

WTO's Environmental Goods: Technical and Legal Scope

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Abstract—The World Trade Organization introduced negotiations for an Environmental Goods Agreement. The aim is to reduce tariffs for "important" environmental-related products. There are however contentious debates on what environmental goods are and what makes some of those goods important. Adding the relevance of international environmental law on environmental goods, the issue of defining WTO's environmental goods becomes even more challenging. In this paper, the author aims to analyse these discussions, and set the boundaries for the scope of environmental goods.

Keywords—environmental goods, the WTO draft agreement on environmental goods, international environmental law, international trade law

I. INTRODUCTION

After a decade-long discussions under a committee of the World Trade Organization (WTO), 46 WTO member states started the negotiations for adopting an Environmental Goods Agreement (EGA) in 2014 [1]. The EGA aims "to eliminate tariffs on a number of important environment-related products" [2]. The expected outcome of this aim is to increase the use and investment potential of such goods. As a result, the EGA can provide a win-win situation for both international trade and environment regimes.

Understanding the term "environmental goods" of the WTO is crucial as the mitigation of, and adaptation to, transboundary environmental problems partially relies on using goods that are environmentally sound [3]. If the EGA comes into force, it is estimated that green-house gas concentration would decrease with the more use of environmental goods [4]. Likewise, a study on the effect of the EGA coming into force in the United States claims that "greater usage of energy-efficient bulbs is estimated to save 238 million kilowatt hours in the United States each year. These savings correspond to 124,000 tons of coal each year" [5]. In other words, the EGA could support international environmental regimes -such as the international climate change regime- to achieve their environmental goals [6].

The negotiating parties of the EGA so far convened 18 times to discuss environmental goods but there is still no clear guidance regarding the term environmental goods. One argues that negotiating parties deliberately avoid a definition [7]. The negotiating parties use a listing method which means that a list is prepared that only includes environmental goods that are considered important by the negotiating parties. However, there is no agreement on what important environmental goods are. Contentious debates were present on this point which resulted in the cessation of meetings since December 2016.

This article aims to set the boundaries for the scope of environmental goods. For this purpose, the negotiating parties' criteria to choose environmental goods and to list the important ones will be discussed. Subsequently, an international environmental law concept of environmentally sound technologies will be analysed. Environmentally sound technologies are considered critical for the mitigation of human-caused environmental problems and for the increase of the resilience of human beings to the pressing environmental issues [8]. It will be questioned whether the concept of environmentally sound technologies could shed light on the scope of environmental goods.

This article will conclude that environmental goods do not constitute a clearly definable concept. The author argues that it is rather a list of goods that are identified by the EGA parties. As a result, if the EGA comes into force, environmental goods would be goods that are exempted from WTO tariffs for a period of time until new products are identified as environmental goods. The author suggests that the concept of environmentally sound technologies could provide guidance on the negotiating parties of the EGA to identify important environmental goods.

II. ENVIRONMENTAL GOODS WITHIN THE EGA

A. Understanding the Listing Method and Current Environmental Goods

The trading system of the WTO is complex. The analysis of the list of environmental goods within the EGA therefore requires an introduction to the WTO.

The WTO oversees the implementation of international trade agreements that guide the trade policies of the vast majority of countries [9]. One of the main principles of the WTO is non-discrimination between products falling under the same product group to give equal opportunity to similar products [10]. For deciding what similar products are, the WTO uses the Harmonized System of the World Customs Organization [11]. The Harmonized System broadly categorises products and the same tariffs apply to the products falling under the same category. Adding that the Harmonized System influences 98 percent of world trade and has over 5,000 product groups, these categories are crucial for international trade [12].

For instance, "machinery and mechanical appliances" is one category given in the Chapter 84 of the Harmonised System. Sub-categories are given to better define each broad category while sub-sub-categories are not allowed internationally. As an example, "milking machines and dairy machinery" is a sub-category meaning that all machinery under this category are subjected to same tariffs. As

environmental goods potentially encompass a range of technologies with vastly different applications, they are not feasible as a category to the Harmonized System. As a result of this situation, the negotiating parties to the EGA adopted a listing method that aims to eliminate tariffs on certain product groups of the Harmonized System that are listed within the EGA.

This listing method was adopted from a regional economic forum, the Asia-Pacific Economic Cooperation which listed 54 product groups of the Harmonized System for tariff cuts in 2012 [13]. The negotiating parties of the EGA adopted the list of the Asia-Pacific Economic Cooperation with the aim of expanding it [14]. During the negotiations, there were times where 650 product groups were identified but the final draft of the EGA had 300 product groups [15]. It is important to emphasise that these are not products themselves but product groups. These 300 product groups are related to the following 10 categories: air pollution control, solid and hazardous waste management, energy efficiency, wastewater management and water treatment, environmental remediation and clean-up, environmental monitoring analysis and assessment, cleaner and renewable energy, noise and vibration abatement, resource efficiency, and environmentally preferable products [16].

After clarifying this listing method, the issues of this method are discussed below.

B. Issues of the Listing Method

During the negotiations, the negotiating parties of the EGA submitted their lists containing product groups that they consider as environmental goods [17]. Every country and the European Union -as a party to the WTO and a negotiating party to the EGA- individually decided what environmental goods are and which of those goods are sufficiently important to be exempted from WTO tariffs. It is not clear how and with which criteria and method the “importance” of environmental goods is defined. A study points out that the evaluation of a product as environmental depends on socio-economic conditions and the perception of the actor [18]. It is hence rather unsurprising that there were differences between the choices of negotiating parties.

Relying on the submissions of the negotiating parties, draft lists of product groups were decided. Contentious debates emerged on each draft of the EGA list. Some claimed that there are product groups that are not environmental and unacceptable, and some alleged that key product groups are missing from the list [19]. Despite the presence of technical experts in the negotiations, a consensus could not be reached for an agreed list of product groups. Leaving the scope of environmental goods solely to parties leaves a great discretion on parties and it becomes nearly impossible to arrive at a joint list. Adding that the list requires updates for keeping up with the technological changes, each updating process would be subjected to the similar discussions amongst parties [20]. It is not clear how the WTO aims to address this problem.

Another issue regarding the listing method is that it does not correspond with the aim of the EGA to allow more trading and the use of goods that are environmentally essential. Indeed, even though the EGA would promote the trade of listed product groups, it would disadvantage others which may be key for environmental protection. For example, a study investigating at the coverage of the final draft list of the EGA

reveals that some solar panel technologies are covered by the EGA list and some are not [21].

Another issue that shows that the listing method does not correspond to the aim of the EGA is that the negotiating parties already have very low tariff rates for the listed product groups in the EGA draft list [22]. All EGA negotiating parties are either developed or major developing countries and these countries do not impose high tariffs for product groups of the EGA [23]. For example, a study analysing the potential effect of a draft list of the EGA on greenhouse gas emissions amongst its parties shows that greenhouse gas emissions would decrease between 0.1 and 0.9 percent of 2030 total greenhouse gas emissions [24]. A much higher percentage of decrease on emissions is needed for the EGA to contribute environmental protection [25].

High tariffs are in place for EGA product groups mainly in developing and least-developed countries. Luring developing and least-developed countries into the EGA is however challenging. Most high technologies are produced by EGA negotiating parties [26]. The remaining countries are hence wary that the EGA would mainly benefit the EGA negotiating parties [27]. As a result of this situation, the EGA does not reach its main target countries that have high tariff rates on product groups listed in EGA. In other words, the EGA does not reach those countries for which its tariff elimination would be most effective.

Due to these issues, there is no further date for EGA negotiations. Nevertheless, trading goods that are playing a role in environmental protection is essential and many multilateral environmental agreements have been promoting and in some cases have given obligations on their parties for this purpose [28]. The support of the international trading regime by cutting tariffs would be a step forward in this regard. Thus, the author questions whether disagreements would be minimised and more countries would join the EGA negotiations in case that the scope of environmental goods are better defined. For this purpose, the following section looks at a better developed international environmental concept of environmentally sound technologies for comparing and finding criteria for the term environmental goods.

III. AN INTERNATIONAL ENVIRONMENTAL LAW APPROACH TO ENVIRONMENTAL GOODS

A. The Relevance of International Environmental Law

Since the Declaration of the United Nations Conference on the Human Environment in 1972, international environmental law puts an importance on environment related technologies as they are considered to play a decisive role for combatting, and for the adaptation to the adverse effects of, environmental issues [29].

The term technology refers both to hardware components such as tangible products, and to software components such as know-how or computer programmes. Furthermore, there is the component of orgware which is about the organisation of the technology [30]. For instance, when a country is implementing a capacity building project for improving its local technological conditions, this capacity building is considered to be about the organisation of the technology and hence is counted as technological support [31]. The concept of technology under international environmental law is restricted in relation to its purpose such the protection of the ozone-layer [32]. In any case, however, the technology in

question must be broadly related to environmental protection and to the adaptation to the adverse effects of environmental issues.

As mentioned before, many multilateral environmental agreements have been promoting and in some cases have given obligations on their parties for the use of technologies for environmental purposes. This is where the WTO becomes relevant. Indeed, the access of countries to these technologies requires their transfers between nations in compliance with the international trade rules of the WTO. However, as explained, the WTO principles and the Harmonised System do not allow technologies to be differentiated according to their benefit to the environment. To address this problem, the WTO started the negotiation for the EGA which is experiencing problems with identifying environmental goods. Understanding the scope of technologies referred under international environmental law could be useful for clarifying the WTO term of environmental goods. This could help the negotiating parties of the EGA to agree on a list of product groups.

There has been a host of different references to technologies under international environmental law such as environmental technologies, green technologies, clean technologies, environmentally friendly technologies, and environmentally sound technologies. Even though their scope changes according to the context where they used, the common aspect of all these technologies is that they play a role in environmental protection and the adaptation to environmental issues [33]. This article prefers the term environmentally sound technologies as it became a widely used concept. The section below discusses environmentally sound technologies to see whether they could illustrate some criteria for identifying environmental goods.

B. The Comparison of Environmentally Sound Technologies and Environmental Goods

Environmentally sound technologies are defined by their function. They “protect the environment, are less polluting, use all resources in a more sustainable manner, recycle more of their wastes and products, and handle residual wastes in a more acceptable manner than the technologies for which they were substitutes” [34].

This definition gives an overall idea but does not provide clear criteria on how to decide whether a technology is environmentally sound. For instance, energy efficient technologies are emitting less greenhouse gases than older technology substitutes, but their energy efficiency varies drastically. It is hard to define what level of energy efficiency makes them environmentally sound. This situation seems to resemble the issue of defining the “environmental” aspect of the term for environmental goods. Nevertheless, the author argues that there are essential differences between them.

The concept of environmentally sound technologies is a very broad concept that in practice refers to any kind of hardware, software, and orgware that provides any kind of improvement for the environment [35]. A look at the diversity of projects on environmentally sound technologies illustrates the vast range of activities. There were projects for transferring renewable energy technologies, for overcoming public opposition to a technology, or for training engineers to develop their skills on a new technology [36]. When a project is undertaken for the transfer of environmentally sound technologies, it is hard to claim that this project is not related to environmentally sound technologies. This is because the

term environmentally sound technologies is a broad concept that includes a normative value of environmental protection [37].

On the other hand, the WTO term “environmental goods” is not necessarily incorporating environmental protection as a normative value. For example, according to the European Union’s understanding of environmental goods, “most of the goods in the WTO list are not ‘environmental’ goods” [38]. Whereas the concept of environmentally sound technologies has an inclusive quality in that it includes technologies according to a normative standard, environmental goods are limited to the identified product groups.

Furthermore, since there will be an economic advantage for listed product groups due to tariff cuts, it is possible that proposals may partially focus on economic rather than environmental considerations. For instance, a study observed that “half of the environmental goods likely to be in use within the coming decade do not currently exist” [39]. This observation brings about the question whether new products are aimed to be exempted from tariffs for their potential environmental benefits or for their value in trade.

In this light, the “environmental” aspect of the WTO’s term of environmental goods is mainly a selection criterion for the EGA list, the content of which is left to the discretion of the negotiating parties. It is possible that the final EGA list will not include crucial environmentally sound technologies and that these technologies will thus be economically disadvantaged. Even though it is realistically not possible to create a list in which all product groups are considered equally important for the environment, it is still imperative that the list takes environmental concerns into account.

Having said this, it becomes apparent that the concept of environmentally sound technologies and the term environmental goods are not compatible in their scope. Extracting criteria from the concept of environmentally sound technologies for defining environmental goods is hence not feasible. However, international environmental regimes conducting studies or projects on environmentally sound technologies could provide guidance for the negotiating parties of the EGA to select important environmental goods. Indeed, project experiences with environmentally sound technologies would provide the negotiating parties of the EGA with crucial data and can be very influential for the decision of which environmental goods are considered “important”. For example, institutions of the climate change regime and the United Nations Environment Programme are respected institutions in this regard.

At the same time, since the EGA has the potential to influence international environmental regimes by contributing to an increased transfer of environmentally sound technologies, more communication amongst the institutions of international environmental regimes and the negotiating parties of the EGA is needed. There is however no initiation of the WTO in this regard.

The last section below will revisit the main discussions and will conclude the analysis on environmental goods.

IV. CONCLUSION

International trading principles and rules have been evolving since the 1940s whereas international environmental laws have developed after the 1970s [40]. In this regard it was not surprising to see that WTO trading principles and the

system it uses for the categorisation of goods did not, at least not initially, provide the necessary flexibility to incorporate environmental concerns into the international trading regime. After half a century and a hitherto unexperienced level of serious global environmental problems, the WTO needs to find a way to change this situation.

With the EGA, the WTO aims at making tariff exceptions on a range of environmental product groups that will be economically advantaged for widespread transfers amongst nations without the WTO having to amend its principles and laws. The EGA negotiations are however suspended since the negotiating parties would not agree on product groups that they consider important environmental goods. This paper therefore aimed at analysing this contentious WTO term - environmental goods- and provide a better understanding.

After the analysis in this article, it is claimed that environmental goods are not a concept but rather a categorisation label of the EGA. It is rather a circular definition: what environmental goods are what is listed in the EGA and what is listed in the EGA are environmental goods. The author therefore suggested to look at international environmental law and the concept of environmentally sound technologies since they have an “environmental” perspective which is considered necessary by the author for the negotiating parties of the EGA to understand to identify production groups. Indeed, the subject matter is as related to the environment as it is related to trade. This environmental perspective would also inspire the negotiating parties to choose essential environmental technology groups as environmental goods.

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