

Defining product environmental standards in international trade

The participation of Latin American stakeholders in the European Union Environmental Footprint Programme

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UNITED NATIONS



Ministry of
Foreign Affairs

ECLAC

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This document has been prepared by Alicia Frohmann, Consultant with the Division of International Trade and Integration of the Economic Commission for Latin America and the Caribbean (ECLAC). A first draft was written while the author was a SECO Visiting Fellow at the World Trade Institute (WTI) of the University of Bern, Switzerland in October 2015. She is grateful to both WTI and the Institute of International Studies of the University of Chile for this opportunity. Many thanks go to Ximena Olmos (another ECLAC consultant) for her inspiration and support to the Latin American and Caribbean Coffee Environmental Footprint Network. Thanks also to Nanno Mulder, for his substantive comments, and to Hyunju Park, who assisted in reviewing coffee trade data.

This document is part of the Division of International Trade and Integration work on trade and sustainable development, which has received financial support from the Government of the Republic of Korea.

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United Nations publication
LC/TS.2017/51
Distribution: Limited
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Printed at United Nations, Santiago
S.17-00544

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Abstract

This paper presents a unique experience of the participation of Latin American stakeholders in the process of defining a European Product Environmental Footprint (PEF) standard for coffee. Although this process was interrupted in 2016 due to a dispute among European industry stakeholders, the broader PEF Program of the European Union (EU) for 10 other food products and 14 industrial products is still ongoing. Final results of this process are expected in 2017 and 2018. This paper originates from a concern about the environmental sustainability and competitiveness of Latin American food exports to the European market. Its purpose is also to contribute to the United Nation's trade-related Sustainable Development Goals (SDGs).

The participation of Latin American stakeholders in the PEF process was organized through the Latin American and Caribbean (LAC) Coffee Environmental Footprint Network. The Network was supported by the author and Ximena Olmos, through ECLAC's Regional Program for Technical Cooperation (RPTC).

Sections I, II and III of this document present a broad introduction of issues related to trade, climate change and environmental standards. Section IV, presents the EU's *Single Market for Green Products* initiative and the European Commission (EC) Product Environmental Footprint (PEF) Program. Section V explains the PEF Pilot Program for Coffee. Section VI presents the participation of Latin American stakeholders in the PEF process through the activities of the LAC Coffee Environmental Footprint Network, as well as some controversial issues raised during this process. Section VII, draws some conclusions about the process and presents the Network's future challenges.

Introduction

The carbon embedded in the production, trade and consumption of goods and services has considerable impact on climate change. Public awareness about this impact has influenced public and private policy initiatives, both within and outside the multilateral United Nations Framework Convention on Climate Change (UNFCCC).

Difficulties related to the design and implementation of a multilateral architecture for international climate policy, the so-called top-down approach, has encouraged the development of alternative and complementary bottom-up approaches (Leal-Arcas, 2013).

Examples of the latter are sector or product standards developed initially by the private sector and increasingly supported by national governments. These standards could be incompatible with trade rules, but are not yet under scrutiny by the multilateral trading system as most are voluntary. Governments and firms in an increasing number of countries are establishing new requirements to measure greenhouse gas (GHG) emissions and other sustainability indicators related to the entire supply chain of goods and services. One such initiative was the Loi Grenelle 2 pilot program in France, a voluntary environmental labeling program implemented during 12 months between 2011 and 2012.

Recently, new methodologies to measure consumption rather than production-based GHG emissions are being developed. These offer different perspectives than traditional emissions accounting as they focus on carbon embedded in the end of the supply chain, mainly trade and consumption. This new measurement shows how emissions are driven by global consumption patterns¹.

These environmental standards are usually defined by governments and industries in developed countries, with little participation by stakeholders from developing countries, who provide many inputs and manufacturing services of the developed countries' supply chains. In the case of

¹ Examples of this methodology are the OECD ICIO 2015 Emissions Statistics Project (Wiebe and Yamano, 2016) and the Consumption-based Accounting and Policy (CAP) Project (Hawkings and Crawford-Brown, 2015).

Latin America, new standards could reduce the export competitiveness of its commodity and other exports. Therefore it is important to include the perspective of the up-stream production stakeholders from Latin American in the standard-setting process.

In 2013, the European Commission initiated a pilot program to measure the product environmental footprint (PEF) of products and organizations². This program is part of the *Single Market for Green Products* project. Its purpose is to develop environmental performance standards which could lead to a common, voluntary EU eco-labeling standard and is intended to help companies develop more efficient production processes and promote more sustainable consumption patterns. Another goal is to define a new standard for the EU that may replace the current multiple eco-labels and as such reduce the confusion for businesses and consumers. The Program is open to both EU and non-EU stakeholders. Part of this PEF program focuses on 11 raw and processed food products. Some of these are exported by Latin American producers to the EU market. The pilot project for each product is conducted by a separate working group, which in turn is supervised by a private sector technical secretariat.

This document presents the rule-making process of the EC's Environmental Footprint Pilot Program and the work of the technical secretariats. It also focuses on the participation of non-EU stakeholders, such as Latin American food exporters, which might be affected by the new standards. In particular, it presents the experience of the public-private Latin American Coffee Environmental Footprint Network, which participated actively in the PEF program. This network was created with the support of the UN Economic Commission for Latin America and the Caribbean (ECLAC) with the goal to include non-state actors in the standard-setting process.

² http://ec.europa.eu/environment/eussd/smgp/ef_pilots.htm.

I. Trade and the environment

The issues at the intersection of trade and the environment are often controversial and have been on the agenda of multilateral negotiations. Both developed and developing countries have taken different positions. This is due in part to the fact that climate change policies may affect trade. Some examples of these policies are carbon taxes at the port of entry, fuel tax regulations for incoming vessels, as well as environmental labeling initiatives (Frohmann and Olmos, 2013).

The World Trade Organization (WTO) has dealt with links between trade, the environment and sustainable development since its creation in 1995. Through its Committee on Trade and Environment and its dispute settlement system, it has tried to minimize the potential negative impact of environment-related measures on trade flows. WTO's General Agreement on Tariffs and Trade (GATT) includes two articles that allow countries to take specific environment-related measures. The first is Article XX, which includes two exceptions for specific environment-related measures. The second is Article III, which establishes national treatment rules and stipulates that "like products" of national and imported origin should receive "no less favorable" treatment³.

Environmental issues have been included more recently in free-trade agreements (FTA), especially those negotiated by the United States and the European Union. Also, bilateral agreements among developing countries, such as the Chile-Uruguay FTA (2016), are increasingly addressing the environment.

Since 2014, a group of WTO members have engaged in plurilateral negotiations for the establishment of an Environmental Goods Agreement (EGA), to liberalize trade in a number of key environmental products, such as wind turbines and solar panels. However, after two years of progress, at the December 2016 meeting, political changes at the international level threatened to jeopardize an agreement. It is yet unclear when the negotiations will be continued or whether they will be suspended.

³ WTO Analytical Index — Guide to WTO Law and Practice, https://www.wto.org/english/res_e/booksp_e/analytic_index_e/analytic_index_e.htm

II. Trade and environmental standards

The GATT likeness of products criterion has been used in relation to standards about production and process methods (PPMs), which may be product-related or non-product related, and need to meet the Article XX exceptions. Product labeling schemes which derive from PPM standards fall under the criteria of the Agreement on Technical Barriers to Trade (Cottier, 2015).

Unilateral initiatives by developed countries to set environmental standards and regulations for both locally produced and imported products, have the potential to limit the competitiveness of countries which have not yet introduced climate change control policies (Maertens and Swinnen, 2012). At the multilateral level, the TBT Agreement deals with standards which it has defined as a “document approved by a recognized body, that provides, for common and repeated use, rules, guidelines or characteristics for products or related processes and production methods, with which compliance is not mandatory. It may also include or deal exclusively with terminology, symbols, packaging, marking or labeling requirements as they apply to a product, process or production method”⁴. The exact implications of these provisions have often been challenged in WTO dispute cases, such as the US-Mexico *Tuna-Dolphin* and *Country of Origin Labelling (COOL)* cases⁵.

Even though until now most product-related environmental initiatives have been private and voluntary, cross-national initiatives such as the EU *Single Market for Green Products*, which furthers legally-mandated private standards, could have an impact at a much larger scale. Going a step further than the Loi Grenelle initiative, in March 2017 the French government launched a voluntary ecolabel to help consumers identify greener products.

Some actors, particularly developing-country governments, view environmental standards as protectionist measures and trade barriers, and have challenged them both bilaterally and in international fora. Other actors, mostly in the private sector, take a more pragmatic approach to these standards, even if they do not favour them. They consider that they are here to stay, and that introducing them into their own business models may actually present an opportunity to innovate,

⁴ WTO Agreement on Technical Barriers to Trade, Annex 1.

⁵ *US-Tuna II* (Mexico) Panel and Appellate Body reports (2011-2012) and *US-COOL* (Mexico and Canada) Panel and Appellate Body reports (2011-2015).

implement energy-efficient technologies, diversify and add value to their products, and ultimately lower costs and increase competitiveness (Frohmann, Herreros, Mulder and Olmos 2015).

From a political economy perspective, standards convey information to consumers and often encourage improved and more sustainable production methods, but can be prone to manipulation because they empower certain actors who influence market behavior while users of standards may not have the power to influence standard-setting and have asymmetrical access to information (Ponte, 2004).

An additional policy perspective is that environmental standards also offer an opportunity for “eco-innovation“, to combine environmental policies with science, technology and innovation policies (CEPAL, 2016) and link competitiveness with sustainable development (European Commission, 2012). Whatever these considerations, environmental standards are an increasing world-wide trend and need to be taken into account increasingly in business decisions (Meybeck and Redfern, 2014).

The diversity of environmental standards and labeling initiatives is confusing for consumers and costly for business. The International Trade Center (ITC) Standards Map identifies 103 different environmental standards for agricultural products⁶ alone. An ITC 2015 study of voluntary sustainability standards (VSS) shows that many of the main agricultural commodity crops —such as tea, sugarcane, soybeans, palm oil, cotton, coffee, cocoa and bananas— have adopted sustainable practices and comply with such standards (ITC, 2015). Some of the best known VSS are 4C, Fairtrade, GLOBALG.A.P., UTZ and Rainforest Alliance. There are also product-specific VSS such as Bonsucro, Forest Stewardship Council (FSC), Roundtable on Sustainable Palm Oil (RSPO), Better Cotton Initiative (BCI), among others.

There are not only a diversity of standards, but also different environmental impact measurement methodologies. For example, in the case of just one environmental impact indicator —green house gas emissions (GHE), also called the carbon footprint— there are at least 8 major methods:

Table 1
Major carbon footprint measurement standards

International Organization for Standardization	ISO 14064
International Organization for Standardization	ISO/TS 14067 (TS technical standard)
World Business Council for Sustainable Development – World Resources Institute	GHG Protocol Scope 1 &2
World Business Council for Sustainable Development – World Resources Institute	GHG Protocol Scope 3
World Business Council for Sustainable Development – World Resources Institute	GHG Protocol Product Standard
British Standards Institute	PAS 2050
ADEME (France)	Bilan Carbone
British Standards Institute	PAS 2060-2010

Source: Frohmann and Olmos, 2013.

Differences between these major standards are mostly explained by the scope and number of specific indicators included, but they all use a life-cycle analysis methodology. These are the standards which are used most often in the existing carbon certification schemes and eventually for eco-labelling.

The result of the environmental impact assessment of products (carbon or multicriteria environmental footprints) has often been communicated to consumers through eco-labels, which can be private or public, mandatory or voluntary. Eco-labelling only complies with WTO/GATT and TBT Agreement rules if it is non-discriminatory (Matsushita, Schoenbaum, Mavroidis and Hahn, 2015).

⁶ <http://www.intracen.org/standardsMap/>.

III. The European Union *Single Market for Green Products Initiative*⁷

The European Commission launched the *Single Market for Green Products* initiative in 2013 to address and seek the convergence of the variety of evaluation methods and labels used to identify and communicate the environmental footprint of products, which lack comparability, confuse consumers⁸, are costly for business, and may become a barrier to trade.

A program which served as a laboratory for the European initiative was the French Loi Grenelle 2 pilot program in France, a voluntary environmental labeling program implemented during 12 months between 2011 and 2012. This was a government led voluntary environmental labeling program in which 168 firms participated, including 70 firms from the food and beverage sector. The firms tested multicriteria environmental impact labels, including the product's carbon footprint and at least one other environmental impact indicator (water footprint, use of non-renewable resources, air acidification, among others), using the French X30-323 methodology. The firms were free to develop their own labels, include any environmental impact indicators and choose the communication format they wished. Thus, the labels were not comparable and the experiment was not extended at the time⁹.

Between 2011 and 2013, different EC agencies, worked in order to develop a harmonized methodology for the calculation of the environmental footprint of products. This methodology was developed building on the International Reference Life Cycle Data System (ILCD) Handbook as well as other existing methodological standards and guidance documents (ISO 14040-44, PAS 2050, BP X30, WRI/WBCSD GHG protocol, Sustainability Consortium, ISO 14025, Ecological Footprint, etc).

In addition to proposing EU-wide methods to measure the life cycle environmental performance of products and organizations (European Commission, Joint Research Centre, 2010), the

⁷ This and the following section is based on the publicly available information on the DG Environment website <http://ec.europa.eu/environment/eussd/smgp/index.htm>.

⁸ According to the EC website, a recent Eurobarometer informed that “48 % of European consumers are confused by the stream of environmental information they receive. This also affects their readiness to make green purchases” (<http://ec.europa.eu/environment/eussd/smgp>).

⁹ In early 2017, France launched a new voluntary environmental labeling program, whose scope is yet unclear.

EC is encouraging Member States and the private sector to adopt them. The methods were announced and published in the Communication *Building the Single Market for Green Products* and in the Commission Recommendation on the *use of common methods to measure and communicate the life cycle environmental performance of products and organizations*¹⁰.

The EC's Recommendation declares that it:

- establishes two methods to measure environmental performance throughout the lifecycle, the Product Environmental Footprint (PEF) and the Organization Environmental Footprint (OEF);
- recommends the use of these methods to Member States, companies, private organizations and the financial community through a Commission Recommendation;
- announces a three-year testing period to develop product— and sector-specific rules through a multi-stakeholder process;
- provides principles for communicating environmental performance, such as transparency, reliability, completeness, comparability and clarity;
- supports international efforts towards more coordination in methodological development and data availability.

A. The Product Environmental Footprint (PEF) Pilot Program

In late 2013 the Commission launched a three-year Pilot Program to test the PEF and OEF through an open call for volunteers:

- to set up and validate the process of the development of product group-specific rules (Product Environmental Footprint Category Rules-PEFCRs¹¹), including the development of performance benchmarks;
- to test different compliance and verification systems, in order to set up and validate proportionate, effective and efficient compliance and verification systems;
- to test different business-to-business and business-to-consumer communication vehicles for Environmental Footprint information in collaboration with stakeholders.

The Program's purpose is to develop environmental performance standards which could lead to a common, voluntary eco-labeling standard and to help companies develop more resource efficient processes and promote more sustainable consumption patterns, as well as lessen consumer confusion caused by too many eco-labels. The Program is open to both EU and non-EU stakeholders.

The PEFCRs resulting from the pilot phase will become the product rules, to be used by all stakeholders in the sector in the EU or internationally who decide to measure the performance of their products based on the PEF.

A PEFCR should be representative of a specific product category, and companies which represent at least 75% of the yearly EU market turnover of the specific sector need to be invited to participate. A wide range of stakeholders, with particular reference to SMEs, consumers' and environmental associations need also be invited to participate. At the end of the process, industry

¹⁰ Recommendation 2013/179/EU, Official Journal of the European Union, 4.5.2013, L124/1.

¹¹ Product Environmental Footprint Category Rules (PEFCRs) provide specific guidance for calculating and reporting products' life cycle environmental impacts.

stakeholders (including producers and importers) need to represent at least 51% of the yearly EU market turnover¹² to validate the standard.

For each pilot there is a Technical Secretariat composed of companies, industry associations, NGOs, governmental representatives, national or international institutions, and/or university or research institutes. This Technical Secretariat is responsible for the overall drafting of the PEFCR proposal and organizing consultations with stakeholders

The institutional process through which a product is selected for a PEF pilot is that private sector stakeholders present the product, and indicate whether they want to lead or participate in the Technical Secretariat, which will lead the process toward the definition of the PEFCRs. The European Commission then selects the product and often indicates how it expects the Technical Secretariat to organize.

As a result of the call for volunteers, the EC selected 14 industrial products and 11 food products for the Pilot Programs.

Table 2
Products selected by the European Commission for the PEF Pilot Programs

Industrial products	Food products
Batteries and accumulators	Beer
Decorative paints	Coffee
Hot and cold water supply pipes	Dairy
Household detergents	Feed for food producing animals
Intermediate paper product	Seafood for human consumption
IT equipment (storage)	Meat (bovine, pigs and sheep)
Leather	Pasta
Metal sheets	Packed water
Non-leather shoes	Pet food (cats & dogs)
Photovoltaic electricity generation	Olive oil
Stationery (discontinued)	Wine
Thermal insulation	
T-shirts	
Uninterruptible Power Supply	

Source: European Commission, Product Environmental Footprint Pilots http://ec.europa.eu/environment/eussd/smgp/ef_pilots.htm#pef.

The process includes several different steps and is technically complex, but it takes into account the necessary studies, reviews and consultations. One PEF screening and at least one PEFCR supporting study will need to be performed per each sub-category included in the PEFCR. At least three stakeholder consultations –physical or virtual- need to be held¹³. The importance of stakeholder consultations for the transparency and legitimacy of the process has been stressed by the EC.

The PEF pilots include during the final phase of the program, the development and testing of communication tools to inform consumers (B2C) and business partners (B2B) about the environmental performance of a product by providing reliable, comparable and clear information. It is not yet clear which communication tools will be used, whether there will be standardized labels which will be additional or replace other labels, or whether these will be voluntary or at a future stage, mandatory.

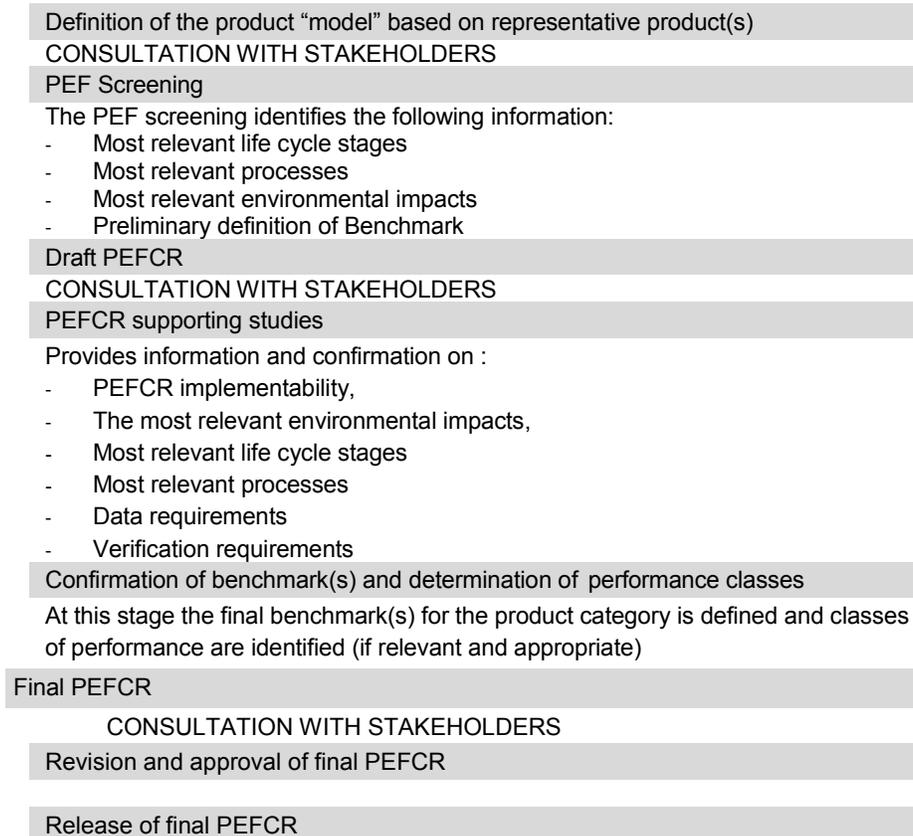
¹² See http://ec.europa.eu/environment/eussd/smgp/pdf/Guidance_products.pdf.

¹³ Although the EC Product Environmental Footprint Pilot Guidance document provides for three consultations in each of the pilots, they seem to have been reduced to only two in the implementation of the coffee pilot.

Although the proposed PEF methodology is new and its results have not been tested yet, there is critical analysis about its application of existing life-cycle assessment (LCA) methods and its purported aim of harmonizing them. Matthias Finkbeiner, a life-cycle analysis expert, argues that the PEF defines new categories and “does not contribute to harmonization [of existing standards], but rather to confusion, proliferation, and mistrust”, and that it is in “severe conflict with several requirements of ISO 14044 and ISO 14025”, which together with ISO 14040, are the basis of all quantification standards (Finkbeiner, 2014).

It is not within the scope of this article to either confirm or challenge Finkbeiner’s technical critique, but one of his concerns, regarding the potential international cooperation dimension of the PEF, provides a warning about the participation and concerns of international stakeholders in the PEF process. The author confirms the relevance of addressing international cooperation because many European environmental policies affect countries and producers in other parts of the world, who often consider environmental standards as non-tariff barriers to trade. Consistency with internationally agreed LCA standards is important, especially because many developing countries have actively participated in the definition of ISO standards.

Diagram 1
Definition of PEF product category scope and scope of the PEFCR
Steps followed for the development of PEFCRs¹⁴



Source: European Commission, Product Environmental Footprint Pilot Guidance, http://ec.europa.eu/environment/eussd/smgp/pdf/Guidance_products.pdf.

¹⁴ By early 2017, only 22 pilot programs had reached the final PEFCR-consultation step and 3 had been discontinued.

B. Environmental impact categories

The PEF-screening includes 15 environmental impact categories which are assessed through life-cycle analysis (LCA). In addition to the better-known categories such as climate change, land use and water depletion, there are other categories of less publicly known environmental impact which need to be identified in the PEF screening (European Commission, 2010). The diversity of these categories, as well as the challenge of obtaining the necessary data, adds technical complexity to the process. Each product-specific PEF need to identify and focus on its own principal impact categories, although all 15 need to be considered.

Table 3
Environmental impact categories considered in the PEF screening

Climate change	Particulate matter	Acidification	Land use
Ozone depletion	Ionizing radiation	Terrestrial eutrophication	Mineral, fossil and renewable resource depletion
Human toxicity, cancer effects	Freshwater ecotoxicity	Freshwater eutrophication	Water resource depletion
Human toxicity, non-cancer effects	Photochemical ozone formation	Marine eutrophication	

Source: European Commission, Product Environmental Footprint Pilot Guidance.

The large number of environmental impact categories that the PEF-screening considers is also challenged by LCA expert Finkbeiner who argues that the PEF methodology will require assessment of “numerous highly complex and untested impact categories” and that the need for “regionalized inventory data”, as well as the exclusion of cut-offs and a new verification scheme, would contemplate high costs for businesses (Finkbeiner, 2014).

IV. The PEF Pilot Program for Coffee

Among the food products proposed by industry stakeholders, coffee was one of 11 products selected by the European Commission for the PEF Pilot Program because of its importance for EU consumption. This paper focuses on the public-private standard setting process of the environmental footprint of this product, and specifically on the role of Latin American coffee producers in this process. These producers received technical assistance from the UN Economic Commission for Latin America and the Caribbean (ECLAC).

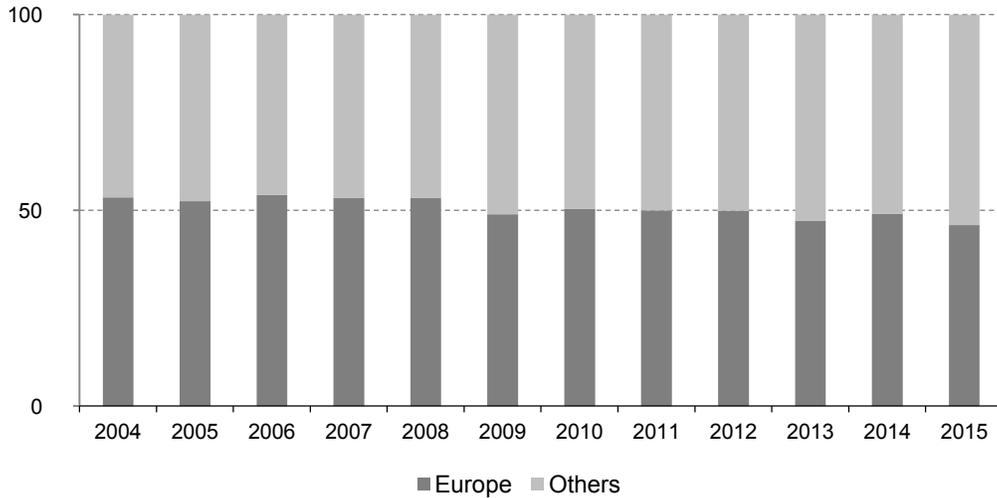
A. Market relevance of coffee

Coffee is a product of great economic importance to Latin American and Caribbean (LAC) producers, and they represent 61% of world coffee production¹⁵. Almost 50% of their exports of this product reaches the EU market (figure 1). Coffee is a major export product for many economies in the region, with a considerable social impact on small producers and cooperatives. In Colombia, for example, the coffee industry association —Federación Nacional de Cafeteros de Colombia (FNC)— represents over 500.000 small coffee producers¹⁶.

¹⁵ International Coffee Organization data for 2016, for 60kg bags of green coffee. One country, Brazil, represented 36% of total world production.

¹⁶ <https://www.federaciondefcafeteros.org>.

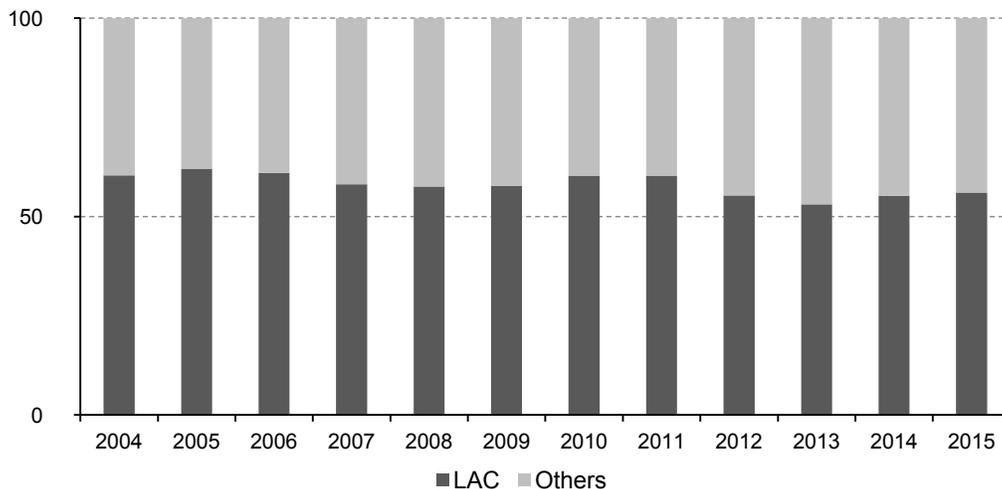
Figure 1
Latin American and the Caribbean exports of green coffee to Europe
(Percent of total coffee exports)



Source: Trade Map, www.trademap.org, accessed on 26/9/2016.

Coffee is also a very significant product for European consumers, with a per capita consumption of almost 5 kg in 2012. The EU imported 66% of world coffee production in 2012-2013 in value terms¹⁷ and is the world's largest coffee market. During 2004-2015, more than 50% of its coffee imports came from Latin America and Caribbean (LAC) countries and 5 of its top ten suppliers were Latin American countries (figure 2).

Figure 2
European imports of green coffee from Latin America and the Caribbean
(Percent of total imports)



Source: Trade Map, www.trademap.org, accessed on 26/9/2016.

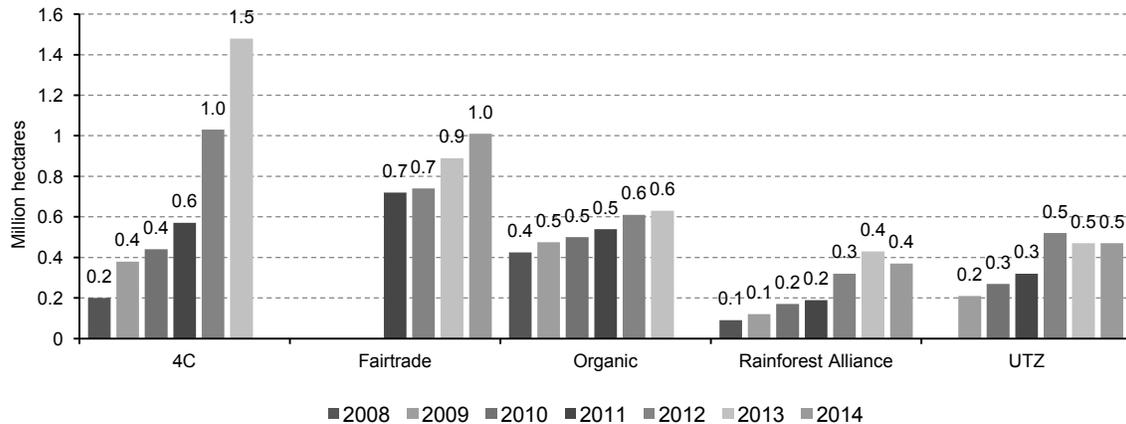
¹⁷ European Coffee Federation, European Coffee Report 2013/14, July 2014.

B. Coffee voluntary sustainability standards (VSS)

Many European consumers tend to be concerned about climate change and the environmental impact of the products they purchase¹⁸ and they often link this concern with the distance from where these were actually produced. In this context and given the fact that all coffee is imported, VSS are especially important to the coffee industry on the European market. They also contribute to segment the market and play a role in the administration and coordination of the coffee value chain by roasters and the big industry brands (Ponte, 2004).

Sustainable coffee cultivation and certification began in the early years of the 21st century and has since grown very fast. While in 2000-2001, sustainable certified coffees were 1% of coffee sold in North America (Ponte, 2004) and less than 2% of the supply on the European market and Japan (ICO, 2004); by 2014-2015, about 40% of the coffee area cultivated globally was certified by a VSS, and the standards with the greatest coverage were the 4C Association, Fairtrade International, Organic, Rainforest Alliance/SAN and UTZ Certified (Panhuyzen and Pierrot, 2014; ITC, 2015). However, a price-premium is not always attached to a sustainability standard certification, and only a fraction of certified coffee is sold (and paid) as such (Panhuyzen and Pierrot, 2014). By far, the region with the largest certified area is Latin America. In coffee, as in other sectors, the variety of certifications and ecolabels tend to be confusing to both producers and consumers. The European PEF process could have the potential to clarify this situation.

Figure 3
Coffee cultivation under voluntary sustainability standards
(Million hectares)



Source: ITC (2015), with data from 4C Association, Fairtrade International, Rainforest Alliance, UTZ.

C. The Coffee PEF process

Both the European Coffee Federation (EFC) and the Colombian Coffee Growers Federation (Federación Nacional de Cafeteros de Colombia, FNC) proposed that coffee should be one of the products included in the Pilot Program. The EFC represented the European industry which processes

¹⁸ A total of 49% of Europeans consider that buying local and seasonal produce is an individual action to combat climate change (Eurobarometer, 2015).

and commercializes coffee on that market, and the FNC, the coffee growers and exporters of Colombia. The product was selected by the EC in early 2014, as one of a total of 11 food products for the PEF pilot programs, and a Technical Secretariat (TS) of 10 members led by the ECF was established, including European companies and industry organizations, as well as the Colombian FNC, with technical support by the consultancy firm Quantis. The industry's awareness about the importance of this program grew and, by September 2015, the membership of the TS had increased to 15, including all the major actors in the coffee industry.

The Coffee TS was a public-private group, with participation of EU and non-EU governmental stakeholders, as well as EU and non-EU industry and other non-governmental stakeholders. The participation of developing-country stakeholders in a group such as this is a rarity, even though formally the EC pilot program is open to non-EU participants.

Non-participation is often due to lack of information. At the time that ECLAC informed Latin American producers about the EC program and the call for product proposals in late 2013 and early 2014, the Latin American exporters with business in the EU were not aware of it. The Colombian Coffee Growers Federation promptly realized the initiative's relevance for the industry and decided to join. In the following months, stakeholders participating in the recently created Latin American and Caribbean Coffee Environmental Footprint Network (LAC Network), became active in the Coffee Pilot.

The work of the Coffee Technical Secretariat was discontinued in mid-2016, due to the inability of its members to reach agreement on some aspects of the PEF. A PEF for coffee will probably be developed after 2018, once the Pilot Programs have ended. However, technical work by the Latin American coffee producers about the environmental footprint of coffee production has continued, in view of creating the technical capacities for local pilot studies about the PEF of green coffee beans, which could be included in the future European standard.

Table 4
Technical Secretariat of the Coffee Pilot Program, September 2015

Leader of Technical Secretariat	
European Coffee Federation (ECF)	
Members of the Technical Secretariat	
European Industry Associations	European Aluminium Foil Association (EAFA) European Coffee Federation (ECF) Flexible Packaging Europe (FPE)
European/Transnational Corporations	D.E Master Blenders 1753 Illycaffè SpA Luigi Lavazza SpA Mondelēz International Nestec Nestlé Nespresso Tchibo
Non-EU Government Agency	Swiss Federal Office for the Environment (FOEN)
Non-governmental Organizations	Solidaridad Network Sustainable Agriculture Initiative (SAI)
Non EU Producer Association	National Federation of Coffee Growers of Colombia (FNC)
Technical Support	Quantis

Source: Coffee stakeholder workplace <https://webgate.ec.europa.eu/fpfis/wikis/display/EUENVFP/Stakeholder+work+space%3A+PEFCR+pilot+Coffee>.

The PEF pilot began by assessing existing environmental performance guidelines in the coffee sector and identifying their limits and differences, in order to develop a harmonized methodology covering the entire lifecycle of coffee based beverages. The first deliverable was the Scope and representative product definition¹⁹, which was published on the Coffee Pilot Stakeholders Workplace²⁰ before the October 2, 2014 public consultation in Brussels. Deliverables 2 and 3 (PEF Screening Report and Draft PEFCRs) were published together on September 2, 2015, and public comments were received until September 30. A new, revised draft was published on March 1, 2016. However, deliverables 4 and 5 (testing the coffee PEFCR on existing products in the market and drafting the final PEFCRs) were not completed due to the discontinuation of the Coffee Group Technical Secretariat in 2016.

Table 5
Initial timeline of the coffee pilot and deliverables

Deliverable	Receiver	Date
1. Scope and representative product definition	Public on wiki (2 weeks before physical consultation)	October 2, 2014
	Steering Committee (1 month before SC meeting)	November 15, 2014
2. PEF Screening Report	EC/helpdesk for technical checks	April 2015
3. Draft PEFCRs	Public(30 days prior to virtual consultation)	May 2015
	Steering Committee (1 month prior to SC meeting)	August 2015
		March 2016
4. PEFCR Supporting Studies	Companies involved	
5. Final PEFCRs	Public (30 days before physical/virtual consultation)	
	Reviewers	
	Steering Committee (1 month prior to SC meeting)	
	European Commission	

Source: Minutes of Coffee PEF kick-off meeting, Coffee stakeholder workplace.

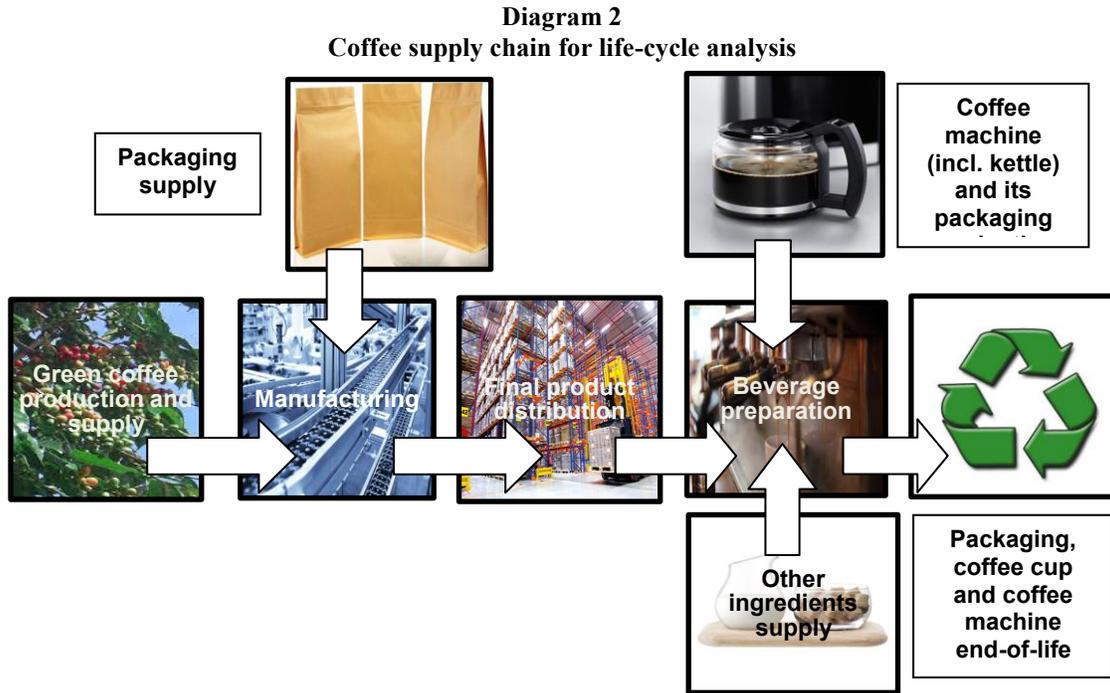
D. Representative product and system boundaries

The product analyzed in the PEF study is not the actual green coffee (unprocessed coffee beans), but a coffee beverage which is an industrial product. The representative products selected by the TS were one cup of either roasted and ground coffee, prepared in a drip coffee machine; soluble coffee; and coffee in capsules, prepared in a machine. The scope of the life-cycle analysis (LCA) used to define the PEF covers the entire supply chain of coffee, beginning with green coffee cultivation and transport; the packaging supply at different stages of production and transport; coffee-product

¹⁹ Definition of representative products could be subject to changes in the final draft. In 2016, the representative product definition was challenged by one of the principal industry stakeholders and this led to the discontinuation of the TS.

²⁰ The Stakeholder Workplace is the means of communicating the official documents of the Coffee Pilot Technical Secretariat, publishes comments and questions by stakeholders, as well as the data stakeholders propose to be considered in the PEFCRs. Stakeholders need to register. It aims to give transparency to the process <https://webgate.ec.europa.eu/fpfis/wikis/display/EUENVFP/Stakeholder+workspace%3A+PEFCR+pilot+Coffee>.

manufacturing and coffee-machine production, and transport; beverage preparation and other ingredients supply, and end-of-life disposal of all products after consumption. Coffee production is only the first link in the supply-chain.



Source: Diagram by the author, based on the Coffee PEF Draft.

E. Data for life-cycle analysis

Which and what quality data is used to calculate the environmental impact of the different stages of the life-cycle is crucial for the PEF methodology. The data can be either specific, generic or semi-specific. The data should have time, geographical and technological representativeness, and specific quality requirements are defined. In the early stages of the PEF process, the Technical Secretariat considered that it would use mostly generic data from international data bases for the coffee cultivation and production stage, alleging the lack of specific data. Generic data is often based on worst-case scenarios and producers tend to consider that their own data sheds a more positive light. As a result of comments about this issue, a more flexible approach was included in the third draft PEF²¹, allowing for sensitivity analysis and the use of semi-specific or specific data when available.

A total of 15 environmental impact categories were defined, in accordance with the PEF Guidelines (see table 3), although the PEF draft considers that only 7 of them are most relevant for coffee, while 4 other impact categories are relevant to a lesser extent. Even if some of these impact categories are in fact not applicable to coffee cultivation complex and costly data inventories would need to be made. Definition of a more compact and relevant number of key environmental

²¹ The latest draft of the coffee PEF CR, as well as its background data, was published by the TS in March 2016 and can be consulted on the Stakeholder Workplace <https://webgate.ec.europa.eu/fpfis/wikis/display/EUENVFP/Stakeholder+workspace%3A+PEFCR+pilot+Coffee>.

performance indicators would be easier to handle and could more accurately assess the coffee environmental footprint.

Obtaining the specific data is crucial for the correct evaluation of environmental impact categories. The PEF Screening Report (European Commission, 2015, Fig.25), published by the TS in 2015, illustrates the considerable differences between the green-coffee cultivation impacts for a default data scenario and the data sensitivity analyses scenarios, i.e., Colombian and Honduran coffee cultivation and organic green coffee. Specific data about Colombia and Honduras was presented to the TS by stakeholders from these two countries.

Table 6
Environmental impact categories relevant for coffee PFCRs

Most relevant impact categories	Less relevant impact categories
Climate change	Water resource depletion,
Human toxicity, cancer effects	Marine eutrophication,
Human toxicity, non-cancer effects	Acidification
Particulate matter	Freshwater eutrophication
Freshwater ecotoxicity	
Land use	
Mineral, fossil and renewable resource depletion	

Source: Product Environmental Footprint Category Rules 3 (PEFCRs): Coffee, January 2016 draft.

V. Participation by Latin American stakeholders in the PEF process

Participation by Latin American stakeholders began very early on in the coffee PEF process and deserves to be highlighted because active involvement by stakeholders from developing countries is rare in the European standard-setting process and this case could be exemplary for future occasions.

The European PEF process is relevant both to coffee suppliers and consumers. As mentioned above, Latin America provides a very significant share (almost 50%) of the green coffee imported by the European Union and coffee is one of the top export products of many countries in the region. Hence, it was clear from the beginning that the environmental standards defined by the European coffee PEFCR process would be of great interest to Latin American coffee producers and certainly have an impact on the industry's competitiveness on the European market.

The Colombian Coffee Growers Federation (FNC) initially proposed coffee as a product for the Pilot Program phase, and then joined the Technical Secretariat (TS) led by the European Coffee Federation. Direct participation in the TS has required significant technical expertise and the FNC's scientific and technical agency, CENICAFE, was well prepared for this task, and assumed a leadership role among Latin American stakeholders.

A. The Latin American and Caribbean Coffee Environmental Footprint Network

In order to strengthen this participation, in September 2014, a group of stakeholders joined in order to create the Latin American and Caribbean Coffee Environmental Footprint Network (LAC Network), with the support of ECLAC, to coordinate participation in the Coffee PEF Pilot which was being developed under the umbrella of the European Commission. The LAC Network is an informal group of representatives of public and private institutions involved in the coffee industry, such as coffee-growers associations, ministries of Agriculture and the Environment, trade

promotion organizations and academia. Representatives from 11 coffee-producing countries participate in the Network: Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Jamaica, Panama, Peru and Nicaragua²².

The objectives of the LAC Network are to:

- Obtain information about the European Commission PEF process and anticipate its possible impact on the LAC coffee producers' market competitiveness
- Participate as stakeholders and add the producers' perspective to the PEF process
- Seek that the PEFCR do not become a non-tariff barrier to trade
- Identify national/regional data about the environmental impact associated with coffee production
- Acquire skills in the use of environmental impact assessment tools
- Identify the national and regional environmental hotspots associated with coffee production
- Publicize the contribution of sustainable coffee production to lower the environmental footprint of the coffee supply chain
- Evaluate the costs of implementing the PEF process in the cultivation and production phase of the supply chain.

The creation of the LAC Network was facilitated by the existence of coffee-industry associations in several countries —some of them private and others public/private— and also by PROMECAFE, a platform for the modernization of coffee cultivation in which several Latin American industry associations participate. The Network includes representatives of national trade promotion agencies which focus on the trade-related aspects of the PEF. ECLAC's support for the coordination of the Network, as well as technical assistance, has been instrumental to the development and strengthening of capacities of the group.

About 25 million small farmers produce 80% of the world's coffee. In the case of Network participants, most of the coffee producers are small (over 90%) and climate change and trade-related standards can have direct impact on thousands of small farmers and their families. Millions of jobs are linked to the coffee sector which contributes significantly to export revenues. Coffee is among the three main export products in several countries and issues such as environmental footprint standards may impact the region's future export competitiveness and access to international markets.

From the very beginning, a priority identified by Network members was the need for quality information about the PEF process, as well as capacity-building, in order to participate as stakeholders in a meaningful way. The Network has been very proactive, participating in the PEF public consultations, meeting periodically, collecting data about their own coffee cultivation process, and seeking opportunities to strengthen their technical capacities.

Four workshops were organized in 2014-2016. The first, in Chinchiná, Colombia, in September 2014, at the Colombian Coffee Growers technical agency CENICAFE. The second, in San Pedro Sula, Honduras, in June 2015, at IHCAFE, the Honduran Coffee Institute. The third was held in Santiago, Chile, in December 2015, at ECLAC, in conjunction with the VII Environmental Footprint and International Trade Seminar. A fourth workshop took place in Antigua, Guatemala, in October 2016. In between workshops, Network members met for technical discussions through

²² Environmental issues are important for these stakeholders. Many coffee producing countries in Latin America and the Caribbean have been severely affected by climate change (CEPAL, CAC/SICA, 2014),

videoconferences. A panel of experts also met at ECLAC in Santiago in December 2016 to discuss available data about coffee environmental impact indicators.

Initially, the main objectives of the workshops were i) technical capacity-building in order to discuss the PEF issues at stake, and ii) to develop a joint perspective and inputs from the producers' perspective, which could contribute to the European process. About 25-30 participants have attended each workshop, most of them mid-level technical staff from the coffee associations and government representatives of the Network's member-countries. International experts and ECLAC staff have also had an active participation.

The workshops included information and updates about the European Coffee PEF Pilot Program by members of the Technical Secretariat (TS) and outside consultants, as well as analysis of the PEF drafts and other documents published by the TS and presentations about best practices and technical data about coffee cultivation in the region. Workshop participants were encouraged to prepare national data about the coffee cultivation process, and to participate in the PEF stakeholder consultations.

The European PEF consultations have mostly been attended by individuals or industry representatives, but have seldom included stakeholder partnerships. The European Commission convened a wide range of stakeholders to participate in the PEF process through an internet platform where the main documents were published once they were discussed and approved by the Technical Secretariat²³. The novelty and value-added dimension of the Latin American Network was that it encouraged the joint analysis and discussion of documents, and an exchange of information and best practices.

The Network's presence as stakeholders in the PEF process was channeled through the active participation of some of its members in the consultations about the documents prepared by the Technical Secretariat and published on the stakeholders' workspace. These documents had been first analyzed and discussed by Network participants.

The network was increasingly active in the stakeholder consultations. The Colombian Coffee Producers (who were members of the Technical Secretariat) and an ECLAC representative participated in the first Physical Consultation on Scope and representative product definition in Brussels. In October 2014, three Network members submitted written comments to the Virtual Stakeholder Consultation on Scope and representative product definition, and in September 2015, eight members submitted theirs to the Virtual Stakeholder Consultation on the Draft PEFCR and Screening Report. National data to be included in the PEF screening, as well as supporting studies -on issues such as carbon storage in coffee agroforestry, biodiversity in coffee farming, coffee agroforestry potential for mitigation of climate change- were presented by Network participants from Costa Rica, the Dominican Republic, Guatemala, Honduras, Peru and ECLAC between February and September 2015.

After three years of collective efforts, the LAC Network has consolidated. More and more, the meetings have become technically sophisticated, with presentations about environmental impact data and methodologies. A Guide for Coffee Environmental Impact Data Collection will provide a tool which can be used openly and will facilitate comparable studies. Supporting studies to test the PEF of green coffee cultivation and production will be undertaken in Colombia, Honduras and Costa Rica in 2017-2018. The studies will not only test the PEF methodology, but also the availability of inventory data for the different impact categories, as well as quantify the impact of local sustainability practices. By 2018-2019, once the EC resumes work on the coffee PEFCR, the Latin American stakeholders will have the technical capabilities and experience to supply the European process with the PEF for green coffee, including the necessary specific and semi-specific background data.

²³ Although the EC Product Environmental Footprint Pilot Guidance document provides for three consultations in each of the pilots, only two were implemented by the coffee pilot TS.

Table 7
Initiatives by the LAC Coffee Environmental Footprint Network 2014-2016

Year	Network Meetings	EC Consultations	Presentation of data and supporting documents
2014	Meeting at the VI ECLAC Carbon Footprint Seminar in Santiago to support the FNC's participation in the Coffee TS and propose creation of LAC Coffee Network, June 2014	Participation in Physical Stakeholder Consultation on Scope and representative product definition, Brussels, October 2014	
	I. Technical Workshop and creation of LAC Coffee Environmental Footprint Network, in Chinchina, Colombia, September 2014	Participation by Network members in Virtual Stakeholder Consultation on Scope and representative product definition, October 2014	
2015	Virtual Network meeting, January 2015		Data and supporting documents were presented by Costa Rica, the Dominican Republic, Guatemala, Honduras, Peru and ECLAC, February-September 2015.
	II. Technical Workshop, in San Pedro Sula, Honduras, June 2015	Participation by Network members in Virtual Stakeholder Consultation on Draft PEFCR and Screening Report, September 2015	
	III. Technical Workshop, in Santiago, Chile, December 2015		
2016	IV. Technical Workshop, in Antigua, Guatemala, October 2016		Study about the availability of inventory data for different impact categories for coffee cultivation in Honduras
	Panel of experts Santiago, December 2016	Update of the PEF process by Michele Galatola, DG Environment, European Commission, at the VIII ECLAC Seminar on Trade and Climate Change, December 2016	ECLAC presents Draft Guide for Coffee Environmental Impact Data Collection
2017	V. Technical Workshop, in Lima, Peru, October 2017		Main sources and mitigation of environmental impact of coffee cultivation.
			Guide for the collection of inventory data for environmental impact categories.

Source: ECLAC.

B. Controversial issues in the PEF process

Why is stakeholder participation and the presentation of the LAC coffee producers' own perspectives important in the PEF process? It is an opportunity to influence the standard-setting process. The coffee producers want the specificities of their own product, the data of their cultivation and production process, to be visible in the PEF methodology.

Has this participation achieved some degree of success? Technical variations between the Technical Secretariat's initial document on Scope and representative product definition (October 2014) and the later Draft PEFCR and Screening Report (March 2016) indicate that the Network's efforts have had some impact on the PEF drafting. Some of the achievements are described below. Even though the TS discontinued its work in 2016, the Network's members have continued their own technical work to test the PEF methodology, as presented in the 2016 draft, with the producers' specific data.

Some of the controversial issues which were raised by the coffee producers during the PEF process were:

Specificity of cultivation and production in the life-cycle analysis: Although coffee production is a crucial phase in the supply chain, its specificities were not considered in the initial PEF draft, which relied only on generic data from international data bases. As a result of the first public consultation in October 2014, when this approach was challenged, the next PEF draft included greater data specificity for the coffee production phase by i) including more detail about the different processes of the production chain; ii) identifying the basic data necessary to measure impact about this phase; and iii) opening the possibility of considering green coffee not only as an input, but viewing its entire life-cycle.

According to coffee producers, when the system boundaries cover the entire supply chain of the coffee beverage, including cultivation of coffee beans, the PEF should use specific or semi-specific country data, because different production systems have diverse environmental impacts. There are diverse production methods which generate different environmental impact. For example, shade v. sun-grown coffee, wet and dry processing, natural or mechanic irrigation, arabica or robusta coffee varieties, organic or non-organic, environmentally certified or not. All these specific issues were not differentiated initially in the PEF life-cycle analysis proposed by the TS. However, in the last PEF draft, published in March 2016, background national data from Colombia and Honduras was acknowledged.

Representative products: The selected representative products i) were roasted and ground coffee, prepared in a drip coffee machine; ii) soluble coffee; and iii) coffee in capsules, prepared in a machine. The coffee growers considered that at least two of them were industrial products, a derivative of coffee beans. In this context, the coffee grains are no more than an ingredient. Including green coffee as a representative product would be useful to identify the specific environmental footprint of coffee beans, before they become an input for an industrial process. As mentioned above, the original selection of representative products was later challenged by one of the industry members (not the coffee growers) of the Technical Secretariat and disagreement over this issue resulted in that the group was discontinued.

Data: The availability and use of data for the different environmental impact categories during the cultivation and production phase has been at the core of the concerns of the Network stakeholders and the industry participants of the TS. The industry is inclined to use generic data, from international databases, to calculate the environmental impact of coffee cultivation and production. This type of data is usually worst-case scenario data.

Producers want their specific or semi-specific data to be used, in order to give visibility to their own production process and, in some cases, to the sustainability practices they have adopted. The TS has argued that specific data is not available, but presentation of national data by Colombia and Honduras invalidated this argument. Country specific data for categories such as production, type of coffee, average yield, land use change, transportation distances, irrigation rates and production volumes is available for all coffee producing countries²⁴.

²⁴ Production data about coffee cultivation (area under cultivation, yield, coffee species, type of culture) from 7 coffee-producing countries in Central America can be found in the above mentioned CEPAL publication, CEPAL, CAC/SICA (2014), op.cit.

Sustainable coffee: Initial drafts of the PEF did not take into account whether green coffee had been certified as environmentally sustainable. No specific incentive was included in the PEF to promote the use of sustainable coffee in industrial coffee beverage production. Thus, no sustainability premium would be received by coffee growers in spite of the considerable effort and expense to obtain sustainability certification. The coffee PEF process involved a certain degree of industry “green-washing”. Coffee environmental sustainability was not always a primary concern. Industry representatives acknowledged off-the-record that the most relevant criteria for the purchase of green coffee were price and quality, not sustainability²⁵. At the most, specific sensitivity studies would be made in the PEF for organic or environmental-sustainability certified coffee. Coffee producers in the LAC Network have argued that the PEF process should offer incentives to the industry to purchase environmentally sustainable coffee, and encourage sustainable cultivation and production.

Consistency with other coffee standards The PEF’s consistency with other standards and certifications is of concern to Network members, because of the effort and cost associated with standards and the uncertainty of obtaining a price-premium to compensate. Partly, the standards have been adopted as a result of the request by European importers. These standards are usually associated with specialty-coffees, but they should be consistent with the PEF which focuses more on industrially produced coffee beverages.

Carbon storage Shade-grown coffee, which is part of an agro-forestry system, has an important role in capturing and storing carbon and thus a potential for the mitigation of climate change. However, although this contribution of shade-grown coffee cultivation lowers the impact of the entire supply chain, it is not considered within the environmental impact indicators. Network members have raised this issue in stakeholder consultations. The TS argues that calculation methodologies such as PAS 2050 do not consider carbon storage and that, moreover, there are no scientific studies to quantify its impact. However, these studies do exist and research on the potential of shade coffee on carbon capture and storage can be found in many publications²⁶. Carbon storage is an issue which should be considered in the PEF standard for coffee, as it is in the PEF for wine and olive oil.

Coffee plantations and agro-forestry systems also generate other environmentally positive impacts —included in the so-called environmental services— which should be considered by the PEF standard. Together with carbon storage, there is also the water sequestration and recharge potential, as well as positive impacts on bio-diversity. In the case of residue disposal, coffee pulp and waste can be used as natural fertilizers, reducing the use of chemical products, and coffee-waste water can be used for the production of biogas and other by-products (Rathinavelu and Graziosi, 2005).

Key environmental performance indicators The draft PEF and Screening Report propose an excessive number of impact categories, which exceed the key performance indicators used in the industry, and some of them have not yet been tested (Finkbeiner, 2014). For many Latin American producers it would be almost impossible to collect the necessary primary data for impact categories and possibly the generic (worst-case) values would be applied. A more compact number of key and tested environmental performance indicators relevant to production should be defined, where primary data is available and which might be more effective to assess the environmental footprint of green coffee production.

²⁵ A recent report shows that although 40% of coffee produced globally is standard compliant certified or verified coffee (4C, Rainforest Alliance, Fair Trade, UTZ, organic, among others), only 15% is purchased as such. (Panhuysen and Pierrot, 2014).

²⁶ For example, data for Mexico, Guatemala, Nicaragua, El Salvador and Colombia (van Rikxoort, Schroth, Läderach, Rodríguez-Sánchez, 2014) and for Costa Rica and Nicaragua (Noponen, Healey, Soto and Hagggar, 2013). A model (CREFT) to calculate carbon storage was developed in Colombia (Riaño, Tangarife, Osorio, Giraldo, Ospina, Obando, Gómez and Jaramillo, 2005).

VI. Conclusions

Environmental issues have a supra-national scope. This is true in general terms when addressing the impact of human activities (and trade) on the environment, and is also relevant when dealing with product specific environmental standards and their impact on international trade.

In the case of the European Product Environmental Footprint Process (PEF) process, the supra-national scope of the standards to be defined will affect not only stakeholders in all member countries of the European Union, but also non-EU stakeholders who do business on the European market.

If consistency and transparency criteria are met, the PEF process could be an opportunity for the participation by a wide spectrum of actors in the setting of technical standards. It is a multiple stakeholder program, coordinated by intergovernmental regulators of the European Commission, with participation of EU and non-EU governmental stakeholders, as well as EU and non-EU non-governmental stakeholders, including from developing countries (Peters et al, 2009).

The PEF Pilot Programs were convened by the European Commission, but the Coffee Pilot Technical Secretariat was dominated by European industry stakeholders, who wanted the PEFCR to serve their own commercial interests. When these industry stakeholders were not able to reach consensus on how to finalize the process, it was discontinued. Initially, coffee cultivation and production were dealt with in a perfunctory manner, using generic, worst-case scenario data, which would allow for a high upstream environmental footprint, while reducing the relative share of the industry's own values. Stakeholder participation was instrumental for modifying this focus to some extent.

On the other hand, coffee producers from Latin America (which provide 50% of European coffee imports) have participated in the PEF process in order to include their own specificities, influence the final outcome, and accommodate their own business interests. Both perspectives are not necessarily complementary and sometimes tend to clash. These differences arise regarding technical issues, but their background is political and economic.

The LAC Coffee Environmental Footprint Network initiative is a unique case of participation of public-private stakeholders from developing countries in the definition of environmental standards in the European Union. The purpose of this initiative is to help define the standard, and not only adapt to it once it is implemented and the coffee suppliers need to adjust.

Whatever the outcome of the European coffee PEF process, Latin American producers will have gained from their active participation. They will have learned about standard setting practices, identified national/regional data about the environmental impact associated with coffee production and acquired skills in the use of environmental impact assessment tools. This will in the future affect their production practices and add value and competitiveness to their exports to international markets.

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Acronyms

CENICAFE, Ciencia, Tecnología e Innovación para la caficultura colombiana

CEPAL, Comisión Económica para América Latina y el Caribe

ECLAC, Economic Commission for Latin America and the Caribbean

EC, European Commission

ECF, European Coffee Federation

EU, European Union

FNC, Federación Nacional de Cafeteros de Colombia

GATT, General Agreement on Trade and Tariffs

GHG, Green House Gas

IHCAFE, Instituto Hondureño del Café

ICTSD, International Center for Trade and Sustainable Development

ILCD, International Life Cycle Data

ISO, International Standards Organization

ITC, International Trade Center

LAC, Latin America and the Caribbean

LCA, Life Cycle Assessment

NGO, Non-governmental Organization

OEF, Organization Environmental Footprint

PEF, Product Environmental Footprint

PEFCR, Product Environmental Footprint Category Rules

PPM, Production and Process Methods

PROMECAFE, Programa Cooperativo Regional para el Desarrollo Tecnológico y Modernización de la Caficultura

RPTC, Regional Program for Technical Cooperation

SDG, Sustainable Development Goals

SECO, Swiss State Secretariat for Economic Affairs

TBT, Technical Barriers to Trade

TS, Technical Secretariat

UNFCCC, United Nations Framework Convention on Climate Change

WTI, World Trade Institute

WTO, World Trade Organization



The Latin American and Caribbean Coffee Environmental Footprint Network initiative is a unique case of participation by public and private sector stakeholders from developing countries in the definition of environmental standards in the European Union. The purpose of this initiative is to involve stakeholders in defining standards that will affect their trade and competitiveness in the European market, rather than simply adapting and obliging coffee suppliers to adjust once standards are implemented.