixing trade and environmental matters has and will become more reconciling remains an open question. In any case, the negotiations for the PTA between the European Union and India, resumed in January 2016 and intended to be finalised quickly (Suneja, 2015), will require a discussion about this topic – the outcome could be an indication of India's future direction of trade policy.

5.3 Indonesia

Indonesia has been a long-standing participant in the multilateral trading regime and is a founding member of the Association of Southeast Asian Nations (ASEAN). In fact, Indonesia has concluded all its PTAs – with the exception of the bilateral agreement with Japan in 2007 – as a member of ASEAN. The adoption of liberal trade and investment policies at the end of the 1990s in Indonesia and across the South Asian region can be attributed to a variety of factors, most importantly the increasing competitive pressure from China, the Asian economic crisis, as well as the conclusion of important regional integration initiatives in North America (NAFTA) and the European Union (Single Market). Liberal economic policies at the national level were accompanied by a wave of PTAs signed at the end of the 2000s.

While having been concluded within a fairly short period of time, Indonesian PTAs display a relatively high variation in terms of the coverage of environmental issues. The two most comprehensive agreements in this regard are the 2007 bilateral agreement with

Japan and the ASEAN Free Trade Area concluded in 2010, covering four of the nine environmental dimensions we identified. The ASEAN agreements with Korea, Japan and India, on the other hand, only cover two dimensions. All PTAs concluded by Indonesia include an environmental exception modelled on GATT Article XX while most PTAs include provisions on cooperation. Compared to more recent North American and European PTAs, none of the Indonesian agreements included an environment chapter or provisions on cooperation and participation in environmental matters. This restraint to include comprehensive environmental provisions is not only characteristic for Indonesian or ASEAN PTAs, but also for other Asian industrialised countries such as Japan (Yanai, 2014). Indonesia is currently negotiating a PTA with the European Union and is considering an accession to the Trans-Pacific Partnership (TPP). It is therefore likely that Indonesia will come under pressure to sign up to more comprehensive environmental provisions in the near future.

5.4 Brazil

Brazil considers the WTO to be the main arena where the most pressing issues in international trade should be discussed (Fishlow, 2004; WTO, 2013). Brazil has focused strongly on the multilateral trade liberalisation track and has not put much emphasis on PTAs so far. Indeed, Brazil remains among the most closed economies as measured by the share of exports and imports in gross domestic product (GDP). One explanation for the country's limited openness to trade is that Brazil has strongly relied on domestic value chain integration rather than on participation in global production networks (Canuto, Fleischhaker, & Schellekens, 2015).

The limited number of PTAs signed by Brazil illustrates the reluctance to open up and the lack of focus on bilateral and regional trade agreements. Brazil, however, is part of MERCOSUR (Southern Common Market), the Latin American regional bloc established in 1991, which also includes Argentina, Paraguay, Uruguay and Venezuela as full members. MERCOSUR is Brazil's main preferential agreement in terms of trade value (WTO, 2013). As member of MERCOSUR, Brazil has signed a number of PTAs.

Whereas the founding treaty for MERCOSUR did not include any provisions on environmental rules, the subsequent developments that occurred in MERCOSUR in the 1990s brought about a recognition of these rules (Giupponi, 2014). Still, analyses of the environmental components in the MERCOSUR agreement indicate that they are weak (Hochstetler, 2003). At the same time, MERCOSUR does include rather elaborate provisions on cooperation for the implementation of MEAs (OECD, 2007, p. 5). The PTAs that Brazil signed as a member of MERCOSUR do not include many environmental provisions, let alone a whole chapter on trade and environment or sustainable development.

It is likely, however – also in light of the possible end of the multilateral Doha Round as well as the proliferation of PTAs around the world and the recent rise of mega-regional trade agreements – that Brazil will review its prevailing trade strategy where efforts have so far focused on multilateral rather than bilateral or regional negotiations (Canuto, 2015). Negotiations with the European Union on a free-trade agreement with MERCOSUR have been re-launched and a number of new PTA negotiations initiated. It remains to be seen

which stance Brazil will take towards environmental provisions in its upcoming PTAs, both in the context of MERCOSUR and beyond.

5.5 Mexico

Mexico's free trade policy has been influenced heavily by its participation in the NAFTA. Subsequently, Mexico has been one of the most active emerging markets with respect to the negotiation of PTAs. The coverage of environmental provisions in Mexican PTAs displays a peculiar pattern distinct from other emerging markets. While environmental provisions became more numerous over time in other emerging economies PTAs, Mexico experienced a reverse trend. Mexico's early and comprehensive commitment to environmental provisions probably stems from its membership in the NAFTA which, at the time, was the most comprehensive PTA and covered five of the nine dimensions of our dataset. Beyond the environmental provisions included in the main text, the three NAFTA member countries (the United States, Canada and Mexico) also signed an environmental side-agreement on environmental cooperation which triggered a number of legal measures and increased the level of cooperation on environmental matters in North America (Gallagher, 2009).

NAFTA included references to environmental protection in the preamble, a GATT Article XX-type environmental exception, references to multilateral environmental agreements, commitments to uphold environmental laws and provisions on the right to regulate in environmental matters. Mexico's experience with NAFTA had repercussions for the PTAs that it concluded in the years following the landmark agreement. The PTAs that Mexico negotiated during the 1990s with other developing countries such as Costa Rica (1994), Bolivia (1995), Colombia and Guatemala (1995), Nicaragua (1997) and Chile (1998) included similar commitments on the environment as NAFTA and, in some cases, even incorporated further provisions on cooperation in the main text. In other words, it seems that towards other developing countries Mexico acted as a rule-maker transferring its experience gained in negotiations with the United States. The PTA Mexico signed with the European Union in 1997, on the other hand, includes less comprehensive commitments on environmental protection than Mexico's agreements with its NAFTA partners and other developing countries. The same is true for two subsequent PTAs that Mexico concluded with industrialised countries. The PTAs with the countries of the European Free Trade Association (EFTA) and Israel included even fewer environmental provisions than the agreement with the European Union.

While Mexico's treaty-making practice during the 1990s appears to a large extent to be influenced by NAFTA, the influence of this landmark deal decreased after the turn of the century. The environmental commitments in Mexican PTAs negotiated with industrialised and developing countries after 2000 were more diverse and less ambitious compared to those of the 1990s. The atypical development with regard to the inclusion of environmental provisions in Mexican PTAs can therefore mainly be attributed to the impact of NAFTA.

6 Conclusions

The coverage of non-economic commitments in PTAs has received comparatively little attention in the academic literature. In this paper, we have addressed this gap by making use of a novel dataset including nine dimensions of environmental commitments in PTAs: reference to environmental goals in the preamble or other chapters; environmental exceptions; references to multilateral environmental agreements; inclusion of a whole chapter on the environment or sustainable development; obligations to uphold environmental law; incorporation of the right to regulate in environmental matters; cooperation in environmental matters; transparency in environmental matters; and public participation in environmental matters.

With regard to the PTAs of emerging markets, there are two main conclusions: Firstly, in the aggregate, the PTAs of emerging markets have become "greener" over time. Secondly, their PTAs tend to include slightly more environmental content when signed with OECD countries. This in turn may be an indication that OECD countries are still rule-makers and emerging markets still largely rules-takers with regard to environmental provisions in trade agreements.

However, the general patterns mask some heterogeneity at the country level. China's recent PTAs indicate that the country is already embarking on a path towards agreements with more environmental content. India is still very reluctant to combine trade and non-trade issues in the same agreement, but things seem to have started moving as well. Indonesia is mostly negotiating PTAs with weak environmental content as a member of ASEAN, but has signed a "greener" agreement with Japan. Brazil is not very active in the conclusion of PTAs in general and the agreements signed through its membership in MERCOSUR are somewhat weak in terms of environmental content. Mexico, as a consequence of NAFTA, signed relatively "green" agreements early on and seems to have become a rule-maker in PTAs with non-OECD countries, but its PTAs have shown more variation in recent years. Both the rise of comprehensive mega-regional agreements and the expansion of global value chains are likely to further shape the future of the trend towards incorporating environmental provisions in trade agreements.

This paper has attempted to contribute to the literature on the design of PTAs, the relationships between international economic and environmental policies, as well as the role of emerging markets in shaping global governance. However, the quantity of environmental content in PTAs allows only a rough approximation about whether we see a trend towards "greening trade". The effectiveness of environmental clauses hinges strongly on issues of implementation and enforcement, which are often only vaguely addressed in the PTAs coded to date. Future research will have to show whether environmental provisions in PTAs improve environmental outcomes or whether, instead, they are used as strategic or normative instruments by developed countries.

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Annex I: List of emerging market PTAs coded

Name of agreement	Year of signature	Year of entry into force	Partner country*	Number of environmental dimensions covered
China-Hong Kong	2003	2003	non-OECD	0
India-Bangladesh	2006	2006	non-OECD	0
China-Macao	2003	2003	non-OECD	0
Southern Common Market (MERCOSUR)	1991	1991	non-OECD	1
South Asian Free Trade Agreement (SAFTA)	2004	2006	non-OECD	1
India-Sri Lanka	1998	2000	non-OECD	1
India-Bhutan	2006	2006	non-OECD	1
MERCOSUR-SACU (Southern African Customs Union)	2009	2008	non-OECD	1
MERCOSUR-Chile	1996	1996	non-OECD	1
Mexico-Israel	2000	2000	non-OECD	1
India-Thailand	2003	2003	non-OECD	2
China-Pakistan	2006	2007	non-OECD	2
European Free Trade Association (EFTA)- Mexico	2000	2001	OECD	2
Association of Southeast Asian Nations (ASEAN)-Korea	2007	2006	non-OECD	2
ASEAN-India	2010	2009	non-OECD	2
MERCOSUR-Israel	2007	2010	non-OECD	2
Mexico-Uruguay	2003	2004	non-OECD	2
ASEAN-Japan	2008	2009	OECD	2
China-Australia	2015	2015	OECD	2
China-Iceland	2013	2014	OECD	3
India-Singapore	2005	2005	non-OECD	3
China-New Zealand	2008	2008	OECD	3
Mexico-Peru	2011	2012	non-OECD	3
ASEAN-China	2005	2004	non-OECD	3
EC-Mexico	1997	2000	OECD	3
India-Malaysia	2011	2011	non-OECD	3
Mexico-Bolivia	1994	1995	non-OECD	3
ASEAN-Australia-New Zealand	2009	2009	OECD	3
China-Singapore	2008	2009	non-OECD	4
China-Costa Rica	2010	2011	non-OECD	4
Mexico-Panama II	2014	2015	non-OECD	4
Mexico-Central America	2011	2013	non-OECD	4
Indonesia-Japan	2007	2008	OECD	4
Mexico-Japan	2004	2005	OECD	4
ASEAN	2009	2010	non-OECD	4
China-Peru	2009	2009	non-OECD	4
North American Free Trade Agreement (NAFTA)	1992	1994	OECD	5

China-Chile	2005	2006	non-OECD	5	
Mexico-Colombia-Guatemala (G3)	1995	1994	non-OECD	5	
Mexico-Chile	1998	1999	non-OECD	5	
India-South Korea	2009	2010	non-OECD	5	
Mexico-Nicaragua	1997	1998	non-OECD	6	
Mexico-Northern Triangle	2000	2001	non-OECD	6	
Mexico-Bolivia	1995	1994	non-OECD	6	
India-Japan	2011	2011	OECD	6	
Mexico-Costa Rica	1994	1995	non-OECD	6	
China-Switzerland	2013	2013	OECD	7	
China-Korea	2015	2015	non-OECD	7	
*OECD status at year of signature					
Source: Authors					

Annex II: CODEBOOK extract

Please note that this is just a subpart of the complete codebook to give the reader a rough idea of the different provisions coded in the respective dimensions. The examples given in this abstract are not necessarily taken from the emerging market PTAs analysed, but stem from a larger pool of (drafted or signed) PTAs that we chose in order to reflect most appropriately the scope of the environmental content.

References to environmental goals

Does the preamble of the treaty name environmental goals?

Examples (emphasis added):

REAFFIRMING their commitment to **promote sustainable development** and the development of international trade in such a way as to **contribute to sustainable development** in its economic, social and environmental dimensions

DETERMINED to implement this Agreement in a manner consistent with the enhancement of the levels of labour and environmental protection and the enforcement of their labour and environmental laws and policies, building on their international commitments on labour and environment matters

RECOGNIZING that the provisions of this Agreement preserve the **right to regulate** within their territories and resolving to preserve their flexibility to achieve **legitimate policy objectives**, such as public health, safety, **environment**, public morals and the promotion and protection of cultural diversity

REAFFIRMING their commitment to sustainable development and convinced of the contribution of international trade to sustainable development in its economic, social and environmental dimensions, including economic development, poverty reduction, full and productive employment and decent work for all as well as the **protection and preservation of the environment** and natural resources

DESIRING to strengthen the development and enforcement of labour and environmental laws and policies, promote basic workers' rights and sustainable development and implement this Agreement in a manner consistent with these objectives

IMPLEMENT this Agreement in a manner consistent with environmental protection and conservation, promote sustainable development, and strengthen their cooperation on environmental matters

PROTECT and preserve the environment and enhance the means for doing so, including through the conservation of natural resources in their respective territories

General and specific exceptions

Is there a reference to GATT Article XX in the general exceptions?

Examples (emphasis added):

GATT 1994 Article XX is incorporated into and made part of this Agreement.

General exceptions

The Parties affirm that their existing rights and obligations under **Article XX of GATT 1994** and its interpretative notes, which are incorporated into and made part of this Agreement, shall apply to trade in goods covered by this Agreement, *mutatis mutandis*.

Uphold environmental law

Does the treaty include an obligation to uphold environmental law?

Any clause referring to upholding environmental standards, not lowering standards, etc. i.e. an obligation to (at least) maintain the status quo in terms of environmental protection/regulation.

Examples (emphasis added):

The Parties recognise that it is inappropriate to encourage trade or investment by weakening or reducing the levels of protection afforded in domestic environmental laws. A Party shall not, through a sustained or recurring course of action or inaction, fail to effectively enforce its environmental laws as an encouragement for trade or investment. A Party shall not waive or otherwise derogate from, or offer to waive or otherwise derogate from, its environmental laws, as an encouragement for trade or the establishment, acquisition, expansion or retention of an investment of an investor in its territory.

A Party shall not weaken or reduce the environmental or labour protections afforded in its laws to encourage trade or investment, by waiving or otherwise derogating from, or offering to waive or otherwise derogate from, its laws, regulations or standards, in a manner affecting trade or investment between the Parties.

The Parties recognise that it is inappropriate to encourage trade or investment by weakening or reducing the protections afforded in domestic environmental laws. Accordingly, neither Party shall waive or otherwise derogate from, or offer to waive or otherwise derogate from, such laws in a manner that weakens or reduces the protections afforded in those laws in a manner affecting trade or investment between the Parties.

Right to regulate

Does the treaty explicitly mention the countries' right to regulate/strengthen environmental law?

This means that countries have the right to go BEYOND their current environmental regulation. Having the right to pursue legitimate policy objectives such as environmental protection may imply that certain aspects of the trade agreement can be ignored in these policy areas. Also check for "legitimate policy objectives".

Examples (emphasis added):

Recognising the right of each Party to set its own environmental priorities, to establish its own domestic levels of environmental protection, and to adopt or modify its relevant laws and policies accordingly in a manner consistent with the multilateral environmental agreements to which they are a party and with this Agreement, each Party shall seek to ensure that those laws and policies provide for and encourage high levels of environmental protection and shall strive to continue to improve those laws and policies and their underlying levels of protection.

With the objectives of facilitating trade and promoting customs cooperation on a bilateral and multilateral basis, the Parties agree to cooperate and to adopt and apply their import, export and transit requirements and procedures for goods on the basis of the following objectives and principles: [...] measures to facilitate trade shall not prejudice the **fulfilment of legitimate policy objectives**, such as the protection of national security, health and the **environment**.

Recognising the right of each Party to establish its own levels of domestic environmental protection and environmental development policies and priorities, and to adopt or modify accordingly its environmental laws and policies, each Party shall strive to ensure that its laws and policies provide for and encourage high levels of environmental protection, and shall strive to continue to improve those laws and policies.

Are there any exceptions to this obligation? (e.g. "otherwise consistent with this Agreement/ Chapter")?

Since the right to regulate restricts the obligations from the trade agreement, it is possible that this right is only granted under specific circumstances. Some treaties, for example, explicitly state that environmental regulation may only be strengthened if consistent with other parts of the chapter/agreement.

Examples (emphasis added):

Recognising the right of each Party to set its own environmental priorities, to establish its own domestic levels of environmental protection, and to adopt or modify its relevant laws and policies accordingly in a manner consistent with the multilateral environmental agreements to which they are a party and with this Agreement, each Party shall seek to ensure that those laws and policies provide for and encourage high levels of environmental protection and shall strive to continue to improve those laws and policies and their underlying levels of protection.

Transparency

Is there an explicit mention of transparency in environmental matters?

Examples (emphasis added):

The Parties stress the **importance of ensuring transparency** as a necessary element to promote public participation and information within the context of this Chapter, in accordance with its provisions, with Chapter [Transparency] and with the relevant provisions in Chapters [labour] and [environment].

Each Party, as well as complying with Art. X.01 of [sic] Transparency Chapter, shall encourage public debate with and among non-State actors as regards the development and definition of policies that may lead to the adoption by public authorities of environmental laws and regulations. Each Party shall **promote public awareness** of its environmental laws and regulations, as well as enforcement and compliance procedures, **by ensuring the availability of information to stakeholders**. Each Party shall be open to receive and shall give due consideration to submissions from the public on matters related to this Chapter, including communications on implementation concerns; each Party shall inform its civil society of such communications through the consultative mechanisms referred to in Article X.13(4).

The Parties, in accordance with their respective domestic laws, agree to develop, introduce and implement any measures aimed at protecting the environment and labour conditions that affect trade between the Parties in a transparent manner, with due notice and public consultation, and with appropriate and timely communication to and consultation of non-state actors including the private sector.

Are procedures for transparency laid out?

There are provisions that clarify how transparency should be achieved, e.g. specific rules on sharing documents, exchanging information, making information publicly available, notifying new environmental regulations etc.

Examples (emphasis added):

The Parties establish a [NAME] on Trade and Sustainable Development, comprised of high level representatives of the Parties responsible for matters covered by this Chapter, Chapter X [Labour], and Chapter Y [Environment].

The NAME on Trade and Sustainable Development shall **promote transparency** and public participation. To this end: all decisions and reports that the NAME on Trade and Sustainable Development may adopt **shall be made public**, [...]; the NAME on Trade and Sustainable Development shall present updates on matters related to this Chapter, including its implementation, to the Civil Society Forum referred to in [Article]. Any views or opinions of the Civil Society Forum may be submitted to the Parties directly, or through the consultative mechanisms referred to in Article 8.3 of Chapter ... (Trade and Labour) and in Article X.13 of Chapter X (Trade and Environment). The NAME on Trade and Sustainable Development **shall report annually** on the follow-up given to such communications; the NAME on Trade and Sustainable Development shall report annually on matters it may address pursuant to Article X.7(3) of Chapter X (Trade and Environment) or Article 8.4 of Chapter ... (Trade and Labour).

Are institutions established to implement transparency obligations?

This could be a council/committee or other cooperation body.

Examples (emphasis added):

The Parties establish a [NAME] on Trade and Sustainable Development, comprised of high level representatives of the Parties responsible for matters covered by this Chapter, Chapter X [Labour], and Chapter Y [Environment].

The NAME on Trade and Sustainable Development shall promote transparency and public participation. To this end: all decisions and reports that the NAME on Trade and Sustainable Development may adopt shall be made public, [...]; the NAME on Trade and Sustainable Development shall present updates on matters related to this Chapter, including its implementation, to the Civil Society Forum referred to in [Article]. Any views or opinions of the Civil Society Forum may be submitted to the Parties directly, or through the consultative mechanisms referred to in Article 8.3 of Chapter ... (Trade and Labour) and in Article X.13 of Chapter X (Trade and Environment). The NAME on Trade and Sustainable Development shall report annually on the follow-up given to such communications; the NAME on Trade and Sustainable Development shall report annually on matters it may address pursuant to Article X.7(3) of Chapter X (Trade and Environment) or Article 8.4 of Chapter ... (Trade and Labour).

Public participation

Is there an explicit mention of public participation in environmental matters?

This includes (i) a mention of environmental matters in the transparency/public participation chapter or (ii) a mention of public participation in the environmental chapter.

Examples (emphasis added):

The Parties stress the importance of ensuring transparency as a necessary element to **promote public participation** and information within the context of this Chapter, in accordance with its provisions, with Chapter [Transparency] and with the relevant provisions in Chapters [labour] and [environment].

Each Party, as well as complying with Art. X.01 of Transparency Chapter, shall encourage **public debate with and among non-State actors** as regards the development

and definition of policies that may lead to the adoption by public authorities of environmental laws and regulations. Each Party shall promote public awareness of its environmental laws and regulations, as well as enforcement and compliance procedures, by ensuring the availability of information to stakeholders. Each Party shall be open to receive and shall give due consideration to submissions from the public on matters related to this Chapter, including communications on implementation concerns; each Party shall inform its civil society of such communications through the consultative mechanisms referred to in Article X.13(4).

Are procedures for public participation laid out?

There are provisions that clarify how public participation should be achieved, e.g. specific rules on involving the public, public consultation mechanisms, etc.

Examples (emphasis added):

The Parties establish a [NAME] on Trade and Sustainable Development, comprised of high level representatives of the Parties responsible for matters covered by this Chapter, Chapter X [Labour], and Chapter Y [Environment]. Unless the Parties otherwise jointly decide, each regular or dedicated meeting of the [NAME] on Trade and Sustainable Development shall include a session with the public to discuss matters relating to the implementation of the relevant Chapter(s). The NAME on Trade and Sustainable Development shall promote transparency and public participation. To this end: all decisions and reports that the NAME on Trade and Sustainable Development may adopt shall be made public, [...]; the NAME on Trade and Sustainable Development shall present updates on matters related to this Chapter, including its implementation, to the Civil Society Forum referred to in [Article]. Any views or opinions of the Civil Society Forum may be submitted to the Parties directly, or through the consultative mechanisms referred to in Article 8.3 of Chapter ... (Trade and Labour) and in Article X.13 of Chapter X (Trade and Environment). The NAME on Trade and Sustainable Development shall report annually on the follow-up given to such communications; the NAME on Trade and Sustainable Development shall report annually on matters it may address pursuant to Article X.7(3) of Chapter X (Trade and Environment) or Article 8.4 of Chapter ... (Trade and Labour).

Are institutions established to implement public participation obligations?

This could be a council/committee or other cooperation body.

Examples (emphasis added):

The Parties establish a [NAME] on Trade and Sustainable Development, comprised of high level representatives of the Parties responsible for matters covered by this Chapter, Chapter X [Labour], and Chapter Y [Environment]. Unless the Parties otherwise jointly decide, each regular or dedicated meeting of the [NAME] on Trade and Sustainable Development shall include a session with the public to discuss matters relating to the implementation of the relevant Chapter(s). The NAME on Trade and Sustainable Development shall promote transparency and public participation. To this end: all decisions and reports that the NAME on Trade and Sustainable Development may adopt shall be made public, [...]; the NAME on Trade and Sustainable Development shall present updates on matters related to this Chapter, including its implementation, to the Civil Society Forum referred to in [Article]. Any views or opinions of the Civil Society Forum may be submitted to the Parties directly, or through the consultative mechanisms referred to in Article 8.3 of Chapter ... (Trade and Labour) and in Article X.13 of Chapter X (Trade and Environment). The NAME on Trade and Sustainable Development shall report annually on the follow-up given to such communications; the

NAME on Trade and Sustainable Development shall report annually on matters it may address pursuant to Article X.7(3) of Chapter X (Trade and Environment) or Article 8.4 of Chapter ... (Trade and Labour).

The Parties shall **facilitate a joint Civil Society Forum** comprising representatives of civil society organisations established in their territories, including participants in the domestic **consultative mechanisms** referred to in Article 8.3 of Chapter ... (Trade and Labour) and in Article X.13 of Chapter ... (Trade and Environment), in order to **conduct a dialogue** encompassing sustainable development aspects of this Agreement.

Members of Domestic Advisory Group(s) of each Party will meet at a **Civil Society Forum** in order to conduct a dialogue encompassing sustainable development aspects of trade relations between the Parties. The Civil Society Forum will meet once a year unless otherwise agreed by the Parties. The Parties shall agree by decision of the Committee on Trade and Sustainable Development on the operation of the Civil Society Forum no later than one year after the entry into force of this Agreement.

Cooperation

Is there an explicit mention of state-state cooperation in environmental matters?

This includes (i) a mention of environmental matters in the cooperation chapter or (ii) a mention of cooperation in the environmental chapter.

Examples (emphasis added):

The Parties **recognise the value of international cooperation** to achieve the goal of sustainable development and the integration at the international level of economic, social and environmental development and protection initiatives, actions and measures. Therefore, in the context of this Agreement, **they agree to dialogue and consult with each other** with regard to trade-related sustainable development issues of common interest.

Are procedures for cooperation laid out?

There are provisions that clarify how cooperation should be achieved, e.g. specific rules on exchanging information, expert meetings, etc.

Examples (emphasis added):

The parties recognise that enhanced cooperation is an important element to advance the objectives of this Chapter, and they commit to cooperate, through actions and instruments that may include technical exchanges, exchanges of information and best practices, research projects, studies, reports, conferences and workshops, on trade-related environmental issues of common interest....

Are institutions established to implement cooperation obligations?

This could be a council/committee or other cooperation body.

Examples (emphasis added):

The Parties establish a [NAME] on Trade and Sustainable Development, comprised of high level representatives of the Parties responsible for matters covered by this Chapter, Chapter X [Labour], and Chapter Y [Environment]. The [NAME] on Trade and Sustainable Development shall oversee the implementation of these Chapters, **including cooperative activities** and review of impacts of the Agreement on sustainable development, address in an integrated manner any matters of common interest in relation to the interface between economic development, social development and environmental protection, and carry out the duties set out under Chapter X [Labour] and Chapter Y [Environment].

References to environmental agreements

Are multilateral environmental agreements referred to?

Examples include but are not limited to: Rio Declaration on Environment and Development of 1992; the Agenda 21 on Environment and Development; the Johannesburg Declaration and Plan of Implementation of 2002 on Sustainable Development; and so on.

Examples (emphasis added):

The Parties recognise the value of international environmental governance and agreements as a response of the international community to global or regional environmental problems and stress the need to enhance the mutual supportiveness between trade and environment policies, rules and measures. Each Party reaffirms its commitment to effectively implement in its laws and practices, in its whole territory, the Multilateral Environmental Agreements to which it is a party. The Parties commit to consulting and cooperating as appropriate with respect to environmental matters of mutual interest related to Multilateral Environmental Agreements, in particular trade-related issues. This includes, interalia, exchanging information on the implementation of Multilateral Environmental Agreements that a Party is bound by, on ongoing negotiations of new Multilateral Environmental Agreements, as well as on each Party's respective views as regards to becoming a party to additional Multilateral Environmental Agreements.

The Parties acknowledge and reaffirm the principles and provisions established in the **Convention on Biological Diversity** adopted on 5th June 1992 and encourage the effort to establish a mutually supportive relationship between the TRIPS Agreement and the **Convention on Biological Diversity**, regarding genetic resources and the protection of traditional knowledge and folklore.

The Parties recognise the concept of regionalisation, zoning and compartmentalisation, as set down in Article 6 of the SPS Agreement, and as elaborated in [sic] International Office of Epizootics ("OIE") and International Plant Protection Convention ("IPPC") Standards, which provide, inter alia, for the recognition of pest- or disease-free areas or areas of low pest or disease prevalence where the exporting Party objectively demonstrates to the importing Party that such areas are, and are likely to remain, pest- or disease-free areas or areas of low pest or disease prevalence, respectively.

Enforcement and implementation

Are environmental matters explicitly excluded from the DSM?

Examples (emphasis added):

For any matter arising under this Chapter where there is disagreement between the Parties, the Parties shall only have recourse to the rules and procedures provided for in Articles X.14 and X.15.

[Note: This means these rules are not dealt with in the regular DSM established under the treaty!]

Is the option/obligation of involving environmental experts in the arbitration explicitly mentioned?

Examples (emphasis added):

For any matter that has not been satisfactorily addressed through government consultations, a Party may, 90 days after the delivery of a request for consultations under Article X.14(1), request that a **Panel of Experts** be convened to examine that matter, by delivering a written request to the contact point of the other Party.

Without prejudice to the appointment of other kinds of experts where authorised by the applicable arbitration rules, a tribunal, at the request of a disputing party or, unless the disputing parties disapprove, on its own initiative, may appoint one or more experts to report to it in writing on any factual issue concerning **environmental**, health, safety, or other scientific matters raised by a disputing party in a proceeding, subject to such terms and conditions as the disputing parties may agree.

Does the treaty include obligations to enforce **domestic** environmental law?

Examples (emphasis added):

The Parties recognise that it is inappropriate to encourage trade or investment by weakening or reducing the levels of protection afforded in domestic environmental laws. A Party shall not, through a sustained or recurring course of action or inaction, fail to effectively enforce its environmental laws as an encouragement for trade or investment. A Party shall not waive or otherwise derogate from, or offer to waive or otherwise derogate from, its environmental laws, as an encouragement for trade or the establishment, acquisition, expansion or retention of an investment of an investor in its territory.

In connection with the obligations in Article X.5: Each Party shall, in accordance with its laws, ensure that its authorities competent to enforce environmental laws give due consideration to alleged violations of those laws brought to its attention by interested persons residing or established in its territory. Each Party shall ensure that administrative or judicial proceedings are available to persons with a legally recognised interest in a particular matter or maintaining impairment of a right, subject to the conditions specified under its domestic law, in order to permit effective action against infringements of its environmental laws, including appropriate remedies for violations of such laws.

Upholding levels of protection in the application and enforcement of laws, regulations or standards

1. A Party shall not fail to effectively enforce its environmental and labour laws, through a sustained or recurring course of action or inaction, in a manner affecting trade or investment between the Parties.

A Party shall not fail to effectively enforce its environmental laws, and its laws, regulations, and other measures to fulfil its obligations under the covered agreements, through a sustained or recurring course of action or inaction, in a manner affecting trade or investment between the Parties, after the date of entry into force of this Agreement.

Is there a mechanism to achieve this (i.e. dispute settlement mechanism, public submission mechanisms, etc.)

Examples (emphasis added):

Each Party shall ensure that judicial, quasi-judicial, or administrative proceedings, in accordance with its law, are available to sanction or remedy violations of its environmental laws.

Any person of a Party may file a submission asserting that a Party is failing to effectively enforce its environmental laws. Such submissions shall be filed with a secretariat or other appropriate body ("secretariat") that the Parties designate.

Is an institution established to oversee the implementation of environmental measures related to this agreement?

Examples (emphasis added):

Each Party shall establish a Domestic Advisory Group(s) on sustainable development (environment and labour) with the task of advising on the **implementation of this Chapter**.

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