

# **An Innovative Policy Framework**

## *Using import tariffs and sales taxes to stimulate sustainability*

**Renée Wehkamp**

S4031644

### **ABSTRACT**

Currently companies often lack economic incentives to operate more sustainably. This research is focusses on if and how import tariffs or sales taxes could be implemented to stimulate sustainable production. 13 respondents were interviewed to explore the advantages, disadvantages and approaches of using import tariffs, sales taxes and an international ecolabel to stimulate sustainability. In this research many barriers were exposed and discussed, such as the capabilities of the producers, loopholes in regulations and lobbying. In the discussion the intentional approach is supplemented to the new insights. The main insights were that the capabilities of the producers have to be taken into account and instead of creating one international ecolabel, the criteria could be determined by the government and the implementation by private sector.

## INRODUCTION

Since the industrial revolution environmental change is mainly driven by human actions (Rockström, et al., 2009). Some say climate change can be considered the greatest market failure the world has ever seen (Stern, 2007), since markets fail to use scarce resources well (Park & Al-laby, 2017). The existence of externalities is a market failure that has a major impact on environmental degradation (Dean & McMullen, 2007). Externalities are costs or benefits that arise from an activity, but are not accrued to the person or organization that carries out the activity (Black, et al., 2013). An example of a negative environmental externality is air pollution (Cuff & Goudie, 2009). Since companies do not bear the costs of the negative externalities of unsustainable business practices, companies lack economic incentives to operate more sustainably.

Companies can internalize negative externalities, by taking external costs into account in their decision making (Hashimzade, et al., 2017). These companies have higher costs than companies who do not consider negative externalities to be a problem, since the costs of negative externalities are carried by the society and not by the companies who cause them (Cuff & Goudie, 2009). Companies who voluntarily limit their negative environmental externalities, thereby have a competitive disadvantage due to their higher production costs.

Since market mechanisms create incentives to operate unsustainably, regulation is needed to prohibit companies from externalizing environmental costs.

Creating environmental regulation at a global scale is important for preventing countries from lowering their environmental standards in order to attract trade and investment from abroad. Zleptnig (2010) described this as the global “race to the bottom”. Companies from countries with less environmental regulation can externalize more and thereby reduce their costs, since externalities are not accrued to the company (Black, et al., 2013). This gives these companies a competitive advantage over companies from countries with more environmental regulation.

Unfortunately, it is hard to create sufficient environmental regulation whereby all countries participate and comply. It should be attractive for the countries that are involved in the environmental problem to join and to keep the environmental agreement (Seneca & Taussig, 1979). The Paris Agreement is an example of an agreement that was perceived as unattractive. Presi-

dent Trump stated about the Paris Agreement: "...it put our country, the United States of America, which we all love, at a very, very big economic disadvantage. A cynic would say the obvious reason for economic competitors and their wish to see us remain in the agreement is so that we continue to suffer this self-inflicted major economic wound." (Whitehouse, 2017). In his speech president Trump mentions the competitive disadvantages of following the Paris Agreement and uses this as an argument to cease the implementation of the Paris Accord (Whitehouse, 2017).

### **Trade measures**

The argument is given that countries should be able to adopt trade measures to prevent a global "race to the bottom" regarding environmental standards. Trade measures, such as import tariffs and quotas, can protect domestic producers against unfair competition caused by differences in environmental standards and can be used as sanctions in response to another country's poor environmental record (Zleptnig, 2010).

Even though trade measures can limit the competitive disadvantages of keeping an environmental agreement and create incentives for countries to participate in an agreement (Mani, 1996), trade measures based on participation do not create incentives for companies within countries that do not join the agreement to meet certain environmental standards. After all, the trade measures are based on the country of origin and not on the individual sustainability of companies.

### **Import tariffs and sales taxes**

This research explores the option of using import tariffs or sales taxes to create incentives for countries and individual companies to meet sustainability standards. Instead of charging import tariffs based on the country of origin, import tariffs or sales taxes can be based on environmental costs of a product.

For illustration the example of palm oil can be used. The palm oil production causes forest loss in several countries. Interventions are needed to reduce the negative environmental effects of the palm oil production (Vijayet, et al., 2016). By charging higher import tariffs for palm oil that is produced unsustainably, unsustainable production is discouraged. This can decrease the negative environmental externalities of the palm oil production.

By basing import tariffs or sales taxes on the environmental costs of a product, incentives to operate sustainably are created regardless of the current environmental regulation and political situation within countries. The potential influence of import tariffs and taxes on the sustainability of products leads to the following research question:

*(How) can import tariffs or sales taxes be implemented to stimulate sustainable production?*

In the theory section different aspects involved in implementing import tariffs and sales taxes at a product level are explored and policy frameworks are constructed to illustrate possible approaches. In the method section, the research method, group of respondents and the interview guide is explained. In the result section a code tree is shown and explained. In the discussion and limitation section the results are being discussed, new insights are being shared and the limitations of this research are being discussed.

**THEORY SECTION**

**Ecolabels and Environmental Qualifications**

When import tariffs or sales taxes are based on the sustainability of products, it is important to determine what makes a product sustainable. An example of a sustainability attribute is the carbon emissions throughout the production process (Carbon Footprint, n.d.).

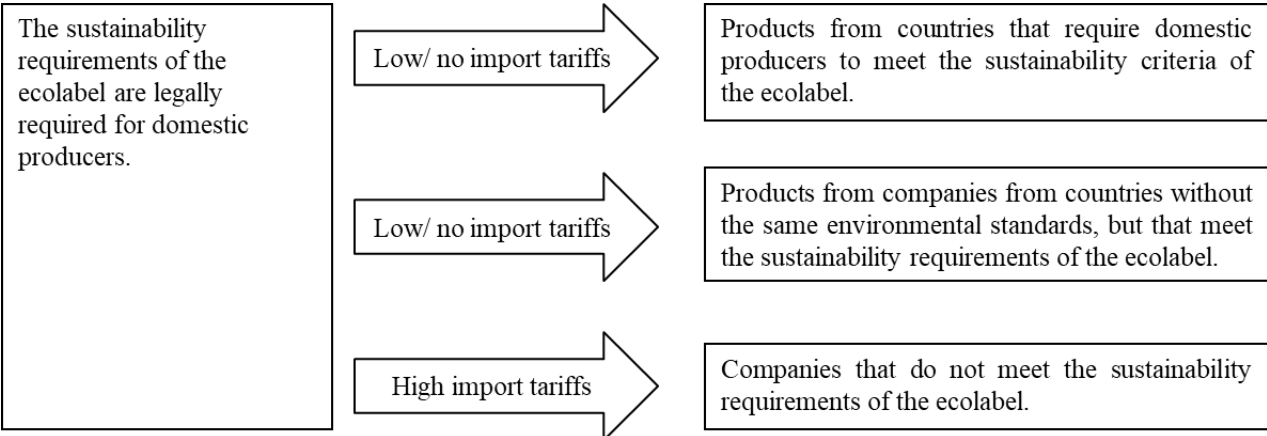
Ecolabels base their certification criteria on the whole life cycle of products (United Nations, 2009) and can be used to select products on certain criteria (UNEP, 2020). An approach to research the sustainability of the life cycle of products is by the use of the product life cycle assessment. This assessment determines the total environmental impact of a product through looking at direct and indirect effects of different aspects of a product (O'Neill, 2003).

Currently product labels are used to facilitate more sustainable consumption and production, but the abundance of labelling schemes leads to confusion (Dendler, 2014).

**Proposed policy frameworks**

Figure 1 shows a policy framework that illustrates how an ecolabel in combination with import tariffs can be used to stimulate sustainable production.

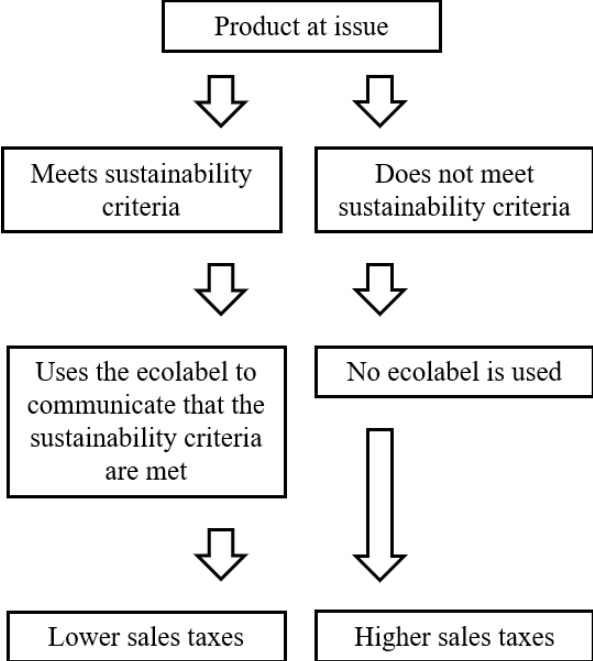
*Figure 1: A policy framework for using import tariffs at a product level*



This policy framework has two objectives. It is aimed at stimulating foreign producers and countries to meet certain sustainability standards and the higher import tariffs compensate for the economic advantages of unsustainable business practises.

Import tariffs are not the only instrument that can be used for creating economic incentives to operate more sustainably. Another approach is stimulating sustainability by using sales taxes. In contrary to import tariffs, sales taxes are not only applied on foreign products, but also on domestic products. This gives governments the opportunity to differentiate between different levels of sustainability of domestic products. In figure 2 a policy framework is shown that is based on sales taxes.

*Figure 2: Policy framework for using sales taxes based on the sustainability of products*



**Intrinsic and extrinsic incentives**

When the environmental costs of products are communicated and prices are adjusted, several incentives are created to increase the demand for sustainable products and the interest of producers to produce sustainably.

By communicating the sustainability attributes of products, consumers can be motivated by intrinsic incentives such as warm-glow and pure altruism. Pure altruism is only motivated by interest in the welfare of others, whereas warm-glow altruism is motivated by a boost in self-

esteem associated with improving the welfare of others (Delmas & Lessem, 2014). When a label communicates the sustainability attributes of a product, consumers can be motivated to reduce negative impact on the environment that is caused by their consumer behaviour (pure altruism) or consumers can be motivated by the boost in self-esteem connected to sustainable products (warm-glow altruism).

Extrinsic incentives arise from factors outside the individual (Law, 2016) and usually entail pecuniary rewards (Delmas & Lessem, 2014). By reducing or inverting the price differences between sustainable and unsustainable products, the economic incentive to choose unsustainable products is diminished or removed.

If the demand for sustainable products increases due to intrinsic and extrinsic incentives, this can create incentives for companies produce products according to certain sustainability criteria.

Through the changed sustainability expectations of governments, companies have another reason to start producing more sustainably. According to institutional theory, organizations enhance their legitimacy by conforming to the expectations of institutions and stakeholders (Berrone & Gomez-Mejia, 2009). By making the expectation of governments salient through linking import tariffs or sales taxes to an ecolabel, an incentive is created for companies to fulfil these sustainability requirements in order to protect their legitimacy.

### **Trade conflict**

Imposing import tariffs is not without risk, trade restrictions could have negative effects on the relation between countries (Curtiss, 1954). An example of a situation where trade restrictions lead to conflict is the trade war between the U.S. and China. In 2018 president Trump increased the levy tariffs on various products from China such as machinery and aerospace. China reacted with import tariffs on US products like wine and fruit. This started a chain reaction, where both countries reacted to trade measures with other trade measures (Manjula & Saloni, 2019).

### **The World Trade Organization and the GATT**

Countries work together to stimulate the economy and maintain good relations through trade agreements. The World Trade Organization (WTO) is currently the most influential institution

regarding trade policy. With 164 members, the WTO represents 98% of the world trade. One objective of the WTO is lowering trade barriers, such as custom tariffs and import bans, to encourage trade (WTO Annual Report 2019 ).

One of the fundamental principles of the WTO, is the principle of non-discrimination. The WTO states that “A country should not discriminate between its trading partners and it should not discriminate between its own and foreign products, services or nationals.” (WTO Annual Report 2019: 11). The General Agreement on Tariffs and Trade, also known as the GATT, is an international agreement governed by the WTO that promotes free trade on a non-discriminatory basis (Koul, 2018).

Greaker and Mads (2006) argue that imposing environmental standards on foreign products is a delicate issue in respect to the GATT rules. The principle of non-discrimination limits governments to use trade measures that restrict imported goods that caused unacceptable damage to the environment (Sampson, 2008).

The WTO acknowledges the constraint that the GATT can have on trade policy related to environmental issues. The WTO refers to Article XX, which is an exception clause that can allow certain measures that are inconsistent with the GATT rules. Exceptions are among others made for measures that are necessary to protect human, animal or plant life or are related to the conservation of exhaustible natural resources (WTO, n.d.).

Import tariffs based on the sustainability of products are in essence in conflict with the principle of non-discrimination and thereby in conflict with the GATT regulation. If the WTO would form a barrier depends on whether the policy frameworks can or cannot be justified under Article XX.

Besides the potential barriers, the WTO also has opportunities. Since the members of the WTO represents 98% of the world trade (WTO Annual Report 2019), the WTO could be the right organization to approach countries to follow and implement the policy frameworks. The WTO could potentially serve as a platform for negotiating international standards for ecolabels and the related import tariffs or sales taxes.



## **Current developments in the European Union**

Currently the European Union is already using and proposing trade regulations to strengthen its positive influence on the environment. Even though this research is not aimed specifically at the EU, certain policies can be used to illustrate how trade and tax regulation can be used to stimulate sustainability.

### ***Green Deal***

On 11 December 2019 was the presentation of the European Green Deal (European Commission, n.d.). The EU stated that minimum requirements will be set to prevent environmentally harmful products from being placed on the EU market and that false green claims will be tackled (European Commission, 2019). This example illustrates how import regulations can affect the sustainability of products in a certain market.

### ***Carbon adjustment mechanism***

The EU argues that the effort of to achieve a climate-neutral EU by 2050 could be undermined by international partners who do not share the same ambitions (European Commission, n.d.). The EU wants to prevent a carbon leakage, which occurs when production is transferred from the EU to other countries with less emission legislation or if EU products are replaced by more carbon-intensive products from non-EU countries. The global emissions would not be reduced if this leakage occurs. A carbon border adjustment mechanism can ensure that the prices of imported products reflect more accurately their carbon contents (European Commission. 2020).

### ***Timber regulation***

The EU Timber Regulation prohibits the trade in illegally harvested timber and timber products. The EU combats illegally harvested timber by requiring among others risk management. This includes the provision of information about the harvested timber and a risk assessment. The risk assessment requires the operator to assess the risk of illegally harvested timber in his supply chain. When the risk exists it should be mitigated by requiring additional information and verification from the supplier (website European Commission). This illustrates how countries can distinguish between sustainable and unsustainable produced products.

### ***CO2 performance ladder***

The CO2 performance ladder that is used in the Netherlands is an example of a measure that links environmental performance to financial consequences. Low CO2 emissions have a positive influence on the subscription price of a tender. The lower the CO2 emissions, the higher the discount (Skao, n.d.).

## **METHOD**

The research question “ (How) can import tariffs or sales taxes be implemented to stimulate sustainable production?” is to a large extent answered by the policy frameworks, shown in figure 1 and 2. Due to the low level of knowledge available about the combination of the different aspects in these policy frameworks, qualitative research is conducted to identify the advantages, disadvantages, barriers and opportunities with respect to these frameworks.

For this research trade policy and certification experts were interviewed. Trade policy experts in this research are people who a) conduct research in respect to trade policy, b) deal with trade policy in their daily work, or c) are involved in the process of designing or implementing trade policy. Certification experts in this research are people who are involved in the certification of organizations. The expertise of the respondents enhances the external validity of this research, since their experience and knowledge makes predictions about the effects of certain measures more reliable. All respondents had a minimum of two years’ work experience in their field and were European citizens or currently working in Europe.

Interviews were conducted until data saturation was reached. This entailed that sufficient data was collected to identify the main ideas related to the formulation of the theory (Weller, et al., 2018). In this research data saturation was reached after 13 respondents were interviewed. The respondent list is shown in table 1.

*Table 1: Respondent list*

<b>Respondent 1</b>	Organization: Employers' Organization Function: Secretary International Business
<b>Respondent 2</b>	Organization: University, School of Law Function: Professor International Law
<b>Respondent 3</b>	Organization: University, School of Economics Function: Assistant Professor International Trade
<b>Respondent 4-6</b>	Organization: Industry Organization Fruit and Vegetables Sector
<b>Respondent 4</b>	Function: Program Manager Food Safety and Sustainability
<b>Respondent 5</b>	Function: Lobbyist
<b>Respondent 6</b>	Function: Policy Officer International Affairs
<b>Respondent 7</b>	Organization: A Political party Function: Policy Advisor
<b>Respondent 8</b>	Organization: Nonprofit Organization aimed at Sustainable Trade Function: Executive Advisor
<b>Respondent 9</b>	Organization: Several UN Organizations and the World Trade Organization Function: Representative and Depute Representative
<b>Respondent 10</b>	Organization: Ministry of Foreign Affairs Function: Trade Policy Officer
<b>Respondent 11</b>	Organization: Ministry of Agriculture, Embassy Function: Agricultural Counsellor
<b>Respondent 12</b>	Organization: A Company that is specialized in Sustainability Certifications for Buildings Function: Founder and Advisor
<b>Respondent 13</b>	Organization: An Organization that supervises Inspecting and Certifying Institutions and Laboratories Function: Technical Policy Advisor

The questions in the interviews were based upon the different aspects of the policy frameworks. The three categories of the questionnaire are a) tax rates based on the sustainability of products, b) international accepted and governed ecolabels, and c) import tariffs used as an incentive to apply international environmental regulation. For the three categories information about the advantages, disadvantages, barriers, opportunities, potential approaches and alternatives were collected. The interview guide is shown in Appendix A.

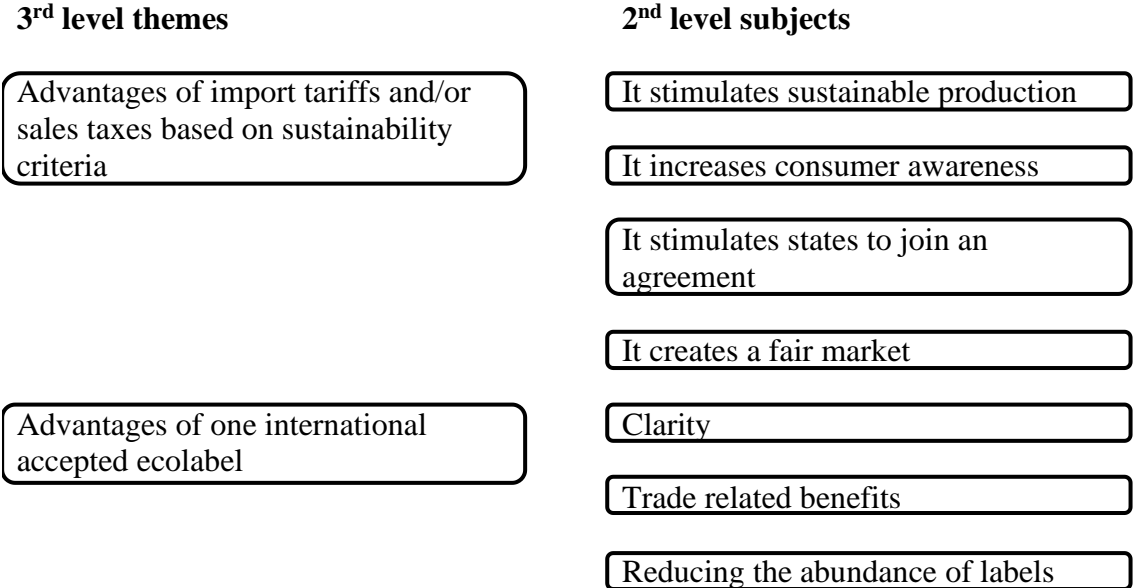
In the first two interviews the advantages, disadvantages, obstacles and opportunities of the three subjects were asked. The respondents did not really differentiate between the advantages and disadvantages and the obstacles and opportunities, therefore the questions about the barriers and opportunities were deleted. The order of the questions changed as well. In the beginning sales taxes was the first subject and import tariffs the last. Starting with import tariffs and then addressing sales taxes appeared to increase the flow of the interview.

**RESULTS**

This section contains the descriptive results of the interviews. A threshold of 2 respondents is used, with a few exceptions for statements that are considered of great importance for this research. The results are structured in 4 themes; advantages, method, obstacles and alternatives and additives. In figure 3, 4, 5 and 6 the code trees of the different themes are shown. In the descriptions these codes are elaborated and explained.

**Advantages**

*Figure 3: The code tree of advantages*



**Advantages of import tariffs and/or sales taxes based on sustainability criteria**

*It stimulates sustainable production*

Respondent 1 mentioned sales taxes and import tariffs based on the sustainability of a product stimulates sustainable production. By reducing the price of sustainable products through sales taxes, respondent 2 argued that consumers are more willing to buy sustainable products and the sale of sustainable products is stimulated.

Respondent 12 argued that sales taxes based on the sustainability of products creates economic incentives to purchase more sustainable alternatives. This measure is a better approach than

subsidies, since subsidies sometimes have the wrong focus or are aimed at the wrong focus group.

***It increases consumer awareness***

Respondent 2 argued that the possibility to differentiate between sustainable and unsustainable products creates awareness. It makes the consumer more conscious about the sustainability attributes of a product.

***It stimulates states to join an agreement***

Respondent 2 argued that import tariffs based on the environmental regulation in a country can stimulate countries to join an agreement and take this agreement seriously. It creates an interest for producers in a country to join the agreement, since they want to export at the same conditions as other countries.

***It creates a fair market***

Respondent 2 argued that tariffs can compensate for production advantages that are caused by lacking environmental regulation in other countries. Since regulation is applicable for everyone, a legal framework creates a level playing field, respondent 8 stated.

Respondent 13 argued when sales taxes are based on the sustainability of products, the principle polluters pay is implemented.

**Advantages of one international accepted ecolabel**

***Clarity***

Respondent 1 argued that one international ecolabel provides more clarity for the producer and the consumer. Producers then know that worldwide the same requirements have to be met, respondent 2 stated. Respondent 13 added that purchasers then worldwide share the same perception about the content of the ecolabel.

***Trade related benefits***

Respondent 4 argued that one standard is convenient in respect to trade. If one ecolabel is accepted globally, respondent 2 mentioned that producers do not have to use different labels in different countries. This makes it easier to qualify a product with a label.

***Reducing the abundance of labels***

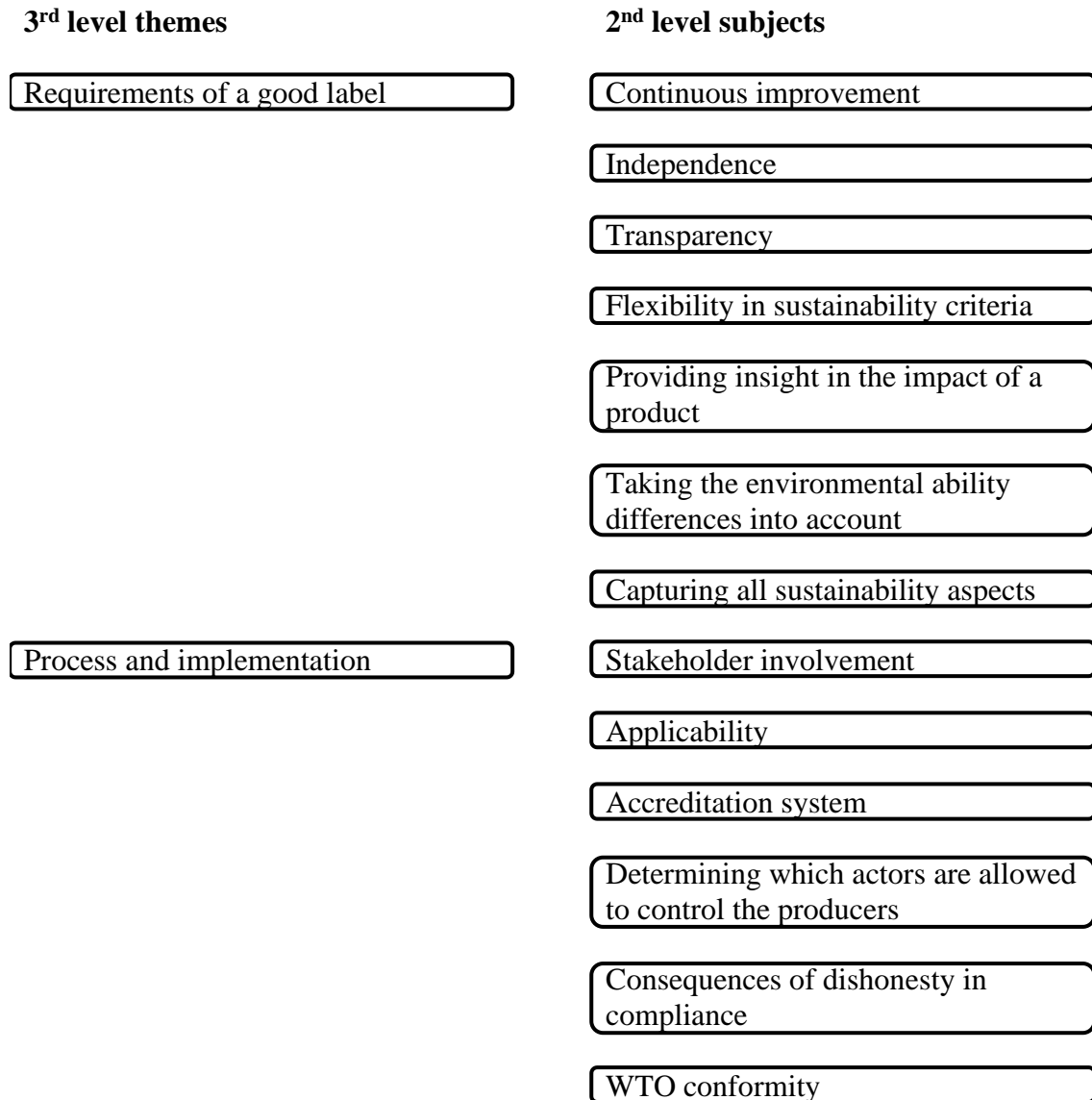
Respondent 11 argued that one international ecolabel could overcome the abundance of labels.

Respondent 7 mentioned that instead of multiple labels, one label on a product is then sufficient.



## Method

Figure 4: The code tree of method



### Requirements of a good label

#### *Continuous improvement*

Respondent 8 and 13 emphasized the importance of continuous improvement. Respondent 13 argued that a label can ensure this by setting certain criteria in the beginning, but demanding additional achievements after a certain period of time. Respondent 13 argued that a label with different levels can stimulate producers to improve their sustainability to reach a higher level.

### ***Independence***

Respondent 9 argued that a label should be independent. Respondent 11 added that independent organizations should do the implementation of the label.

### ***Transparency***

Respondent 4 and 9 mentioned the importance of transparency.

### ***Flexibility in sustainability criteria***

Respondent 3 mentioned that the definition of sustainability might change over time. A certain dynamic must be involved that allows the sustainability criteria to change. Respondent 12 suggested to determine how often the sustainability criteria that are linked to a favourable tax rate are being revised.

### ***Providing insight in the impact of a product***

Respondent 4 argued that by demanding insight about the impact of a product instead of only requiring certain criteria to be met, the label is less dependent on the quantity and quality of controls and the robustness improves.

Respondent 7 mentioned the use of new technologies to improve the trackability and transparency of products. An app, for example, can display information about the origin of a product.

### ***Taking the environmental ability differences into account***

Respondent 4 mentioned that the sustainability of products is closely linked to the carrying capacity of the region. Water use, for example, is a different issue in different countries.

### ***Capturing all sustainability aspects***

Respondent 2 argued that the whole chain from producer until consumer has to be taken into account. Respondent 4 and 12 emphasised the circularity of products. Respondent 12 mentioned the sustainability of the production process, the energy use if applicable and the quality and lifetime of a product. The importance of each aspect depends on the usage.

Respondent 4 suggested the European guidelines for environmental footprint calculations. Here multiple impact categories are assessed.

## **Process and implementation**

### ***Stakeholder involvement***

Respondent 13 argued that stakeholder involvement is crucial to create support for an international ecolabel. Almost all stakeholders were mentioned multiple times by the respondents. Actors such as producers, business associations, consumer organisations, NGO's and governments were mentioned. Respondent 5 emphasised the role of the retail in the sustainability transition, since a lot of standards are set by the retail.

Respondent 10 emphasized the importance of communicating early in the process with states that are effected by the measure at issue.

### ***Applicability***

Respondent 8 mentioned that it is crucial that the government is able to control for the application of the sustainability criteria. Without proper implementation and enforcement, respondent 9 stated that measure remain a paper reality.

If very specific requirements are imposed on companies, respondent 10 stated that the measure could become a practical trade barrier. This should not be the intention.

### ***Accreditation system***

Respondent 1 stated that an accreditation system is needed. This can be a private system with a government behind it. The question is whether it is possible and desirable to have a global accreditation system. Respondent 13 also mentioned that an accreditation system can be used for supervision.

### ***Determining which actors are allowed to control the producers***

Respondent 2 mentioned that it is difficult to determine who will check if the criteria are met. Can delegates be sent by environmental organizations or only by governments? Or is a government only allowed to ask another government to do certain controls?

Respondent 13 mentioned the option to create a legal basis for the supervision of the label. In that case, the government can supervise the implementation of the label and intervene when

necessary. Respondent 11 argued that it is important that independent organizations provide the implementation of the ecolabel.

### *Consequences of dishonesty in compliance*

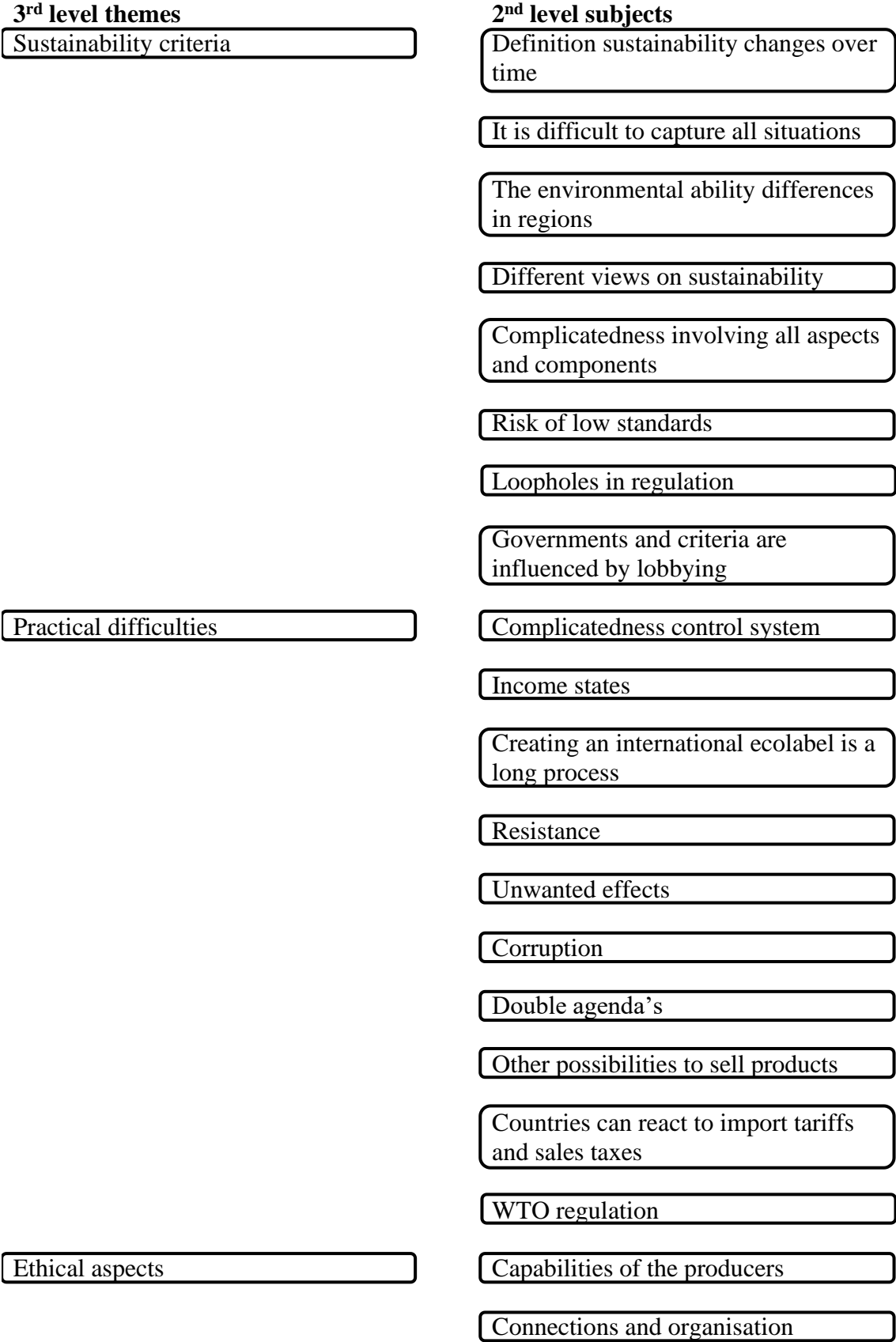
It is complicated to determine the consequences of noncompliance, respondent 2 stated. Will offenders be subject to trade restrictions, lose the label or be fined?

### *WTO conformity*

Respondent 6 and 10 mentioned that compliance of the WTO rules can be a criteria for states or interest groups to support a proposal. Trade barriers should not be discriminatory, scientifically substantiated and justified.

**Obstacles**

*Figure 5: The code tree of obstacles*



## **Sustainability criteria**

### ***Definition sustainability changes over time***

Respondent 3 and 12 mentioned that sustainability criteria change over time and have to be revised.

### ***It is difficult to capture all situations***

Respondent 9 argued that it is difficult to cover all situations in one label. Respondent 2 argued that the differences between products influence the sustainability criteria.

### ***The environmental ability differences in regions***

Respondent 4 argued that the environmental ability and other circumstances in production processes are so diverse that it is hard to capture everything in one ecolabel.

### ***Different views on sustainability***

Respondent 9 and 11 mentioned that there are many different currents in respect to environmental labels. Respondent 4 mentioned different views exist on what is considered sustainable, and respondent 5 and 7 specifically mentioned the differences between countries. According to respondent 5 this is influenced by the environmental aspects of a country.

### ***Complicatedness involving all aspects and components***

Respondent 1 argued that creating one ecolabel is very complicated and involves many different aspects. Some products exist of hundreds of components, mentioned respondent 9. It is difficult to determine whether all components meet certain criteria. In addition are a lot of issues not black and white, stated respondent 8.

The usage influences the importance of the sustainability of the production process, the energy use if applicable and the quality and lifetime of a product, respondent 12 stated.

### ***Risk of low standards***

According to respondent 2 there is a risk that the “lowest common denominator” becomes the norm. These are the criteria where all states agree on. This could be detrimental for the more ambitious countries. Respondent 13 also mentioned that in practice international cooperation

and development often leads to compromises. When everyone has to add water to the wine, the strength of the label can decrease.

### ***Loopholes in regulation***

Respondent 8 argued that the disadvantage of every legal system are the loopholes in the regulation that undermine the effectiveness. For example, when the investment in cluster bombs was prohibited, the bombs were changed just a little in order to dodge the official definition. Respondent 12 also mentioned that producers might cheat the system or do other things to get a more favourable rate.

### ***Governments and criteria are influenced by lobbying***

Respondent 3 and 12 mentioned the danger of lobbying. Powerful firms can bend the rules to their advantage, respondent 3 stated. If producers notice that their product has a better score with another certificate or criteria they will try to bring this more forward, respondent 12 stated.

### **Practical difficulties**

#### ***Complicatedness control system***

Respondent 9 mentioned that in many situations the sustainability of a product is determined by the production circumstances. This cannot be controlled at the border. Respondent 2 mentioned that it is difficult to determine who is allowed to check if the criteria are met. In addition can effective control systems differ per product group.

#### ***Income states***

Respondent 2 argued that changes in sales taxes influence the income of a state. If people consume more sustainable products with a more favourable tax rate, the state loses income. Respondent 7 argued that changing sales taxes might disturb a very sensitive balance, so it has to be very gradual. Respondent 6 argued that it will be hard to create international standards, since sales taxes are the income of a country.

#### ***Creating an international ecolabel is a long process***

Respondent 8 mentioned that laws aimed at sustainability often take a long time to make. R8 gave as an example the European law aimed at an import ban on illegal logging. It took 15 years

to create this regulation. Respondent 9 also mentioned that creation one international ecolabel would be a long process.

### ***Resistance***

Respondent 2 mentioned consumers might resist to certain measures that increase the price of products they want to purchase.

Respondent 7 mentioned that as a political party, they believe it is the responsibility of consumers to choose more sustainable products and the government should not intervene in the market. In addition, respondent 7 argued that economic interests should be the priority of the trade agenda. Governmental policies such as social services and a social safety net rely on economic prosperity.

Respondent 8 mentioned that there already has been discussion about whether certified products can be set into another tax or import rate, but due to the political resistance of certain European countries these measures are not implemented yet.

### ***Unwanted effects***

Respondent 6 argued that import tariffs can bring a lot of unwanted effects in different areas. Respondent 3 argued import tariffs always create some inefficiencies in the economy. Changing the trade policy in a certain industry, also has an effect on other industries.

Respondent 3 argued that when charging import tariffs based on a country's lacking environmental regulation, producers will not adopt more sustainable production styles. Instead, they try to reduce the production costs so that the rates have no effect.

### ***Corruption***

Respondent 5 stated that corruption and unreliable governments can make measures such as import tariffs in relation to sustainability vulnerable. Respondent 8 argued that one international ecolabel is more prone to corruption than the current labels. There is more corruption involved in creating an ecolabel with an international government then with different stakeholders in the sector.



### ***Double agenda's***

Respondent 4 and 11 mentioned that import tariffs are sometimes misused for other purposes than are communicated. Sometimes countries use environmental justifications to protect their own markets. If a measure is abused for other purposes, the question is whether the initial goal will be achieved.

### ***Other possibilities to sell products***

Respondent 9 and 11 state that the effectiveness of measures largely depends on the possibilities that producers have to sell their products elsewhere. When enough other outlets exist, producers are not persuaded to invest in more sustainable production processes and the environment is not protected.

### ***Countries can react to import tariffs and sales taxes***

Respondent 3, 6 and 9 mentioned that if measures are imposed unilaterally on other countries, the risk exists that these countries react and impose certain measures in other areas. Respondent 6 called this the boomerang effect.

### ***WTO regulation***

Respondent 2 mentioned that it can be challenging to bring environmental measures in line with the requirements of the WTO. Respondent 1 mentioned that it is probably not allowed by the WTO to use different import tariffs for sustainable and unsustainable products. Respondent 10 mentioned that the WTO previously stated that countries are not supposed to compel other countries to pursue certain policies. Import tariffs which are based on the participation in an environmental agreement are probably not WTO conform.

Respondent 1 and 2 indicated that tax rates based on the sustainability of products should be allowed under WTO rules, provided that sales taxes are the same for domestic and foreign products.

Respondent 1 mentioned that it appeared to be difficult to make new agreements within the WTO. Since the 25 year of the existence, the WTO only made new arrangements about customs facilities and a few bilateral agreements.

## **Ethical aspects**

### ***Capabilities of the producers***

Respondent 7 mentioned that products are not always produced deliberately unsustainable, but various reasons can be involved. Respondent 4 mentioned the knowledge, the general education level of the population, the level of prosperity and access to facilities differ across regions and producers. It is not fair if people are punished because they have a bad grade, without considering the fact that they never had the class to begin with, respondent 3 stated.

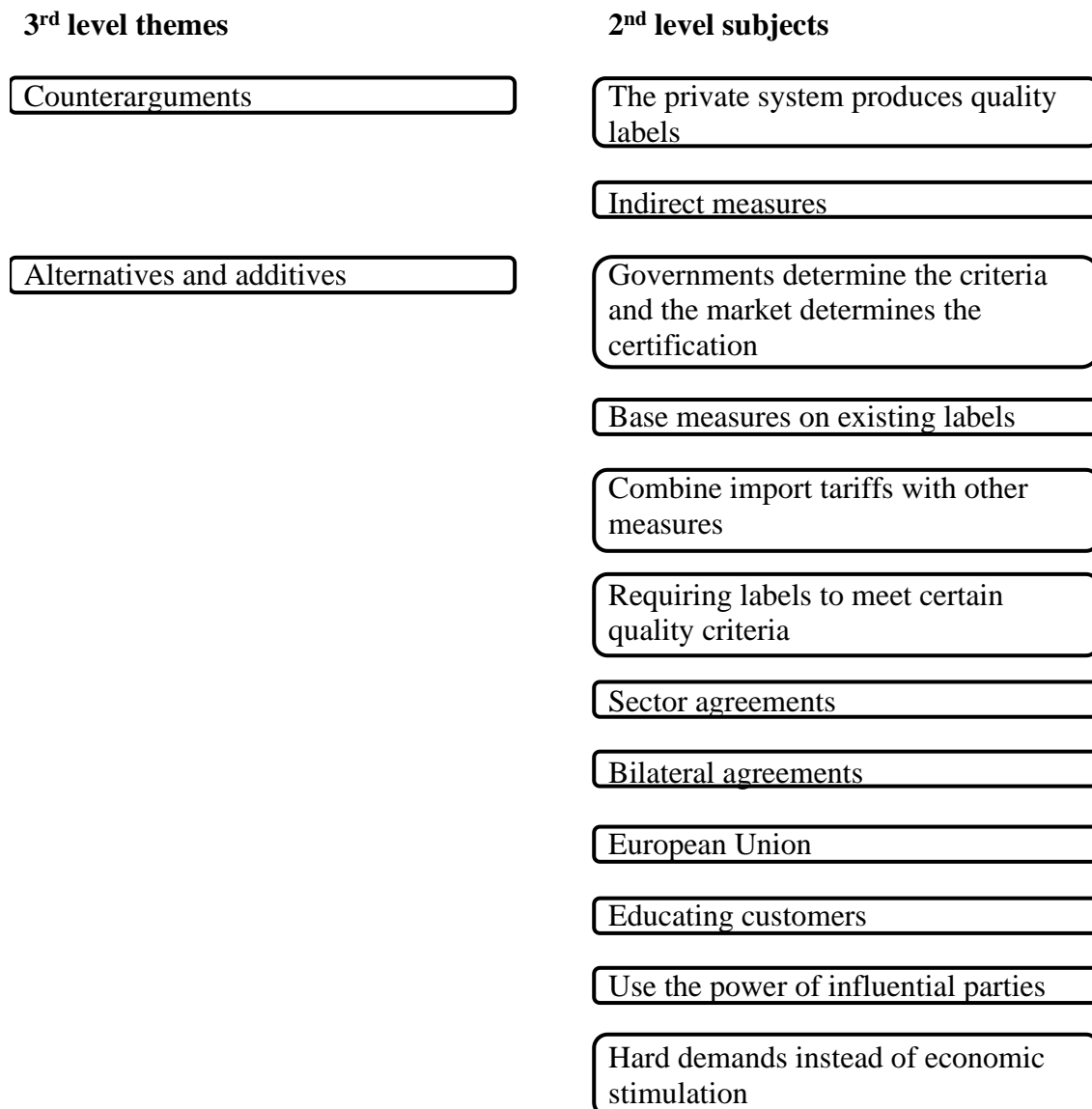
Respondent 3 mentioned that firms which do not have the capacity to produce sustainable, will be left out of the game. Respondent 5 mentioned that people in third world countries who are dependent on export, can lose their income if extra import tariffs are charged upon unsustainable products.

### ***Connections and organisation***

Respondent 3 mentioned that without the right connections it can become difficult for certain farmers in developing countries to get a certain label. Respondent 8 mentioned that certification is easier if producers are well organized. Many coffee companies therefore buy their coffee from the farmers who are best organized.

## Alternative approaches and additional aspects

Figure 6: The code tree of alternatives and additives



### Counterarguments

#### *The private system produces quality labels*

Respondent 8 believes that the government is not able to create an ecolabel that is better than the existing labels. The best labels are created by a combination of NGO's, producers, companies and research and are certified by international organisations. Respondent 4 argued that from an organizational point of view it is preferable to create labels by private parties instead of public bodies. Respondent 9 argued that eventually the market will do its job and only labels with a good story will be accepted by retailers.

### ***Indirect measures***

Respondent 11 doubted if differences in sales taxes and import tariffs stimulate enough to change production processes. After all, sales taxes are an indirect measure and are quite far away from the producer.

### **Alternatives and additives**

#### ***Governments determine the criteria and the market determines the certification***

Respondent 9 suggested that the government formulates the sustainability criteria, but the final certification is determined by the market. Products are certified by a set of certification-granting bodies that meet the criteria set by the government.

Respondent 8 argued that when the government anchors certificates in terms of robustness, the government could base policies to stimulate sustainability upon robust labels.

Respondent 4 argued that instead of one international ecolabel various regional labels can exist that meet certain criteria. Respondent 4 also proposed that the main lines could lie with a bilateral organization, but that the lines are coloured by private parties.

#### ***Base measures on existing labels***

Respondent 8 suggested that governments should incorporate quality labels in their legislation and link measures such as import tariffs to these labels. Respondent 7 suggested that if sales taxes are based upon the sustainability of products, this could be linked to existing labels.

#### ***Combine import tariffs with other measures***

Respondent 9 argued that import tariffs on its own are not effective. It should be supported with other measures, such as development aid.

Respondent 11 suggested to reinvest the income of the tariffs into sustainable innovation.

Requiring labels to meet certain quality criteria

Respondent 9 suggested that the criteria labels have to meet should be well organized to guarantee the quality of a label. Respondent 8 suggested that the government connects certain criteria to labels. If a label does not meet certain criteria, it should be prohibited to put this label on a product, since this is misleading.

### ***Sector agreements***

Respondent 7 preferred that labels are imposed by the sector, rather than through legislation. Respondent 9 argued that sustainability can be stimulated effectively through sector agreements. Support for farmers in third world countries could be included in the arrangements.

### ***Bilateral agreements***

Respondent 9 argued that bilateral and regional trade agreements are often more effective to stimulate sustainable production than import tariffs. Through agreements more support can be given to help countries with their legislation and countries are given the chance to respond and come up with counterarguments.

Respondent 7 also argued that it is desirable to use bilateral agreements instead of import tariffs as much as possible. Trade treaties can contain a sustainability clause, which stimulates sustainable development.

### ***European Union***

Respondent 7 argued that due to the decreasing confidence in bilateral organizations, it is important to focus on creating impact with the European Union. The large internal market gives the EU leverage. Respondent 8 stated that Europe takes sustainability most serious and is big enough to apply certain trade regulation in a meaningful way.

### ***Educating customers***

Respondent 2 argued that consumers have to become aware of their consumer behaviour. Respondent 3 suggested educating consumers about the sustainability of products. Champagnes were suggested by respondent 7 to make consumers more conscious about the sustainability of products.

### ***Use the power of influential parties***

Respondent 4 mentioned that multinationals such as Alibaba and Amazon have a huge impact on product flows and product requirements. It would be wise to look at the influence that these powerful multinationals have on trade policy.

Respondent 9 argued that the power of civil society organizations is sometimes underestimated. If NGOs declare a boycott or disapprove a certain label this has a huge impact.

*Hard demands instead of economic stimulation*

Respondent 11 argued that in some cases hard demands work better than economic stimulation. The European Union can operate as a power block and is able to make demands. Respondent 8 mentioned that for sustainable development it is important to prohibit the most unsustainable practices by law.

## **DISCUSSION**

The results show different approaches to determine the sustainability of a product. Several obstacles and other important factors regarding defining sustainability criteria are identified. Advantages, disadvantages, barriers and approaches to base import tariffs and sales taxes on the sustainability of products are addressed.

In this section is discussed how important aspects and insights can be used to design effective policies for using import tariffs or sales taxes to stimulate sustainability.

### **Rigidity**

Respondent 1 mentioned that the WTO is very rigid. The agreements barely changed anything in the last 25 years. Respondent 3 mentioned that it changes over time what is considered sustainable. It is thereby important to organize sustainability policy in a way that allows easily adaption to new insights. Which could mean that if trade regulation aimed at sustainability is organized internationally, the organizations involved need other decision structures then the WTO currently has. An example could be that decisions are not dependent on a general consensus, but aspects can change without unanimous support.

### **Control and corruption**

In the interviews the problem of corruption was mentioned several times. Respondent 5 asked the question whether unreliable governments should have control over the sustainability transition. Respondent 2 tossed the question who will check if the companies meet the criteria.

To diminish the possible dangers of corruption, an approach could be that every organization in every country is allowed to control if a company meets the sustainability criteria. If an organizations which is not officially part of the control system, determines that a company is not meeting the requirements, an official check-up can be requested.

### **Research, transparency and continuous improvement**

The importance of both transparency and continuous improvement were mentioned by the respondents. Transparency can enhance continuous improvement by obligating producers to research and publish their impact. In addition to their current impact, producers have to publish a plan for improving their sustainability or demonstrate that improvement is not possible.

When the ecolabel is linked to the sustainability of products and the efforts of producers to improve their sustainability, this stimulates continuous improvement. When impact reports and sustainability plans are published, this will increase the knowledge of sustainable production processes and gives companies the chance to use insights and knowledge from each other to improve their sustainability.

### **Providing aid for sustainable production**

A drawback of the regulatory approach is that the capabilities of the producers are not taken into account. As several respondents mentioned, it is not fair to give higher tariffs to producers who do not have the capacity to produce sustainably. As respondent 3 well worded; “You cannot give them a bad grade, if they haven’t had the class to begin with.” It is important to give everyone the chance to follow the class. To not only make demands, but also provide the opportunity to learn and invest in sustainability.

Aid for sustainable production techniques can entail courses about sustainability and loans with a low interest rate to invest in sustainable production facilities. This can be (partly) financed with the money received from the import tariffs or the increase in sales tax revenue. The policy becomes fairer when support for sustainable production techniques is included in the policy proposal.

### ***Requesting aid***

Producers, NGO’s and other organizations can address that a certain producer is not capable of improving the sustainability of their products and request aid. When this request is approved, these producers are not obligated to pay the higher sales or import tariffs, until they received the aid or when it is established that they are capable of improving the sustainability of their products.



Whether a producer is entitled to aid is among others determined by the budget and capacity of the company on top of the supply chain. Wealthy multinationals for example often have the capacity to improve the sustainability of their supply chain.

### **Responsibility for the whole supply chain**

Respondent 7 suggested transparency in the supply chain. When the supply chain becomes more transparent, producers can be held accountable for their supply chain. Depending on their capacity and power in the supply chain they can be expected to intervene where necessary.

It can be challenging to improve the transparency in supply chains, but new technical developments are creating opportunities in this area. When there is more transparency in supply chains, there is more insight into the sustainability of products and more targeted measures can be taken to improve the sustainability in the supply chain. Opportunities might also arise in other areas. The social aspects of a supply chain can be taken into account and the traceability of products can improve food safety. In addition, transparency makes it easier to research supply chains and the effect that certain measures have on product flows and other aspects.

### **Using existing ecolabels**

Several obstacles and disadvantages were mentioned regarding the creation of one international ecolabel. Arguments such as susceptibility to corruption, a lower quality compared to the best existing labels and the long process were given against the creation of an international ecolabel.

Instead of creating one international accepted ecolabel, existing ecolabels can be used. Governments can create the criteria, as suggested by respondent 9, and products with labels that meet these criteria are eligible for the lower import tariffs or sales taxes.

As respondent 8 mentioned, labels that lack quality and thereby mislead the consumers should be prohibited to put on a product. This will create more clarity for consumers.

### **Sales taxes or import tariffs**

The opinions differed with respect to import tariffs and sales taxes. Some respondents were more enthusiastic about sales taxes and others about import tariffs.

It is important that differentiating in sales taxes does not reduce the income of governments. If this is the case it can create financial problems for governments and make it less desirable to apply sales taxes based on the sustainability of products. In order to prevent this from happening, sustainable products should keep the same sales taxes, while the tax rate of unsustainable products increases. The extra tax income can be reinvested in sustainable development.

An advantage of sales taxes in comparison to import tariffs can be that sales taxes are applied on both foreign and domestic products. This gives the government the opportunity to also differentiate between different levels of sustainability for domestic products.

Import tariffs on the other hand are less complicated to manage. It can more easily be set at an absolute amount instead of a percentage. This gives more control on the height of the tariff and the price increase of unsustainable products.

### **Bilateral agreements and stakeholder involvement**

Several respondents mentioned that communication is the key for sustainable development. It is important to communicate with all countries and stakeholders involved. The plans should be communicated early in the process as well as the motives behind it and all stakeholders should be involved in the process.

Several respondents mentioned that the best way to stimulate sustainability is through bilateral agreements. Even though bilateral agreements are not always possible, it is important that before the sustainability criteria and the corresponding import tariffs or sales taxes are determined, countries and stakeholders get the opportunity give counterarguments, their perspective on sustainability and propose other solutions. If better alternative solutions can be reached, sales taxes or import tariffs may not need to be applied for the country at issue.

### **Education consumers**

Many respondents emphasized the importance of educating consumers. In addition to the price increase of unsustainable products, the reason for the increase should be communicated.

Why certain products are more sustainable and why this is important. This can be communicated for example with commercials about the consequences of unsustainable production.

### **Continuous improvement and eventually hard demands**

Both continuous improvement and hard demands were mentioned by respondents. It could be wise to start with financial incentives for operating more sustainable and communicate that the economic incentives will turn into hard demands after a certain amount of time. This gives the companies the chance to invest in a sustainable production. The measures will gradually turn from stimulating into demanding a sustainability.

### **Duration and energy use**

Respondent 12 mentioned that not only the sustainability of the production process is important, but also the quality and the energy use if applicable. The importance of these factors in determining the overall sustainability is for a great extent dependent on the consumer. By intensive use the energy use is very important, while by a less intensive use the sustainability of the production process might be more important. If a consumer wants to use a product for a long time, the quality is very important, but if the product is used for a short time, the sustainability of the production process is a more important aspect.

These aspects of a product can be displayed in a clear overview. In this way, the consumer can decide for herself which aspect is most important in her case. For example, the following setup can be used:

Quality + life time	1-10
Sustainability production process	1-10
Energy use	1-10
Circularity materials	1-10

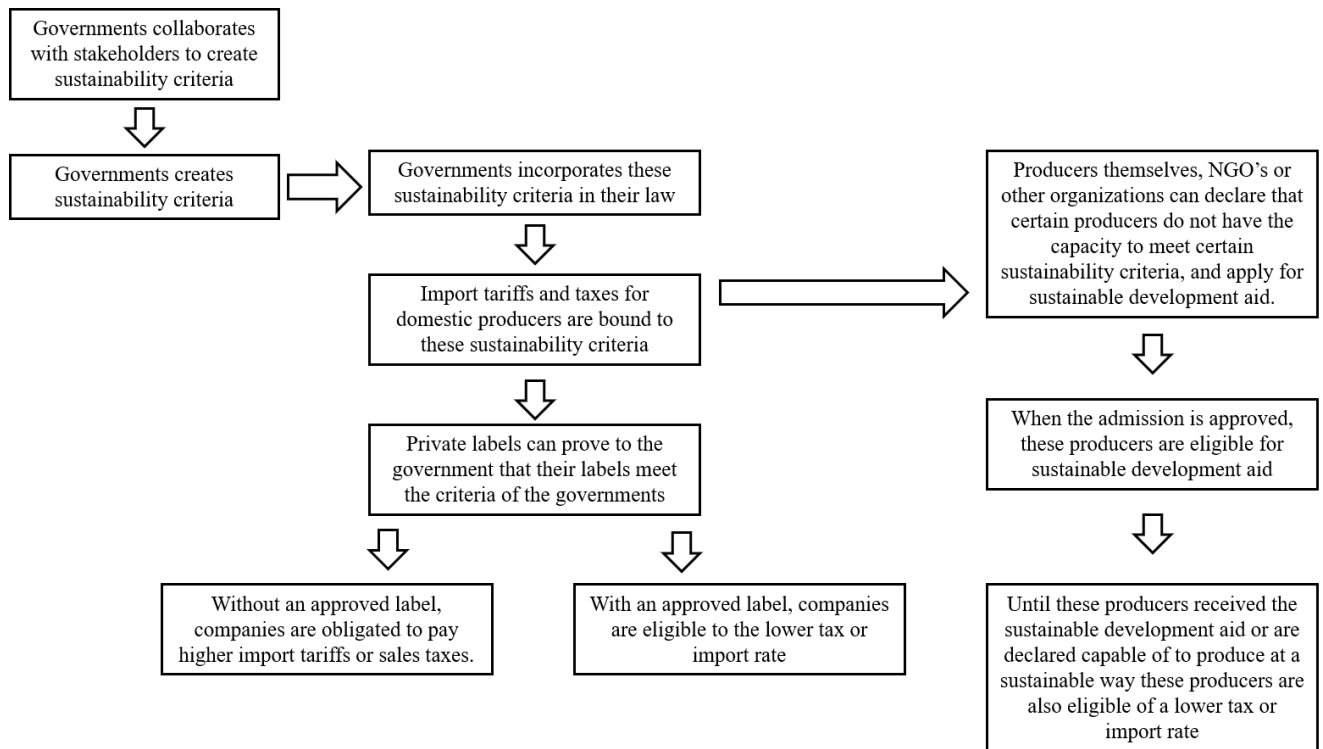
### **Scrutiny and involvement of NGOs and other organizations**

To reduce the susceptibility of corruption and flaws, NGOs can be allowed to check everything, intervene and help where necessary and publish data about dishonest companies and governments. Moreover, NGOs can scrutinize and criticize the sustainability criteria of governments and labels that are approved by the governments.

## New policy framework

After insights of the interviews a new policy framework is created.

*Figure 6: Revised policy framework*



There have been a few significant changes in respect to the policy framework. Instead of one international ecolabel, the sustainability criteria are set by governments, but the labels are determined by the market.

Producers that do not have the capacity to produce products sustainably, can receive aid. This aid can be (partly) funded by the income of the sales taxes or import tariffs. Until the aid is given, they are eligible for the lower tax or import rate. Of course it is difficult to determine who is not capable of producing sustainably. And in the interviews was mentioned that connections are also very important in order to get an ecolabel. This is why not only the producers, but also governments and NGOs can request aid for producers. Of course, certain producers will be overlooked, but by allowing all actors to request aid for producers, this amount will be minimized.

Stakeholders are involved in the process, but eventually the criteria are made by the government. Stakeholder involvement is needed to create executable criteria and gain support of the stakeholders. However, the risk exists that through the lobbying of influential stakeholders, the

criteria are influenced in disadvantage of the environment. Stakeholder involvement is needed, but at the same time it also creates a risk.

This policy framework is not perfect and it is complicated to implement. However, climate change and environmental degradation is a complex problem and there is no perfect solution available yet. With this policy framework the first steps can be taken to overcome the economic advantages of unsustainable business practices.

## **LIMITATIONS AND FUTURE RESEARCH**

### **Nationality respondents**

One of the limitations of this study are that most of the respondents were Dutch, this means that the answers might be biased towards a Dutch or European perspective. This study is still relevant for a larger audience because this research addresses a lot of general trade and sustainability issues that are not bound to the EU. Even though the EU is often mentioned in examples, the aspects involved are applicable for all nations.

### **Biased interviews**

Since a semi-structured interview is used, the interview can be biased towards the perspective of the interviewer. The additional questions and clarifications are largely influenced by the interviewer, which can make this research biased towards the perspective of the interviewer. The bias of a semi structured interview is diminished through having fixed questions for every subject and additional questions were only based on the respondents former statements or specifically aimed at the expertise of the respondent. No leading questions were asked.

Another bias is the explanation of the topics. The reasoning behind the question is mentioned. This makes the question more understandable for the respondents, but it can also point them in a certain direction. However, the reasoning was needed to explain why certain measures can be implemented. The reasoning behind a certain measure generally has no effect on disadvantages and barriers regarding the measure.

### **Different question regarding import tariffs**

The three subjects were all aimed at a different aspect. The question about import tariffs was aimed at creating a financial objective for producers in a county to have better environmental regulation, the question about sales taxes was aimed at product based financial incentives and creating awareness and the international ecolabel was aimed at defining the sustainability criteria. Even though these questions gained a lot of relevant information, the inclusion of the question about import tariffs based on the sustainability of products would have added value to this research. Since sales taxes and import tariffs are viewed very differently by the respondents.

### **Qualitative method**

Generally, a qualitative method is quite subjective, since the answer are very dependent on the point of view of the respondents. However, due to the expertise of the respondents the provided information was based on experience and expertise. This makes the knowledge gathered in this interview valuable.

### **Future research**

Future research can focus on the implementation of this or another policy framework that is aimed at using sales taxes or import tariffs based on the sustainability of products. The framework at issue can be applied in a small or large scale. The research can focus on the advantages, disadvantages, barriers and opportunities that come forward when the policy framework is applied.

## **APPENDIX A**

### *Interview guide*

#### **General opening questions**

1. How would you describe your current position?
  - a. How many years of work experience do you have in this field?
2. What is the role of trade policy in your work?
3. What is your opinion about sustainability measures in trade and tax regulation?

#### **Import tariffs used to create incentives to apply international environmental regulation.**

Trade measures such as tariffs or quotas can be used against countries that refuse to join an international environmental agreement. These trade barriers create incentives for countries to join the international environmental agreement (Mani, 1996), and protect domestic producers and employees against “unfair competition”, since the producers from those countries have lower costs due to lacking environmental regulation (Zleptnig, 2010). In the following questions the use of import tariffs to create incentives to apply international environmental regulation are being addressed.

1. What are the advantages and disadvantages of using import tariffs based on the environmental regulation of a country?
2. Which institutions should be involved in creating and implementing import tariffs based on compliance of international environmental regulation?

#### **The rates of sales taxes based on sustainability products.**

Sales taxes can be dependent on the product or product category. In the Netherlands for example the sales tax is normally 21 % on products and services, but exceptions are for example made for edibles, which has a sales tax of 9% (website Belastingdienst). In the following questions the possibility of sales taxes based on sustainability attributes of products and services is addressed.

3. What are the advantages and disadvantages of sales tax rates based on the sustainability of products?
4. Which institutions should be involved in creating and implementing sales tax rates based on the sustainability of products?

#### **International accepted and governed ecolabels.**

Product labels can be used to communicate environmental attributes of a product, product labels are used to facilitate more sustainable consumption. However, the abundance of the amount of product labels causes confusion by the consumers (Dendler, 2014). To solve this problem one international accepted ecolabel can be created and officially recognized by governments. This ecolabel can still have several different versions, to represent different degrees



of sustainability. In the following questions the possibility of creating an international accepted and governed ecolabel are addressed.

5. What are the advantages and disadvantages of international accepted and governed ecolabels?
6. Which institutions should be involved in creating and implementing an international accepted and governed ecolabels?

**Closure of the interview**

7. Do you have any addition comments or suggestions regarding the previous questions or trade policy in relation to sustainability in general?

Thank you for this interview.

## APPENDIX B

### Consent form for participation in an interview for the master thesis of Renée Wehkamp

Dear Sir / Madam,

You are invited to participate in an interview, which will be used for a master thesis of the master program Sustainable Entrepreneurship at Campus Fryslân, University of Groningen.

By agreeing to this interview, you acknowledge and agree to the following:

1. The purpose of this interview is to collect qualitative data on the feasibility and the pros and cons of various policy instruments that can be used to promote the sustainability of products.
2. To conduct the research, the interview will be recorded, transcribed and analyzed. The recording and transcription are not used for any other purpose than conducting the research and preparing an article on the subject. The recordings are deleted after the research has been carried out.
3. The data is coded and processed anonymously.
4. Participation is voluntary and until May 29, 2020, which is 2 weeks before the submission deadline of the master thesis, can be decided to not participate or to stop the participation. No reason has to be given.
5. You do not have to answer questions you do not want to answer.
6. After the assessment by the professor, this article can be published or sent to people who can use this article in a positive way.

This research is supported by the [REDACTED].

[REDACTED]

University of Groningen, Campus Fryslân

[REDACTED]

Respondent:

Name: \_\_\_\_\_

E-mail address: \_\_\_\_\_

Signature: \_\_\_\_\_

## REFERENCES

- Belastingdienst.** Btw-tarief voedingsmiddelen. [https://www.belastingdienst.nl/wps/wcm/connect/bldcontentnl/belastingdienst/zakelijk/btw/tarieven\\_en\\_vrijstellingen/goederen\\_9\\_btw/voedingsmiddelen/voedingsmiddelen](https://www.belastingdienst.nl/wps/wcm/connect/bldcontentnl/belastingdienst/zakelijk/btw/tarieven_en_vrijstellingen/goederen_9_btw/voedingsmiddelen/voedingsmiddelen). Accessed on 7-4-2020.
- Belastingdienst.** Goederen en diensten met 21% btw Belasting dienst. [https://www.belastingdienst.nl/wps/wcm/connect/bldcontentnl/belastingdienst/zakelijk/btw/tarieven\\_en\\_vrijstellingen/goederen\\_diensten\\_21\\_btw/](https://www.belastingdienst.nl/wps/wcm/connect/bldcontentnl/belastingdienst/zakelijk/btw/tarieven_en_vrijstellingen/goederen_diensten_21_btw/). Accessed on 7-4-2020.
- Berrone, P. and Gomez-Mejia, L. R. 2009. Environmental Performance and Executive Compensation: An Integrated Agency-Institutional Perspective. *The Academy of Management Journal*, 52(1): 103-126
- Black, J., Hashimzade, N., & Myles, G. D. 2013. *A dictionary of economics*. Oxford: Oxford University Press.
- Black, J., Hashimzade, N., Myles, G. 2017. *A dictionary of economics*. Oxford: Oxford University Press.
- Cambridge Dictionary: English Dictionary, Translations & Thesaurus. n.d. *Cambridge Dictionary | English Dictionary, Translations & Thesaurus*. <https://dictionary.cambridge.org/us/dictionary/english/tariff>, March 11, 2020.
- Cambridge Dictionary: English Dictionary, Translations & Thesaurus. n.d. *Cambridge Dictionary | English Dictionary, Translations & Thesaurus*. <https://dictionary.cambridge.org/dictionary/english/institution>, March 11, 2020. ~~10:53~~
- Carbon Footprint. n.d. *Calculate*. <https://www.carbonfootprint.com/measure.html>. Accessed on June 10, 2020.
- Clegg, S. R., & Bailey, J. R. 2007. *International encyclopedia of organization studies*. Thousand Oaks, CA: Sage Publications.
- Cuff, D. J, Goudie, A. eds. 2009. *The Oxford Companion to Global Change*. Oxford England: Oxford University Press.
- Curtiss, W. M. 1954. Tariffs. *The Analysts Journal*, 10 (1): 35–38.
- Dai, X. 2007. *International institutions and national policies*. Cambridge: Cambridge University Press.
- Dean, T. J., & McMullen, J. S. 2007. Toward a theory of sustainable entrepreneurship: Reducing environmental degradation through entrepreneurial action. *Journal of Business Venturing*, 22(1): 50–76.
- Vijay, V., Pimm, S. L., Jenkins, C. N., Smith, S. J., and Anand, M. 2016. The impacts of oil palm on recent deforestation and biodiversity loss. *Plos One*, 11(7):
- Delmas, M. A., & Lessem, N. 2014. Saving power to conserve your reputation? The effectiveness of private versus public information. *Journal of Environmental Economics and Management*, 67(3): 353–370.

- Dendler, L. 2014. Sustainability meta labelling: an effective measure to facilitate more sustainable consumption and production? *Journal of Cleaner Production*, 63:74-83.
- Desai, B. H. 2010. *Multilateral Environmental Agreements : Legal Status of the Secretariats*. Cambridge: Cambridge University Press.
- Eco-labelling. 2020. *United Nations Environment Programme for Procurement Practitioners of the United Nations System*. 2009.
- European Commission. 2019. Sustainable industry. The European Green Deal. (Accessed on May 29, 2020) ?
- European Commission. 2020. *Inception impact assessment*.
- European Commission. <https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12228-Carbon-Border-Adjustment-Mechanism>. Accessed on May 29, 2020.
- European Commission. *Policy areas*. [https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal\\_en#timeline](https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en#timeline) Accessed on May 29, 2020.
- European Commission. *Timeline*. [https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal\\_en#timeline](https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en#timeline) Accessed on May 29, 2020.
- European Commission. *Timber Regulation*. [https://ec.europa.eu/environment/forests/timber\\_regulation.htm](https://ec.europa.eu/environment/forests/timber_regulation.htm). Accessed on May 30, 2020
- Gauchat, G., O'Brien, T. and Miroso, O., 2017. The legitimacy of environmental scientists in the public sphere. *Climatic Change*, 143(3-4): 297-306.
- Greker, M., 2006. Eco-labels, trade and protectionism. *Environmental and Resource Economics*, 33(1):1-37.
- Harrington, A. 2018. *International organizations and the law*. New York, NY: Routledge.
- Heires, M. 2008. The International Organization for Standardization (ISO). *New Political Economy*, 13(3): 357–367.
- Hornborg, A. and Jorgensen, A. K. (2010) *International trade and environmental justice : toward a global political ecology*. New York: Nova Science
- Koul, A. K. 2018. *Guide to the WTO and GATT: economics, law and politics*. New Delhi, India: Satyam Law International.
- Law, J. (ed.) 2016. *A dictionary of business and management*. Oxford: Oxford University Press
- Levi, M. (2018). The who, what, and why of performance-based legitimacy. *Journal of Intervention and Statebuilding*, 12(4), 603-610. doi:10.1080/17502977.2018.1520955
- Mani, M. S. 1996. Environmental tariffs on polluting imports. *Environmental and Resource Economics*, 7(4): 391-411.
- Manjula, J. and Saloni, S. 2019. Us-china trade war: chinese perspective. *Management and Economics Research Journal*, 5: 1–8.
- Nerlich, B., Koteyko, N., & Brown, B. 2010. Theory and language of climate change communication. *Wiley Interdisciplinary Reviews: Climate Change*, 1(1): 97-110.

- ONeill, T. J. 2003. *Life Cycle Assessment and Environmental Impact of Polymeric Products*. Shawbury, U.K: Rapra Technology.
- Park, C., Allaby, M. 2017. *A Dictionary of Environment and Conservation*. Oxford: Oxford University Press.
- Rockström, J., Steffen, W., Noone, K., Persson, Å., Chapin, F.S., Lambin, E.F., Lenton, T.M., Scheffer, M., Folke, C., Schellnhuber, H.J. and Nykvist, B., 2009. A safe operating space for humanity. *Nature*, 461(7263): 472-475.
- Sampson, Gary P. 2008. *The WTO and Global Governance : Future Directions*. Tokyo: United Nations University Press.
- Seneca, J., & Taussig, M. 1979. *Environmental economics* (2d ed.). Englewood Cliffs, N.J.: Prentice-Hall.
- Skao. *Wat is de Ladder?* <https://www.skao.nl/wat-is-de-ladder>. Accessed on May 30, 2020.
- Stanford University. Libraries & Academic Information Resources, and World Trade Organization. 2020
- Stern, N.H. 2007. *The economics of climate change : the Stern review*. Cambridge, UK: Cambridge University Press.
- Suchman, M. 1995. Managing legitimacy: Strategic and Institutional Approaches. *The Academy of Management Review*, 20(3): 571-610
- Tarullo, D. 2000. Norms and institutions in global competition policy. *The American Journal of International Law*, 94(3): 478-504.
- United Nations. 2009. *A Guide to Environmental Labels-* for Procurement Practitioners of the United Nations System
- Weller S.C., Vickers B., Bernard H.R., Blackburn A.M., Borgatti S., Gravlee C.C., and Johnson, J.C. 2018. Open-Ended Interview Questions and Saturation. *Plos One*, 13 (6): 0198606.
- whitehouse.gov . n.d. *whitehouse.gov* . Rose Garden. <https://www.whitehouse.gov/briefings-statements/statement-president-trump-paris-climate-accord/> , March 8, 2020.
- World Trade Organization. n.d. **WTO**. [https://www.wto.org/english/tratop\\_e/envir\\_e/envt\\_rules\\_gatt\\_e.htm](https://www.wto.org/english/tratop_e/envir_e/envt_rules_gatt_e.htm). Accessed on February 25, 2020
- World Trade Organization. n.d. **WTO**. [https://www.wto.org/english/tratop\\_e/envir\\_e/envt\\_rules\\_gatt\\_e.htm](https://www.wto.org/english/tratop_e/envir_e/envt_rules_gatt_e.htm). Accessed on February 29, 2020
- WTO, Annual Report 2019
- Zaum, D. 2013. *Legitimizing international organizations*. Oxford: Oxford University Press.
- Zleptnig, S. 2010. *Non-economic objectives in WTO law: justification provisions of GATT, GATS, SPS, and TBT agreements*. Leiden: Martinus Nijhoff Publishers.