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The climate-energy-trade nexus in EU external relations

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Abstract

This chapter provides an analysis on the links of climate change, energy, and international trade, specifically from the perspective of the EU's external relations. The chapter first analyzes the links between these three sectors (climate change, energy, and trade). It then examines the environmental language in EU free-trade agreements. Finally, and before the conclusions, it looks at obstacles that explain the lack of coordination between environmental and trade agreements.

1. Introduction

There is a lot of talk about the fact that, as a result of trade, we have increased social inequality nationally and internationally and that the level of carbon dioxide and other greenhouse gas (GHG) emissions has been going up over time, also a result of international trade,¹ and what can be done about it.² Trade is in many senses considered to be the nemesis of environmental protection. In this chapter, however, we argue that, while all of that may be true, trade can contribute to climate change mitigation.

There is no question that climate change is one of the biggest challenges humanity faces today. Today, 80% of the global energy supply comes from fossil fuels.³ Fossil fuels contribute to climate change and are finite, which leads to energy insecurity. Renewable energy can help here in that it is cleaner than fossil fuels. It also helps towards energy independence and therefore enhances energy security. Trade law could be used as a vehicle to achieve this goal. We argue that trade agreements can help mitigate climate change since, in the past, they have been a very powerful instrument for change, as the following two examples demonstrate:

1. poverty reduction: due to trade agreements, one billion people have come out of poverty between 1990 and 2010;⁴ and
2. the protection of human rights: 75% of countries use trade agreements to protect human rights.⁵

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So why not use trade agreements as a novel tool to solve one of the most important challenges of today, namely climate change?

The purpose of this chapter is not to thoroughly describe the current state of the climate-energy-trade nexus in the external relations of the European Union (EU), but to explore, in normative terms, the potential of the EU's external trade⁶ towards contributing to global decarbonization. As the EU has done in the case of human rights, EU free trade agreements (FTAs) may be used to help decarbonize the economy by bundling the fate of these agreements and international climate-change obligations, i.e., the breach of the latter would give rise to legal consequences under the dispute settlement mechanisms of the former (in other words, there would be no free-trade-benefits without effective fulfillment of international climate-change-related obligations). The feasibility of this idea will be assessed via the textual analysis of the current wording and content of environmental/climate-change-related elements in a sample of relatively recent and/or upcoming FTAs.

This chapter first sets the global scene on the links between energy and climate change, trade and energy as well as climate change and trade. It then provides a textual analysis⁷ of environmental or climate-change-related provisions in several EU FTAs. Finally, it offers a case for bundling environmental and trade agreements before it concludes.

2. Setting the global scene: A triangulation to sustainable development

2.1. Linking energy and climate change⁸

Starting from the premise that climate change mitigation is a global public good, there is a nexus between energy and climate change, which encompasses a range of issues such as clean energy subsidies,⁹ carbon taxes,¹⁰ and border adjustment for carbon emissions.¹¹ This last point of border carbon adjustment may be a way forward in tackling climate change. As climate change is one of the most important public policy issues facing countries around the world, countries are adopting various policies in order to address these concerns. Of these, limiting anthropogenic (man-made) GHG emissions is a significant mitigation measure.

In the view of Dieter Helm, “since 1900, the global population has more than tripled and the consumption of energy (largely fossil fuels) has increased more than tenfold. Climate change has been caused by the way resources have been consumed, and climate change policy necessitates a substantial change in the allocation of resources.”¹² Moreover, according to Kleymeyer, “the energy sector, including energy use and production, accounts for over 50% of global [greenhouse gases] GHGs.”¹³ Given rapidly rising industrialization in the developing world, and the fact that low-cost energy options are likely to be heavily fossil fuels based for some time to come, GHG emissions are projected to increase and climate change mitigation will remain an urgent issue.¹⁴ Furthermore, when dealing with biofuels, it is necessary to find a balance between climate change and energy security concerns.¹⁵

Since the use of fossil fuel is one of the major sources of anthropogenic GHG emissions, it is important to promote climate-sensitive energy policy that would help countries increase non-fossil fuel sources in their energy mix.¹⁶ Various alternative energies, in which nuclear and renewable sources play key roles, are being explored and developed by countries as part of their diversification efforts.¹⁷ Major investments in the new and renewable energy sector will be required in order to increase non-fossil energy usage.¹⁸

The increased competition for energy resources, climate change and GHG emissions controls, technological advances and limitations have all contributed to a contradictory, fragmented regulatory

web. These include the exploration of new sources of energy, the transition to greener resources and intelligent grids, the challenges to the security of supply networks, affordability and its links with development and the contested consumption paradigms, the nature and size of energy companies, and the cross-jurisdictional terrain on which they compete.

2.2. Linking trade and energy¹⁹

The presumption is that trade liberalization will increase economic activity²⁰ and therefore energy consumption.²¹ All countries require energy resources, but few possess these, and thus trade in energy (primarily oil) is crucial to fulfil global energy needs.²² Internationally, there is more trade in oil than in anything else. “Fully half of world trade in services is intensely energy-dependent.”²³ Yet, the General Agreement on Tariffs and Trade/World Trade Organization (GATT/WTO) has historically not preoccupied itself with energy trade. Very few energy-rich countries saw a need to join the GATT/WTO club, given that the reduction of import restrictions—one of the main goals of the multilateral trading system—is not an issue when it comes to energy. Saudi Arabia, the main energy-producing country in the world, only joined the WTO in 2005.²⁴ Russia joined in 2012²⁵ and several energy-producing countries²⁶ are still not WTO Members.²⁷

All forms of energy should be subject to the same rules. Energy may become part of the WTO agenda in the near future.²⁸ Given that current WTO rules are far from addressing all the needs of energy trade today, is it necessary to have a WTO Agreement on trade in energy?²⁹ If so, can and should the Energy Charter Treaty be used as a model? Moreover, since Russia finally joined the WTO on its own in 2012³⁰ (and not as a customs union along with Belarus and Kazakhstan³¹) and since energy is one of its greatest assets in economic terms, would this be the right time to include energy trade as part of the WTO Agreements? Those energy-rich Middle Eastern countries that are not yet WTO Members, but wish to become WTO Members, will most likely follow Russia.³² These Middle Eastern countries should prioritize the conclusion of negotiations to enter the WTO in order to fully integrate into the global trading system and protect their growing interests on world markets. WTO membership will certainly help eliminate any discrimination against them in their trade and investment.

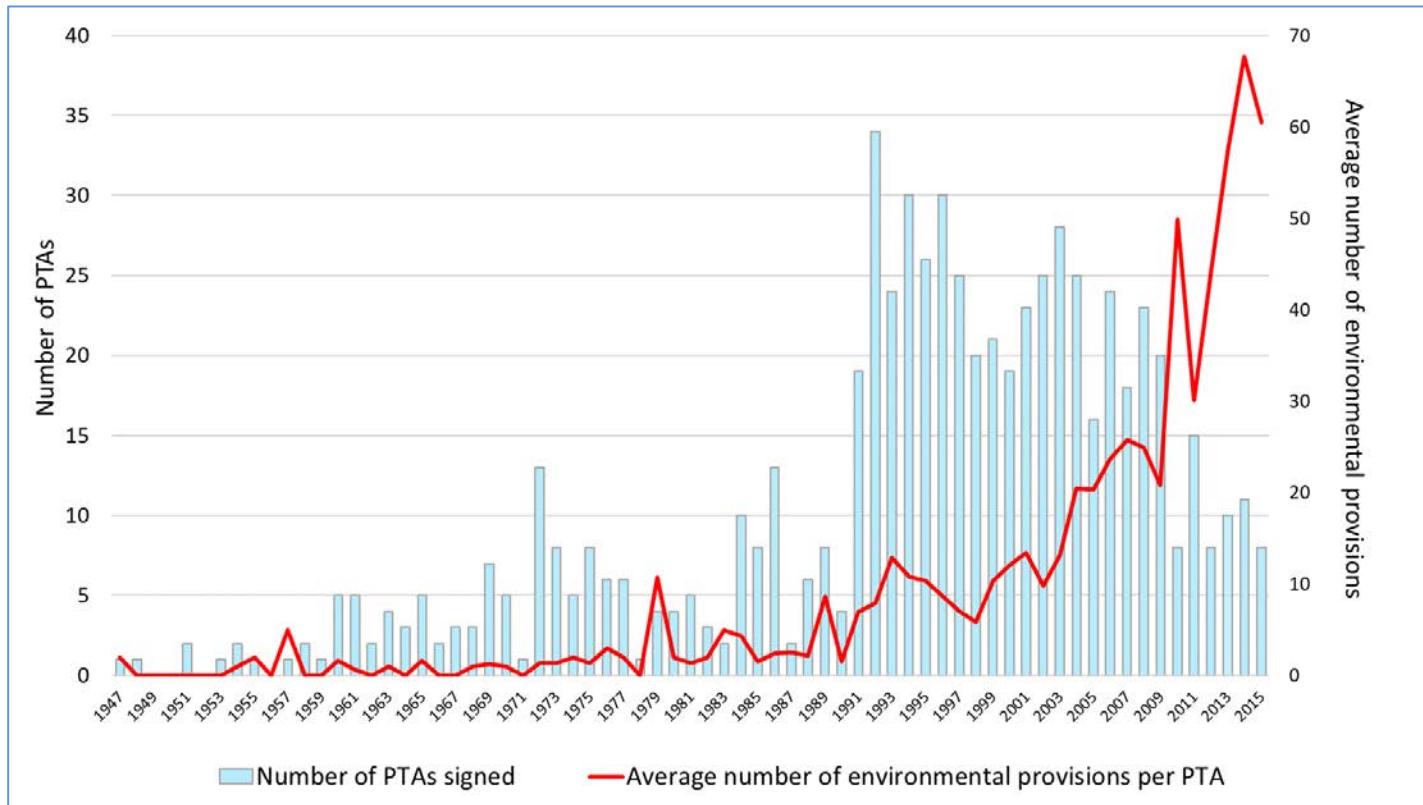
2.3. Linking climate change and trade³³

Given that much of the world’s energy needs are likely to largely depend on fossil fuel based sources for the near to mid future, an increase in economic activity and energy consumption in the future, together with an increase in world population, will lead to higher levels of GHG emissions. This means that there is an inevitable link between international trade and future global climate change agreements,³⁴ which could lead to a potential conflict between the objectives of the Kyoto Protocol/Paris Agreement on Climate Change and the WTO rules.³⁵ Moreover, climate change is one of the most relevant international issues facing the world today. The relationship between trade agreements and measures to mitigate the effects of climate change remains a polemic part of the debate.³⁶ It is therefore relevant to explore key legal and economic issues arising from the climate change debate, including the relationship between the WTO Agreement and multilateral environmental agreements that address climate change.³⁷

Based on the premise that regional trade agreements (RTAs) can be used as building blocks for multilateralism, however, one could envisage a global climate agreement based on climate-related RTAs, especially large RTAs such as the Trans-Pacific Partnership.³⁸ Indeed, given how pro-active developing countries are in the conclusion of RTAs, this option would be an effective way toward a future global climate agreement. In this sense, RTAs can be used as a legal mechanism to move forward the multilateral environmental agenda. This avenue could be very promising given the exponential increment in the conclusion of preferential trade agreements (PTAs)/FTAs/RTAs in recent years and the increasing

number of environmental provisions per FTA as depicted in Figure 1.³⁹ In fact, around 45% of climate contributions submitted to the Conference of the Parties 21 in 2015 make reference to trade measures.⁴⁰ This fact shows the increasing interaction between climate and trade.

Figure 1: History of PTAs with environmental provisions

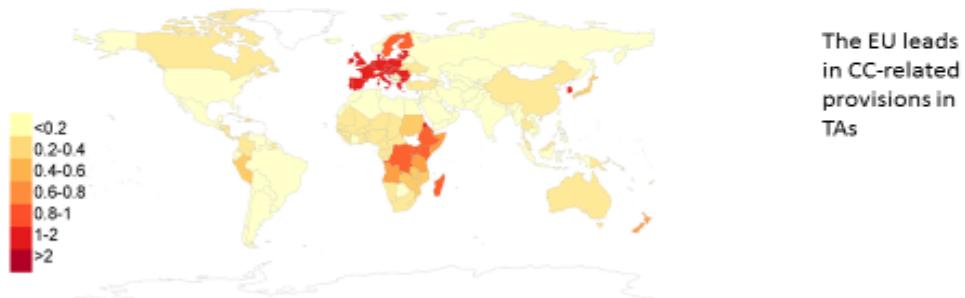


Source: J-F Morin et al., "Environmental Clauses in Trade Agreements: Empirical evidence for sound policies."

3. "Environmental" language and content in EU Free Trade Agreements

As depicted in Figure 2, the EU leads in the number of climate-related provisions in FTAs concluded throughout the world.

Figure 2: Average number of climate-related provisions



Source: J-F Morin et al., “Environmental Clauses in Trade Agreements: Empirical evidence for sound policies.”

When analyzing the environmental and/or climate-change-relevant substantive content of several EU FTAs and its potential articulation with dispute settlement mechanisms, different configurations can be identified therein. Let us assess them in sequence.

3.1. First configuration – Ambiguous substantive content and non-enforceability: various EU Free Trade Agreements

The first possible configuration that may be found within the sample of agreements is embodied in the following five: the “*Free trade Agreement between the European Union and its Member States, of the one part, and the Republic of Korea, of the other part*” (EU-South Korea FTA);⁴¹ the “*Trade Agreement between the European Union and its Member States, of the one part, and Colombia and Peru, of the other part*” (EU-Colombia-Peru TA);⁴² the “*Association Agreement between the European Union and its Member States, of the one part, and Ukraine, of the other part*”;⁴³ the “*Comprehensive Economic and Trade Agreement (CETA) between Canada, of the one part, and the European Union and its Member States, of the other part*” (CETA);⁴⁴ and the “*Japan-EU Economic Partnership Agreement*” (JEEPA).⁴⁵ Overall, the environmental language and content of these EU FTAs seem to be relatively stable (with the notable exception, as it will be seen, of the EU-Colombia-Peru TA), and, therefore, they will be assessed simultaneously. In terms of substantive content, generally speaking, these agreements tend to contain a chapter on “*Trade and sustainable development*” or “*Trade and environment*”, within which an article on “*Multilateral environmental agreements*” may be found.⁴⁶ The content of the said article has a constant basis, upon which other elements are pinned. The said basis is constituted by the following language:

“1. **The Parties recognise the value** of international environmental governance and agreements as a response of the international community to global or regional environmental problems.

2. *The Parties reaffirm their commitments to the effective implementation in their laws and practices of the multilateral environmental agreements to which they are party.”*⁴⁷ [Emphasis added]

This common basis is sometimes accompanied by further paragraphs which, despite depicting progressive intentions, are unable to lead to ambitious environmental outcomes. As brief examples, in the agreements with South Korea and Japan, the parties mention the United Nations Framework Convention on Climate Change and the Kyoto Protocol (or, in the case of the JEEPA, the Paris Agreement), but only to state that they “*reaffirm their commitment to reaching [the Agreements’] ultimate objective*”. The Agreement with Ukraine establishes further means through which the parties “*shall cooperate*,” as does CETA, which adds that the parties “*commit to consult*” and “*exchang[e] information*”. Equally, the first paragraph above is sometimes accompanied by additional elements which remain within the same vague narrative (the parties “*commit to consulting and cooperating*”, “*stress the need to enhance*”, etc.).

However, beyond these considerations, which would tend to sustain the conclusion that the substantive content of the concerned Agreements is purely and simply weak, a qualification may be made: the second paragraph is ambiguous in its content. The paragraph begins with a typically “weak” wording (“*The Parties reaffirm their commitments*”), but, instead of referring to weak policy objectives, it refers to the “*effective implementation in their laws and practices [...] of the multilateral environmental agreements to which they are party.”*⁴⁸ It, therefore, could be argued that, despite its beginning, the paragraph actually links, in a solid manner, the trade agreement to the relevant multilateral environmental agreements (any relevant agreement to which they are party, without limitation). In other words, it could be argued that a lack of “*effective implementation in their laws and practices*” of the relevant environmental agreements entails a breach of paragraph 2.

This potential interpretation is further reinforced by the specific wording of the relevant provisions of the EU-Colombia-Peru TA. The second, third and fourth paragraphs of Article 270 (“*Multilateral Environmental Standards and Agreements*”), included in Title IX (“*Trade and sustainable development*”) of the said FTA, read as follows:⁴⁹

“2. *The Parties reaffirm their commitment to effectively implement in their laws and practices the following multilateral environmental agreements: the Montreal Protocol on Substances that Deplete the Ozone Layer [...], the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal [...] the Kyoto Protocol to the United Nations Framework Convention on Climate Change [...].*

3. *The Trade Committee may recommend the extension of the application of paragraph 2 to other multilateral environmental agreements [...].*

4. *Nothing in this Agreement shall limit the right of a Party to adopt or maintain measures to implement the agreements referred to in paragraph 2.*⁵⁰ [Emphasis added, original footnotes omitted]

Paragraph 2 of the article contains a list with a limited number of precisely identified agreements. Notwithstanding the fact that, at its present state, this provision does not seem very prone to providing coverage to climate-change instruments,⁵¹ it may be argued that this provision does not contain vague

policy objectives and statements, but clear, precise and solid obligations. If this is the case, the above-referred parallel provisions in other EU FTAs may be interpreted accordingly, as being open-ended clauses (hence, not restrained to a limited list of agreements), containing the same kind of clear, precise and solid obligations.

However, in order for this ambiguous possibility to have any practical impact, the said provisions would need to be enforceable under the relevant “*Dispute Settlement*” provisions in the respective EU FTAs, which does not seem to be the case. While, in most cases, the dispute settlement chapters of the selected FTAs are assort with provisions which state that their scope is general and covers the entirety of the said agreements, these provisions operate only “*unless otherwise provided*”⁵². The environmentally-relevant chapters, therefore, exclude resort to dispute settlement under various formulations.⁵³ In general, they only provide for soft and conciliatory mechanisms, such as “*Government consultations*”, or the establishment of “*panels*” or “*groups*” of experts, who draft “*initial*” and, “*final*” reports, on how to solve issues.⁵⁴ The parties then “*shall take into account the final report*”, or “*inform the [relevant entity] of its intentions as regards the recommendations*”, or “*discuss actions or measures to resolve the matter in question, taking into account the [...] report and suggestions.*”⁵⁵ The parties’ courses of action are often “*monitor[ed]*”, but no consequence is provided for.

3.2. Second configuration – Solid substantive content, but non-enforceability: The EU-Singapore Free Trade Agreement

A second possible configuration is reflected in the text of the “*Free Trade Agreement between the European Union and the Republic of Singapore*” (EU-Singapore FTA).⁵⁶ Chapter thirteen (“*Trade and sustainable development*”) contains in Section C (“*Trade and Sustainable Development – Environmental Aspects*”) an Article on “*Multilateral Environmental Standards and Agreements*” (Article 13.6) which bears a structure that greatly resembles the one described in the analysis of the previous configuration (i.e., “*ambiguous substantive content and non-enforceability*”). However, on this occasion, there is no possible ambiguity:

“*2. The Parties shall effectively implement in their respective laws, regulations or other measures and practices in their territories, the multilateral environmental agreements to which they are party.*”⁵⁷ [Emphasis added; original footnote omitted]

The wording of the second paragraph of Article 13.6 of the EU-Singapore FTA is clearly assertive, without any sort of resort to the typical vague language found in weak policy statements. It can hardly be argued that it does not contain clear, precise and solid obligations. *A priori*, its only fault, for the purposes of this chapter, is that it clearly does not cover climate-change obligations, for climate change is the object of the third paragraph of the Article, which is undoubtedly weak in its content:⁵⁸

“*3. The Parties reaffirm their commitment to reaching the ultimate objective of the UN Framework Convention on Climate Change (hereinafter referred to as “UNFCCC”), and of its Kyoto Protocol in a manner consistent with the principles and provisions of the UNFCCC. They commit to work together to strengthen the multilateral, rules-based regime under the UNFCCC building on the UNFCCC’s agreed decisions, and to support efforts to develop a post-2020 international climate change agreement under the UNFCCC applicable to all parties.*”
[Emphasis added]

In any case, again, as was the case in the first model, for the second paragraph of this provision to have any practical impact, it would need to be enforceable under the relevant “*Dispute Settlement*” chapter. And, again, this does not seem to be the case.⁵⁹

3.3. Third configuration – Enforceability, but ambiguous substantive content: The Transatlantic Trade Investment and Partnership

The “*Transatlantic Trade Investment and Partnership*” (TTIP), which the European Union and the United States began negotiating between the 7th and the 12th of July 2013, is at the roots of the third configuration detected in the sample of agreements. Notwithstanding the fact that a significant amount of uncertainty swirls around its future,⁶⁰ draft-documents on this envisaged agreement, reflecting different stages in the negotiations, will serve as the basis for the analysis. The first of such documents is the EU’s “*initial proposal for legal text on “Trade and Sustainable Development,”*⁶¹ drafted to serve during the negotiating round with the United States that took place between the 19th and the 23rd October 2015. Within “*Section III*” (“*Trade and Sustainable Development – Environmental aspects*”), Article 10 (“*Multilateral environmental governance and rules*”) contains the following paragraph:

“2. **Each Party reaffirms its commitment** to effectively **implement** in its domestic laws and practices the Multilateral Environmental Agreements to which it is a party.” [Emphasis added]

Other than this paragraph, verbs and terminology in the remainder of the provision are, again, weak in nature (i.e., “*recognize*”, “*continue to strive*”, “*exchanging information*”, “*supporting each other [...]*”, “*commit to consult and cooperate*”, “*acknowledge*”). Hence, in general terms, the wording of Article 10 roughly corresponds with that of equivalent substantive provisions in the EU FTAs that were classified as having an “*ambiguous substantive content*” but lacking enforceability (i.e., the first configuration above). What distinguishes this early TTIP document from the above-commented FTAs is precisely the fact that, following an EU’s “*initial proposal for legal text on “Dispute Settlement (Government to Government),”*” the TTIP’s relevant provisions would be enforceable, and that remedies would be available. Article 2 (“*Scope of application*”) in Section 1 (“*Objective and Scope*”) establishes that the dispute settlement chapter applies to “*any dispute concerning the interpretation and application of the provisions of this Agreement, except as otherwise provided.*”

This assessment, made on the basis of a rather early-stage document, may be altered if the content of a second document, stemming from a later round of the negotiations (11-15 July 2016), gets to be inserted into the relevant chapter of the TTIP. The EU’s “*initial proposal for a legal text on climate which would be included [sic] to the “Trade and Sustainable Development” chapter in TTIP*”⁶² contains lengthy language on “*Trade favouring low-emission and climate-resilient development*” and “*Protection of the Ozone Layer and Measures Related to Hydrofluorocarbons*”. For the sake of brevity (especially taking into account the above-referred uncertainty surrounding the negotiations), suffice it to say that most of the content of the draft provisions can be easily qualified as “weak,” for it reflects the same kind of language as other provisions described in previous pages. However, each of the two unnumbered draft provisions features a paragraph bearing more solid content:⁶³

“4. [...] the Parties shall: [...] b) **effectively implement the WTO Environmental Goods Agreement (EGA) and in this context cooperate to reduce or, as appropriate, eliminate non-tariff barriers related to environmental goods and services;**”⁶⁴ [Emphasis added]

“2. [...] each Party **shall take measures to control the production and consumption of, and trade in, substances within the scope of the Montreal Protocol on Substances that Deplete the Ozone Layer, including any future amendments thereto.**”⁶⁵ [Emphasis added]

Nevertheless, as none of these paragraphs with “solid” content refers to any of the core climate-change agreements, they may only be collaterally relevant, if anything, for the purposes of this chapter.

The potential insertion of this language in the TTIP would likely remove climate change from the scope of the above-referred Article 10. This would mutate this third configuration, which would thus become “*enforceability, but weak content.*” It would, nevertheless, remain a distinct one, despite containing solid obligations as regards collaterally-relevant agreements: on the one hand, the provision is weak and, on the other hand, enforcement is available.

However, irrespective of the availability of enforcement, a major hindrance in this respect would always remain: putting aside the actual architecture and specific features that a final TTIP may possibly come to display, what is really fundamental is the fact that the United States has not ratified the Kyoto Protocol and may withdraw from the Paris Agreement on Climate Change.⁶⁶ If that were the case, consequently, there would be no relevant climate-change obligation that could potentially come to be enforced via this trade agreement, other than the rather weak obligations assumed under the Climate Convention itself.

4. The case for bundling Trade and Environmental Agreements

Empirical research shows that, as the law stands nowadays, there are, at least, three sorts of obstacles to the hypothesis presented in this chapter:

- 1) Ambiguous language of the relevant “primary” obligation: whenever a given climate-change relevant provision is covered by the dispute settlement mechanism, the actual content of the relevant obligation is ambiguous.
- 2) Lack of coverage by the relevant dispute-settlement provisions. This is the reverse problem: while the content / language of the relevant obligations is solid, the provision is not covered by the dispute settlement mechanism.
- 3) Lack of environmental commitment by at least one of the parties: No bundled climate-change enforcement would be possible because the relevant party has not ratified any meaningful international climate change obligation.

Despite this, in normative terms (*de lege ferenda*), an effective way for the European Union to move forward regarding the enforcement of international climate change mitigation obligations would be to bundle the fate of climate-change-relevant obligations with that of trade agreements. Since the relevant elements for “bundling” are already disseminated in various FTAs (some feature solid climate change-linkage language, others feature coverage by the relevant dispute-settlement mechanism), law-makers would need to simultaneously include both sorts of elements in future FTAs to obtain the desired result:

- 1) In substantive terms, possibly the clearest wording found in the analyzed agreements is the one featured in Article 13.6 of the EU-Singapore FTA:

*“2. The Parties shall **effectively implement** in their respective laws, regulations or other measures and practices in their territories, the multilateral environmental agreements to which they are party.”* [Emphasis added; original footnote omitted]

It is not a closed or limited list of agreements, but a general clause, and leaves no doubt regarding the kind and extent of obligation being assumed.

- 2) In enforceability terms, it will suffice to follow the example of the TTIP. In other words, the relevant provision needs to be covered by the Dispute Settlement Chapter of the relevant agreement, which needs to ultimately provide access to remedies such as compensation and suspension of benefits in case of “non-implementation” of panel reports.

All in all, a “partially progressive” trend towards using trade agreements as legal instruments to protect the environment is possibly starting: While CETA and JEEPA face, cumulatively, ambiguous content and un-enforceability, the EU-Singapore FTA only suffers from un-enforceability, but has clearly solid content.

5. Conclusions

Very little is still known on the interaction between trade agreements and climate action. Yet trade is increasingly becoming an important element in the intersection with climate action. Similarly, there is an increasing interest in inserting climate-related provisions in the WTO context and in FTAs. Reference to climate change, the UNFCCC, the Kyoto Protocol and the Paris Agreement in FTAs is increasing. However, the empirical analysis in this chapter has shown that there are still limitations to how trade agreements can contribute to climate change mitigation. This denotes that there is still a major gap between the trade and climate communities to answer questions such as how can one reduce GHG emissions from energy-intensive traded goods without economic loss?

Being creative in legislative terms and accepting the fact that most international trade rules were written for a 20th century reality should be enough reasons to be optimistic that we may soon see trade agreements that address 21st century challenges such as climate change and clean energy technologies. In fact, evidence of this trend is the fact that recent bilateral and regional trade agreements cover, albeit in a light manner, climate-related issues by inserting chapters in such agreements that refer to the links between trade and climate change. Therefore, as time progresses and the science of climate change becomes more robust, there is a great chance that future free trade agreements may incorporate strong chapters on climate-related issues. The EU is perfectly placed to exploit this nexus within the realm of its external relations.

Finally, a ‘peace clause’ for climate action in future (EU) FTAs could be a way forward in finding supportive avenues between trade and climate action. Similar to the WTO’s Agriculture Agreement, the peace clause would enable countries to protect themselves from action taken against each others’ fossil fuel subsidies. The trading system could also be more accommodating to climate objectives if countries reduced tariffs for environmental goods and services and removed or reduced fossil fuel subsidies. Such

actions would contribute greatly to GHG emissions reduction. In any event, environmental protection should not be lowered in the name of trade liberalization or investment promotion.

¹ *Is Trade Good or Bad for the Environment?* OECD, <http://www.oecd.org/trade/tradeandenvironment.htm> (last visited July 17, 2017) [<https://perma.cc/4VXK-KTWC>]; see also *Environmental Goods and Services Sector*, EUROPA: EUROSTAT, <http://ec.europa.eu/eurostat/web/environment/environmental-goods-and-services-sector> (last visited July 17, 2017) (“The purpose of environmental goods and services is to prevent, reduce and eliminate pollution and any other form of environmental degradation . . . and to conserve and maintain the stock of natural resources, hence safeguarding against depletion.”) [<https://perma.cc/5R27-B7FH>].

² Some policy suggestions include a tax on the carbon content of imports and refund the tax to companies when they export, as the European Union is doing with cement. See *The Economist*, “Externalities: The lives of others,” 19 August 2017, pp. 60-61, at 61.

³ *World Energy Council Report Confirms Global Abundance of Energy Resources and Exposes Myth of Peak Oil*, WORLD ENERGY COUNCIL (Oct. 15, 2015), <https://www.worldenergy.org/news-and-media/press-releases/world-energy-council-report-confirms-global-abundance-of-energy-resources-and-exposes-myth-of-peak-oil> [<https://perma.cc/5ZK6-8LNL>].

⁴ See *Towards the End of Poverty*, THE ECONOMIST (June 1, 2013), <http://www.economist.com/news/leaders/21578665-nearly-1-billion-people-have-been-taken-out-extreme-poverty-20-years-world-should-aim> [<https://perma.cc/WHD7-8TZY>].

⁵ Susan Ariel Aaronson, *Human Rights*, THE WORLD BANK 443, 443 <http://siteresources.worldbank.org/INTRANETTRADE/Resources/C21.pdf> (last visited July 17, 2017) [<https://perma.cc/P5KD-KZX8>].

⁶ For a comprehensive analysis of EU external trade law and policy, see Leal-Arcas, R. *Theory and Practice of EC External Trade Law and Policy*, Cameron May, 2008; Leal-Arcas, R. *International Trade and Investment Law: Multilateral, Regional and Bilateral Governance*, Edward Elgar, 2010.

⁷ Due to word-limit constraints, for the purposes of this chapter, we focus solely on a textual analysis of free trade agreements.

⁸ See generally Leal-Arcas, R. *The European Energy Union: The quest for secure, affordable and sustainable energy*, Claeys & Casteels Publishing, 2016.

⁹ Cosbey, A. “Revenue Energy Subsidies and the WTO: The Wrong Law and the Wrong Venue,” Global Subsidies Initiative, available at <http://www.globalsubsidies.org/subsidy-watch/commentary/renewable-energy-subsidies-and-wto-wrong-law-and-wrong-venue>; see also Bigdeli, S., “Incentive Schemes to Promote Renewables and the WTO Law of Subsidies,” in Cottier, T., Nartova, O., and Bigdeli, S. (eds.), *International Trade Regulation and the Mitigation of Climate Change*, New York: Cambridge University Press, 2009, pp. 155-192; Howse, R. “Climate Mitigation Subsidies and the WTO Legal Framework: A Policy Analysis,” Geneva: International Institute for Sustainable Development, 2010.

¹⁰ Sindico, F. “Climate Taxes and the WTO: Is the Multilateral Trade Regime a Further Obstacle for Efficient Domestic Climate Policies?” *EcoLomic Policy and Law*, Vol. 3, No. 7/8, pp. 116-139, 2006.

¹¹ Kaufmann, C. and Weber, R. “Carbon-related Border Tax Adjustment: Mitigating Climate Change or Restricting International Trade?” *World Trade Review*, published online on 16 August 2011; Burniaux, J.-M., Chateau, J. and Duval, R. “Is There a Case for Carbon-Based Border Tax Adjustment?: An Applied General Equilibrium Analysis,” *Economics Department Working Papers*, No. 794, 2010; Holmes, P., Reilly, T. & Rollo, J. “Border Carbon Adjustments and the Potential for Protectionism,” *Climate Policy*, Vol. 11, No. 2, 2011, pp. 883-900; Genasci, M. “Border Tax Adjustments and Emissions Trading: The Implications of International Trade Law for Policy Design,” *Carbon and Climate Law Review*, Vol. 2, No. 1, 2008, pp. 33-42; Ismer, R., and Neuhoff, K., “Border Tax Adjustment: A Feasible Way to Support Stringent Emission Trading,” *European Journal of Law and Economics*, Vol. 24, 2007, pp. 137-164; de Cendra, J. “Can Emissions Trading Schemes be Coupled with Border Tax Adjustments? An Analysis vis-à-vis WTO Law,” *15 Review of European Community & International Environmental Law*, 2006.

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²⁴ WTO, “Members and Observers,” available at https://www.wto.org/english/thewto_e/whatis_e/tif_e/org6_e.htm.

²⁵ *Idem*.

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²⁸ Marceau, G. “The WTO in the Emerging Energy Governance Debate,” *Global Trade and Customs Journal*, Vol. 5, Issue 3, 2010.

²⁹ On this point, see the views of Cottier, T. *et al.* “Energy in WTO law and policy,” in Cottier, T. and Delimassis, P. (eds.) *The Prospects of International Trade Regulation: From Fragmentation to Coherence*, New York: Cambridge University Press, 2011, pp. 211-244 (arguing that, since the regulation of energy in international law is highly fragmented and largely incoherent, pertinent issues should be addressed by a future Framework Agreement on Energy in the context of WTO law).

³⁰ WTO, “Ministerial Conference Approves Russia’s WTO Membership,” available at 16 December 2011, available at http://www.wto.org/english/news_e/news_e.htm; see also “Russia to Join WTO Alone,” *The Moscow Times*, 16 April 2010, available at <http://www.themoscowtimes.com/business/article/russia-to-join-wto-alone/404038.html>.

³¹ International Centre for Trade and Sustainable Development, “Russia Update,” *Bridges Monthly*, Vol. 13, No. 2, June 2009, available at <http://ictsd.net/i/news/bridges/48583/>.

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³³ See generally Leal-Arcas, R. *Climate Change and International Trade*, Edward Elgar, 2013.

³⁴ Cinnamon Carlarne argues that the WTO should adopt an interpretative clause that provides clear principles for defining the relationship between the WTO and multilateral environmental agreements. See Carlarne, C. “The Kyoto Protocol and the WTO: Reconciling Tensions Between Free Trade and Environmental Objectives,” *Colorado Journal of International Environmental Law and Policy*, Vol. 17, Issue 1, pp. 45-88, 2006. See also Charnovitz, S. “A New WTO Paradigm for Trade and the Environment,” *Singapore Year Book of International Law*, Vol. 11, pp. 15-40, 2007; Gentile, D. “International Trade and the Environment: What is the Role of the WTO?” *Fordham Environmental Law Review*, Vol. 20, pp. 197-232, 2009; McNamee, D. “Climate Change, the Kyoto Protocol, and the World Trade Organization: Challenges and Conflicts,” *Sustainable Development Law and Policy*, Vol. 6, Winter 2006, pp. 41-44.

³⁵ See Green, A. “Climate Change, Regulatory Policy and the WTO: How Constraining are Trade Rules?,” *Journal of International Economic Law*, Vol. 8, Issue 1, pp. 143-189, 2005.

³⁶ See for instance Messerlin, P. “Climate and Trade Policies: From Mutual Destruction to Mutual Support,” *World Trade Review*, Vol. 11, Issue 1, pp. 53-80, 2012.

³⁷ John Jackson has studied the link between world trade rules and environmental policies in Jackson, J. “World Trade Rules and Environmental Policies: Congruence or Conflict?” in Bhagwati, J. and Hirsch, M. (eds.) *The Uruguay Round and Beyond: Essays in Honor of Arthur Dunkel*, University of Michigan Press, 1999, pp. 414-448.

³⁸ Ghosh and Yamarik have studied the impact of RTAs on the environment. They found that membership in an RTA reduces the amount of environmental damage by increasing the volume of trade and raising per capita income. They did not, however, find that RTAs directly impact the environment. These results suggest that recent surge of regional trading arrangements will not increase the amount of pollution, but in fact may help the environment. See Ghosh, S. & Yamarik, S. “Do Regional Trading Arrangements Harm the Environment? An Analysis of 162 Countries in 1990,” *Applied Econometrics and International Development*, Vol. 6, No. 2, 2006.

³⁹ R. Leal-Arcas “Proliferation of Regional Trade Agreements: Complementing or Supplanting Multilateralism?” *Chicago Journal of International Law*, Vol. 11, No. 2, pp. 597-629, 2011.

⁴⁰ Clara Brandi, “Trade elements in countries’ climate contributions under the Paris Agreement,” International Centre for Trade and Sustainable Development, Issue Paper, 2017, p. 12.

⁴¹ O.J. L 127/6, 14.5.2011, signed on 06.10.2010; in force as of 13.12.2015.

⁴² O.J. L 354/3, 21.12.2012, signed on 26.06.2012. Provisionally applied from 01.03.2013 between the EU and Peru; provisionally applied (with the exception of Articles 2, 202(1), 291 and 292) from 01.08.2013 between the EU and Colombia.

⁴³ O.J. L 161/3, 29.5.2014, signed on 26.06.2014, in force as of 01.09.2017.

⁴⁴ Not yet in force, signed on 30.10.2016.

⁴⁵ Per a European Commission press release dated July the 6th 2017, Japan and the EU have only reached so far an “*agreement in principle*” which covers various but not all the aspects under negotiation (<http://trade.ec.europa.eu/doclib/press/index.cfm?id=1686>; accessed on August the 17th 2017.)

⁴⁶ Korea: Chapter Thirteen, “*Trade and sustainable development*”, Article 13.5; Ukraine: Chapter 13, “*Trade and sustainable development*”, Article 292; CETA: Chapter twenty-four, “*Trade and environment*”, Article 24.4; JEEPA: Chapter twenty-four, “*Trade and sustainable development*”, Article 4.

⁴⁷ This “constant basis” has specifically been taken from Article 13.5 of the EU-South Korea FTA.

⁴⁸ There are, however, minor variations on the wording. For instance, JEEPA refers to “*related practices*”; and in CETA, each party implements multilateral environmental agreements “*in its whole territory*”.

⁴⁹ The wording of the first paragraph, which has not been reproduced here, contains the following relevant verbs: “*1. The Parties recognise the value [...] stress the need to enhance the mutual supportiveness [...] and [...] shall dialogue and cooperate as appropriate [...]*”.

⁵⁰ Compare this wording of paragraph 4 of Article 270 of the EU-Colombia-Peru TA with the wording of the fourth paragraph of Article 24.4 CETA: “*4. The Parties acknowledge their right to use Article 28.3 (General exceptions) in relation to environmental measures, including those taken pursuant to multilateral environmental agreements to which they are party.*”

⁵¹ Only one of the instruments listed in paragraph 2 may be characterized as a climate-change instrument. Beyond this, in the EU-Colombia-Peru TA, climate change agreements are the object of a separate, notably weak provision, namely Article 275.

⁵² See, for instance, Article 29.2 (“*Scope*”) of Chapter twenty-nine (“*Dispute settlement*”) of CETA: “*Except as otherwise provided in this Agreement, this Chapter applies to any dispute concerning the interpretation or application of the provisions of this Agreement.*”

⁵³ EU-Korea FTA, Article 13.16 (“*Dispute settlement*”): “*For any matter arising under this Chapter, the Parties shall only have recourse to the procedures provided for in Articles 13.14 and 13.15.*” (See similarly Article 300.7 of the Agreement with Ukraine, and the first paragraph of Article 24.16 of CETA).

⁵⁴ See, as examples, Article 13.15 (“*Panel of experts*”) of the EU-Korea FTA; Article 16 of the “*Trade and sustainable development*” chapter of JEEPA.

⁵⁵ Respectively, Article 24.15.11 of CETA, Article 285.4 of the EU-Colombia-Peru TA, and Article 17.6 of the “*Trade and sustainable development*” chapter of JEEPA.

⁵⁶ Not yet in force; not yet signed by the EU or its Member States. See Opinion 2/15 [Opinion of the Court (Full Court) of 16 May 2017, ECLI:EU:C:2017:376]: “*The Free Trade Agreement between the European Union and the Republic of Singapore falls within the exclusive competence of the European Union, with the exception of the following provisions, which fall within a competence shared between the European Union and the Member States: [...]*”.

⁵⁷ Article 13.6.2 of the EU-Singapore FTA.

⁵⁸ This third paragraph resembles the third paragraph of the corresponding provisions of JEEPA and of the EU-Korea FTA.

⁵⁹ See Article 13.16 (“*Government Consultations*”): “*1. In case of disagreement on any matter arising under this Chapter, the Parties shall only have recourse to the procedures provided for in Article 13.16 (Government Consultations) and Article 13.17 (Panel of Experts). Chapter Fifteen (Dispute Settlement) and Chapter Sixteen (Mediation Mechanism) do not apply to this Chapter.*”

⁶⁰ Following a meeting report of the “*Transatlantic Trade & Investment Partnership Advisory Group*” dated March the 9th 2017, the negotiations are “*frozen*” (p. 3) [http://trade.ec.europa.eu/doclib/docs/2017/april/tradoc_155484.pdf, accessed on August the 16th 2017].

⁶¹ http://trade.ec.europa.eu/doclib/docs/2015/november/tradoc_153923.pdf.

⁶² http://trade.ec.europa.eu/doclib/docs/2016/july/tradoc_154800.pdf, accessed on August the 18th 2017.

⁶³ Further paragraphs in the draft provisions resort to language which has mostly already been discussed in previous pages of this chapter.

⁶⁴ Available at http://trade.ec.europa.eu/doclib/docs/2016/july/tradoc_154800.pdf.

⁶⁵ Regarding the protection of the ozone layer and measures related to hydrofluorocarbons, see text available at http://trade.ec.europa.eu/doclib/docs/2016/july/tradoc_154800.pdf.

⁶⁶ New York Times, “*Trump Will Withdraw U.S. From Paris Climate Agreement*”, June the 1st 2017 (<https://www.nytimes.com/2017/06/01/climate/trump-paris-climate-agreement.html?mcubz=1>; accessed on August the 22nd 2017).