RESEARCHREPORT

No. 1, 2024

Environmental Impact Assessments of Trade Agreements

Linh Bui, Ruben Dewitte, Simon Happersberger, Nidhi Nagabhatla, Glenn Rayp





About the authors

Linh Bui¹, Ruben Dewitte², Simon Happersberger^{1,3}, Nidhi Nagabhatla^{1,2}, Glenn Rayp^{1,2}

- 1. UNU Institute on Comparative Regional Integration Studies (Belgium)
- 2. Ghent University (Belgium)
- 3. Vrije Universiteit Brussel (Belgium)

About UNU-CRIS

The United Nations University Institute on Comparative Regional Integration Studies (UNU-CRIS) is a research and training institute of the United Nations University, a global network engaged in research and capacity development to support the universal goals of the United Nations and generate new knowledge and ideas. Based in Bruges, UNU-CRIS focuses on the provision of global and regional public goods, and on processes and consequences of intra- and inter-regional integration. The Institute aims to generate policy-relevant knowledge about new patterns of governance and cooperation and build capacity on a global and regional level. UNU-CRIS acts as a resource for the United Nations system, with strong links to other United Nations bodies dealing with the provision and management of international and regional public goods.

The mission of UNU-CRIS is to contribute to generate policy-relevant knowledge about new forms of governance and cooperation on the regional and global level, about patterns of collective action and decision-making.

UNU-CRIS focuses on issues of imminent concern to the United Nations, such as the 2030 Development Agenda and the challenges arising from new and evolving peace, security, economic and environmental developments regionally and globally. On these issues, the Institute will develop solutions based on research on new patterns of collective action and regional and global governance. The Institute endeavours to pair academic excellence with policy-relevant research in these domains.

For more information, please visit www.cris.unu.edu

Director's Foreword

Philippe De Lombaerde



Environmental Impact Assessments (EIAs) of trade agreements are crucial for aligning global economic policy with sustainable development. This study explores the design and implementation of EIAs, aiming to understand their methodologies and effectiveness.

This investigation is vital to ensure that trade policies uphold environmental integrity, supporting global sustainability goals. It also clarifies the roles of various actors, from international organizations to national governments, in maintaining environmental standards. By analyzing 124 EIAs, the study provides insights into their geographical and thematic scope, setting a benchmark for future assessments.

The findings offer essential guidance for policymakers, environmental advocates, and trade negotiators, promoting the integration of environmental considerations in trade agreements and contributing to a more sustainable global trading system.

in alliance with









Abbreviations and Acronyms

AA Association Agreement

AANZFTA ASEAN-Australia-New Zealand Free Trade Agreement

ACP African, Caribbean and Pacific Group of States

APEC Asia-Pacific Economic Cooperation
ASEAN Association of Southeast Asian Nations

ATPC African Trade Policy Centre

AU African Union

BNU Beijing Normal University

CAFTA-DR Dominican Republic - Central America - United States Free Trade Agreement

CARICOM Caribbean Community
CBA Cost benefit analysis

CBD Convention on Biological Diversity

CCA Causal Chain Analysis

CCSCS Southern Cone Confederation of Trade Unions

CEP Closer Economic Partnership

CEPA Comprehensive Economic Partnership Agreement
CEPAL Commission for Latin America and the Caribbean

CEQ Council on Environmental Quality
CER Closer Economic Relations

CETA Canada-European Union Comprehensive Economic and Trade Agreement

CGE Computable General Equilibrium

CGEP Center for Global Environmental Policy

CJKFTA China-Japan-Korea Free Trade Agreement

CKFTA Canada-Korea Free Trade Agreement

CPTPP Comprehensive and Progressive Agreement for Trans-Pacific Partnership

CSD Commission on Sustainable Development
CSIS Center for Strategic and International Studies

CSO Civil Society Organizations

CTE Committee on Trade and Environment
CUSMA Canada-United States-Mexico Agreement

DA9 Development Account Ninth

DCFTA Deep and Comprehensive Free Trade Area

DEAT Department of Environmental Affairs and Tourism

DEPA Digital Economy Partnership Agreement
DIT Department for International Trade
E3MC Energy-Emissions-Economy Model

EA Environmental assessment

EAAG Environmental Assessment Advisory Group

EC European Commission

ECA Economic Commission for Africa

ECLAC Economic Commission for Latin America and the Caribbean

ECLAP East County Large and Small Animal Practice

EFA European Free Alliance

EFTA European Free Trade Association
EIA Environmental Impact Assessment
EMFTA Euro-Mediterranean Free Trade Area
EPA Economic Partnership Agreement

Environmental review ER **ERG** Environmental Review Group

ESCAP Economic and Social Commission for Asia and the Pacific

ETUC European Trade Union Confederation

EU European Union

FAO Food and Agriculture Organization

FAOSTAT Food and Agriculture Organization Corporate Statistical Database

Foreign Direct Investment FDI FTA Free Trade Agreement GAC Global Affairs Canada Gender-Based Analysis plus GBA+

Global Biodiversity Information Facility **GBIF**

Gulf Cooperation Council GCC Greenhouse Gas Emission **GHG** GOC Government of Canada Global Trade Analysis Project **GTAP**

ΙΑ Impact assessment / Integrated assessment **IATRP** Integrated Assessment of Trade-related Policies

ICIO Inter-Country Input-Output

International Institute for Democracy & Electoral Assistance **IDEA**

IEA International Energy Agency

IISD International Institute for Sustainable Development **IMAZON** Institute of People and the Environment of the Amazon

Ю International Organization

ITA Information Technology Agreement

IUCN International Union for Conservation of Nature JWPTE Joint Working Party on Trade and Environment

MCA Multi-criteria analysis

Multilateral Environmental Agreement MEA MEP Ministry of Environmental Protection

MERCOSUR Mercado Común del Sur (Southern Common Market)

MFAT Ministry of Foreign Affairs and Trade

Ministry of Commerce MOFCOM

NAFTA North American Free Trade Agreement NGO Non-Governmental Organization NIA

National Interest Analysis

Organization for Economic Co-operation and Development **OECD**

Pacific Agreement on Closer Economic Relations **PACER**

PCA Partnership and Cooperation Agreement

Partial equilibrium

Policy Research Center for Environment and Economy PRCEE Regional Comprehensive Economic Partnership **RCEP**

Regional Organization RO **RPC** Regulatory Policy Committee **RTA** Regional Trade Agreement

Stabilisation and Association Agreement SAA SADC Southern African Development Community

SDG Sustainable Development Goal SEA Strategic Environment Assessment SIA Sustainability Impact Assessment STAG Strategic Trade Advisory Group

TAG Trade Advisory Group

TEPAC Trade and Environment Policy Advisory Committee

TISA Trade in Services Agreement
TPA Trade Promotion Authority
TPP Trans-Pacific Partnership
TPSC Trade Policy Staff committee

TTIP Transatlantic Trade and Investment Partnership

UK United Kingdom UN United Nations

UNCTAD United Nations Conference on Trade and Development UNECE United Nations Economic Commission for Europe

UNEP United Nations Environment Program

UNITAR United Nations Institute for Training and Research

UNU-CRIS United Nations University Institute on Comparative Regional Integration Studies

USA United States

USMCA United States - Mexico - Canada Agreement

USTR United States Trade Representative

WTO World Trade Organization
WWF World Wildlife Fund

Acknowledgments

The authors acknowledge the time and funding from their home affiliations to produce this report. The contributions from UNU-CRIS authors are supported by the Flemish Government (Kingdom of Belgium) and the working partners of UNU-CRIS – Ghent University and the Vrije Universiteit Brussels. They would also like to thank Max Mycroft and Olivia Toles for their edits and support.

Table of Contents

1.	Intro	oduction 7		
2.	Con	ceptualization of Environmental Impact Assessments of Trade Agreements	ç	
	2.1	Definitions and Historical Development	S	
	2.2	The Design of an Environmental Impact Assessment	1	
	2.3	EIA Process & Methodology	13	
3.	-	oping the Landscape: Actors and Agencies in the Context of Environmental act Assessments of Trade Agreements	16	
	3.1	International Organisations: Advancing and Guiding EIAs	16	
	3.2	Regional Organisations: Is only the EU applying EIAs?	20	
	3.3	Countries: Few OECD Nations Systematically Practice EIAs	26	
	3.4	Academia and Civil Society: Consultation and Criticism of EIA Practices	43	
4.		Design of Environmental Impact Assessments of Trade Agreements: ghts from a New Data Set	50	
	4.1	Introducing the DEIATA	50	
	4.2	Analysis	52	
5.	Sun	nmary and Conclusions	64	
6.	Rec	ommendations	70	
Re	fere	nces	7	
Αŗ	pen	dices	75	
	Арр	endix A - Common methodologies and criteria	75	
	Арр	endix B – List of country studies supported by UNEP from 1999 to 2005	77	
	Арр	endix C – List of EIAs by Actors	79	
	Арр	endix D – Summary main points of selected of environmental impact assessments in RTAs	89	
	Арр	endix E – Comparison between Ex-post Evaluation and Sustainability Impact Assessment	92	

1. Introduction

With the creation of the World Trade Organization (WTO), sustainable development and environmental protection were included as explicit objectives of the international trading system and mentioned as such in the preamble of the Marrakesh Agreement (1994). This acknowledged that international trade and environmental protection can, but don't need to be, in conflict depending on the specific circumstances. Although monitoring the environmental impact of international trade is essential, a standardized global governance framework for this purpose is currently missing. Despite the ambitious agenda of the Committee on Trade and the Environment (CTE), until now the achievements of the WTO in this respect are quite modest. Complementary to international efforts in the WTO, countries were called to conduct voluntary environmental impact assessment (hereafter, EIA) of trade agreements that they negotiated or agreed to.

In 1993, the Organisation for Economic Co-operation and Development (OECD) Ministerial Council recommended that "governments should examine or review trade and environmental policies and agreements with potentially significant effects on the other policy area early in their development to assess the implications for the other policy area and to identify alternative policy options for addressing concerns." In 2017, almost 15 years later, the United Nations Environmental Programme (UNEP) and the International Institute for Sustainable Development (IISD) developed the first recommendations for conducting an EIA of trade agreements including the timing, geographical and thematic scope, and the nature of the assessor. Surprisingly, there is no systematic assessment of how trade actors conduct EIAs of trade agreements and to what extent current practices in EIAs of trade agreements align with these recommendations in a transnational context.

This study investigates the design of EIAs for trade agreements. The primary objective is to understand how EIAs for trade agreements are conducted. Specifically, the study aims to explore the following five aspects:

- The actors responsible for assessing the environmental impact of trade agreements.
- The range for which trade agreements EIAs are conducted.
- . The definitions of environmental impact in EIAs.
- The geographic and thematic scope covered in EIAs.
- . The methods employed in conducting EIAs.

To achieve this, the study collected and analyzed 124 environmental impact assessments of trade agreements conducted since 1999. The analysis of these assessments is based on four criteria outlined by the UNEP-IISD recommendations. These criteria are essential for evaluating the quality, caliber, and overall viability of EIAs. The study's primary goal is to provide insights into the processes and standards used in assessing the environmental impacts of trade agreements, contributing to a better understanding of how trade agreements affect the environment.

Outline

The report starts with the evolution of EIAs in the trade area. In the 1990s, deep concerns were raised in anti-globalisation groups that trade liberalization would cause severe damage to the environment. This criticism peaked around Seattle's WTO Trade Negotiation in 1999, when various environmental groups protested in the streets to express their frustrations over the environmental impacts of trade¹. In response to these concerns, EIAs were built as an evaluation tool in the context of trade negotiations. Initially, EIAs were ad-hoc single assessments from the European Commission (EC) for the Single Market and from Canada and the United States (USA) for the North American Free Trade Agreement (NAFTA). Afterwards, EIAs were anchored in the USA, Canada, and the EU in 1999².

International organisations such as the United Nations (UN) and the OECD refined and systematized the process and methodology for conducting EIAs in the early 2000s. This methodological aspect will be presented in detail in Section 2 as a springboard for the discussions in the following sessions.

¹ See more at https://www.seattle.gov/cityarchives/exhibits-and-education/digital-document-libraries/world-trade-organization-protests-in-seattle

² Government of Canada introduced the Cabinet Directive on the Environmental Assessment of Policy, Plan, and Program Proposals in 1999. The government of the US also issued Executive Order 13141 to guide conducting environmental reviews.

Actors and Agencies

Section 3 is dedicated to the actors involved in the environmental impact assessments of trade agreements. This section expounds upon environmental repercussions stemming from trade agreements, focusing on various entities, including international organizations, regional organizations, national governments, and non-governmental organizations (NGOs). International organisations such as UN agencies and the OECD have worked on enhancing countries' capacities to conduct EIAs of trade policies through developing frameworks and pilot studies. At the same time, the WTO acts as an observer institution to encourage members to share EIA practice experiences. Nevertheless, the roles of these organisations are not always clear and often overlap.

The European Union (EU) seems to be a key regional organization that visibly carries out environmental assessments for major trade negotiations. These assessments are included in a broader agenda called Sustainability Impact Assessments (SIAs) and Ex-post Evaluations, which identify the economic, social, and environmental impacts together³. Notably, ex-ante SIAs and Ex-post Evaluations cover the impacts of both the EU and third-country partners. In contrast, most other EIAs focus mainly on the impacts of the country carrying out the assessment. While the EU's approach can be seen as the perhaps the most comprehensive, conducting environmental assessments for trade agreements has not yet transformed into a legally binding requirement for all trade agreements (OECD, 2007).

On the country level, we found only a few OECD countries - the US, Canada, and New Zealand - enacted legislation requiring their governments to examine the possible environmental implications of trade agreements in which they are involved. The UK has begun to self-conduct environmental impact assessments of its trade negotiations after leaving the EU, using an approach closely resembling the EU's. Japan, Korea, Norway, and Switzerland conducted several environmental impact analyses of trade agreements, but they are not systematically applied and not always publicly available.

The discussion of academia and civil society in the context of EIAs of trade negotiations highlights the effectiveness of EIA and the conflict of interests in the EIA process as two main issues. While EIAs can uncover the implicit effects of trade agreements, their ability to shape negotiating positions and achieve sustainable development goals is unclear. Notably, NGOs frequently point out the shortcomings of EIAs, including inadequate timing, a lack of transparency, limited civil society engagement, and insufficient enforcement mechanisms for mitigating actions. One critical issue is that EIAs have rarely led to clear changes in negotiating stances or influenced the structure of trade agreements. Against this background, this report provides analysis and arguments pointing to the need to address these gaps and enhance the effectiveness of EIAs to better align trade agreements with sustainable development objectives.

A Novel Dataset on Environmental Impact Assessments of Trade Agreements (DEIATA)

Datasets have been proven to be important assessment tools for analyzing the state and the evolution of environmental and trade policymaking. Given the scarcity of empirical research on the design of these EIAs, Section 4 presents the construction of this Dataset on the Environmental Impact Assessments of Trade Agreements (DEIATA). DEIATA provides a systematic means to evaluate the evolution and structure of these assessments over time. With 124 EIAs collected, it becomes evident that the design of these assessments varies significantly. Notably, the European Union (EU) stands out in the field, conducting the most EIAs for trade agreements, involving independent consultants in the EIA process, and conducting comprehensive reviews of environmental impacts for all parties involved.

However, despite these advances, the current practices in EIAs of trade agreements need to meet the recommendations set forth by the United Nations Environment Programme (UNEP). Gaps persist, particularly in addressing the impact on third parties, assessing ex-post effects, and selecting appropriate and comparable indicators. 'Thus, the dataset serves as a crucial tool to highlight these shortcomings and guide improvements in the environmental assessment of trade agreements toward promoting more sustainable and equitable international trade practices.

³ The European Union launched its first SIA in 1999 in anticipation of the Doha Round, while its first ex-post evaluation was in 2012 for the EU-Chile Association Agreement.

The existing landscape of EIAs also prompts a series of pressing policy inquiries: Who should carry out EIAs? When should they be published? How can EIAs be provided impartially also to low-income countries? Section 5 of this report delves into this critical territory. It gives a summarized set of policy recommendations to address concerns about the appropriate governance level for conducting EIAs, defining the responsible entities for carrying out these assessments, identifying the relevant stakeholders who should actively participate in the EIA process, and devising effective strategies for encouraging and motivating the implementation of EIAs. These recommendations represent a crucial step in enhancing the policy framework surrounding EIAs, aiming to make them more effective and impactful in promoting environmental sustainability and responsible decision-making, especially in regions where such assessments are imperative for sustainable development.

2. Conceptualization of Environmental Impact Assessments of Trade Agreements

2.1 Definitions and historical development

Environmental impact assessments go back to the increasing environmental awareness since the 1960s. The contemporary usage of "Environmental Impact Assessment" originated in the U.S. National Environmental Policy Act of 1969, which mandates an environmental impact statement for major federal actions significantly affecting the quality of the human environment (Ortolano and Shepherd, 1995; Salzman, J., 2001). With the beginning of globalisation since the 1980s, international and cross-border transactions have led to a rising interest in EIAs (e.g., Wathern 1984) and the Convention on Environmental Impact Assessments in a Transboundary Context (1991). Nowadays, EIAs generally refer to the "process of evaluating the likely environmental impacts of a proposed project or development, taking into account inter-related socio-economic, cultural and human-health impacts, both beneficial and adverse" (CBD 2010)⁴.

Beyond the project level, EIAs have been extended to international trade. There are several different forms of environmental assessments related to trade, such as Environmental Assessment (EA), Environmental Review (ER), Impact Assessment (IA), and Sustainability Impact Assessment (SIA) (see Table 1). These various assessments come with different definitions and conceptual foundations, which are employed to assess the potential environmental consequences of international trade activities. In essence, these assessments are emerging as instruments to monitor and assess that international trade is conducted sustainably and in an ecologically responsible manner.

Despite the absence of a universally agreed-upon framework of reference, EIAs find widespread use in appraising the likely environmental ramifications of trade policies. By providing insights into the environmental repercussions of trade agreements, EIAs play a role in pinpointing measures that can optimize positive outcomes while minimizing adverse effects. At its core, the overarching objective of EIAs is to advance global sustainable development by ensuring that trade policies align with environmentally responsible practices and adhere to the principles of sustainable development. This contributes to realizing ecologically sustainable trade (Fauchald and Greaker, 1998)⁵.

In the DRC, both ASM and large-scale mining co-exist on a wide scale (see Figure 1) to form complex mining value chains, spurring risks of conflicts (Katz-Lavigne 2020; Deberdt 2022). This is the case for the Copperbelt region, which is one of the most important mining regions in the DRC.

^{4 &}lt;a href="https://www.cbd.int/impact/whatis.shtml">https://www.cbd.int/impact/whatis.shtml

⁵ It is mentioned in page 74 that: "One point which is stressed in recent UNEP publications, and with which UNCTAD wholehearted agrees, is that EIAs are not only a tool for the minimisation of negative environmental impacts; their principal objective is to focus on and to be used in promoting sustainable development."

Terms	Definitions/Concepts	Sources (Country/ Agency)
Environmental Review (ER)	Environmental reviews provide important support for trade negotiations and trade policies. Reviews, and the process of conducting them, provide information concerning potentially significant environmental implications of trade agreements, and a framework for discussing these implications within the government and with the public.	USA ⁶ WTO ⁷
Environmental Assessment (EA)	Environmental assessments of trade negotiations are an important decision-making tool for promoting sustainable development. Environmental assessments of trade negotiations contribute to more open decision-making within the federal government by engaging representatives from other levels of government, the public, the private sector, and non-governmental organizations in the process.	Canada ⁸
Impact Assessment (IA)	The impact assessment sets out assessment of the economic, social, and environmental impacts of the agreement. The impact assessment aims to provide a comprehensive assessment of the potential long-term implications of the negotiated agreement	The UK ⁹
Integrated Assessment (IA)	An integrated assessment serves several purposes: exploring the linkages between trade, the environment, and development; informing policymakers across government departments and international negotiators; developing policy packages to integrate policy objectives on trade, the environment, and development; and increasing transparency in policymaking.	UN ¹⁰
Sustainability Impact Assessment (SIA)	Trade Sustainability Impact Assessment is a process undertaken during a trade negotiation that seeks to identify the potential economic, social, environmental, and human rights impacts of a trade agreement. Sustainability impact assessment is a trade-specific tool developed for supporting major trade negotiations.	EU ¹¹ OECD ¹²

Table 1. Conceptualizations of EIAs of Trade Agreements

Source: UNU CRIS collated using various information sources listed in the reference list

EIAs of trade agreements specifically started with early estimates of the environmental impacts of the North American Free Trade Agreement (Grossman & Krueger 1991), the EU Single Market, and the Uruguay Round Agreements (Moïsé and Rubínová 2021). International organisations, including the OECD (1993) and UNEP (1997, 2001), have developed the first international approaches. Following massive public demonstrations at the WTO Seattle Ministerial Conference in 1999, state actors in the

⁶ https://ustr.gov/issue-areas/environment/environmental-reviews

⁷ https://www.wto.org/english/tratop_e/envir_e/reviews_e.htm

⁸ https://www.international.gc.ca/trade-commerce/trade-agreements-accords-commerciaux/agr-acc/env-ea.aspx?lang=eng

⁹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1057311/uk-new-zealand-free-trade-agreement-impact-assessment.pdf

¹⁰ UNEP (2001), Reference Manual for the Integrated Assessment of Trade-Related Policies

¹¹ European Commission (2016). Handbook for Trade Sustainability Impact Assessment. 2nd ed. Luxembourg: Publications Office of the European Union.

¹² OECD (2010), Guidance on Sustainability Impact Assessment, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264086913-en.

USA, Canada, and the EU, have implemented more EIAs in the context of their trade agreements, accompanied by a continuous methodological debate about how to assess trade-induced environmental impacts best (Abaza & Hamwey 2001, Lee & Kirkpatrick 2001, Morris & Therivel 2001, Kirkpatrick & George 2006, Petts et al. 2009, Ekins & Voituriez 2012, Kettunen et al. 2021, Malik et al. 2022). Figure 1 summarises the further development of trade-related environmental impact assessments.

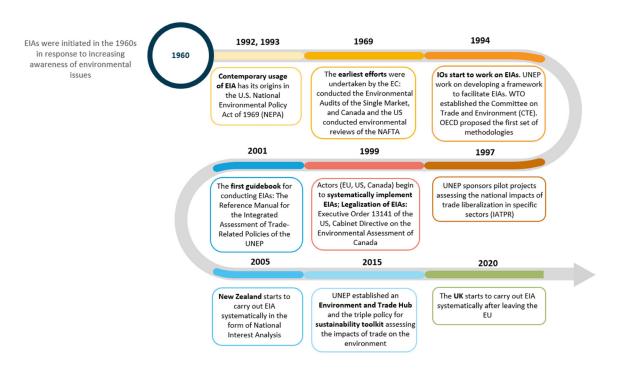


Figure 1. Key Events in the Evolution of Environmental Impact Assessments and Trade Agreements since 1960s Source: UNU-CRIS Compilation

2.2 The Design of an Environmental Impact Assessment

There is little comparative analysis of how states and international organisations apply and implement EIAs of trade agreements. The academic debate has mostly focused on estimating the environmental impact of trade or trade liberalization as such (e.g., Wiedmann & Lenzen 2018), focused on specific regions like North America (Tweedie 2006), the EU (Knigge & Kranz 2017), East Asia (Kojima & Bhattacharya 2007), or Latin America (Blanco 2006), or specific environmental fields like biodiversity (Kettunen et al. 2021). Furthermore, there appears to be limited evaluation regarding how current practices align with international organizations' recommendations for environmental impact assessments of trade agreements. For example, the International Institute for Sustainable Development (IISD) and the UNEP provided recommendations in 2017, highlighting four essential design choices to consider when crafting an EIA for trade agreements:

1. Timing: ex-post or ex-ante (or both) - The EIA can take place before the implementation of a trade measure or the negotiation of a trade agreement (ex-ante), during the process of negotiating a trade agreement (concurrent) or following the implementation of a trade-related policy or the final ratification of a trade liberalisation agreement (ex-post). The toolkit for trade negotiators (IISD and UNEP, 2017) recommends doing both¹³. The results of a particular ex-post assessment could be used as the baseline for a future ex-ante assessment, for instance, in the case of the Environmental Assessments of the Canada-United States-Mexico Agreement (CUSMA).

 $^{13 \}qquad \underline{\text{https://www.iisd.org/toolkits/sustainability-toolkit-for-trade-negotiators/6-process/6-2-environmental-impact-assessments-in-trade-agreements/}{\text{https://www.iisd.org/toolkits/sustainability-toolkit-for-trade-negotiators/6-process/6-2-environmental-impact-assessments-in-trade-agreements/}{\text{https://www.iisd.org/toolkits/sustainability-toolkit-for-trade-negotiators/6-process/6-2-environmental-impact-assessments-in-trade-agreements/}{\text{https://www.iisd.org/toolkits/sustainability-toolkit-for-trade-negotiators/6-process/6-2-environmental-impact-assessments-in-trade-agreements/}{\text{https://www.iisd.org/toolkits/sustainability-toolkit-for-trade-negotiators/6-process/6-2-environmental-impact-assessments-in-trade-agreements/}{\text{https://www.iisd.org/toolkits/sustainability-toolkit-for-trade-negotiators/6-process/6-2-environmental-impact-assessments-in-trade-agreements/}{\text{https://www.iisd.org/toolkits/sustainability-toolkits/sustainability-toolkit-for-trade-negotiators/6-process/6-2-environmental-impact-assessments-in-trade-agreements/}{\text{https://www.iisd.org/toolkits/sustainability-toolkits$

- 2. **Geographical scope**: domestic impacts or international The toolkit for trade negotiators (IISD and UNEP, 2017) recommends covering significant global and domestic (national) impacts. Some environmental impacts (e.g., climate change) are inherently international, and impacts on third countries may be substantial.
- 3. Thematic scope: what sorts of impacts will be considered? The more comprehensive the scope of analysis, the more chance there is to identify and address the most critical impacts of trade agreements. For example, the EU's assessments cover environmental, social, and economic impacts, with a particular focus on the development of developing partners. The U.S. and Canadian assessments focus exclusively on environmental impacts.
- 4. Analyst: conducted by government or by consultants? A consultant's analysis may carry more weight as an objective assessment, but it may be less effective at ensuring ministry buy-in of the results. The European Commission, for example, hires a consultant to conduct the EIA, which includes public consultations¹⁴.

These design choices are critical for ensuring the effectiveness and comprehensiveness of EIAs, but further examination and assessment of their implementation in practice are needed. While the recommendations serve as a valuable framework, the practical application and alignment of current practices with these principles require more in-depth investigation. Additional research and analysis can help identify gaps and improvement areas in the EIA trade agreements processes. This would contribute to enhancing the role of EIAs in promoting sustainable and environmentally responsible trade practices. We reiterate that for a more comprehensive evaluation of the effectiveness of these design choices, additional research and analysis would be valuable to assess their implementation in practice and the extent to which they contribute to the overall sustainability of trade agreements.



¹⁴ Source: https://ec.europa.eu/info/law/law-making-process/planning-and-proposing-law/better-regulation-why-and-how/better-regulation-guidelines-and-tool-box en

Actors	EIA	Timing Ex-ante/ Post	Geographical Scope	Thematic Scope	Analyst
The EU	Sustainability Impact Assessment (SIA) & Ex-post Evaluation	Both	Covers the EU, partner countries, and global effects	Cover environmental, social, and economic impacts	Contracted to consultants
Canada	Environmental Assessment (EA)	Ex-ante	Covers impacts in Canada's territory	Covers only environmental impacts	Conduct their analyses in-house
The US	Environmental review (ER)	Ex-ante	Covers the US' territory, and transboundary & global effects if needed	Covers only environmental impacts	Conduct their analyses in-house
The UK	Impact assessment (IA)	Ex-ante	Covers the UK, partner countries, and global effects	Covers environmental, social, and economic impacts	Conduct their analyses in-house
New Zealand	National Interest Analysis (NIA)	Ex-ante	Covers impacts in New Zealand's territory	Covers environmental, social, and economic impacts	Conduct their analyses in-house

Table 2. The Form of EIAs by selected Actors

Source: UNU CRIS collated using various information sources listed in the reference list

Note: Besides Environmental reviews, the US also conducts Labor Rights Report and Child Labor Report¹⁵

2.3 EIA Process & Methodology

Process

The methodology for conducting EIAs in the context of trade agreements typically involves a phased approach, although there is no standardized process. The standard phases typically include the Inception Report, the Interim Report, and the Final Report. This structured approach helps ensure the assessment is comprehensive (See Figure 2).

Regarding the timeframe for EIA reports, it is important to note that the publication of the Final Report tends to occur on average 2–3 years after the Notices of Intent to conduct the EIA. This timing often aligns with the launch of negotiations for the trade agreement. For example, in the case of the EU-Canada Comprehensive Economic and Trade Agreement (CETA), negotiations were initiated in May 2009, with the first round of negotiations in October 2009. The Sustainability Impact Assessment (SIA) tender was issued in January 2010, and the final SIA report was published in June 2011.

^{15 &}lt;u>https://ustr.gov/issue-areas/labor/labor-reports</u>

However, there can be exceptions to this timeline, such as the Final Environmental Assessment of the Comprehensive and Progressive Agreement for Trans-Pacific Partnership conducted by Canada, which took approximately six years to complete. The duration of EIAs varies depending on the specific nature and context of each proposed trade agreement. The methodology for conducting EIAs in trade agreements involves various and varying approaches. The timeline for final reports can vary based on the trade agreement's characteristics and complexities.

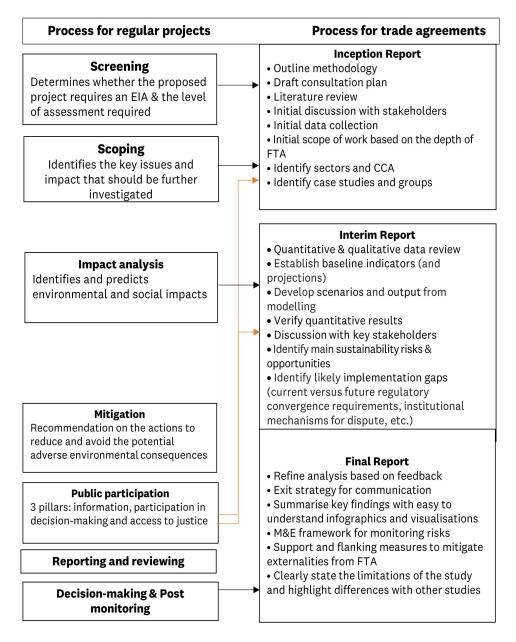


Figure 2. Typical process for conducting EIA Source: UNU CRIS collated using various information sources listed in the reference list

Note: CCA = Causal Chain Analysis; M&E = Monitoring & Evaluation

Methodology

The methodology for conducting an EIA is still evolving, as the development of effective environmental review mechanisms is an ongoing process that requires continuous improvements and adjustments to ensure their efficacy. Countries have varying approaches toward environmental reviews.

Box 1. Diverse approaches in EIA

WTO members recognize that countries have different approaches to environmental reviews, that conducting the reviews is difficult and that the methods are still evolving. Some countries emphasize that no member has the perfect tool for these reviews and that any tool must be adapted to each situation. Developing country members have stressed that national authorities should not be obliged to conduct environmental reviews — the reviews should be voluntary. They say the reviews should also be consistent with a country's priorities and that the developing countries' task should not be made more onerous by requiring countries to use the same or similar procedures (the procedures should not be "harmonized"). That would mean that the reviews must be carried out in the light of the requirements of each country, its capability and resources, its level of development, its expertise, and the local situation.

Source: WTO, Environmental reviews.

Link: https://www.wto.org/english/tratop_e/envir_e/reviews_e.htm

Each EIA typically employs a mix of methods that complement each other in evaluating a set of trade and environmental effects. Moïsé and Rubínová (2021) highlighted five different types of trade-related environmental effects stemming from trade measures or agreements: scale effects, structural effects/composition effects, technology effects, product effects, and regulatory effects:

- Scale effects changes in economic activity: predicts that the economic expansion resulting from trade liberalisation will increase pollution and the depletion of natural resources, all other things held constant.
- Structural effects changes in production or consumption patterns at the microeconomic level (e.g. changes in the cost of raw materials or labour). Suppose trade liberalisation leads to a resource shift away from environmentally-damaging production processes or techniques (such as over-production or land degradation associated with primary production). In that case, these structural effects will likely be a net positive for the environment. Negative structural effects can occur if domestic policy settings are not sufficiently robust to deal with a potential increase in the production of goods and services resulting from trade liberalisation that may damage the environment. Alternatively, structural effects are also indicated as composition effects, i.e. changes in the national-level mix of economic activity due to international trade specialisation. If "dirty" industries shrink in comparison to "cleaner" ones, and if "cleaner" industries grow in comparison to "dirty" ones, trade liberalisation may lead to less pollution. It is noted that structural effects and composition effects refer to the same economic concept but are applied at different aggregation levels.
- Technology effects the impacts of the flow of new technologies (e.g., more efficient goods): It can lower pollution if trade liberalisation leads to the diffusion and adoption of new (less resource-intensive or less polluting) technologies (Garsous and Worack, 2021). In addition, the increase in real income caused by trade liberalisation may lead consumers to demand environmental quality, leading to more stringent policies and the adoption of cleaner technologies¹⁶.

¹⁶ This follows the Environmental Kuznets Curve hypothesis which asserts that during the process of economic development countries pollute more in the early stages, but that economic growth and greater wealth means that countries in later stages of development can invest in environmental improvement.

- Regulatory effects the impacts of legal and policy changes stemming from the agreement: It occurs where trade reforms may impact environmental regulations and standards. On the positive side, trade agreements may explicitly include measures to improve environmental standards. However, provisions of trade reforms may also impinge on a government's ability to set environmental protection standards (OECD, 1994).
- Product effects changes in the use of specific goods and services following liberalisation¹⁷: This effect may be direct or indirect and positive or negative. Some products may be environmentally friendly, while others may be hazardous to the environment. For example, increased trade in environmental goods and services would yield positive effects while trade in hazardous waste could yield negative effects.

The scale-composition-technological classification of environmental effects is used in Canada, the UK, and some EU studies, while the US, New Zealand, and some EU studies use the OECD approach, which proposes product, scale, structure, technology, and regulatory effects.

In terms of methods, the majority of EIAs use a computable general equilibrium model (CGE) to assess the aggregate economic effects of the agreement (i.e., in the EU, approximately 80% of SIAs used a CGE model as their main quantitative analytical tool from 1999 to 2018 (Rojas-Romagosa, 2018)). After that, the changes in production output estimated by the CGE model are converted to emissions output using sector-level emissions intensity. This decomposition can quantitatively provide scale, composition, and technique effects. The product effects and regulatory effects are often assessed qualitatively.

The main indicators of environmental outcomes directly simulated by most CGE models are key Greenhouse Gas Emission (GHG emissions): carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O), where results can be obtained directly from model estimates to the extent that the pollution relates to various sectors. In addition to GHG emissions, air quality, waste and waste management, water, energy, land use, and forest area coverage are widely used to analyse environmental impacts (see Appendix A). The range of indicators and their measurement mode (qualitative or quantitative) considered in an EIA varies across countries depending on their capacity and policy priorities.

3. Mapping the Landscape: Actors and Agencies in the Context of Environmental Impact Assessments on Trades

This third section explores the question: "Who participates in the EIAs of trade agreements?" We highlight the involvement of various actors and entities, ranging from international and regional organizations to national governments, non-governmental organizations, and research institutes. We aim to delineate their specific roles and interactions with respect to environmental impact assessments of trade agreements.

3.1 International Organisations: Advancing and Guiding EIAs

International organisations have been instrumental in spearheading the early phases of EIAs for trade policies. Our investigation describes the involvement of three pivotal organisations in this field: the UN, the OECD, and WTO. Figure 3 illustrates the specific bodies of these organisations dealing with environmental impact assessments of trade agreements. The ensuing sections will provide a deeper exploration into these IOs' roles and contributions.

3.1.1 United Nations

The United Nations has significantly influenced environmental impact assessments in international trade. UNEP has developed frameworks for evaluating the environmental impacts of trade policy, notably in developing countries. Concurrently, other UN agencies, such as UNCTAD and the Regional Economic Commissions, complement UNEP's initiatives, addressing regional nuances in trade and sustainability.

¹⁷ Mayrand and Paquin (2007), p. 21; http://unisfera.org/IMG/pdf/Unisfera.- EAs of Services Trade Liberalisation - Literature Review 19 April 2007.pdf

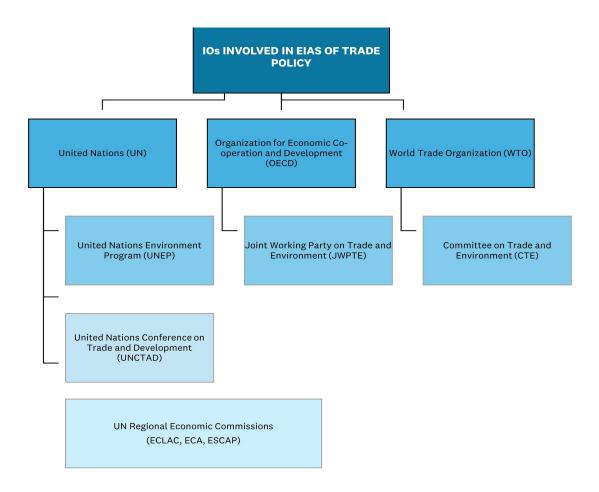


Figure 3. International Organisations involved in EIAs of trade policy sources listed in the reference list

United Nations Environment Program (UNEP)

Within the UN, the UNEP has the main responsibility for environmental issues. In respect to environmental impact assessments of trade agreements, it focuses mainly on (i) developing frameworks to assess the environmental outcomes of trade policies and (ii) assisting developing nations in researching the effects of trade liberalization on the environment. UNEP's work on frameworks for EIAs started in 1994 after the UN Commission on Sustainable Development (CSD) tasked UNEP to create a framework for the environmental assessment of trade policies (OECD, 2007). In response to this call, UNEP built EIA capacities at multiple levels, prioritizing developing countries, such as the "Reference Manual for the Integrated Assessment of Trade-Related Policies" (UNEP, 2001), which elucidates trade integration with other multidisciplinary aspects such as the environment. After the manual's release, UNEP broadened its collaborative sphere, interfacing with diverse organizations, including fellow UN agencies and the WTO, to delve deeper into the nexus of trade, environment, and development. This collaboration resulted in an integrated ex-ante planning tool, "The Handbook on Integrated Assessment of Trade-Related Measures: The Agriculture Sector" (UNEP, 2005). In 2015, UNEP established an Environment and Trade Hub, which serves as the overarching delivery mechanism for UN Environment's work on trade. Together with the IISD, the UNEP Environment and Trade Hub developed a sustainability toolkit¹⁸ for trade negotiators, which helps assess the potential impacts of trade on the environment (IISD and UNEP, 2017).

¹⁸ Source: https://www.iisd.org/toolkits/sustainability-toolkit-for-trade-negotiators/6-process/6-2-environmental-impact-assessments-in-trade-agreements/

In parallel, UNEP has also directly supported the implementation of pilot EIAs of trade projects by enhancing the national capacities of developing countries to undertake the Integrated Assessment of Trade-Related Policies (IATRP) since 1997. The IATRP is an interdisciplinary approach that assesses trade impacts, promotes informed decision-making, and explores the nexus between trade, environment, and development (Moïsé and Rubínová, 2021). The IATRP process evolved by implementing four rounds of country projects facilitated by over 30 assessments (Kessler and Abaza, 2006) (see Appendix B). Central to this initiative, UNEP's role in this process is to provide technical and (limited) financial support and facilitate project implementation. These activities show UNEP's commitment to enhancing the capacities of countries, especially those developing or in transition, to integrate environmental considerations seamlessly into trade policies.

United Nations Conference on Trade and Development (UNCTAD)

UNCTAD's historical stance towards EIAs in trade agreements has been relatively discreet. Fauchald and Greaker (1998) note that the UNCTAD has yet to address EIAs explicitly. In 1996 the Commission on Sustainable Development (CSD) invited both UNCTAD and UNEP to work on both areas of the effect of trade liberalisation on the environment and the further development of a framework for assessing the environmental effects of trade policies¹⁹. While this collaboration between UNCTAD and UNEP was expected to pave the way for combined efforts on EIAs, particularly on development projects in developing countries, concrete details of shared projects remain unknown. Only recently, in 2022, UNCTAD designed a Guidebook on Trade Impact Assessment to help trade policymakers and practitioners in developing countries with comprehensive information on:

- When and how to conduct an impact assessment
- Where to obtain detailed and technical information on the conduct and use of impact assessments
- How the results of the impact assessments may be interpreted and put into practice

UN Regional Economic Commissions

The UN Regional Economic Commissions play an important role in regional cooperation on environmental sustainability and trade. Each of them has units responsible for issues of trade and economic integration, and several are showing a growing interest in sustainability issues.

i. Economic Commission for Latin America and the Caribbean (ECLAC)

ECLAC has carried out several impact studies of integration agreements for Latin American governments (IISD and UNEP, 2017). For example, the ECLAC investigations looked at economic, environmental, and social consequences in Chile. Notably, Chile's approach have inspired China's proposed EIA legislative extensions to trade policies (George, 2011).

ii. Economic Commission for Africa (ECA)

The African Trade Policy Centre of the UN Regional Commission for Africa published views on how to promote the SDGs through regional integration and is working to advance climate and environmental considerations in the work of the African Continental Free Trade Area (AfCFTA). In 2021, for instance, the Centre is supporting work on a Strategic Environment Assessment (SEA) of the AfCFTA, including stakeholder consultations (Economic Commission for Africa, 2021). Unfortunately, the details of this assessment are currently not publicly available.

¹⁹ Paragraph 7(c) "invites UNCTAD, in cooperation with UNEP and other relevant organisations, such as the OECD, and taking into account the work already done at the WTO, to examine how further trade liberalization, such as through the reduction or elimination of tariff escalation, export taxes or restriction, trade-distortive subsidies and the elimination of tariff and non-tariff barriers to trade, can result in environmental benefits and contribute to sustainable development." Paragraph 7(a) "recalls the recommendation made in paragraph 67 of the report on its third session, in which it invited the UNEP/UNCTAD program to carry out further work and to report on the development of a framework to facilitate the assessment of the environmental impact of trade policies, taking into account the special needs of developing countries with economies in transition."

iji. The Economic and Social Commission for Asia and the Pacific (ESCAP)

The ESCAP has recently shown increased interest in environmental issues and trade. They work together with East County Large and Small Animal Practice (ECLAP) and ECA in Development Account Ninth (DA9) on "Enhancing the Contribution of Preferential Trade Agreements to Inclusive and Equitable Trade". As the output of this project, they published the "Handbook on Negotiating Sustainable Development Provisions in Preferential Trade Agreements" in 2018 and an updated version in 2021. The handbook aims to supplement the training materials included in ESCAP's e-learning courses on trade negotiations²¹.

iv. The United Nations Economic Commission for Europe (UNECE)

There is limited evidence that UNECE's activities are directly related to EIAs for trade agreements. However, UNECE might have some activities supporting EIA processes in general (not specific to trade agreements). For example, there is a guideline for applying environmental impact assessment principles to policies, plans, and programs published by the UNECE (UNECE, 1992).

Other UN Affiliated Agencies

The Food and Agriculture Organization (FAO) has some activities indirectly related to building capacity for EIAs in trade. According to FAO, they assist member countries by²²:

- Generating information on the possible consequences of trade policies and levels of regional integration on food security and development.
- Strengthening capacities of national stakeholders to improve their understanding of international rules and their implications and prepare stakeholders for negotiations and implementation.
- Facilitating neutral forums for dialogue between different stakeholders in trade and agriculture, often in collaboration with the WTO and other key institutions.

To achieve the above goals, the FAO and the United Nations Institute for Training and Research (UNITAR) have developed and delivered e-learning courses on trade agreements and their implications for agriculture²³. These courses support authorities and the private sector in understanding and applying the provisions of trade agreements to improve the agricultural sector's overall competitiveness.

3.1.2 World Trade Organization

The WTO has primarily acted as an information-sharing platform for EIAs of trade agreements. In particular, the Committee on Trade and Environment (CTE) has enabled members to remain informed and learn collaboratively. In 1994, the World Trade Organization (WTO) took a pivotal step by establishing the Committee on Trade and Environment (CTE). The CTE comprises the entire WTO membership and selected international organizations as observers and acts primarily as a forum for sharing experiences and best practices²⁴. Since 1996, the CTE has sustained discussions on environmental reviews. The discussions have intensified since 2001 to highlight that trade agreements can benefit from environmental reviews. The 2000 WTO Secretariat note "Environmental (Sustainability) Assessments of Trade Liberalization Agreements at the National Level" provides a comprehensive analysis of (i) why countries choose to undertake an assessment, (ii) what is assessed and (iii) how to establish the link between the effects of trade liberalisation and environmental impacts. Furthermore, the 2002 WTO Secretariat note "Discussion Paper on the Environmental Effects of Services Trade Liberalization" emphasises the need for effective methods to address significant environmental effects, especially for resource-constrained entities.

In addition to the WTO Secretariat note, the 2001 Doha Declaration indicate the significance of environmental reviews in WTO

 $[\]underline{20} \quad \underline{https://www.unescap.org/sites/default/d8files/knowledge-products/SD\%20in\%20RTA\%20Handbook_2021\%20update.pdf}$

²¹ Available at: https://www.unescap.org/kp/2021/e-learningcourses-trade-policy-negotiation-and-facilitation

²² https://www.fao.org/economic/est/international-trade/agreements/en/

²³ https://elearning.fao.org/course/view.php?id=408 and https://www.unitar.org/unitar-and-fao-launch-online-russian-course-agriculture-trade-agreements-europe-and-central-asia

^{24 &}lt;a href="https://www.wto.org/english/tratop_e/envir_e/reviews_e.htm">https://www.wto.org/english/tratop_e/envir_e/reviews_e.htm

trade negotiations, as articulated in paragraph 6: "We take note of the efforts by Members to conduct national environmental assessments of trade policies on a voluntary basis." Notably, Paragraph 33 of the Doha Ministerial Declaration emphasizes, "We recognize the importance of technical assistance and capacity building in the field of trade and environment to developing countries, especially the least developed. We also advocate for the sharing of expertise and experience with members eager to conduct environmental reviews at the national level." In 2007, the Secretariat concretised this conversation by cataloging trade-related environmental assessments, enhancing member states' comprehension²⁵. Another notable view of the WTO on the issue of implementing EIAs is that they acknowledge the varied approaches countries adopt for environmental reviews, understanding that these assessments are challenging to conduct and that methodologies continue to evolve (see again Box 1).

3.1.3 Organisation for Economic Co-operation and Development

The OECD Ministerial Council encouraged governments to review trade agreements and environmental policies and strategies. The first set of proposed methodologies for conducting ex-ante environmental reviews of trade agreements was elaborated by the OECD Joint Working Party on Trade and Environment (JWPTE) (OECD, 1994). The report also proposed methodologies for conducting trade reviews of environmental policies and agreements. The pioneering approach of the OECD JWPTE laid the groundwork for the systematic environmental assessment of trade, influencing other international organisations, governments, and NGOs to develop their own approaches. Among others, it highlighted five different types of trade-related environmental effects stemming from trade measures or agreements: scale effects, structural effects, technology effects, product effects, and regulatory effects. This typology remains relevant and has been employed with varying degrees of emphasis in all approaches developed to assess the environmental impacts of trade (Moïsé and Rubínová, 2021).

The OECD further developed this work in the 2000s with a series of analytical reports and subsequent annual updates between 2007 and 2013 on the evolution of environmental clauses in Regional Trade Agreements (RTAs). The JWPTE 2007 flagship publication "Environment and Regional Trade Agreements" describes the state-of-the-art for environmental provisions, side agreements, and cooperation agreements linked to RTAs. In consequence, a series of working papers and reports was released, including a "Checklist for Negotiators" (Kim and Less, 2008), "A Framework for Evaluation" (Gallagher and Serret, 2011), "Monitoring implementation and assessing impacts" (George, 2011), and "Emerging Trends and Policy Drivers" (George, 2014) on environmental provisions in RTAs. From 2015 onwards, the JWPTE has continued to investigate RTAs and their environmental provisions, though attention has shifted from tracking and analysing the typology of environmental provisions in RTAs towards more analytical work (OECD, 2021). The focus has been on how governments implement these environmental commitments and whether these commitments have had an impact on environmental endpoints.

3.2 Regional Organisations: Is only the EU applying EIAs?

In an examination of a set of more notable regional organizations, including the Mercado Común del Sur (MERCOSUR), the African Union (AU), and the Association of Southeast Asian Nations (ASEAN), it seems that their specific involvement in Environmental Impact Assessments (EIAs) are not elucidated. In contrast, the European Union seems to be the only regional organization that systematically undertakes EIAs for both its member states and external nations, but also the only regional organization with the competence to negotiate trade agreements. We delve into the background, process, and methodology of conducting EIAs of trade agreements for each actor. By presenting this information in a consistent format, our objective is to facilitate comparison among the strategies of different actors for conducting EIAs.

 $[\]underline{\textbf{25}} \quad \underline{\textbf{https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=Q:/WT/CTE/W245.pdf&Open=True}\\ \\ \underline{\textbf{25}} \quad \underline{\textbf{1}} \quad \underline{\textbf{1}} \quad \underline{\textbf{2}} \quad \underline{\textbf{$

Туре	Title	Year
Book	Methodologies for Environmental and Trade Reviews	1994
Annual report	Reports on the OECD Environment and Regional Trade Agreements	2007 - 2013
Analytical report	Checklist for Negotiators of Environmental Provisions in Regional Trade Agreements	2008
Book	The OECD Guidance on Sustainability Impact Assessment	2010
Workshop report	Regional trade agreements and the environment: Monitoring implementation and assessing impacts	2011
Analytical report	Implementing Regional Trade Agreements with Environmental Provisions: A Framework for Evaluation	2011
Analytical report	Environment and Regional Trade Agreements: Emerging Trends and Policy Drivers	2014
Analytical report	Sustainability Impact Assessments of Free Trade Agreements: A Critical Review	2021
Analytical report	A retrospective on OECD work on Trade and Environment in 2008-2020	2023

Table 3. OECD Publications on Environmental Assessments within Trade Agreements

3.2.1 European Union (EU)

The European Commission (EC) undertook one of the earliest efforts in the field of environmental impact assessments of trade agreements in the early 1990s with the assessment of the environmental impacts of the Single Market (Moïsé & Rubínová, 2021). After that, the first Trade Sustainability Impact Assessment (SIA), which considers economic, social, environmental, and human rights impacts, was launched in 1999 in anticipation of the WTO Doha Round negotiations (Kirkpatrick & Lee, 1999). Since then, such assessments have been enshrined in the EU's broader commitment to sustainable development, and SIAs are now required for all major trade-related initiatives, including multilateral, bilateral, and regional negotiations, to identify their potential impacts both in the European Union, partner countries, and third-party countries. EU member states may also conduct a sustainable or environmental impact assessment of trade agreements, focused on the impact on the national level. Such national impact assessments seem, however, more ad hoc or restricted to a small number of agreements. A prominent example is the environmental and sustainability assessment of the EU-Mercosur free trade agreement for Ireland²⁶.

The SIAs take place during the negotiations and feed into the work of the negotiators as the negotiations evolve. The SIA reports are conducted by external consultants selected through a tender procedure by the European Commission. The involvement of external consultants may provide better technical expertise than government officials and benefit from greater independence (Reynaud, 2012). Once this assessment is completed and delivered to the Commission, the Commission will present the best course of action to be shared with the EU member states. Thus, it can be observed that the Commission and the consultants are vital players involved in the SIA process (Figure 4). There are multiple objectives of the SIAs; besides identifying the main social and environmental changes that the implementation of the trade agreement can cause, it also helps the negotiating parties and guides during the negotiations on particular topics. It allows stakeholders—in the EU and partner countries—to share their opinions and concerns with negotiators and the EC.

²⁶ See https://enterprise.gov.ie/en/publications/publication-files/economic-and-sustainability-impact-assessment-for-ireland-of-the-eu-mercosur-trade-agreement.pdf

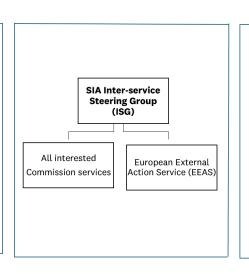
The ultimate aim of the trade SIAs is that the negotiating process is optimised by identifying sensible topics, providing recommendations for policy changes to address these concerns, and that the whole process is interlinked with a broad dialogue with stakeholders. Meanwhile, ex-post evaluation is another, more recent type of EIAs that the EU carries out²⁷. Ex-post evaluations also look for unintended effects (i.e., those not anticipated at the time of the Impact Assessment or Sustainability Impact Assessment) and evidence of causality. Compared to SIAs, the evaluation work is also outsourced to an external consultant, and their evaluation report is published. Its goal is to assess whether a specific intervention was justified, whether it worked (or is working) as expected in achieving its objectives, and why.

No.	Regional Organizations	Status of EIA Involvement
1	African Union (AU)	No further details
2	Association of Southeast Asian Nations (ASEAN)	No further details
3	European Union (EU)	Conducts EIAs in both parties of trade agreement (member states and partners) and third countries
4	Mercado Común del Sur (Southern Common Market (MERCOSUR)	No further details
5	Southern African Development Community (SADC)	No further details

Table 4. Involvement of Regional Organizations in EIAs of trade policy

²⁷ The first EU ex-post evaluation was done in 2012 for the Trade Pillar of the EU-Chile Association Agreement.

STAKEHOLDERS (1) Non-governmental organisations (2) Businesses (3) Social partners (including trade unions) (4) Academia and national administrations External consultations



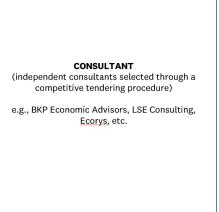


Figure 4. ConsultantsThe EU's main players in the conduct of SIAs and Ex-post Evaluations

Source: UNU-CRIS compilation adapted from Handbook for trade sustainability impact assessment 2nd edition (EC, 2016),

Better Regulation Guidelines (EC, 2021), and Better Regulation Toolbox (EC, 2023).

Process

When the Commission considers a new SIA (or export-evaluation) useful for policymakers and stakeholders, it will publish a call for tender and terms of reference to contract external consultants to carry out the assessment work. In most EU trade negotiations, the tendering process for the SIA only starts after negotiations commence²⁸. According to the second SIA handbook (European Commission, 2016), the SIA process can usually be divided into three main phases:

- 1. The first phase of the Inception Report is to clarify the methodology, analyse the policy texts, propose different scenarios, map out the area, and consult key stakeholders and vulnerable groups. This is the phase to agree on the scope of the study, assess the availability and quality of data, and conduct a full literature review and preliminary case studies.
- 2. The second-phase Interim Report includes setting up models for quantitative analysis, refining scenarios, elaborating assumptions and risks of the quantitative work, and having extensive consultations with various stakeholders from line ministries, the private sector, civil society, and academia. Focus groups, expert panels, workshops, or the input of policymakers can test and validate the assumptions made in the impact assessment.
- 3. The third phase is to generate the **Final Report**. In addition to the economic impact of the policy change, the report should highlight potential social and environmental impacts and propose flanking policies. The impact assessment can provide information on the study's limitations and make suggestions for further work.

At the same time, typical SIAs also have two main components: an in-depth, evidence-based analysis and a broad consultation process with relevant stakeholders, including those from the negotiating partner.

- i. A **robust analysis** of economic, social, human rights, and environmental impacts using, among other methods, modeling techniques and causal chain analysis; and
- ii. A consultation process involving stakeholders in FTA member countries to gather information and disseminate results.

²⁸ For instance, the EU-Canada Comprehensive Economic and Trade Agreement (CETA) was launched in May 2009, and the first round of negotiations occurred on October 19, 2009. The tender for the SIA was posted in January 2010, and the final SIA report was published in June 2011.

No.	Consultant	Number of SIAs and Ex-post Evaluations conducted
1	Ecorys	16
2	BKP Economic Advisors	9
3	LSE Consulting	5
4	Institute for Development Policy and Management University of Manchester	5
5	CASE – Center for Social and Economic Research	4
6	Centre for Economic Policy Research (CEPR)	3
7	Centre for European Policy Studies (CEPS)	2
8	PriceWaterhouseCoopers Audit France (PwC France)	2
9	Civic Consulting and the Ifo Institute	1
10	Consumer Unity & Trust Society (CUTS)	1
11	India-based Centre for Trade and Development (CENTAD)	1
15	Appleton Luff	1
16	FEMISE Network	1
17	Impact Assessment Research Centre (IARC)	1
18	IBM Belgium	1
19	ITAQA Sarl	1
20	Planistat Luxembourg	1
21	CESO-CI	1
22	SIA-EMFTA Consortium	1
23	Stockholm Environment Institute (SEI)	1
24	Trade Impact BV.	1

Table 5. Consultants Conducting the EU's SIAs and Ex-post Evaluations²⁸ Source: UNU-CRIS

Note: The Inception Report, Interim Report, and Final Report are conducted by consultants, while the Call for Tender and Position Paper/ Commission Staff Working document are compiled by the Commission Services.

During all three phases, different consultation processes with stakeholders are considered at each stage. For example, drafts of the reports are shared with the public so that stakeholders can comment and suggest changes. In practical terms, however, not all SIAs have followed the three phases described above. There can be inception reports, interim technical reports, and documentation. However, each SIA concludes with a final report. Once the SIA is finished, the European Commission sets out its views on the consultants' findings and recommendations by means of a position paper. The position paper explains how the SIA has and will contribute to the negotiations; it highlights the Commission services' views on the impacts identified in the SIA and on the measures proposed by the consultants, and it explains how the SIA findings have been or will be used.

Analytical Methodology

The SIA and the ex-post evaluation methodology are described in the 2nd Handbook and the Better Regulation Toolbox of EC. These documents set out the main characteristics, objectives, and principles of environmental analysis. It also reflects methodological changes and improvements adopted through the years—the new generation of SIAs that analyse more dimensions and employ more evidence than previous SIAs. For instance, since 2012, all SIAs have systematically included an analysis of the potential human rights impacts of the trade agreement under negotiation.

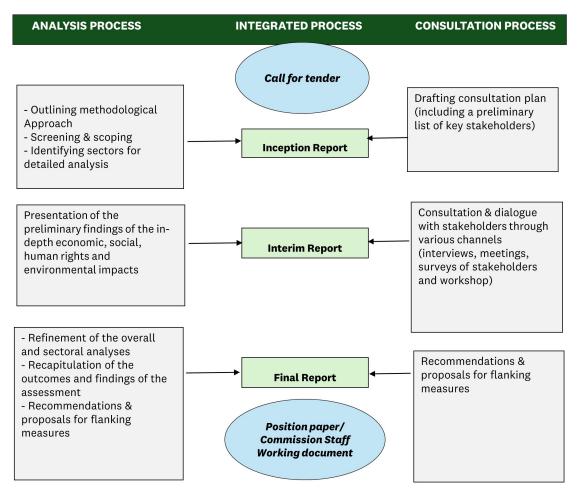


Figure 5. An integrated process of SIAs and Ex-post evaluations in the EU Source: UNU-CRIS compilation adapted from Handbook for trade sustainability impact assessment 2nd edition (EC, 2016), Better Regulation Guidelines (EC, 2021), and Better Regulation Toolbox (EC, 2023)

In the case of the early EC's trade SIAs, they focused on indicator-based analyses. For instance, the first SIA handbook (European Commission, 2006) recommended using indicators to assess environmental impacts. However, the precise definition of these indicators was vague, i.e., air, water, and land quality indicators. The focus changed in the second SIA handbook (European Commission, 2016); although the use of indicators is still strongly encouraged, the analysis is no longer indicator-based (tellingly, no indicators are provided or suggested, and only broad advice to use "state-of-the-art available indicators" is mentioned). Overall, there has been a growing emphasis on risk-based analyses in trade SIAs and ex-post evaluations over the years. Such analyses aim to identify vulnerable social groups and significant environmental concerns. The survey by Torriti and Lofstedt (2012) highlighted that this trend was already evident a decade ago, especially in regions like the United States, and Canada.

EIA Studies

The EU has conducted 39 SIAs and ten ex-post evaluations of trade agreements since 1999²⁹ (see Appendix E). Yet, it is noted that SIAs and ex-post evaluations have not been completed for all negotiated agreements. The special report by the European

²⁹ Trade agreements counted here include free trade agreements (FTAs), economic partnership agreements (EPAs), association agreements (AAs), and excluding investment agreements. See the list at https://policy.trade.ec.europa.eu/analysis-and-assessment/ex-post-evaluations_en and https://policy.trade.ec.europa.eu/analysis-and-assessment/sustainability-impact-assessments_en

Court of Auditors (2014) found that there are no SIAs for the FTAs negotiated with the Western Balkan countries (that is, six FTAs with these countries, also known as Stabilisation and Association Agreements (SAAs): the former Yugoslav Republic of Macedonia (2004), Albania (2009), Montenegro (2010), Serbia (2013), Bosnia and Herzegovina (2015), and Kosovo (2016).

3.3 Countries: Few OECD Nations Systematically Practice EIAs

3.3.1. Canada

Canada has committed to conducting Environmental Assessments of all trade agreements through a process that requires interdepartmental coordination and external consultations. The initial environmental reviews conducted by Canada include the North American Free Trade Agreement (NAFTA), and the 1994 Uruguay Round of Multilateral Trade Negotiations (GOC, 2008). However, they did not inform the agreement's negotiation as they were carried out in an ex-post fashion. The first ex-ante exercise began in early 1999 in response to a commitment to assess the domestic environmental implications of the WTO Doha Round of trade negotiations. It was later expanded to apply to bilateral and regional agreements³⁰. The official policy on this field of the Government of Canada (GOC) was introduced in the 1999 Cabinet Directive on the Environmental Assessment of Policy, Plan, and Program Proposals (updated in 2010). This document outlines ministers' expectations for strategic environmental assessment of policy, plan, and program proposals. Per the Cabinet Directive, the EIA's process is also guided by a Framework for Conducting Environmental Assessments of Trade Negotiations, launched in 2001, revised in 2020 (GOC, 2020), supplemented by a Handbook for Conducting Environmental Assessments of Trade Negotiations (GOC, 2008). The revised Framework includes changes to ensure consistency with Canada's inclusive approach to trade and the Sustainable Development Goals (SDG) of Agenda 2030.

Canada's environmental assessments are conducted by interdepartmental committees in consultation with external stakeholders. There is an interdepartmental committee established for the EA of each trade negotiation. The mandatory representatives are from Environment and Climate Change Canada, the Impact Assessment Agency of Canada, and Global Affairs Canada (GAC)³¹. Other government departments and agencies can participate³². In there, GAC oversees carrying out and reporting on findings, while concurrently the analysis undertaken by government officials is supported through consultations with provinces and territories, indigenous peoples³³, the Environmental Assessment Advisory Group (EAAG), and the general public³⁴.

^{30 &}lt;a href="https://www.wto.org/english/tratop_e/envir_e/reviews_exper_e.htm#canada">https://www.wto.org/english/tratop_e/envir_e/reviews_exper_e.htm#canada

³¹ The Prime Minister Justin Trudeau's Liberal government modified the names of the departments on November 4, 2015. While the legal name of the department remains the Department of Foreign Affairs, Trade, and Development (DFATD), its public designation (applied title) is Global Affairs Canada (GAC).

³² Other departments and agencies are: Innovation, Science, and Economic Development Canada; Employment and Social Development Canada; Natural Resources Canada; Crown-Indigenous Relations and Northern Affairs Canada; the Department of Canadian Heritage; Finance Canada; Agriculture and Agri-Food Canada; Transport Canada; Fisheries and Oceans Canada; Health Canada; Immigration, Refugees, and Citizenship Canada; the Canada Border Services Agency; and the Canadian Food Inspection Agency.

³³ Indigenous peoples, notably through the GAC-led Indigenous Working Group on Trade Policy (IWG)

³⁴ See more at https://www.international.gc.ca/trade-agreements-accords-commerciaux/env/facts.aspx?lang=en and https://www.international.gc.ca/trade-commerce/trade-agreements-accords-commerciaux/agr-acc/environ-assessments-evaluations-environnementale.aspx?lang=eng

Criteria/Indicators

- Greenhouse gas (GHG) emissions
- Air quality
- · Use of energy
- Water quality and resources
- Land use, soil quality
- Waste and waste management
- Biodiversity, ecosystem services and protected areas

Techniques/Tools

- Quantitative assessment (CGE model, gravity model, E3MG, indicators)
- Stakeholder inputs
- Causal chain analysis and baseline scenario
- Case studies
- Literature review
- Evaluation Matrix
- Regulatory/legal analysis

Impact channels

- Scale effects
- Structural effects
- Product effects
- Technology effects

Figure 6. The analytical methodology for SIAs and Ex-post evaluations of trade agreements Source: UNU-CRIS compilation adapted from Handbook for trade sustainability impact assessment 2nd edition (EC, 2016), Better Regulation Guidelines (EC, 2021), and Better Regulation Toolbox (EC, 2023).

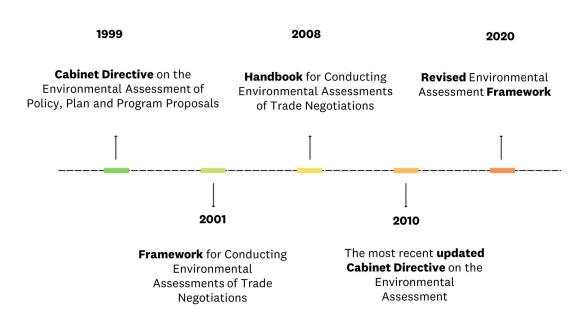


Figure 7. The Canadian Government's guidance on conducting EAs of Trade Negotiations Source: UNU-CRIS compilation

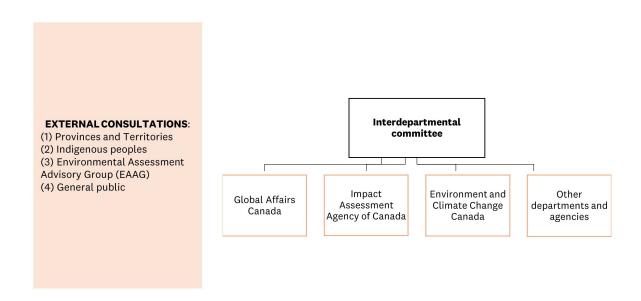


Figure 8. Who conducts the Government of Canada's EAs of trade negotiations?

Source: UNU-CRIS compilation adapted from Handbook and Framework for Conducting Environmental Assessments of Trade Negotiations (GOC, 2008) (GOC, 2020)

In general terms, Canada's environmental assessments aim to improve overall policy coherence at the national level. With that goal, there are two specific objectives: First, it helps trade negotiators integrate environmental considerations into the negotiating process by calling for the identification of potential positive and negative environmental impacts of trade negotiations. Second, it provides a means to address public concerns about the environmental effects of trade negotiations by documenting how the environment is considered during negotiations.

Process

The in-house assessment process adheres to the principle of self-assessment in the 2010 Cabinet Directive, which allows those participating in the trade negotiations to be personally involved in the assessment process. This facilitates informed policy development and decision-making and avoids the constraints on the analysis that would result if an external party did not have access to sensitive information.

That is why there is no independent body in Canada conducting EAs. The EA process in Canada is intentionally flexible so that it can be applied on a case-by-case basis according to the scope and nature of the agreement.

The 2020 Framework provides for four assessment phases generally: the Initial, Draft, Final Environmental Assessment (EA), and Monitoring and Evaluation. These correspond to progress within the negotiations. A public report is issued after each applicable phase (see Figure 8). If the Initial EA finds little likelihood of significant environmental impacts from the intended negotiations, a Draft EA is not required. For instance, the Canada-European Union Comprehensive Economic and Trade Agreement negotiations did not include a Draft EA since the Initial report anticipated negligible environmental impacts on Canada (GOC, 2017).

• Phase 1: Initial EA analysis and reporting. The EA process begins once exploratory discussions are launched with potential trade partner(s) in preparation for future trade agreement negotiations. First, a notice of intent to conduct an EA is published to announce and solicit early input in analyzing environmental matters related to the proposed negotiations.

Then, after the preliminary screening analysis summarizing the key findings of the analysis, an Initial EA Report is prepared by GAC and made public after the launch of negotiations.

- Phase 2: Integration of environmental considerations. The consolidation of the analysis undertaken in Phase 1 and the integration of environmental considerations into the preparation of Canadian positions during negotiations.
- Phase 3: Final EA analysis and reporting. Based on the final outcomes of the concluded negotiations, the third phase updates the analysis undertaken in phases 1 and 2. The final EA Report is made public after the conclusion of negotiations.
- Phase 4: Monitoring and ex-post reporting. The actual follow-up and monitoring may be conducted depending on the context of the agreement and the goals of the parties concerned³⁵.

Consultations are an essential component of each of the above assessment phases. After these consultations, EA reports are finalized and published on GAC's "Environmental Assessments" website. On draft versions of EA reports, provinces, and territories, as well as experts from academia, NGOs, and industry, are called for feedback. The general public is also invited to provide comments. These remarks assist in improving the next step of future EAs of trade work.



³⁵ So far only NAFTA was conducted Ex-post studies documented by GAC. See more https://www.international.gc.ca/trade-commerce/trade-agreements-accords-commerciaux/agr-acc/cusma-aceum/final_ea-ee_finale.aspx?lang=eng

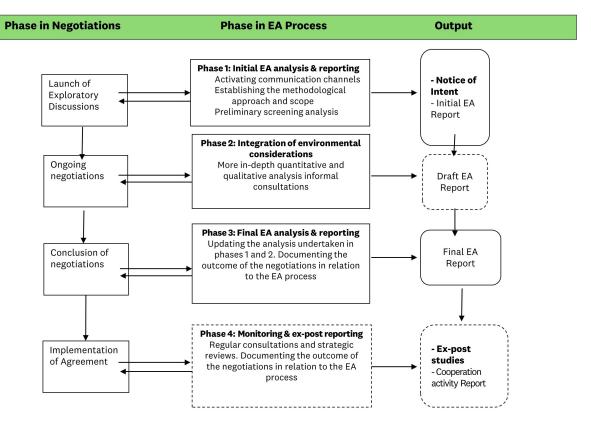


Figure 9. The typical process for conducting EAs of trade agreements in Canada

As Figure 9 shows, EA's process closely aligns with the negotiation process and begins at the policy development stage as early as possible. It is a tailored approach to effectively assess the environmental implications of international trade negotiations and identify ways to reduce environmental risks and enhance positive environmental outcomes, notably through specific provisions in trade agreements.

Analytical Methodology

Typically, the environmental assessments will focus on all areas of agreements or negotiation; however, they will also be limited in scope to the potential impacts in Canada.

During each phase of assessment, a consistent four-step methodology is applied:

- i. Identification of the economic effects of the negotiation: This step identifies the trade liberalization activities of the negotiating agreement. It investigates the prospective areas of the agreement, the changes or new trade activity that may come from these areas, and the agreement's overall economic significance to Canada.
- ii. Identification of the likely environmental impacts of such changes: After assessing the economic implications of the proposed trade agreement, the anticipated environmental impacts of such changes are estimated. Potential positive and negative effects are considered.
- iii. Assessment of the significance of the likely environmental impacts: The Framework outlines various criteria for determining significance, to be used as appropriate, including frequency, duration, permanence, geographical scope, magnitude, level of risk, irreversibility of the impacts, and possible synergies among the impacts.
- iv. Identification of enhancement/mitigation options to inform the negotiations: The fourth stage identifies policy options to address those impacts. Enhancement activities raise the potential benefits to environmental quality, and mitigation actions



Criteria/Indicators

- · Climate change
- Fossil fuel energy use
- · Water quantity and quality
- · Air pollution
- Waste
- Biodiversity and wildlife loss

Techniques

- Quantitative assessment (CGE model, gravity model, E3MG, indicators)
- Review of trade agreement provisions
- Review of existing environmental legislation, policies, and actions in Canada
- · Case studies and sector studies
- Stakeholder consultation and public participation

Impact Channels

- · Scale effects
- · Composition effects
- · Product effects
- Technology effects
- Regulatory effects

Figure 10. The analytical methodology for EAs of trade agreements in Canada Source: UNU-CRIS compilation adapted from Handbook and Framework for Conducting Environmental Assessments of Trade Negotiations (GOC, 2008) (GOC, 2020)

EIA Studies

Canada has conducted 29 EIAs since 1999; 12 are completed, and 17 are in progress or have been terminated³⁶ (see Appendix C). In the context of ASM, Salo et al. (2016) reflect critically on formalizing the sector, instead suggesting bottom-up processes for governing and managing ASM impacts via mesoscale collaborative approaches.

3.3.2. The United States of America

The United States' experience with conducting environmental reviews (ERs) dates to the 1992 North American Free Trade Agreement (NAFTA) report on environmental issues. In 1999, they began conducting formal environmental reviews for all trade negotiations³⁷. Since then, in addition to the WTO Doha Round of negotiations, reviews have been conducted for bilateral and regional trade negotiations. Until now, there have been 14 ERs undertaken by the US Government³⁸.

The legal and policy framework for conducting environmental reviews includes Executive Order 13141 (issued in 1999), its relevant Implementation Guidelines (completed in 2000)³⁹, the Trade Act of 2002, and the Bipartisan Congressional Trade Priorities and Accountability Act of 2015 or Trade Promotion Authority (TPA).

 $^{{\}tt 36} \quad \underline{\tt https://www.international.gc.ca/trade-agreements-accords-commerciaux/env/EAlist-listeEE.aspx?lang=eng} \\$

³⁷ In late 1999, as part of the run-up to the Seattle ministerial meeting of the World Trade Organization (WTO), President Clinton signed Executive Order No. 13,141, committing the U.S. government for the first time to conduct environmental reviews of trade agreements.

³⁸ See in detail at https://ustr.gov/issue-areas/environment/environmental-reviews

³⁹ See more at https://www.federalregister.gov/documents/2000/12/19/00-32238/guidelines-for-implementation-of-executive-order-13141-environmental-review-of-trade-agreements

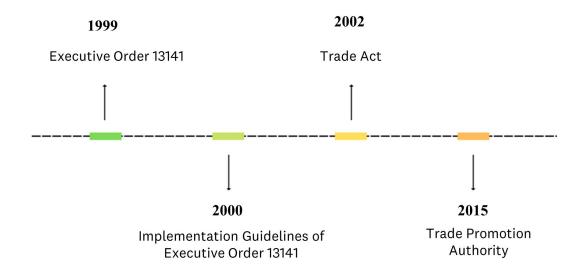


Figure 11. Legal and policy framework for conducting environmental reviews in the USA Source: UNU-CRIS compilation

The purpose of the Order and the Guidelines is to ensure that consideration of reasonably foreseeable environmental impacts of trade agreements, and identification of complementarities between trade and environmental objectives, are consistent and integral parts of the policymaking process. The Trade Act of 2002 required reviews consistent with the Order and Guidelines with reports to Congress. The Trade Promotion Authority sets several negotiating objectives and other priorities.

Following the Executive Order, "as appropriate and prudent, reviews may also examine global and transboundary effects". However, the analysis is usually focused on transboundary effects that manifest in the United States rather than on environmental impacts in the partner countries more broadly. Impacts in partner countries are considered to the extent they have a transboundary impact (for example, the US-Andean FTA ER warned that increased trade flows might increase the risks, to all partners, of importing invasive species).

USTR, through the Trade Policy Staff committee (TPSC⁴⁰), carried out the environmental review (or individual reviews). Chaired by a USTR official, the TPSC is composed of representatives from seventeen agencies and offices (see figure 11). Environmental issues shall be analysed by the relevant TPSC subcommittee(s) or, as appropriate, by a working group under the subcommittee(s), the so-called Environmental Review Group (ERG). More than sixty subcommittees examine specific issues (Salzman, J. 2001). Membership of the ERG shall be open to all interested agencies, and shall include, at a minimum, those agencies with relevant expertise in economic and environmental assessment.

USTR shall consult with CEQ at the outset of each environmental review. CEQ and agencies with environmental expertise shall play a prominent role in the conduct of the reviews. Environmental agencies shall be principally responsible for providing the expertise necessary to analyse impacts on environmental media and natural resources within their areas of specialization. During the negotiations, the public, Congress, stakeholders, the Trade and Environment Policy Advisory Committee (TEPAC), non-governmental organizations (NGOs), and experts at other Federal agencies provided vital knowledge and insight.

⁴⁰ The TPSC, established under section 242 of the Trade Expansion Act of 1962, as amended (19 U.S.C. section 1872), is the principal staff-level mechanism for interagency decision making on U.S. trade policy.

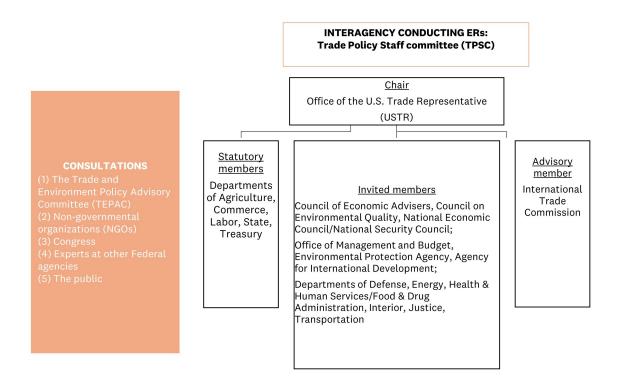


Figure 12. Who conducts environmental reviews of trade agreements in the USA? Source: UNU-CRIS compilation adapted from Executive Order 13141 and its Guidelines

Overall, ERs in the US are intended to be one tool for integrating environmental information and analysis into the fluid, dynamic process of trade negotiations. Reviews primarily focus on domestic environmental effects, but also consider transboundary and international environmental concerns as appropriate. Mining operations directly and/or indirectly intersect with each of the 17 SDGs. Sustainability-oriented practices in the mining sector can, therefore, support the implementation of these global goals and targets.

Process

According to Executive Order 13141 and its Guidelines, the process usually contains three components: Initiation of the ER, a determination of the scope that the environmental review will take, and an estimation of the economic, regulatory, and subsequent environmental effects of the proposed trade agreement. Throughout the review process, a commitment is made to intergovernmental and public participation.

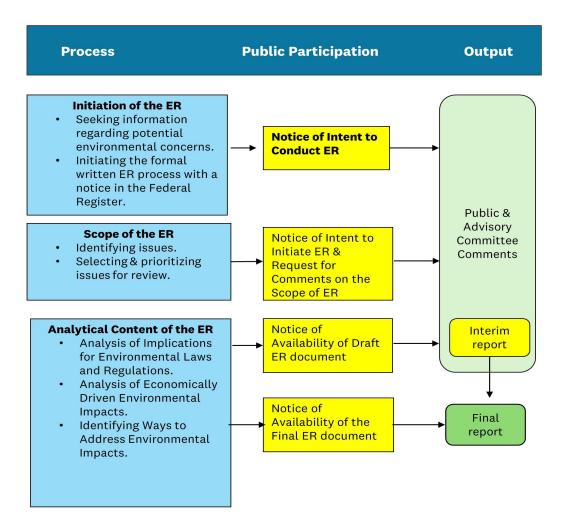


Figure 13. The typical process for conducting ERs of trade agreements in the USA Source: UNU-CRIS compilation adapted from Executive Order 13141 and its Guidelines

- i. Initiation of the Environmental Review: When negotiating the prospective trade agreement is first under consideration, USTR, through the TPSC, shall seek information regarding potential environmental concerns and benefits associated with the commercial practices and trade policies under consideration. This shall be accomplished through an ongoing, flexible process of consultation with Congress, the interested public, and advisory committees, and, in the normal case, Federal Register notice(s) requesting public comment on environmental issues and other issues concerning the negotiations.
- ii. Scope of the Environmental Review: The scoping process involves the identification of significant issues to be analysed in depth in the written ER. There are two principal components: (i) identification of issues; and (ii) selection and prioritization of issues for review. USTR, through the TPSC, shall request public comment on the scope of the ER through the Federal Register Notice of Intent to Initiate Environmental Review, and shall seek the views of interested advisory committees, including the TPSC.
- iii. Analytical Content of the Review: The analysis shall entail an objective, rigorous assessment of the environmental issues under consideration, and shall be based on scientific information and principles, documented experience, and objective data.

Given that the U.S. government relies on a closed interagency process, known as the TPSC, to determine negotiating positions, this process is also closed to the public. At a minimum, the public shall be involved in the following stages of the Environmental Review process:

- 1. Notice of Intent to Conduct Environmental Review (or Federal Register notice)⁴¹
- 2. Notice of Intent to Initiate Environmental Review and Request for Comments on the Scope of Environmental Review
- 3. Notice of Availability of the Draft Environmental Review document and Request for Comments (in the normal case where a draft ER document is prepared for public comment)
- 4. Notice of Availability of the Final Environmental Review document

Analytical Methodology

A different mix of analytical methodologies for different types of trade agreements is applied to ERs in the US. Since trade agreements exhibit broad variation, each ER will likely incorporate uniquely tailored analytical approaches. Although the published documents related to EIA of trade agreements, including ER reports and Guidelines, do not explain the methodology in detail, there are some considered indicators such as air, climate, water, protected areas, endangered species, biodiversity, and environmental quality related to human health.

EIA Studies

The US has conducted 14 EIAs since 1999, 13 EIAs have been completed, and one EIA is in progress (see Appendix C).

3.3.3. The United Kingdom

After the United Kingdom (UK) decided to leave the European Union in 2016, it had to negotiate, sign, and ratify new trade agreements. Thus, the UK government pointed out the Department for International Trade (DIT) as the main unit responsible for negotiating and conducting impact assessments (IA) of FTAs. The government also has established the Strategic Trade Advisory Group⁴² (STAG) and a network of expert Trade Advisory Groups⁴³ (TAGs) to support the development of their trade policy and negotiations. The STAG was established in 2019 to provide a forum for high-level strategic discussions between government and stakeholders representing a cross-section of interests from all parts of the UK on trade policy matters.

The Minister for International Trade chairs the group, and the DIT provides the secretariat function. The group will meet as required (approximately three times a year). The TAGs were established in 2020 to meet the requirements of the DIT trade negotiations. The TAGs are chaired by the relevant DIT Director, and the DIT acts as the Secretariat. The TAGs cover key sectors vital to the British economy, such as financial services, agri-food, and manufacturing. The groups will also meet at least three times a year or as required by developments in the free trade negotiations process.

Another independent agency involved in IA's process in the UK is the Regulatory Policy Committee (RPC). The RPC's role in assessing the IA of an FTA is to consider the validity of the analysis underpinning the assessment in the IA.

⁴¹ See more <a href="https://www.federalregister.gov/documents/search?conditions%5Bagencies%5D%5B%5D=trade-representative-office-of-united-states&conditions%5Bterm%5D=Notice+of+Availability+of+Final+Environmental+Review+Document&conditions%5Btype%5D%5B%5D=NOTICE

⁴² https://www.gov.uk/government/groups/strategic-trade-advisory-group

⁴³ https://www.gov.uk/government/publications/trade-advisory-groups-tags

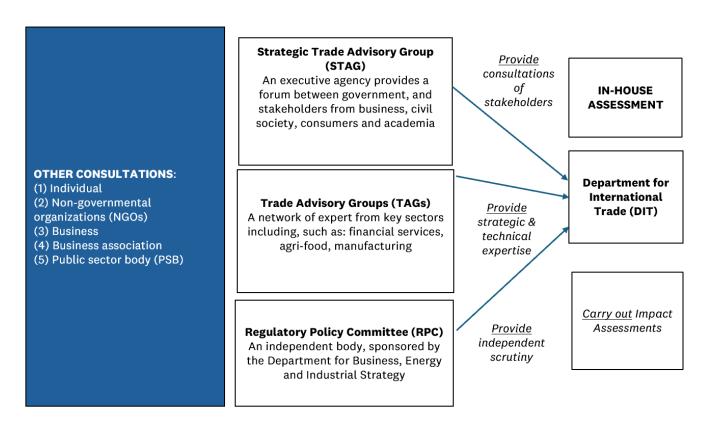


Figure 14. Main players involved in IAs in the UK

Source: Source: UNU-CRIS adapted from IA reports and the website of the UK government⁴⁵

Process

Although the UK does not publish any guidelines specifying the process from the conducted IAs, it is noticed that the typical process consists of three main phases: call for input, strategic approach, and final impact assessment (see Figure 15).

For example, the UK-Australia FTA is the UK's first trade deal negotiated from scratch since leaving the EU. On 20 July 2018, the DIT launched a public consultation seeking views on a potential FTA with Australia. The public consultation closed on 26 October 2018 after 14 weeks⁴⁵. Then, the UK's strategic approach report was updated on 17 July 2020⁴⁶ and the final report was published on 16 December 2021⁴⁷. Thus, the total time for the whole process is about three years and five months.

⁴⁴ https://www.gov.uk/government/collections/the-uks-trade-agreements

⁴⁵ https://www.gov.uk/government/consultations/trade-with-australia

^{46 &}lt;a href="https://www.gov.uk/government/publications/uks-approach-to-negotiating-a-free-trade-agreement-with-australia/uk-australia-free-trade-agreement-the-uks-strategic-approach#aus-summary">https://www.gov.uk/government/publications/uks-approach-to-negotiating-a-free-trade-agreement-with-australia/uk-australia-free-trade-agreement-the-uks-strategic-approach#aus-summary

⁴⁷ The date of publication of the final assessment report is also the date of signing the FTA https://www.gov.uk/government/publications/uk-australia-fta-impact-assessment

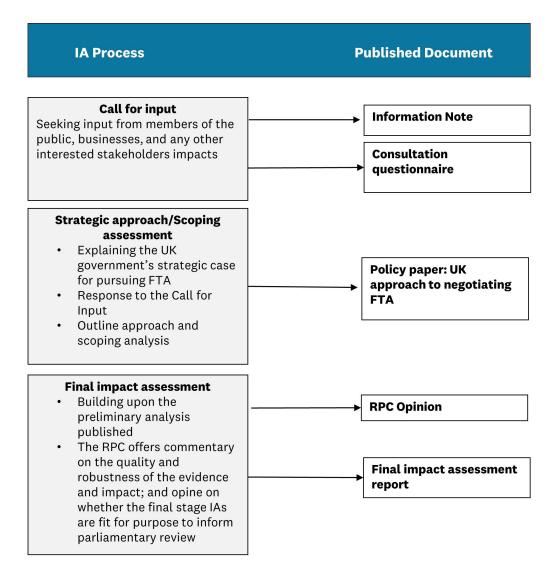


Figure 15. Typical process for conducting IA in the UK Source: UNU-CRIS adapted from IA reports and the website of the UK government

Analytical Methodology

In general, the analytical methodology used in the IAs of the UK is somewhat similar to the EU criteria for SIAs. However, the UK has updated two new criteria: carbon leakage risk and transport emissions. The impact on environmental variables of increased production due to trade is broken down into three channels: the scale, the composition, and the effects of technique from the CGE model.

Criteria/Indicators

- Green House Gas (GHG)
- Transport emissions
- Carbon leakage risk
- Natural capital and nature loss (water quality; air pollution, waste management; biodiversity & ecosystems; marine habitats & fisheries; forests)

Techniques

- Quantitative assessment (CGE model, gravity model)
- Stakeholder inputs
- Indicators (e.g. Environmental Performance Index -EPI)
- Regulatory and institutional reviews
- Scenario analysis

Effects

- Scale effects
- · Composition effects
- Technology effects

Figure 16. The analytical methodology for IAs of trade agreements in the UK Source: UNU-CRIS adapted from IA reports and the website of the UK government

EIA Studies

The UK has conducted 14 IAs to date, of which eight are ongoing (see Appendix C). Like the SIAs of the EU, the IAs of the UK set out assessments of the agreements' economic, social, and environmental impacts. In addition, it also assesses impacts on the UK's regions and nations, sectors, employment, consumers, and businesses, as well as the potential impacts on partner countries.

3.3.4. New Zealand

New Zealand requires a National Interest Analysis (NIA) concerning any new trade or investment agreement. The analysis examines the economic, social, cultural, and environmental impacts of the agreement entering into force for New Zealand and not entering into force for New Zealand⁴⁸.

The environmental component of the NIA is also supported by the "2001 Framework for Integrating Environment Standards and Trade Agreements" which guides New Zealand in negotiations on trade and the environment (Marian Hobbs, 2001). However, details of this document are not currently publicly accessible accessible on the internet⁴⁹. The government is currently consulting New Zealanders and developing a new trade and environment framework (MFAT, 2021). Thus, there will be a new framework to replace the existing 2001 framework.

The Ministry of Foreign Affairs and Trade (MFAT) is responsible for negotiating trade and investment agreements and preparing the NIAs for approval by the cabinet. The main agencies consulted are often: the Ministry of Business, Innovation and Employment, the Ministry for Primary Industries, the New Zealand Treasury, New Zealand Customs, the Ministry for the Environment, and the Ministry of Culture and Heritage (Ivanova and Angeles, 2006).

In addition to internal consultations, external opinions are collected from various methods. The New Zealand government also consults the public by two key approaches: public meetings and written public submissions. The public meeting is a new communication method in New Zealand to get input from various individuals, compared to the EU, the US, Canada, and the

⁴⁸ Parliamentary standing order 2020, paragraph 406, https://www.parliament.nz/media/7418/standing-orders-2020.pdf

⁴⁹ https://www.mfat.govt.nz/foreign/tnd/newissues/environment/envframework.html

UK. For instance, to discuss the European Union-New Zealand free trade agreement and other current and upcoming trade negotiations, public meetings were held in Nelson, Napier, Wellington, Invercargill, Gisborne, Whangarei, Auckland, Christchurch, New Plymouth, Dunedin, Blenheim, Rotorua, Cromwell, Tauranga, and Hamilton from June to November 2019⁵⁰.

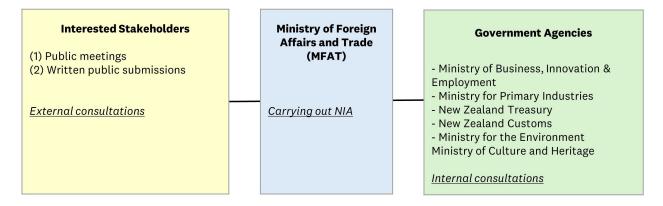


Figure 17. Main players involved in the NIA process in New Zealand Source: UNU-CRIS adapted from NIA reports and the MFAT's website⁵²

Process

New Zealand does not publish any specific process describing how they conduct NIAs internally. The typical process that can be observed is that the government organizes stakeholder events, calls for public submissions and public meetings⁵² on ongoing negotiations, and publishes an NIA report once the negotiation is finished.

Analytical Methodology

Although the environmental analysis of New Zealand's NIA often categorizes effects into scale, structural, regulatory, product, and technique — similar to the methodology used in the EU, Canada, and the UK — the tools employed are substantially different. NIA reports tend to present results succinctly through a qualitative analysis, rather than relying on quantitative tools like the CGE model. Additionally, the NIAs are unilateral analyses, focusing exclusively on the impact on the home country.

There are two possible explanations for these brief assessments. The first possibility is that there might exist quantitative specifications of the environmental assessments, but they have not been published. The second possibility is that the government of New Zealand did not conduct a quantitative analysis of environmental issues for the negotiations.

In a meeting of CTE 2005, a representative of New Zealand raised concerns on certain assumptions of the EC's SIA, with respect to the modeling. He said that one difficulty in assessing the effects on the environment was that many environmental issues, such as biodiversity and resources, were not linear, and were extremely difficult to effectively model using economic modelling techniques⁵³. Thus, there is reason to think that New Zealand has chosen not to focus on the quantification of environmental assessments.

^{50 &}lt;a href="https://www.mfat.govt.nz/en/trade/nz-trade-policy/public-engagement-on-trade/">https://www.mfat.govt.nz/en/trade/nz-trade-policy/public-engagement-on-trade/

⁵² For example, public outreach and engagement for the New Zealand-Pacific Alliance free trade agreement: https://www.mfat.govt.nz/en/trade/free-trade-agreements/member-negotiation/new-zealand-pacific-alliance-free-trade-agreement/public-engagement/

⁵³ Document WT/CTE/M/41, dated 30 November 2005, paragraph 15 https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=Q:/WT/CTE/M41.pdf&Open=True

EIA Studies

Since 2005, New Zealand has conducted 14 EIAs, all of which are ex-ante assessments (see Appendix C).

3.3.5. Other Countries

Japan

In 2000, the Ministry of the Environment explored the prospect of environmental assessments through a survey. By 2002, they initiated a study group to address the environmental impact assessment for trade liberalization under Economic Partnership Agreements/Free Trade Agreements (EPA/FTA)⁵⁴.

Their work centered around:

- (i) Concrete methods to enhance the mutual supportiveness of trade and environment,
- (ii) A guideline on environmental impact assessment methods involving EPAs/FTAs,
- (iii) Conducting case studies

Notably, some case studies were performed under the hypothetical premise of an EPA/FTA between Japan and the Republic of Korea. Yet, due to limited public information, it remains uncertain how many EIAs the Japanese government has carried out and the methodologies they've employed.

Republic of Korea

Korea's approach towards environmental review on free trade agreement policy echoes Japan's. The Korean Ministry of Environment has formed a joint working group on the EIA of trade agreements. Notably, in 2005, both Japan and Korea collaboratively hosted a seminar addressing methods for assessing environmental impacts by FTAs in Tokyo (APEC Committee on Trade and Investment, 2017). Again, as in Japan, the number of EIAs, their process, and methodology are unknown. However, there is some evidence that there are few EIAs conducted by the Korea Environment Institute.

NO.	EIAs	Trade Agreement	Status	Publication Date
1	The environmental impact induced by free trade between Korea and Japan ⁵⁶	Korea-Japan	Completed	December 2003
2	Study of environment clauses in the TPP (Trans- Pacific Partnership) and response strategy ⁵⁷	ТРР	Completed	May 2016

Table 6. Several EIAs in Korea Source: UNU-CRIS compilation

⁵⁴ See https://www.env.go.jp/en/policy/assess/epa_fta/index.html

⁵⁵ https://www.kei.re.kr/elibList.es?mid=a20403000000&elibName=researchreport&class_id=&act=view&c_id=664671&rn=1112&nPage=112&keyField=&keyWord=

 $[\]underline{ bttps://www.kei.re.kr/board.es?mid=a20502040000\&bid=0026\&act=view\&list_no=55466\&tag=\&nPage=10026\&act=view\&list_no=55466\&tag=\&nPage=10026\&act=view\&list_no=55466\&tag=\&nPage=10026\&act=view\&list_no=55466\&tag=\&nPage=10026\&act=view\&list_no=55466\&tag=\&nPage=10026\&act=view\&list_no=55466\&tag=\&nPage=10026\&act=view\&list_no=55466\&tag=\&nPage=10026\&act=view\&list_no=55466\&tag=\&nPage=10026\&act=view\&list_no=55466\&tag=\&nPage=10026\&act=view\&list_no=55466\&tag=\&nPage=10026\&act=view\&list_no=55466\&tag=\&nPage=10026\&act=view\&list_no=55466\&tag=\&nPage=10026\&act=view\&list_no=55466\&tag=\&nPage=10026\&act=view\&list_no=55466\&tag=\&nPage=10026\&act=view\&list_no=55466\&tag=\&nPage=10026\&act=view\&list_no=55466\&tag=\&nPage=10026\&act=view\&list_no=55466\&tag=\&nPage=10026\&act=view\&list_no=55466\&tag=\&nPage=10026\&act=view\&list_no=55466\&act=view\&act=view\&list_no=55466\&act=view\&act=v$

Norway

In 2012, a report about the environmental impacts of a Free Trade Agreement between China and Norway was made by Vista Analysis and Fridtjof Nansen Institute (FNI) for the Ministry of the Environment in Norway⁵⁷. Given the limited number of its FTAs with other countries, Norway has not developed a tradition of conducting EAs of such agreements. This EIA, therefore, marks a first for Norway. This report also stated at its publication that "this is the first bilateral FTA to be negotiated by Norway on a bilateral basis since 1992, as most such agreements are negotiated through EFTA. No environmental assessments (EAs) have been conducted as regards bilateral FTAs in EFTA. Nor have EAs been conducted on an independent basis, e.g., by academic institutions."

Switzerland

Switzerland, like Norway, does not systematically conduct EIAs for trade agreements. In 2020, there was an assessment of the environmental impacts of the FTA between the EFTA states and MERCOSUR58. This EIA was published by the World Trade Institute of the University of Bern and conducted for SECO – Foreign Economic Affairs and Economic Policy Directorates. The report says that this is one of the first official studies done by the Swiss government on how a Swiss trade deal affects the environment. No further information is available on whether Switzerland carries out similar reports for other trade agreements.

China

Several Chinese research institutes including the Centre for Global Environmental Policy (CGEP) at Beijing Normal University (BNU) and the Policy Research Centre for Environment and Economy (PRCEE) subordinated to the Ministry of Environmental Protection (MEP), among others, have carried out intensive exploratory works on trade policy EIAs with the support of the MEP, the Ministry of Commerce (MOFCOM) (Mao et al., 2015).

No.	EIAs	Supported By	Time	Undertakers
1	EIA on China-Japan-Korea FTA (CJKFTA)	Ministry of Environmental Protection (MEP)	2013	CGEP at BNU
2	Integrated Environmental Assessment of Trade Agreements: Literature Review of Experience and Their Application to China's WTO Accession	Ministry of Commerce (MOFCOM)	2001	PRCEE

Table 7. Several EIAs in Korea Source: UNU-CRIS commpilation

^{57 &}lt;a href="https://www.vista-analyse.no/en/publications/environmental-impacts-of-a-free-trade-agreement-between-china-and-norway/">https://www.vista-analyse.no/en/publications/environmental-impacts-of-a-free-trade-agreement-between-china-and-norway/

^{58 &}lt;a href="https://www.newsd.admin.ch/newsd/message/attachments/61957.pdf">https://www.newsd.admin.ch/newsd/message/attachments/61957.pdf

Australia

In Australia, the federal government is not required to consider environmental considerations when negotiating trade agreements (Cebon, 2003). Although this country also carries out National Interest Assessments of FTAs, like New Zealand, these NIAs do not include environmental assessments59. As a result, there is little research about the environmental impacts of the trade agreements Australia negotiates. The EIAs conducted in Australia have come mainly from independent think tanks (e.g., OzProspect60) and universities (e.g., University of New England). For instance, Cebon (2003) considers the environmental impacts of the proposed US-Australia free trade agreement. Meanwhile, Siriwardana (2015) examines both the economic and environmental impacts of the two FTAs that Australia has with Japan and South Korea using a CGE model. Hence, these environmental considerations play no formal role in Australia's negotiations of free trade agreements, and there is no opportunity for formal public comment.

Brazil and other Latin America countries

As in Australia, most of the EIA studies have been carried out by academic centres, non-governmental organisations (NGOs), and international bodies such as UN Economic Commission for Latin America and the Caribbean (CEPAL) (Blanco, 2006). These studies have also been conducted in the absence of any government-supported research on this matter.

South Africa

The South African Government, through its Departments of Environmental Affairs and Tourism, and Trade and Industry, does not undertake any formal environmental assessments of trade-related agreements and policies (DEAT, 2005).

So far, no developing country has conducted systematic environmental reviews of RTAs. A few governments have performed assessments, when in negotiations with the United States, Canada, and the EU, all of which encourage and, in some cases, provide financial and technical support for such efforts by their negotiating partners. The United States has encouraged its trade partners to conduct assessments. For example, Morocco, Jordan, Chile, and Singapore have conducted assessments in connection with RTAs negotiated with the United States. However, these reports are generally not publicly available, and these efforts have not been duplicated in subsequent negotiations with other partners. Singapore, for example, performed an environmental review of the US-Singapore Free Trade Agreement, but did not repeat that effort in any of its subsequent FTA negotiations (Cosbey et al, 2004).

3.4 Academia and Civil Society: Consultation and Criticism of EIA Practices

In addition to nation-states and regional/international bodies, the EIA process has witnessed considerable engagement from independent entities, particularly academic institutions, and non-governmental organizations (NGOs). This section delves into the influence, contributions, and critiques of these entities with respect to the EIA process.

3.4.1. Academia

Academic institutions serve a pivotal role in the EIA process, notably in the development of analytical methodologies and the review and evaluation of existing EIAs.

⁵⁹ For example: https://www.dfat.gov.au/trade/agreements/not-yet-in-force/aukfta/news/tabling-uk-fta-agreement-australian-parliament

⁶⁰ OzProspect was founded in 2001 with the objective of developing new voices and new ideas in Australian public debate. Employing funds from philanthropic foundations and individual donors, it supports exceptionally promising individuals working in fields including journalism, economics, sociology, education, law, social work and environmental science.

The Development of Analytical Methodologies

The most common approach to assessing trade-environment effects is a decomposition into scale, composition, and technique effects, shaped for instance by Grossman and Krueger (1993) and Copeland and Taylor (1994). Levinson (2009) set up a standard method to quantify these effects for each country's emissions (see detail in section 2.2). The accounting exercise is widely applied in both EIA studies supported by the EU, UK, and Canadian governments and independent research organizations for developing countries.

The decomposition technique is often incorporated within quantitative models to obtain the final assessment results. Practically, computable general equilibrium models (CGE models) associated with GTAP data set based on the Armington assumption are the dominant method used in the system of EIAs of developed countries. In the EU, around 80% of SIAs used the CGE models as their main quantitative analytical tool from 1999 to 2018 (Rojas-Romagosa, 2018).

However, the "classical" CGE models have several downsides. First, the most popular criticism is that the CGE models are viewed as black boxes, which makes it hard to clarify the mechanisms (Felbermayr et al., 2022). Second, the CGE models do not explicitly model household heterogeneity, instead relying on external connections to other models (Moïsé and Rubínová, 2021). Meanwhile, differences in consumption and employment patterns across households are vital for assessing distributional effects. Finally, models do not capture all impact channels through which trade changes may affect the environment (Moïsé and Rubínová, 2021). They can ignore elements such as the creation of new markets (i.e., an impact on the extensive margin of trade – new products and/or new destinations) and technology elements (i.e., endogenous knowledge spillovers or technology diffusion). Thus, to assess these technology/product effects, for example, the SIA of FTA negotiations between the EU and Australia used qualitative methods instead of quantitative analysis as scale and structural effects61.

Recently, there have been papers using other quantitative models to investigate the effects of individual trade agreements. Cherniwchan et al. (2017) considers heterogeneous firms in both trade and environment settings to estimate the effects of tariff changes on the different forms of pollution by NAFTA as identifying variation. He ran a regression with plant, industry-year, and state-year fixed effects and found positive environmental effects of NAFTA at the US-plant level. Nemati et al. (2018) analyse the impact of Mercosur, NAFTA, and the Australia-United States Free Trade Agreement on greenhouse gas emissions using econometric panel methods. However, they pointed out that NAFTA, as an agreement involving nations at very different stages of development, increases GHG emissions. They found that the agreements are not environmentally harmful if concluded between only high-income countries (US-Australia) and can lower per capita emissions if concluded between only developing and emerging economies (Mercosur). Additionally, they discovered that NAFTA increased Mexican GHG emissions while having no impact on US and Canadian emissions.

Tian et al. (2022) employed a quantitative trade model similar to Caliendo and Parro (2015) and then adopted the environmentally extended inter-country input-output (ICIO) model to account for carbon-emission changes caused by the Regional Comprehensive Economic Partnership (RCEP). The result is that global CO2 emissions would rise by approximately 3.1% per year under complete tariff elimination among RCEP members. The nature of the model built by Caliendo and Parro (2015) is a sectoral input-output linkages gravity model, which is built into a Ricardian model with sectoral linkages, trade in intermediate goods, sectoral heterogeneity in production, and multiplicative gravity equation. This approach has the advantage of being more strongly grounded in empirical relationships. As such, it has become more popular more recently.

Overall, the literature related to the trade-environment nexus is evolving rapidly, from using traditional CGE models to combining them with other quantitative methods such as structural gravity models, which explicitly capture trade flows and can analyse counterfactual scenarios.

⁶¹ See Appendixes of the EU - Australia SIA, page 28 https://trade.ec.europa.eu/doclib/docs/2021/july/tradoc_159753.pdf

Reviewing and Evaluating the Effectiveness of EIAs

There are relatively few papers discussing the implementation of EIAs in trade negotiations. In one of the few review studies, Rojas-Romagosa (2018) supposes that SIAs in the EU are ineffective in achieving sustainable development goals. However, they can be instruments to realise the potential effects implicit in the trade agreements. He argued that recommendations generated by SIAs could easily be overlooked and/or changed during any part of the complex negotiation process. Because there is no single body that makes decisions regarding trade—usually a government department deals with trade negotiations, but the executive and legislative powers have the last say, and sometimes the judicial branch is also involved. Other papers are also doubtful about the effectiveness of EIA. Adelle et al. (2006), for instance, found that overall, the SIAs have not been an effective instrument to achieve the EU's commitments to promoting sustainable development in developing countries.

It is also questionable how the SIAs' insights and recommendations are practically (and politically) addressed within the trade agreement, as well as how the implementation of flanking mechanisms is effectively determined and implemented, which is clearly beyond the scope of SIAs (Kirkpatrick and George, 2006).

Conflicts of Interest in EIAs

Although actors' approaches to EIA are intended to be impartial in all aspects, there are still conflicts between different objectives.

- Transparency vs. Confidentiality: EIAs of the EU, US, UK, Canada, and New Zealand are conducted publicly with public participation for transparency purposes. Yet, this also creates potential conflicts with a negotiating process that is necessarily confidential to give priority to the economic interests of parties to the negotiation. According to the European Commission (2002), they do not expect its negotiating positions to be completely different from the results of an SIA, but it accepts that there will be inconsistencies. In the case of the EU, under the mechanism established for resolving such inconsistencies, the Commission modifies its negotiating position if it considers the finding robust, but it may not do so otherwise. Given the high levels of uncertainty, there is a significant possibility that the results of SIA studies will be rejected on these grounds (Ekins and Voituriez, 2012).
- Inhouse vs. outsource: EIAs should be objective, which may require that they should be outsourced to independent consulting organisations and not be carried out by governments themselves. Yet, government involvement at an early stage also brings effective integration into the decision-making process (Fauchald and Greaker, 1998).
- Developing vs. developed countries: Ideally, EIAs should be initiated and conducted by the country's government, whose environment may be impacted. However, in some cases, such as when trade preferences are being considered for environmental reasons, the importing country may be required to consider the environmental effects in other countries to assess the effectiveness of such measures.

Currently, some developed countries, such as the UK and the European countries, are conducting EIAs for both sides. However, it should be noted that an EIA process driven by the agenda of developed countries may become distant and alien from the process in developing countries (Fauchald and Greaker, 1998).

On the one hand, developing countries are still reluctant towards conducting EIAs and integrating environmental management policies in trade agreements. They fear that their rapid economic growth could be stopped or slowed down by setting up higher environmental standards (Ivanova and Angeles, 2006). On the other hand, developing countries can question the reliability of EIA reports. For example, as regards the negotiation of the EU-Tunisia Deep and Comprehensive Free Trade Agreement, Tunisians believe the SIA report is biased, as the consultancy firms are regular clients of the Commission, and they tell it what it wants to hear⁶². Although the final SIA was completed with the conclusion of mixed and small environmental effects, the trade agreement cannot be finalised due to political reasons, rather than sustainability issues.

⁶² See https://www.equaltimes.org/tunisia-holds-off-a-deep-free?lang=en#.Yydh9XZBy5d

3.4.2. Civil Society

In a broader sense, the participation of Civil Society Organizations (CSOs) in the EIA process resembles the roles of international organisations, as discussed earlier. However, CSOs exert a more limited influence, primarily due to their voluntary involvement. While CSOs undertake a diverse range of activities, they primarily focus on:

- i. Participating in the internal consultation process, offering useful feedback for the design of trade agreements, and enriching EIA analyses of actors.
- ii. Articulating their views and criticizing the effectiveness of EIAs through social media platforms and formal publications.

CSOs' Engagement in the EIA Consultation Process

Table 8 delineates the principal stakeholders in EIA's consultation process, sourced from 47 EIAs spanning the US and EU. The European Economic and Social Committee (EESC) emerges as a foremost participant, signifying the EU bodies' active role. Non-governmental organizations (NGOs), epitomized by Friends of the Earth and World Wildlife Fund (WWF), closely follow, highlighting the strong imprint of civil society in EIA dialogues.

No.	Stakeholder	Type of Organisation	Frequency
1	European Economic and Social Committee (EESC)	EU body	17
2	Friends of the Earth	NGO	16
3	World Wildlife Fund (WWF)	NGO	16
4	Eurogroup for Animals	NGO	15
5	European Services Forum (ESF)	Industry/trade association	14
6	European Trade Union Confederation (ETUC)	Industry/trade association	14
7	International Labour Organisation (ILO)	International organisation	12
8	BusinessEurope	Industry/trade association	11
9	Greenpeace	NGO	11
10	European Environmental Bureau (EEB)	EU body	10
11	FoodDrinkEurope	Industry/trade association	10
12	Industrial Ethanol Association (IEA)	Industry/trade association	9
13	DigitalEurope	Industry/trade association	7
14	European Policy Centre	Academia/think tank	7
15	Oxfam	NGO	7
16	Brussels Office of the Swedish Trade Unions	Industry/trade association	6
17	EuroCommerce	Industry/trade association	6
18	European Patent Office	EU body	6
19	FERN	NGO	6
20	Friedrich-Ebert-Stiftung (FES)	Academia/think tank	6

Table 8. Participation of top 20 stakeholders in EIA consultations (Data collected from 47 EIAs: 11 from the US and 36 from the EU)

Box 2. The World Wildlife Fund (WWF) and its Leading Role in EIA

Founded in 1961, the World Wildlife Fund (WWF) stands as an esteemed international NGO dedicated to wilderness preservation and diminishing human environmental impact. During the late 1990s and early 2000s, WWF played a leading role in advancing the EIA processes. WWF was a leading NGO supporting EIA implementation in the late 1990s and early 2000s with various activities. This organization conducted several independent studies as the sample work for assessing environmental problems of trade policies. For example, in 1998, WWF and Oxfam commissioned to review the impacts of economic liberalisation on the Mexican corn sector in the context of NAFTA. The study provides an important example of the social and environmental problems resulting from a rapid and poorly-planned adjustment to a more liberal agricultural regime in the absence of adequate transitional state support (Richardson et al., 2001).

WWF's EIA methodologies, showcased in their 1998 and 1999 publications, lean heavily on a qualitative assessment framework based on questions and checklists. This approach was further solidified with their "Handbook for Conducting Environmental Reviews of Trade Agreements" for the U.S.

In 2001, the WWF published a pre-eliminary assessment of the environmental and social effects of trade in tourism, aiming amongst others at developing an assessment framework and provide practical applications thereof. The study concluded that the sustainable development impact of international tourism could both be positive or negative and that the environmental and social effects were in the first place linked to foreign direct investment and foreign establishment.

However, while WWF once took an active role in EIAs, their recent engagement is more consultative. They now predominantly provide feedback as an NGO during EIA deliberations. Despite this shift in their mode of involvement, WWF continues to critically evaluate EIA practices. For instance, a 2002 briefing paper critiqued the shortcomings of Strategic Impact Assessments (SIA) in EU trade policies, pinpointing issues from timing discrepancies to limited stakeholder involvement.

A deeper dive into the specifics, as detailed in Box 3, reveals the environmental concerns these organizations bring to the forefront. Biodiversity degradation and transportation emissions emerge as two primary areas of focus. Such advocacy highlights the essential nature of these topics and the pressing need to ensure they are adequately addressed in EIAS.

Box 3. Key Environmental Concerns CSOs Advocate for in EIAs

Biodiversity Impact: Recent feedback from CSOs underscores the urgency of addressing biodiversity degradation in EIAs. As highlighted by the Centre for Strategic and International Studies (CSIS), international trade can inadvertently exacerbate biodiversity loss. This encompasses issues like resource overexploitation, the spread of invasive species, wildlife poaching, and detrimental agricultural methods.

Transportation Emissions: Transportation emissions represent another crucial area that CSOs believe should gain more attention in EIAs. Transport and Environment (T&E), a leading NGO in this realm, highlights that the current European Commission's SIA handbook doesn't adequately address the impacts of trade on transportation modes like aviation, maritime, road, and rail. This oversight is significant, especially since Cristea et al. (2013) found that emissions from transportation constitute approximately one-third of the total emissions associated with traded goods. CSOs argue that EIAs should robustly consider and address the implications of these transport emissions.

Source: UNU-CRIS, based on references.

For more, visit: Trade Laws of Nature: Biodiversity Provisions and AfCFTA

Assessing the Sustainable Impact of EU Trade DealsHaving established the prominence of key stakeholders in EIA consultations, as seen in Table 8, how impactful is the involvement of NGOs in shaping EIA outcomes? A recent expert survey delved into this, querying if stakeholder consultations influenced the design of trade agreements (Fiorini et al., 2019). The data presented a dichotomy: while 49% perceived a positive impact, 25% either disagreed or expressed strong reservations. Significantly, skepticism was most pronounced among entities aligned with trade union representatives and civil society members. Conversely, those affiliated with EU institutions demonstrated a more positive stance. In another recent interview by Hoekman and Rojas-Romagosa (2022) with consultants conducting SIAs of the EU, interviewees believed the consultation process influenced the design of SIAs. Still, most did not believe the consultation process influenced the negotiating process.

CSOs' Insight: Shortcomings and Needs in Current EIA Systems

Often, EIA positioning in trade agreements illustrates suboptimal timing. It is evident that certain aspects of the negotiation process occur at less-than-ideal junctures. This temporal misalignment can lead to challenges in addressing critical factors or incorporating timely insights, potentially impeding the overall effectiveness of the exercise. For example: Greenpeace European Unit⁶³ recently conducted a study to uncover failures of SIA's. This study finds that despite the EU guidelines according to which such assessments should be conducted "hand-in-hand with negotiations" to steer them and "ensure that policy choices are optimised", the timing of SIAs has been much less optimal in practice.

The tendering process is usually launched after the negotiations, and final SIA reports tend to be published two to four years after the negotiations. In some cases, the SIA was incomplete (EU-Vietnam) or was delivered after the end of the negotiations (EU Mercosur trade agreement) (Dauphin and Dupré, 2022). Also, the FERN⁶⁴ emphasizes the failure to consider the EU's and Mercosur FTA's environmental impacts since the Commission failed to complete a timely assessment before negotiations. Clearly, insufficient time allowed for assessment processes and amendment of trade agreements is one major drawback of EIA. In another example of a trade agreement between the EU and a region in the Global South (in this case, Southern America), we can note the criticism from various stakeholders, mainly the civil society actors, as to how some processes lack due consideration to EIA being a transparent process.

⁶³ See more at https://www.greenpeace.org/eu-unit/issues/nature-food/46193/eu-trade-deals-failures-of-sustainability-impact-assessments/

⁶⁴ FERN is an NGO working on protecting forests. See more at https://www.fern.org/publications-insight/eu-commission-reprimanded-for-failure-to-consider-environmental-social-impacts-of-south-american-trade-deal-2313/

Box 4. The Controversy Surrounding the EU-Mercosur FTA: A CSO Perspective

As the world's lengthiest, the EU-Mercosur trade negotiation is replete with contention. While the SIA, conducted by the London School of Economics in 2020, portrayed the deal as environmentally neutral: it has a negligible impact on global GHG emissions, does not threaten higher deforestation, and positively contributes to increasing trade in environmental goods and services, NGOs strongly oppose this view. Their concerns have birthed a 450-member civil society coalition demanding a halt to the agreement. Key arguments by NGOs include:

- a) IMAZON's Insight: Using the GTAP-BIO model, IMAZON identified the trade agreement's potential for considerable landuse impact. The research predicts notable land-use emissions, with Brazil being the primary deforestation hub. Only robust Brazilian land-use governance could mitigate these effects. The agreement lacks provisions to counterbalance this increased deforestation risk, as highlighted by Aguiar et al. (2020).
- b) Greenpeace's Concerns: In addition to putting pressure on scarce land in Mercosur, the agreement hampers the transition towards more environmentally friendly European agriculture, with fewer animals and closed cycles, according to Greenpeace Netherlands (Jilles, 2022).
- c) **GRAIN's Projections**: GRAIN, an international NGO championing small farmers, outlines alarming CO2 emission statistics post-agreement: Emissions from increased bilateral trade in eight key farm products are expected to go up by one-third (34%).
- Beef exports from Mercosur to the EU will be the biggest source of new emissions (82%).
- The EU's climate footprint from food exports to Mercosur may rise five-fold.

Moreover, CSOs underscore their limited negotiation participation. An analysis commissioned by The Greens/EFA critiques the negotiation process for its opacity and inaccessibility. Though EU parliamentarians had draft access, the broader civil society was kept in the dark, relying on Greenpeace leaks from 2017. Limited observer status was granted only to major trade unions like the Southern Cone Confederation of Trade Unions (CCSCS) and the European Trade Union Confederation (ETUC) (Ghiotto and Echaide, 2019).

In another discussion of the International Union for Conservation of Nature (IUCN), the world's largest union for nature conservation, noted that the EU civil society has more information regarding the treaty than Mercosur local civil society. The IDEA from Paraguay also confirms that they had little knowledge about the free trade agreement and that in all these years, the local government did not enable a space to update and consult with civil society on the negotiations.

Source: UNU-CRIS, based on references.

For more, visit:

- Stop EU Mercosur Coalition Statement
- Greens-EFA Analysis
- Greenpeace Netherlands Leaked Documents
- IUCN's Opinion on Mercosur Agreement

Furthermore, EIA's shortcomings do not stop at timing and transparency. The lack of enforceability in mitigation actions is also significant. An analysis by Friends of the Earth indicates that impact assessments have little bearing on the final content of the agreement and often lack enforceability (Bergan and Movement, 2020). These experts expound how problems severely undermine the usefulness of mitigating actions recommended in EIA reports, pointing out that environmental harm is commonly given less weight than anticipated economic benefits. Thus, action against any threats is piecemeal and unenforceable. It typically depends on both parties' willingness to take proactive measures in the future rather than changing the nature of the deal itself.

Earlier in this context, Kirkpatrick and George (2006) highlight the intricacies surrounding negotiating positions that are either undisclosed due to confidentiality concerns or remain ambiguous, particularly when opposing parties' priorities remain

enigmatic. A notable illustration lies within the EU's commitment to respond to "red light" indications in SIAs, signifying critical concerns. It is worth noting that such instances of marked concern are exceptionally infrequent due to the prevailing uncertainty characterizing the assessment process. This underscores the need for policy instruments in trade agreements toward balancing transparency and confidentiality during negotiations.

Box 5. The Limited Influence of SIA on the Canada-European

The EU's position paper on the CETA impact assessment highlighted potential environmental implications, especially in agriculture. It states:

"an EU-Canada Agreement could have an impact on the environment, particularly in certain sectors. Increased agricultural production could lead to a higher degree of intensification and use of chemical inputs, while increased beef production could lead to greater herd size and production of methane [...] The environmental impact associated with energy and extractive industries is likely to be limited, though it could be exacerbated if the agreement leads to significant increases in foreign direct investment (FDI) in Canada's oil sands and mining industries since these sectors are environmentally intensive. Growth of trade would likely increase the greenhouse gas (GHG) emissions associated with transport."

The report goes on to highlight a number of recommendations which might mitigate these impacts, and the European Commission indicates that it has 'taken these assessments into consideration when formulating its negotiating positions'.

Despite these concerns, there is no indication of specific provisions within the agreement aiming to target any of the issues raised. The contemporaneous timing of impact assessments with negotiations, rather than prior, further restricts their influence on agreement contents. Thus, in its current form, the influence of EIAs on trade agreements like CETA appears minimal. Source: Bergan and Movement (2020).

4. The Design of Environmental Impact Assessments of Trade Agreements: Insights from a New Data Set

This section delves into the intricacies of "What and how are EIAs executed?". By leveraging insights from the New Data Set for Environmental Impact Assessments of Trade Agreements (DEIATA), we aim to understand which EIAs are undertaken and how. This expansive database serves as a reservoir of information, capturing diverse EIA practices across the globe. Through DEIATA, we strive to shed light on the nuances and designs that shape the realm of EIAs in the context of trade agreements.

4.1 Introducing the DEIATA

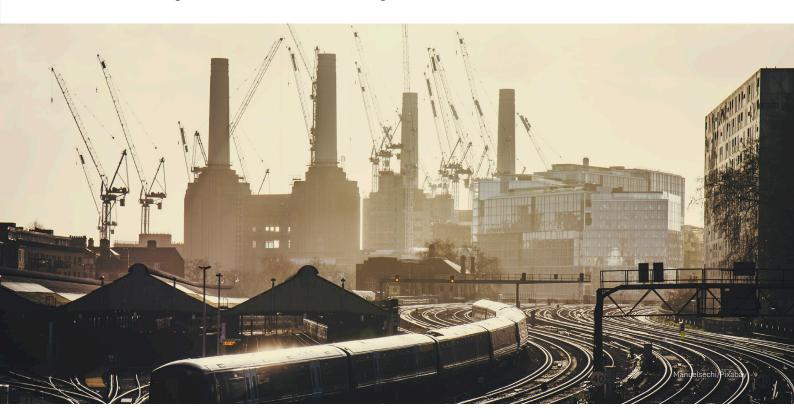
Our goal is to create a comprehensive database of EIAs related to trade agreements that have been conducted by the countries, regions, or international organizations negotiating the trade agreements, to date. We employed a two-step methodology to locate any relevant EIAs (see Figure 18). In the first step, we conducted a literature review on EIAs in trade agreements to identify the actors that typically carry out EIAs. As we focused on EIAs that are part of the institutionalised negotiation process of an RTA, we only considered EIAs conducted by or for the policy actors to whose competencies trade policy belongs, i.e. national governments (in the case of countries) or international organisations (in the case of customs or economic unions, such as the EU). The EIAs conducted by customs or economic union member states (e.g. those of the EU) were not considered. In a similar vein, we did not include the EIAs by civil society organisations or by academicians. With the actors defined, we accessed the published EIAs related to RTAs directly from the relevant government websites. This initial search yielded 122 EIAs.

In the second step, we used the list of regional trade agreements (RTAs) reported to the World Trade Organization (WTO).

As of 2022, this list consisted of 582 RTAs. We searched for EIAs related to every RTA in the WTO database using various combinations of English keywords, including the full name of the RTA, its abbreviation, and terms such as environmental impact assessment (EIA), sustainable impact assessment (SIA), impact assessment, and environmental review. We used Google as the search engine to locate any additional EIAs. This step yielded two additional EIAs.

For each EIA we identified, we conducted a thorough textual analysis and coded its contents along several dimensions. We focused on the EIA process, the transparency of the resulting EIA, the methodology used, the criteria considered, the economic (in terms of sectors) and geographical coverage, and the role of the EIA in the decision-making process of the RTA. Since the process of conducting EIAs is not standardised across countries, we documented any differences in the procedures used by classifying the stepwise progression of the EIA over time, recording the time elapsed between the notice of Intent to conduct an EIA and the publication of the final EIA, and noting whether the EIA was conducted ex-ante (before the RTA was in place) or ex-post. Note that ex-ante and ex-post EIAs published in a single document, usually in the process of updating and/or renegotiating a trade agreement, are treated separately.

We also documented the level of transparency achieved during the process by indicating whether active involvement or participation of broader socio-economic groups, community members, or concerned citizens was allowed during the EIA and the form of this participation. We synthesised the multiple criteria considered in the EIAs and the methodological approach (quantitative or qualitative) used in this consideration into a classification system summarised in Table 16 in Appendix A. The aim is to differentiate between general environmental and trade-related environmental criteria used in EIAs. General environmental criteria cover pollution issues (such as climate change, the ozone layer, air quality, and waste management) and natural resources and assets (including water, energy, land, forestry, fisheries, and biodiversity). Trade-related environmental criteria evaluate environmental policies and regulations in the RTA, trade in environmental goods and services, or trade-related transport emissions. Our database contains 124 EIAs that were evaluated and compared along four main issues (i.e., coverage, process, transparency, and method and criteria). The database allowed us to obtain valuable insights into the conduct of EIAs across countries and regions and their role in decision-making related to RTAs.



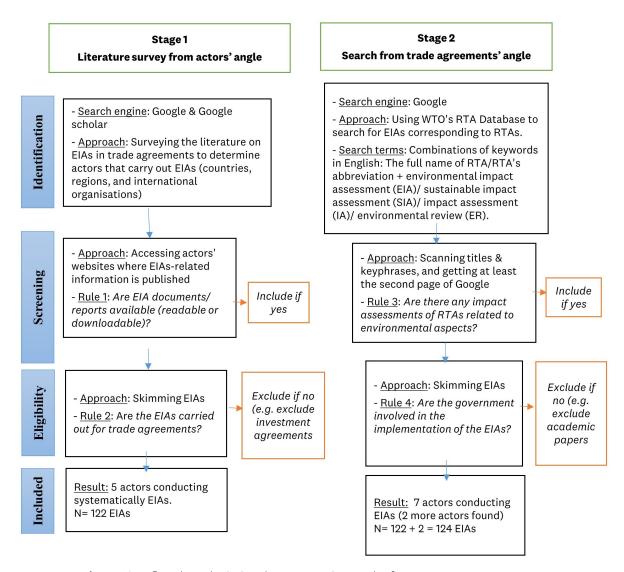


Figure 18. A flowchart depicting the systematic search of EIAs to construct DEIATA

4.2 Analysis

The initial phase of data analysis involved conducting a descriptive analysis, a statistical technique used to summarize and elucidate the key features of the dataset under investigation. In our study on the EIA trends and patterns in trade agreements, this method was employed to understand better the number of EIAs included in various bilateral and multilateral trade agreements. Our search strategy and database selection enabled us to identify 124 EIAs that have been finalized or are currently under negotiation since 1999. The analysis considers various characteristics, including:

- The actor and the partner(s) of the EIA
- The connection between the EIA and the corresponding RTA
- The method and criteria of the evaluation
- The distinctions between ex-ante and ex-post evaluations

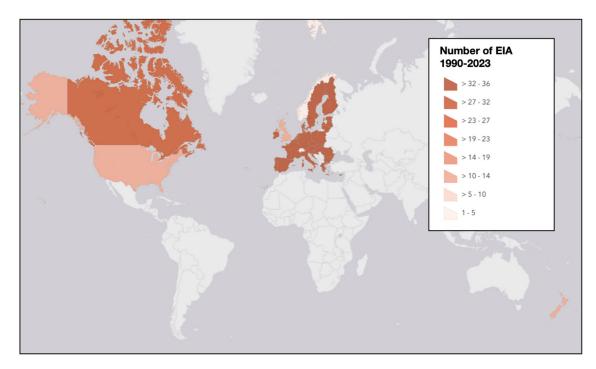


Figure 19. Countries conducting EIA for trade agreements systematically as of June 2023 Source: UNU-CRIS Compilation

A Tale of Two Designs: Process-Oriented EIA in the EU and Canada Versus Results-Driven EIA in the US, and New Zealand

In our exploration from Section 3, we identified five primary actors: the EU, Canada, the US, the UK, and New Zealand, which systematically and publicly conduct Environmental Impact Assessments (EIAs), as illustrated in Figures 19 and 20. Norway and Switzerland, too, have made EIA accessible, albeit without a systematic approach. Strikingly, only European and North American nations have delved into trade agreement environmental assessments, leaving other global regions without an established EIA protocol for such agreements. The conspicuous absence of the BRICs nations and other affluent non-OECD countries underscores the pressing necessity for heightened global collaboration in standardizing EIA procedures and protocols for trade agreements, ensuring harmonization with global environmental regulations.

Figure 19 and Figure 20 delineate the distribution of EIAs by actor. The EU and Canada emerge as frontrunners, accounting for a robust 41% and 24% of total EIAs, respectively, as captured in the upper left part of Figure 20. In contrast, the US, the UK, and New Zealand trail, each contributing to 11% of the aggregate EIAs. The difference between the two sets of actors is not just in number; it is also evident in the economic profiles of the trade agreement partners (see the right part of Figure 20). Canada and the EU, for instance, frequently undertake EIAs for trade negotiations with emerging countries. Conversely, the US and the UK, with fewer EIAs, seem to favour assessments for trade agreements with their more affluent counterparts.

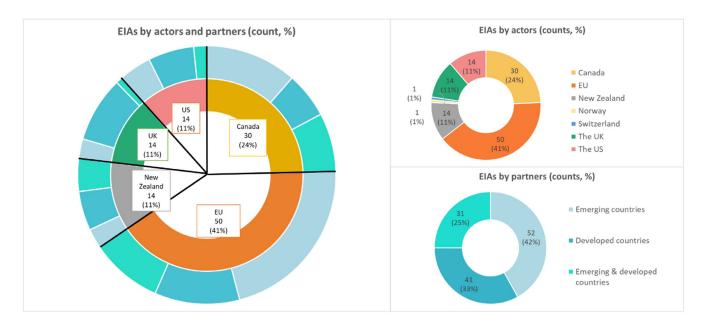


Figure 20. EIA of trade agreements by actors and partners (% of total) Source: UNU-CRIS Compilation

In terms of approach and process, the EU and Canada not only undertake both ex-post and ex-ante EIAs but also publish their ex-ante EIAs in advance of finalizing agreements. Specifically, the gap between the EIA's publication year and the trade agreement's signing year averages -1.13 years for Canada and -5.09 years for the EU. On the other hand, countries like the US and New Zealand typically publish their ex-ante EIAs around the time of, or up to two years after, the trade agreement signatures, as detailed in Table 9. Critics argue that such delays undermine the EIAs' capacity to guide negotiators, shape agreement terms, and garner public endorsement for trade projects (Hoekman & Rojas-Romagosa, 2022). Another noteworthy distinction between these two sets of actors is that EIAs conducted (and published) by the US and New Zealand commonly lead to at least one signed trade agreement. In contrast, not all EIAs from the EU and Canada achieve this outcome (see Figure 21). Many of their ex-ante EIAs are associated with trade negotiations that are pending, suspended, or cancelled. A plausible explanation might be that the US and New Zealand primarily release EIAs for agreements that have been successfully negotiated, while the EU and Canada disclose all their assessments.

Actors	Approach	Average year gap (year of EIA publication - year of RTA signature)	Based on pairs of EIA-RTA linked
Canada	ex-ante	-1.13	12
Canada	ex-post	28.00	1
The EU	ex-ante	-5.09	22
The EU	ex-post	15.00	16
New Zealand	ex-ante	0.23	13
The UK	ex-ante	1.67	9
The US	ex-ante	1.40	10

Table 9. The gap between the year of EIA publication and the year of RTA signature Source: UNU-CRIS Compilation

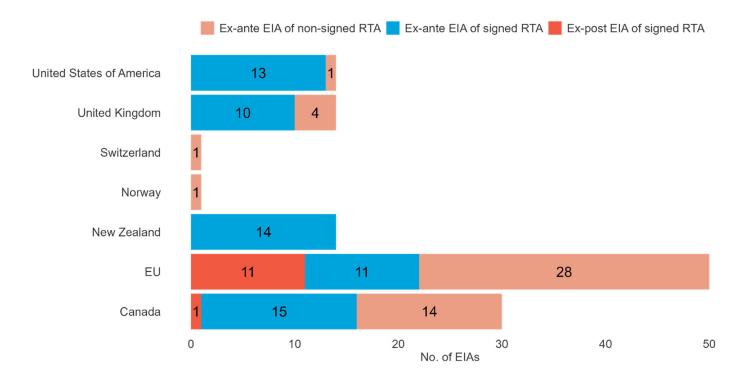


Figure 21. Number of EIAs covered by RTAs for main actors Source: UNU-CRIS Compilation

Limited RTAs Covered by EIAs

Reversing the perspective to view the link between EIA and RTA, one might ask: How many Regional Trade Agreements (RTAs) undergo an Environmental Impact Assessment (EIA)?

To determine this, we first scanned all global RTAs and then tried to link them with any EIA if they existed. On the global scale, a limited number of RTAs undergo assessment for environmental impact (see Figure 22 and Figure 23). Only about a quarter of all signed RTAs are evaluated through an EIA. However, when focusing solely on our seven principal actors, a more encouraging trend emerges.

Their commitment to EIAs is large and seems to have increased over the years, as shown in Figure 24, Figure 25, and Figure 26. Yet, it should be noted that aside from the US, the other actors still bypass several RTAs without incorporating environmental considerations.

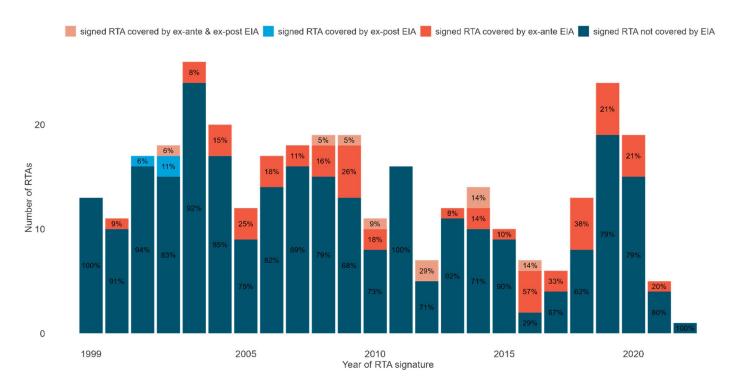


Figure 22. Evolution of signed RTAs over time since 1999 - all countries Source: UNU-CRIS Compilation

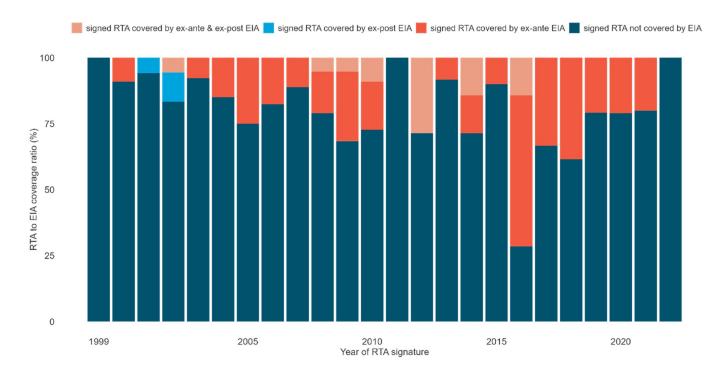


Figure 23. Percentage of signed RTAs covered by EIAs over time since 1999 - all countries Source: UNU-CRIS Compilation

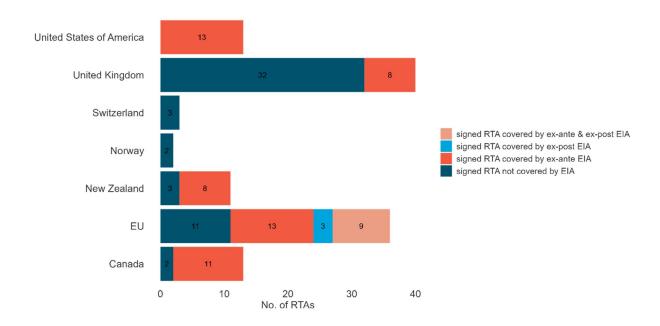


Figure 24. Number of RTAs covered by EIAs for main actors Source: UNU-CRIS Compilation

Note: The UK's RTA numbers have spiked since 2020 as a result of the country's withdrawal from the European Union. Most of these RTAs are Continuity agreements, i.e., using a mutatis mutandis concept to quickly replicate the existing EU agreements, only having to call out those minor areas of differentiation.

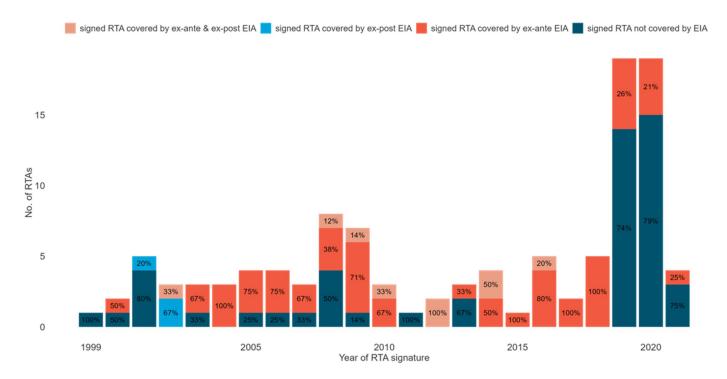


Figure 25. Evolution of signed RTAs over time since 1999 - main actors Source: UNU-CRIS Compilation

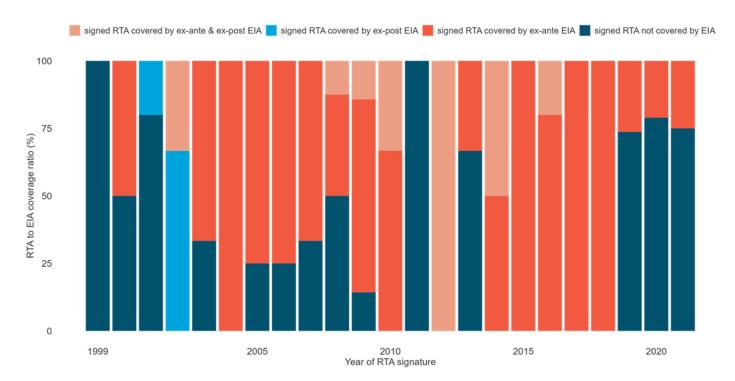


Figure 26. RTA to EIA coverage ratio (%) - main actors Source: UNU-CRIS Compilation

Note: The UK's RTA numbers have spiked since 2020 as a result of the country's withdrawal from the European Union. Most of these RTAs are Continuity agreements, i.e., using a mutatis mutandis concept to quickly replicate the existing EU agreements, only having to call out those minor areas of differentiation.

Divergent EIA Approaches: Varied Criteria and Methodologies Across Actors

The assessment method varies substantially between actors. The US, Canada, and New Zealand focus their assessments on the domestic environmental effects of the agreement, neglecting those in the partner countries. In contrast, the EU, the UK, Norway, and Switzerland conduct bilateral assessments. The assessment agreements of New Zealand are exclusively in qualitative terms; the other actors use a mix of quantitative and qualitative evaluation.

Based on the enumeration in the reports, we group the criteria according to which the assessment proceeds into two components: environmental issues (covering pollution and natural resources), and trade-related issues. Table 16 in Appendix A gives a more specific composition as well as the inclusion of each criterion in the assessment, either qualitatively or quantitatively.

Most criteria are covered more in a qualitative rather than a quantitative way. Climate change, biodiversity, and water are the most frequently included criteria; climate change (carbon gas emission and climate warming), air quality, energy, and traderelated transport emissions are the criteria assessed quantitatively in 50% or more of the times the criteria were covered.

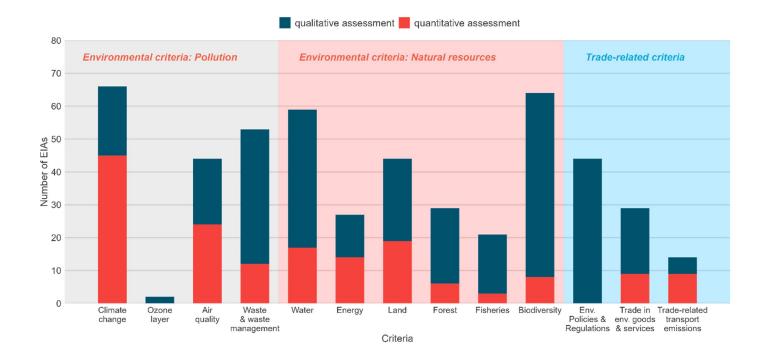


Figure 27. Number of EIAs by issue area Source: UNU-CRIS Compilation

This global impression hides substantial heterogeneity in assessment criteria between the actors, as is shown in Table 10. New Zealand, which is not included in the table, conducts its assessments without a clearly defined indicator scheme. Canada and the US follow assessment criteria rather sporadically, except for environmental policies and regulations (i.e., compliance to environmental norms by the trading partner) and biodiversity for the US. The EU adopts a fairly detailed scheme of criteria, with half covered in more than 50% of the assessments. Pollution issues seem rather systematically covered in the EU EIAs with the exception of the ozone layer, whereas natural resources and assets show a more mixed pattern (strong attention to water, land, and biodiversity, but weak for energy, forests, and fisheries).

Since Brexit, the UK's approach has mirrored that of the EU in most aspects, with a slight emphasis on fisheries and a significantly amplified focus on emissions related to goods transportation. Notably, the UK's stance on emissions stands out. Considering that the Norwegian and Swiss agreement assessment adopted a similar scheme to that of the EU, this distinctiveness unveils a dichotomy between the assessment methods of Europe and North America, where the first seems more detailed, structured, and verifiable than the second, as well as bilateral in contrast with the unilateral Canadian and US approach.

On average, the EU and the UK include over six identified criteria in their assessments, whereas Canada and the US only have two (see Table 10). The progression is evident, with the average number of assessment criteria rising from three in 1999 to nearly six in 2022. The above content also reflects the growing influence of European-style evaluations following Brexit.



	Crit	eria	Canada	EU	UK	US	Total
		C1. Climate change	33	82	86	0	53
	Pollution	C2. Ozone layer	0	0	0	14	2
	issues	C3. Air quality	7	62	57	14	35
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	C4. Waste and waste	17	74	50	21	53 4 2 4 35 1 43 0 48 1 22 0 35 1 23 9 17 9 52 3 35 0 23
Environmental		management	,,	, .			10
indicators/	Natural resources & Assets	C5. Water	23	23 84		0	48
criteria		C6. Energy	13	38	7	21	22
		C7. Land	13	72	21	0	35
		C8. Forest	10	32	43	21	23
		C9. Fisheries	13	12	43	29	17
		C10. Biodiversity	20	76	57	79	52
		C11. Environmental policies	30	40	14	93	35
		and regulations					
Trade - Env	ironment	C12. Trade in environmental	0	34	21	50	23
indicators,	′ criteria	goods and services					
		C13. Trade-related transport	10	4	57	7	11
		emissions				·	

Table 10. Coverage of assessment criteria by actors Source: UNU-CRIS Compilation

The criteria coverage in the assessment largely seems neutral with respect to the agreement partner, with slight differences based on the level of development. As shown in Table 11, the most pronounced differences are the higher attention to energy, forestry, and fisheries in agreements with developed countries and to environmental regulation in agreements with emerging countries. A similar pattern emerges for the EU (see Table 12), with higher overall coverage rates. Overall, these findings suggest that impact assessments are conducted following a relatively fixed, country-specific template.



	Crit	eria	Canada	EU	UK	US	Total
		C1. Climate change	33	82	86	0	53
	Pollution	C2. Ozone layer	0	0	0	14	2
	issues	C3. Air quality	7	62	57	14	35
Environmental	155555	C4. Waste and waste management	17	74	50	21	43
indicators/	/ Natural resources & Assets	C5. Water	23	84	57	0	48
criteria		C6. Energy	13	38	7	21	22
		C7. Land	13	72	21	0	35
		C8. Forest	10	32	43	21	23
		C9. Fisheries	13	12	43	29	17
		C10. Biodiversity	20	76	57	79	52
		C11. Environmental policies and regulations	30	40	14	93	35
Trade - Environment indicators/ criteria		C12. Trade in environmental goods and services	0	34	21	50	23
		C13. Trade-related transport emissions	10	4	57	7	11

Table 11. Criteria coverage by agreement partner in all actors Source: UNU-CRIS Compilation



	Criteria/indicators			Developed countries	Emerging & developed countries
		1. Climate change	88	82	69
	Pollution	2. Ozone layer	0	0	0
	issues	3. Air quality	73	64	38
Environmental	133463	4. Waste and waste management	88	82	38
indicators/	Natural resources & Assets	5. Water	88	91	69
criteria		6. Energy	23	82	31
		7. Land	77	82	54
		8. Forest	31	36	31
		9. Fisheries	4	27	15
		10. Biodiversity	85	64	69
		11. Environmental policies and regulations	50	45	15
Trade – Environment indicators/ criteria		12. Trade in environmental goods & services	35	45	23
		13. Trade-related transport emissions	8	0	0

Table 12. Criteria coverage by agreement partner in the EU Source: UNU-CRIS Compilation

While differentiating in the criteria coverage is a crucial aspect of the assessment process, some gaps need to be addressed. For instance, the assessment process could give greater attention to issues such as water use, waste management, air pollution, and trade-related transport emissions which are significant environmental concerns globally but are not given adequate coverage in the current assessment process. Additionally, the assessment process should also consider the potential environmental impacts of non-trade-related provisions, such as investment and intellectual property rights, which can have a significant impact on the environment. Also, the EIA process could consider the socioeconomic impacts, as these factors can also have a significant impact on the environment directly or indirectly. For example, trade agreements can lead to an increase in the production of goods, which can result in increased environmental pollution and depletion of natural resources. Similarly, trade agreements can lead to changes in land use patterns, which can have a significant impact on the environment.

Ex-Post EIAs: Limited in number, advanced in approach

While the IISD and UNEP (2017) advocate the dual adoption of ex-ante and ex-post evaluations for trade agreements, the actual implementation of ex-post assessments remains constrained. Specifically, up to the data collection phase spanning July 2023, only a modest 12 out of the 124 EIAs were conducted with an ex-post approach (see Table 13). 11 of these are ex-post evaluations administered by the EU. Two of these were carried out simultaneously in both ex-ante and ex-post dimensions, with ex-post assessment for the old agreement and ex-ante assessment for the deepening or modernization one⁶⁵. This observed asymmetry can partly be attributed to the temporal maturation necessary for trade agreements to generate quantifiable impacts post-implementation (see, for instance, Egger et al., 2022).

Beyond the noted numerical distinction, the methodologies and processes of both ex-post and ex-ante approaches exhibit striking similarities. This commonality occurs due to the application of common sets of guidelines (in the EU's case) or the execution by the same agency (in Canada's case). However, when juxtaposing ex-post with ex-ante evaluations for an identical trade agreement, it is observed that ex-post EIAs—often conducted years after their ex-ante counterparts—tend to offer a more expansive and quantitative criterion coverage. Moreover, ex-post EIA also strives to identify causal links, thus frequently utilizing quantitative models like the CGE model.

Diving deeper into comparing outcomes from these approaches, especially when examining the environmental impacts of identical trade agreements, we find only six such agreements available for scrutiny (refer to Table 23 in Appendix E). This analysis shows that findings from ex-post assessments frequently appear more optimistic than the forecasts from earlier ex-ante evaluations. Interestingly, some of these ex-post studies indicate a decrease in global emissions, suggesting a positive influence of the trade agreement—this contrasts with previous apprehensions of potential environmental detriments. The more favourable outcomes observed in ex-post EIAs, relative to their ex-ante counterparts, may suggest that including ex-ante evaluations may shape the trade agreement negotiations, possibly prompting amendments to provisions that prioritize environmental concerns.



⁶⁵ That is the SIA for the Deepening the Existing Interim Economic Partnership Agreement between the EU and with Eastern and Southern African partners, and the EA for the Canada-United States-Mexico Agreement (CUSMA).



Table 13. Comparison of criteria coverage between ex-post and ex-ante EIA Source: UNU-CRIS Compilation

5. Summary and Conclusions

Diving deeper into comparing outcomes from these approaches, especially when examining the environmental impacts of identical trade agreements, we find only six such agreements available for scrutiny (refer to Table 23 in Appendix E). This analysis shows that findings from ex-post assessments frequently appear more optimistic than the forecasts from earlier ex-ante evaluations. Interestingly, some of these ex-post studies indicate a decrease in global emissions, suggesting a positive influence of the trade agreement—this contrasts with previous apprehensions of potential environmental detriments. The more favourable outcomes observed in ex-post EIAs, relative to their ex-ante counterparts, may suggest that including ex-ante evaluations may shape the trade agreement negotiations, possibly prompting amendments to provisions that prioritize environmental concerns. To conclude this study, we first summarize the key conceptual aspects of the EIAs in trade policies, including different concepts and the typical process and methodology, then summarize the prominent issues in EIAs practices at various scales and in diverse settings.

The Conception of Environmental Impact Assessments of Trade Agreements

Consideration of possible environmental effects of trade negotiations exists parallelly under various concepts: Environmental reviews, Environmental assessments, Impact assessments, Integrated assessments, and Sustainability Impact Assessments.

These concepts co-exist and are used in different countries and organizations depending on whether they are interested in single-objective (environmental impacts) or multi-objective (sustainability including social, environmental, and economic impacts). Although there is no consensus on common terms of reference and standardization of the EIA for trade policy, the EIA generally provides information about potentially significant environmental implications of trade agreements. It tries to identify actions that can increase positive environmental impacts while avoiding negative ones, aiming to achieve environmental sustainability at the global level.

Agencies and Actors

At the international level, UNEP and OECD contribute most to the EIA's evolution in trade agreements compared to the other organizations. Since the 1990s, UNEP has focused on financial and technical assistance to developing countries to conduct pilot studies. Meanwhile, the OECD regularly developed and updated frameworks for the EIA. However, in recent years, the roles of the IOs appear to be overlapping and blurring (Table 14).

	Carry out EIAs	Direct support through funding/ technical guiding	Indirect support through networking & experience sharing	Develop frameworks
UNEP	✓	✓	×	V
UNCTAD	×	×	×	✓
UN Regional Economic Commissions	✓	×	×	×
WTO-CTE	×	×	✓	×
OECD	×	×	✓	~

Table 14. Comparative Roles of International Organizations in EIA Source: UNU-CRIS Compilation

At the regional organization level, the EU seems to be leading the environmental assessment agenda for every major trade negotiation in which it is involved. These environmental assessments are included in a broader study called SIAs (explained earlier) and ex-post Evaluations, which identify the economic, social, and environmental impacts together. Notably, the SIAs cover the impacts of both the EU and third-country partners, whereas most other EIAs focus mainly on the impacts of the country carrying out the assessment. We reflect that incorporating insights from the trade partners' natural environment can enhance the efficacy of trade agreement design. Another notable progression within the SIA process involves delegating report execution to external consultants. This shift facilitates heightened impartiality and transparency in the analytical process.

Although the approach of the EU can be considered the most comprehensive (Table 14), conducting SIAs has not yet evolved into a strict legal obligation (OECD, 2007). Around 30% of trade agreements that the EU is signed in still have no associated SIAs (see Figure 24), such as the Association Agreements of the EU with the Western Balkan countries⁶⁶.

One caveat of DEIATA, and our subsequent analysis, is our focus on EIAs conducted by or for the policy actors to whose competences trade policy belong, i.e. national governments (in the case of countries) or international organisations (in the case of customs or economic unions, such as the EU). The EIAs conducted by customs or economic union member states (e.g. those of the EU) are not considered. Extending our analysis to a member country or regional level, for instance, could help reveal whether EIAs are heterogeneous and tailored to local circumstances.

Only a few countries have enacted legislation requiring their governments to examine possible environmental implications of trade agreements in which they are involved. Such assessments are obligatory in the United States and Canada. New Zealand must also conduct a "National Interest Analysis" of any new treaty, which considers environmental implications and economic, social, cultural, and fiscal effects. Recently, the UK has begun to self-conduct an impact assessment of its trade negotiations after leaving the EU, and naturally, its approach closely resembles that of the EU. In addition to the aforementioned countries, Japan, Korea, Norway, and Switzerland conducted several environmental impact analyses of trade agreements, but they were not systematic or publicly available.

Currently, most developing countries have not fully implemented comprehensive EIAs for trade agreements. Some governments within these countries have undertaken assessments, particularly when negotiating with the United States, Canada, or the European Union. This has been made possible through financial and technical support from their negotiating partners. However, these assessment reports are generally not made publicly available.

Several factors contribute to the reluctance of developing countries to embrace EIAs. They consider the EIA process costly, complex, and time-consuming, and question its necessity, particularly when they anticipate that the economic benefits of trade will outweigh any potential environmental harm. Research by Fauchald and Greaker (1998) and Ivanova and Angeles (2006) highlighted this perspective. Additionally, there is an underlying scepticism that implementing stringent environmental standards may impede their rapid economic growth. Despite sporadic efforts in some developing countries, systematic EIAs for trade agreements have yet to become the norm. The perceived expenses and complexities, along with the expectation of economic gains, pose significant obstacles and concerns about hampering economic growth further contribute to this situation.

⁶⁶ the Association Agreements of the EU with the Western Balkan countries: the former Yugoslav Republic of Macedonia (2004), Albania (2009), Montenegro (2010), Serbia (2013), Bosnia and Herzegovina (2015) and Kosovo (2016).

	Comprehensive	Transparent		Thorough	Continuous/ up-to-date	
The EU	- Both ex-post and ex-ante - 4 effects (Scale, Structural/ Composition, Product, Technology effects) - All parties and third countries	- Public engagement - Publicity available - Clear process		- Both qualitative and quantitative tools - Various criteria - Various sectors	- Require for all trade agreements - Framework updated	
Canada	- Both ex-post and ex- ante - 5 effects (Scale, Composition, Product, Regulatory effects) - Only their territory	- Public engagement - Publicity available - Clear process		- Both qualitative and quantitative tools - Limited criteria - Limited sectors	- Require for all trade agreements - Framework updated	
USA	- Ex-ante - Effects: no mention - Only their territory	- Public engagement - Publicity available -Clear process		- Both qualitative and quantitative tools - Limited criteria	- Require for all trade agreements - Having a Framework	
The UK	- Ex- ante - 3 effects (Scale, Composition, Technology effects) - All parties and third countries	- Public engagement - Publicity available - Clear process		- Both qualitative and quantitative tools - Limited criteria	NA	
New Zealand	- Ex- ante - 5 effects (Scale, structural, Product, Regulatory effects) - Only their territory	- Public engagement - Publicity available	<u> </u>	- Quanlitative tools	- Require for all trade agreements - Having a Framework	

Table 15. Comparative analysis of actors's strengths and limitations in conducting EIAs Source: UNU-CRIS Compilation

Note: The table presents a general assessment of the typical strengths (in green) and limitations (in red) for conducting EIAs of actors.

The Landscape of Environmental Impact Assessments of Trade Agreements

The landscape of Environmental Impact Assessments predominantly features an ex-ante approach, whereas a smaller proportion adopts the ex-post methodology. As elucidated earlier, ex-post evaluations play a pivotal role in unearthing interconnections and their potential significance, especially during the scoping phase of EIAs. These assessments complement ex-ante EIAs and furnish invaluable insights guiding future evaluations. Thus, it is advisable to enhance the frequency of ex-post assessments.

The DEIATA dataset indicates that various processes and methodologies are employed in EIAs. This leads to significant variations across individual reports. The crafting of a fitting assessment strategy invariably accounts for a myriad of factors. These span national or regional priorities, unique challenges specific to a context, and the broader scope of the agreements being analysed.

Furthermore, we have delved into the prevalent evaluation criteria, shedding light on how they bifurcate into different environmental indicators. On average, 4-5 of these criteria form the EIA's backbone. While some aspects have received relatively little attention, for instance, only a small fraction (10%) of EIAs discussed trade-related transport emissions, and close to 20% of EIAs handled trade in environmental goods and services. In some cases, the assessment is comprehensive and in line with general standards of practice; in other cases, these processes are rather limited. The European Union and the United Kingdom have the most extensive coverage in terms of criteria, with broader indicators used. Overall, the EIAs have helped ensure that economic development and trade do not come at the cost of the environment. As the focus on sustainable development continues to increase globally, the trend towards incorporating EIAs in trade agreements is likely to continue.

Additionally, the CGE model has become the dominant quantitative framework for contemporary EIAs. With studies exploring the nexus between trade and the environment evolving swiftly, it's vital to marry traditional CGE models with newer quantitative tools, such as structural gravity models. Recognising these shifting dynamics, it's clear that countries should embrace a flexible EIA practice. This approach should resonate with emerging paradigms, ensuring the delivery of comprehensive and reliable assessments.

The Effectiveness of EIA Implementation

This approach should resonate with emerging paradigms, ensuring the delivery of comprehensive and reliable assessments. While EIAs can highlight the effects inherent in trade agreements, their full efficacy in shaping negotiating stances and promoting sustainable development goals is yet to be realised. NGOs often raise concerns about the practice of EIAs in trade agreements, pointing to issues such as inadequate timing, lack of transparency, limited civil society engagement, and enforcement mechanisms for mitigating actions. Moreover, it is rare for EIAs to lead to changes in negotiation positions or to significantly influence trade agreement structures. At the heart of these challenges lies a core dilemma in the EIA process, coupled with conflicting interests.

Balancing economic development with environmental protection is a complex challenge. There is often a trade-off between economic growth and environmental quality, with the potential harm to the environment receiving less weight than anticipated economic benefits. This dilemma becomes even more pronounced in developing countries, where the fear of slowing down rapid economic growth can often discourage the adoption of higher environmental standards. Another challenge in this balancing act is the conflict between publicity and confidentiality. While open public comment and transparency can enhance the quality of environmental impact assessments, negotiators often require confidentiality to prioritize economic interests during trade agreement negotiations. Striking the right balance between public engagement and confidential negotiations is crucial in addressing environmental and economic concerns. The choice between conducting an in-house EIA or outsourcing it poses a common dilemma. Government-run EIAs may be faster and more integrated into decision-making, but political considerations can influence them. On the other hand, consultant-run EIAs are often perceived as more objective and possess better technical expertise. Deciding which approach to take depends on the specific circumstances and objectives of the EIA.

At this point, we can highlight the need for a global standard of practice to ensure EIAs can follow a standard protocol. Addressing the challenges of economic development and environmental protection requires navigating the trade-offs and finding the right balance between public engagement and confidentiality and making informed decisions about the execution of EIAs in trade agreements. These complexities are particularly pronounced for countries striving for economic progress and environmental sustainability.

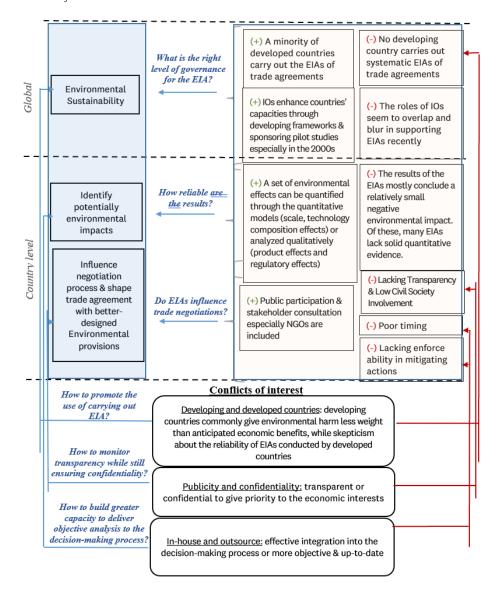


Figure 28. Schematic representation of critical review process of EIAs in Trade Agreements Source: UNU-CRIS Compilation: The table presents a general assessment of the typical strengths (in green) and limitations (in red) for conducting EIAs of actors.

Note: The red arrows indicate the main causes leading to shortcomings in the practice of EIAs of trade agreements. The blue arrows show the issues and questions that need to be solved to achieve the goals of the EIAs.

6. Recommendations

In this section, we outline five key recommendations to enhance the effectiveness of EIAs in trade agreements. The present approach to EIAs brings several critical policy questions to the fore: What is the appropriate governance level for EIAs? Who should conduct them? And who should be involved? We offer several suggestions as potential solutions to address these concerns.

- First, International organisations could encourage and support the implementation of EIAs at the national and regional level⁶⁷, while governments/national agencies are primarily responsible for ensuring such assessments are carried out efficiently. As several governments in industrialised nations are conducting EIAs concurrently for their partner and third countries, enhancing cooperation between national, regional and international agencies can boost the efficacy of such processes.
- 2. Second, EIA, in the trade value chains approach, is entangled with the conflicts of interest discussed in the last section, which leads to criticism of its effectiveness. Hence, to handle these conflicts, a multistakeholder approach may be effective in balancing the interests of different parties as well as impartiality in all aspects.
- 3. Third, a multi-country EIA study might make a more significant contribution if undertaken on behalf of the wider international community rather than being commissioned by one of the main negotiating parties. A joint report might be published, combining research findings from different parties. To be more specific, each country can make its environmental impact assessment for its own country. When the local government and/or local consultants self-conduct assessments, their willingness to implement mitigation actions will improve.
- 4. Fourth, such assessments might be coordinated and supervised jointly by a group of international bodies such as UNEP, OECD, CTE, and other international bodies invited to participate as observers. In addition, international organisations also need a clear division of roles to avoid current overlap. For example, UNEP should expand its programs to help build capacity in developing countries to undertake EIAs of this nature. Expanding such assistance may be particularly beneficial for smaller developing countries' capacity to support their negotiators with detailed assessments of the impacts of other countries' proposals or their own proposals. The OECD could focus on developing a standard process, standardising methods, and indicators, and reviewing the effectiveness of EIAs regularly. Also, the CTE may oversee overall coordinating and delivering the results.

In addition, we also suggest that data and information-based toolsets (like the DEIATA dataset) highlight the use of diverse processes and methodologies in EIAs. This diversity results in considerable differences among individual reports. When formulating an appropriate assessment strategy, it is essential to consider many factors. These factors encompass national and regional priorities, the distinct challenges associated with a particular context, and the overall scope of the agreements under examination.

5. Lastly, we conclude that EIAs hold potential to foster transparency in government policymaking by amplifying the participation of NGOs, political parties, and other interest groups. The outcomes of these studies, if wielded effectively, might hold the power to influence trade agreements, paving the way for global environmental sustainability.

⁶⁷ In Paragraph 33 of the Doha Ministerial Declaration Ministers "encourage that expertise and experience be shared with Members wishing to perform environmental reviews at the national level" (https://www.wto.org/english/tratop_e/envir_e/reviews_e.htm)

References

Ackerman, F., K. Gallagher, and A. Nadal. 2001. "The Limits of Economic Modeling in the FTAA Environmental Review. Globalization and Sustainable Development Program Background Paper." Medford: Tufts University Global Development and Environmental Institute.

Adelle, C., J. Hertin, and A. Jordan. 2006. "Sustainable Development 'outside' the European Union: What Role for Impact Assessment?" European Environment 16: 57-72.

Aguiar, A., E. Arima, F. Taheripour, and P. Barreto. 2020. "Is the EU-MERCOSUR Trade Agreement Deforestation-Proof." IMAZON (Institute of People and the Environment of the Amazon).

APEC Committee on Trade and Investment. 2017. "Study Report on Environmental Provisions in APEC Member Economies' FTAs/RTAs." https://www.apec.org/publications/2018/05/study-report-on-environmental-provisions-in-apec-member-economies-ftasrtas.

Banerjee, O., M. Cicowiez, M. Horridge, and R. Vargas. 2016. "A Conceptual Framework for Integrated Economic–Environmental Modeling." Journal of Environment & Development, 1–30.

Barrett, B.F., and R. Therivel. 2019. Environmental Policy and Impact Assessment in Japan. Routledge.

Bergan, R., and T.J. Movement. 2020. "Aligning Trade Policy with Climate and Environmental Goals." https://www.tjm.org.uk/documents/briefings/Alternative-Trade-for-the-PlanetFINAL.pdf.

Blanco, H. 2006. "Sustainability Impact Assessment of Trade Policy and Its Application in the Context of Latin America." Impact Assessment and Project Appraisal 24 (4): 285–97. https://doi.org/10.3152/147154606781765101.

Caliendo, L., and F. Parro. 2015. "Estimates of the Trade and Welfare Effects of NAFTA." The Review of Economic Studies 82 (1): 1-44.

Cebon, M. 2003. "The Australia-US Free Trade Agreement: An Environmental Impact Assessment." OzProspect.

Cherniwchan, J., B. Copeland, and S. Taylor. 2017. "Trade and the Environment: New Methods, Measurements, and Results"." Annual Review of Economics 9: 59–85

Cloquell-Ballester, V.-A., V.-A. Cloquell-Ballester, R. Monterde-Díaz, and M.-C. Santamarina-Siurana. 2006. "Indicators Validation for the Improvement of Environmental and Social Impact Quantitative Assessment." Environmental Impact Assessment Review 26 (1): 79-105.

Convention on Biological Diversity. 2010. "What Is Impact Assessment?" April 27, 2010. https://www.cbd.int/impact/whatis.shtml.

Copeland, B., J. Shapiro, and M.S. Taylor. 2021. "Globalization and the Environment." Working Paper w28797. NBER Working Paper Series. NBER.

Copeland, B., and M.S. Taylor. 1994. "North-South Trade and the Environment." The Quarterly Journal of Economics 109 (3): 755-87.

Cosbey, Aaron, Hank Lim, Simon Tay, and Matthew Walls. 2004. The Rush to Regionalism: Sustainable Development and Regional/Bilateral Approaches to Trade and Investmentî. Ottawa: International Development Research Centre/International Institute for Sustainable Development.

Cristea, A.D., D. Hummels, L. Puzzello, and M.G. Avetisyan. 2013. "Trade and the Greenhouse Gas Emissions from International Freight Transport." Journal of Environmental Economics and Management 65 (1): 153–73.

Cui, J. 2020. "The Environmental Effect of Trade Liberalization: Evidence from China's."

 $\label{lem:decomposition} Dauphin, T., and M. Dupr\'e. 2012. ``The European Commission's Trade Sustainability Impact Assessments: A Critical Review, Veblen Institute for Economic Reforms.'' <math display="block">\frac{1}{1000} \frac{1}{1000} \frac{1}{1$

DEAT. 2005. "Environmental Assessment of Trade-Related Agreements and Policies in South Africa." 18. Integrated Environmental Management Information Series. Pretoria.

Dellink, R., and S. Yamaguchi. 2021. "OECD Work on Trade and the Environment. A retrospective (2008-2020)." https://one.oecd.org/document/COM/TAD/ENV/JWPTE(2020)3/FINAL/en/pdf

Donnelly, A., E. Jennings, P. Mooney, J. Finnan, D. Lynn, M. Jones, T. O'Mahony, R. Thèrivel, and G. Byrne. 2006. "Workshop Approach to Developing Objectives, Targets and Indicators for Use in SEA." Journal of Environmental Assessment Policy and Management 8 (2): 135–56.

Economic Commission for Africa. 2021. "ATPC Embarks on First Ever Environmental Assessment of the AfCFTA to Usher in Green-Friendly Trade on the Continent"." https://www.uneca.org/stories/atpc-embarks-on-first-ever-environmental-assessment-of-the-afcfta-to-usher-in-green-friendly.

Egger, Peter H., Mario Larch, and Yoto V. Yotov. 2022. "Gravity Estimations with Interval Data: Revisiting the Impact of Free Trade Agreements." Economica 89 (353): 44–61.

Ekins, P., and T. Voituriez, eds. 2012. Trade, Globalization and Sustainability Impact Assessment: A Critical Look at Methods and Outcomes. Earthscan.

ESCAP, United Nations. 2018. "Handbook on Negotiating Sustainable Development Provisions in Preferential Trade Agreements." https://www.unescap.org/resources/handbook-negotiating-sustainable-development-provisions-preferential-trade-agreements.

European Commission. 2002. "Communication from the Commission on Impact Assessment." COM (2002)276. Brussels: European Commission.

European Commission. 2006. Handbook for Trade Sustainability Impact Assessment. European Commission, External Trade.

European Commission. 2016. Handbook for Trade Sustainability Impact Assessment. 2nd ed. Luxembourg: Publications Office of the European Union.

European Court of Auditors. 2014. "Are Preferential Trade Arrangements Appropriately Managed?" Special report,. European Union.

Fauchald, O.K., and M. Greaker, eds. 1998. Environmental Assessment of Trade Agreements and Policy. Vol. 551. Nordic Council of Ministers.

Fauchald, O.K., and H. Vennemo. 2016. "Environmental Impacts of a Free Trade Agreement between China and Norway." https://www.fni.no/publications/environmental-impacts-of-a-free-trade-agreement-between-china-and-norway.

Felbermayr, G., S. Peterson, and J. Wanner. 2022. "Structured Literature Review and Modelling Suggestions on the Impact of Trade and Trade Policy on the Environment and the Climate."

Fiorini, M., B. Hoekman, N. Ralaison, and A. Yildirim. 2019. "EU Trade Policy and Non-Trade Objectives: The RESPECT Survey." In Perspectives on the Soft Power of EU Trade Policy, edited by S. Bilal and B. Hoekman. London: CEPR Press.

Gallagher, P., and Y. Serret. 2011. "Implementing Regional Trade Agreements with Environmental Provisions: A Framework for Evaluation."

Garsous, G., and S. Worack. 2021. "Trade as a Channel for Environmental Technologies Diffusion: The Case of the Wind Turbine Manufacturing Industry"." OECD Trade and Environment Working Papers, no. 2021/01. https://doi.org/10.1787/ce70f9c6-en.

George, C. 2011. "Regional Trade Agreements and the Environment: Monitoring Implementation and Assessing Impacts." In Report on the OECD Workshop.

George, C. 2014. "Environment and Regional Trade Agreements: Emerging Trends and Policy Drivers."

George, C., and B. Goldsmith. 2006. "Impact Assessment of Trade-Related Policies and Agreements: Experience and Challenges." Impact Assessment and Project Appraisal 24 (4): 254-58.

Ghiotto, L., and J. Echaide. 2019. "Analysis of the Agreement between the European Union and the Mercosur. Anna Cavazzini MEP, the Greens/EFA." Berlin, Germany.

Glasson, J., and R. Therivel. 2013. Introduction to Environmental Impact Assessment. Routledge.

Global Affairs Canada. 2012. "List of Environmental Assessments." GAC, June. https://www.international.gc.ca/trade-agreements-accords-commerciaux/env/EAlist-listeEE.aspx?lang=eng.

GOC. 2008. "Handbook for Conducting Environmental Assessments of Trade Negotiations." https://www.international.gc.ca/trade-agreements-accords-commerciaux/env/handbook-guide.aspx?lang=eng.

GOC. 2017. "Final Environmental Assessment of the Canada-European Union Comprehensive Economic and Trade Agreement." https://www.international.gc.ca/trade-commerce/trade-agreements-accords-commerciaux/agr-acc/ceta-aecg/ea-ee.aspx?lang=eng&_ga=2.70271703.614832789.1658739412-1609510382.1657189175#a6.

GOC. 2018. "Final Environmental Assessment of the Comprehensive and Progressive Agreement for Trans-Pacific Partnership." https://www.international.gc.ca/tradecommerce/trade-agreements-accords-commerciaux/agr-acc/cptpp-ptpgp/final_eaee_finale.aspx?lang=eng.

GOC. 2020. "Environmental Assessments of Trade Agreements: Process and Revised Framework." https://www.international.gc.ca/trade-commerce/trade-agreements-accordscommerciaux/agr-acc/environ-assessments-evaluations-environnementale.aspx?lang=eng.

GRAIN. 2019. "EU-Mercosur Trade Deal Will Intensify the Climate Crisis from Agriculture." https://grain.org/e/6355.

Grossman, G., and Krueger A. 1993. "Environmental Impacts of a North American Free Trade Agreement." NBER Working Paper, no. 3914). https://www.nber.org/system/files/working_papers/w3914/w3914.pdf

Hobbs, Marian. 2001. "Government Issues New Trade and Environment Framework." https://www.beehive.govt.nz/release/government-issues-new-trade-and-environment-framework.

Hoekman, B., and H. Rojas-Romagosa. 2022. "EU Trade Sustainability Impact Assessments: Revisiting the Consultation Process." Journal of International Economic Law 25 (1): 45–60.

IISD and UNEP. 2017. "A Sustainability Toolkit for Trade Negotiators: Trade and Investment as Vehicles for Achieving the 2030 Sustainable Development Agenda." In The International Institute for Sustainable Development (IISD) and the United Nations Environment Program (UNEP).

Ivanova, A., and M. Angeles. 2006. "Trade and environment issues in APEC." The Social science journal 43: 629-42.

Jilles, Mast. 2022. "EU-Mercosur Free Trade Agreement, A Critical Analysis and an Alternative."

Kessler, J.J., and H. Abaza. 2006. "United Nations Environment Programme's Approach to Integrated Assessment of Trade-Related Policies: Evolution and Recent Progress." Impact Assessment and Project Appraisal 24 (4): 273–83.

Kirkpatrick, C., and C. George. 2006. "Methodological Issues in the Impact Assessment of Trade Policy: Experience from the European Commission's Sustainability Impact Assessment (SIA) Programme." Impact Assessment and Project, no. al,24(4): 325–34.

Kirkpatrick, C., and N. Lee. 1999. "Introduction: Integrated Appraisal and Decision Making, Pp."

Less, C.T., and J.A. Kim. 2008. Checklist for Negotiators of Environmental Provisions in Regional Trade Agreements. OECD Publishing.

Levinson, A. 2009. "Technology, International Trade, and Pollution from Us Manufacturing." American Economic Review 99 (5): 2177 2192.

Mao, X., P. Song, L. Kørnøv, and G. Corsetti. 2015. "A review of EIAs on trade policy in China: Exploring the way for economic policy EIAs." Environmental Impact Assessment Review 50: 53–65. https://doi.org/10.1016/j.eiar.2014.08.010.

Ministry of Foreign Affairs (MFAT) and Trade. 2021. "Trade, Environment and Climate Change." https://www.mfat.govt.nz/assets/Trade/Trade-and-Environment-Full-Visual.pdf.

Moïsé, E., and S. Rubínová. 2021. "Sustainability Impact Assessments of Free Trade Agreements: A Critical Review." OECD Trade Policy Papers, no. 255. https://doi. org/10.1787/65b1a07e-en.

Mubanga, R.O., and K. Kwarteng. 2020. "A Comparative Evaluation of the Environmental Impact Assessment Legislation of South Africa and Zambia." Environmental Impact Assessment Review 83: 106401. https://doi.org/10.1016/j.eiar.2020.106401.

Nadal, A. 2000. The Environmental and Social Impacts of Economic Liberalization on Corn Production in Mexico. Geneva: WWF and OXFAM.

Nemati, M., W. Hu, and M. Reed. 2018. "Are Free Trade Agreements Good for the Environment? A Panel Data Analysis." Review of Development Economics, 435–53. https://doi.org/10.1111/rode.12554.

OECD. 1994. "Methodologies for Environmental and Trade Reviews." http://www.oecd.org/environment/envtrade/36767000.pdf.

OECD. 2007. "Environment and Regional Trade Agreements." Paris, France. http://www.oecd-ilibrary.org/environment/environment-and-regional-tradeagreements_9789264006805-en.

 $OECD.\ 2008.\ "Key\ Environmental\ Indicators."\ https://www.oecd.org/env/indicators-modellingoutlooks/37551205.pdf.$

OECD. 2010. Guidance on Sustainability Impact Assessment. Paris: OECD Publishing. https://doi.org/10.1787/9789264086913-en.

OECD. 2021. "A Retrospective on OECD Work on Trade and Environment in 2008-2020." https://www.oecd.org/env/retrospective-trade-environment-2008-2020. html.

Ortolano, L., and A. Shepherd. 1995. "Environmental impact assessment: challenges and opportunities." Impact assessment 13 (1): 3-30.

O'Ryan, R.D. 2010. "The Socioeconomic and Environmental Effects of FTAs: A Dynamic CGE Analysis for Chile." Environment and Development Economics, 305-27.

Reynaud, P. 2012a. "Sustainable Development and Regional Trade Agreements: Toward Better Practices in Impact Assessments." McGill International Journal of Sustainable Development Law and Policy 8 (2): 205-44.

Reynaud, P. 2012b. "Sustainable Development and Regional Trade Agreements: Toward Better Practices in Impact Assessments." McGill International Journal of Sustainable Development Law and Policy 8 (2): 205-44.

Richardson, S., T. Banuri, R. Bisset, and H. Francisco. 2001. "Reference Manual for the Integrated Assessment of Trade-Related Policies."

Rojas-Romagosa, H. 2018. "Overview of the Evolution of the Methodology and Coverage of EU Ex-Ante Trade Sustainability Impact Assessments over Time." http://respect.eui.eu/wpcontent/uploads/sites/6/2019/02/SurveyPaper_draft_D1.3_28dec2018.pdf.

Salzman, J. 2001. "Executive Order 13, 141 and the Environmental Review of Trade Agreements"." American Journal of International Law 95 (2): 366-380,. https://doi.org/10.2307/2661402.

Siriwardana, M. 2015. "Australia's New Free Trade Agreements with Japan and South Korea: Potential Economic and Environmental Impacts." Journal of Economic Integration, 616-43.

Suwanteep, K., T. Murayama, and S. Nishikizawa. 2016. "Environmental Impact Assessment System in Thailand and Its Comparison with Those in China and Japan." Environmental Impact Assessment Review 58: 12–24.

Therivel, R. 2012. Strategic Environmental Assessment in Action. Routledge.

Torriti, J., and R. Löfstedt. 2012. "The First Five Years of the EU Impact Assessment System: A Risk Economics Perspective on Gaps between Rationale and Practice. Journal of Risk Research, 15(2."

Tsigas, M., D. Gray, and T. Hertel. 2002. "How to Assess the Environment Impacts of Trade Liberalisation." https://www.gtap.agecon.purdue.edu/resources/res_display.asp?RecordID=1076.

UNCTAD. 2022. "Guidebook on trade impact assessment."

UNECE. 1992. "Application of Environmental Lmpacf Assessment Principles to Policies, Plans and Programmes." Environmental Series. Geneva: UNECE.

UNEP. 2001. "Reference Manual for the Integrated Assessment of Trade-Related Policies."

UNEP. 2002. "Integrated Assessment of Trade Liberalization and Trade-Related Policies. A Country Study on the Cotton Sector in China." https://wedocs.unep.org/bitstream/handle/20.500.11822/8379/Integrated%20Assessment%20of%20Trade%20Liberalization%20and%20TradeRelated%20Policies_%20A%20Country%20Study%20on%20the%20Cotton%20Sector%20in%20China-2002141.pdf?sequence=3&isAllowed=y.

UNEP. 2004. "United Nations Environment Programme." In Training Manual on Integrated Assessment of Trade Policies. Geneva.

UNEP. 2005. "Handbook on Integrated Assessment of Trade-Related Measures: The Agriculture Sector."

World bank. n.d. "Global Preferential Trade Agreements Database Search." https://wits.worldbank.org/gptad/database_landing.aspx, accessed 24 March 2022.

WWF. 1998. Developing a Methodology for the Environmental Assessments of Trade Liberalization Agreements. Gland: WWF International discussion paper.

WWF. 1999. "Initiating and Environmental Assessment of Trade Liberalisation in the WTO (Vol." In II). A WWF International Discussion Paper. Gland: WWF International.

WWF. 2002. "Changing the Balance of Trade – WWF Briefing on Sustainability Assessment of EU Trade Policy." WWF European Policy Office. http://www.hubrural.org/IMG/pdf/wwf_changing_the_balance_of_trade.pdf.

WWF. 2004. For Conducting Environmental Reviews of Trade Agreements in the United States. Gland, Switzerland: WWF.

Appendices

Appendix A - Common methodologies and criteria

N	lethods	Description	Source in Guidebooks*
	Multi-criteria analysis	An analytical hierarchy process that takes into	OECD (2008); UNEP (2001)
	(MCA)	account the preferences of stakeholders in the use of	
		resources	
	Cost benefit analysis (CBA)	Widely used, simple tool where the costs and	OECD (2008); UNEP (2001)
		benefits of the action are compared, and if the	
		benefits outweigh the costs, the action is deemed	
		desirable.	
	Risk Assessment	The risk assessment method can be used in the real	UNEP (2001)
		world to look at how trade reforms might affect how	
		chemicals that could be harmful to health are used and	
		moved.	
Quantitative	Input-output analysis	Input-output analysis allows tracing the indirect	OECD (2021); UNEP (2001); Ministry
methods		effects of a policy that are generated by supplier and	of the Environment Government
illetilous		customer linkages across industries.	(2004);
	Partial equilibrium (PE)	PE analysis offers a complementary or stand-alone	UNCTAD (2022); OECD (2021); UNEP
	models	technique employing single sector or single issue	(2001); Ministry of the Environment
		(microeconomic) models that consider the effects of	Government (2004);
		a given policy action.	
	Computable General	These models use assumptions about how the trade	UNCTAD (2022); OECD (2021); UNEP
	Equilibrium (CGE) models	agreement in question will affect trade costs to	(2001); Ministry of the Environment
		compute changes in trade, production, consumption,	Government (2004); European
		employment, demand for natural resources, and	Commission (2006); Global Affairs
		welfare. These changes are calculated as differences	Canada (2020);
		between a counterfactual scenario that includes the	
		trade agreement and a baseline scenario without it.	
	Regulatory and	Regulatory and legal analysis are meant to clarify the	UNCTAD (2022); OECD (2021);
	institutional reviews	environmental regulatory and legal context for an	
		accurate "baseline" picture, mapping the	
		environmental protection and commitments of the	
Oualitative methods		partner countries.	
	1	Stakeholder consultations typically include	UNCTAD (2022); OECD (2021);
	public participation	representatives from NGOs, industry, trade unions,	European Commission (2016); OECD
		consumer groups, professional associations, and	(2010); European Commission (2006)
		academics, and can extend to members of the	
		broader public.	0500 (0001) 5
	Causal chain analysis	CCA is an inference-based analysis that links	OECD (2021); European Commission
	(CCA) & baseline scenario	economic outcomes from a quantitative model to	(2016); OECD (2010); European
		environmental outcomes. Environmental impacts can	Commission (2006); UNEP (2001)
		be traced through air, water, and land pollution and	
		from changes in demand for natural resources and	
Hybrid mothods	Case studies	their degradation. Sectoral approaches and case studies often delve	UNCTAD (2022); OECD (2021);
Hybrid methods	Case studies		, ., .,
		deeply into critical trading sectors that could yield significant environmental impact. They are typically	European Commission (2016); Global Affairs Canada (2020)
		based on quantitative assessments complemented	Anans Canada (2020)
		,	
		with qualitative methods, working through a causal	
		chain that considers scale, composition, and	
	l	technology effects, along with regulatory impacts.	

Table 15. Common methodologies for EIA of trade and environment Source: UNU-CRIS collated using various information sources listed in the reference list

*List of sources:

- Key Environmental Indicators (OECD, 2008)
- Guidebook on trade impact assessment (UNCTAD, 2022)
- Sustainability Impact Assessments of Free Trade Agreements a critical review (OECD, 2021)
- Reference Manual for the Integrated Assessment of Trade-Related Policies (UNEP, 2001)
- Guideline on Environmental Impact Assessment of Economic Partnership Agreements and Free Trade Agreements in Japan (Ministry of the Environment Government, 2004)
- Handbook for Trade Sustainability Impact Assessment (European Comission, 2006)
- Handbook for Trade Sustainability Impact Assessment 2nd edition (European Comission, 2016)
- Environmental Assessments of Trade Agreements: Process and Revised Framework (updated from the initial version in 2001) (Global Affairs Canada, 2020)
- Guidance on Sustainability Impact Assessment (OECD, 2010)

	Levels			
1	2	3	Description	Source
	Pollution	Climate change 1. Ozone layer	Effects of increasing atmospheric greenhouse gas (GHG) concentrations on global temperatures and the earth's climate. GHG emissions refer to the sum of the 6 gases of the Kyoto Protocol (CO2, CH4, N2O, PFCs, HFCs and SF6). CO2 is a major contributor to the greenhouse effect. Consumption of ozone depleting substances (E.g., Methyl Bromide)	UNCTAD (2022); OECD (2010, 2021); Canada (2020); EU (2006, 2016); UNEP (2001) OECD (2021); EU (2006); US (2000)
		1. Air quality	SOx and NOx emission, PM2.5 exposure	UNCTAD (2022); OECD (2021); EU (2006, 2016)
		Waste	Municipal waste production/ generation/recycling, Wastewater treatment, toxic releases.	UNCTAD (2022); OECD (2010, 2021); Canada (2020); EU (2006, 2016)
Environment		Water	Water use, water quality & quantity, Depletion of water resources	UNCTAD (2022); OECD (2010, 2021); Canada (2008, 2020); EU (2006, 2016); UNEP (2001); US (2000)
al criteria	Energy Land Natural resources	Energy	Energy consumption by sector and fuel type; intensity of energy use, fossil fuel, energy efficiency, natural gas, Cleaner and renewable energy	UNCTAD (2022); OECD (2010, 2021); Canada (2020); EU (2006, 2016); UNEP (2001)
		Land	Land use: Increased competition for land resources between staple crops, agricultural expansion for increased cropland. Soil quality: the levels of soil erosion, soil carbon change and soil salinization, average annual fertilizer use	UNCTAD (2022); OECD (2010); Canada (2008); EU (2006, 2016); UNEP (2001)
		Forest	Forest area coverage, intensity of use of forest resources, deforestation risks	UNCTAD (2022); OECD (2021); EU (2006)
		Fisheries	Fish stocks, fish production, Intensity of use of fish resources	OECD (2021); EU (2006)
		Biodiversity	Terrestrial & marine areas protected, threatened species, invasive alien species; Ecosystem diversity, area of key ecosystems.	UNCTAD (2022); OECD (2010, 2021); Canada (2008); EU (2006, 2016); UNEP (2001), US (2010)
Trade-	Environmental Policies & Regulation policies		Support to fossil fuels and renewable energy; enabling policy and regulatory environment for renewable energy, Wildlife Conservation	OECD (2021); US (2000)
related Criteria	Trade in env. goods and services		Trade in environmentally related goods; trade in environmental technologies; Wildlife Trade	OECD (2021)
	Trade-related transport emissions		Carbon emissions embodied in trade	OECD (2021)

Table 16. Harmonised system criteria for the analysis of EIAs of Trade Agreements Source: UNU-CRIS Compilation

Appendix B - List of country studies supported by UNEP from 1999 to 2005

Environmental Impacts of Trade Liberalization and Policies for Sustainable Management of Natural Resources: a Case Study on Bangladesh's Shrimp Farming Industry (1999)

Environmental Impacts of Trade Liberalization and Policies for Sustainable Management of Natural

Resources: a Case Study of Chile's Mining Sector (1999)

Environmental Impacts of Trade Liberalization and Policies for Sustainable Management of Natural

Resources: a Case Study of India's Automobile Sector (1999)

Environmental Impacts of Trade Liberalization and Policies for Sustainable Management of Natural

Resources: a Case Study of the Philippines's Forestry Sector (1999)

Environmental Impacts of Trade Liberalization and Policies for Sustainable Management of Natural

Resources: a Case Study of Romania's Water Sector (1999)

Environmental Impacts of Trade Liberalization and Policies for Sustainable Management of Natural

Resources: a Case Study of Uganda's Fisheries Sector (1999)

Trade Liberalization and the Environment: Lessons learned from Bangladesh, Chile, India, Philippines, Romania and Uganda a Synthesis Report (1999)

Country Studies Round I, Phase II

Implementation of Policy Response Packages to Promote Sustainable Management of Natural Resources: Confronting Sustainability

in the Mining Sector - Role for a Sustainability Fund (Chile) (2003)

Fisheries Subsidies and Marine Resource Management: Lessons from Bangladesh (2004)

Instituting a Pollution Charge for Sound Fisheries Management (Uganda) (n.d.)

Country Studies Round II

Integrated Assessment of Trade Liberalization and Trade-Related Policies, a Country Study on the Argentina Fisheries Sector (2002)

Integrated Assessment of Trade Liberalization and Trade-Related Policies, a Country Study on the Cotton Sector in China (2002) Integrated Assessment of Trade Liberalization and Trade-Related Policies, a Country Study on the Ecuador Banana Sector (2002) Integrated Assessment of Trade Liberalization and Trade-Related Policies, a Country Study on the Export Crop Sector in Nigeria (2002)

Integrated Assessment of Trade Liberalization and Trade-Related Policies, a Country Study on the Fisheries Sector in Senegal (2002)

Integrated Assessment of Trade Liberalization and Trade-Related Policies, a Country Study on the Forestry Sector in Tanzania (2002)

Integrated Assessment of Trade Liberalization and Trade-Related Policies, a Synthesis Report (2002)

Évaluation intégrée de la libéralisation des échanges et des politiques liées au commerce. Un rapport de synthèse (2004)

Country Studies Round II, Phase II

Fisheries Subsidies and Marine Resource Management: Lessons Learned from Studies in Argentina and Senegal (2003) Policy Implementation and Fisheries Resource Management: Lessons from Senegal (2004)

Implementation of Policy Response Packages to Promote Sustainable Management of the Cotton Sector in China (n.d.)
Implementation of Policy Response Packages to Promote Sustainable Management of the Argentine Fisheries Sector (n.d.)

Country Studies Round III

Integrated Assessment of Trade Liberalization in the Rice Sector, a Country Study in China (2005)

Integrated Assessment of Trade Liberalization in the Rice Sector, a Country Study in Colombia (2005)
Integrated Assessment of Trade Liberalization in the Rice Sector, a Country Study in Indonesia (2005)
Integrated Assessment of Trade Liberalization in the Rice Sector, a Country Study in Nigeria (2005)
Evaluation intégrée de l'impact de la libéralisation du commerce – une étude de cas sur la filière du riz au Sénégal (2005)
Integrated Assessment of Trade Liberalization in the Rice Sector, a Country Study in Viet Nam (2005)
Integrated Assessment of Trade and Trade Related Policies with Specific Focus on the Rice Sector, a Synthesis Report (2005)

Country Studies Round IV

Sustainable development plan for the pavement of the federal highway BR-163 in the Amazon region in Brazil (n.d.) Ministry of Agriculture's environmental agenda with a focus on the forestry, pork and wheat sectors in Chile (n.d.) Colombia–USA Free Trade Agreement and its implications for the corn sector in Colombia (n.d.) Integrating socio-economic and environmental assessment of the National Development Plan in Czech Republic (n.d.) Linking conservation, trade, and poverty reduction at the local level in Indonesia (n.d.) National energy policy in Kenya (n.d.)

Lebanon–EU Trade Agreement and its implications for the olive oil sector in Lebanon (n.d.)

Development planning in Tomsk region in Russia (n.d.)

Participatory district agricultural development planning in Tanzania (n.d.)

Trade and fisheries policies in Uganda (n.d.)

Appendix C – List of EIAs by Actors

No.	EIAs	Approach	Trade Agreement	Status	Publication Date
1	Trade Sustainability Impact Assessment in support of FTA negotiations between the European Union and Australia	Ex-ante	European Union and Australia	Completed	March 2020
2	Sustainability Impact Assessment in Support of the Association Agreement Negotiations between the European Union and Mercosur	Ex-ante	EU-Mercosur Association Agreement Negotiations	Completed	December 2020
3	SIA in support of free trade agreement (FTA) negotiations between the European Union and the Republic of Indonesia	Ex-ante	EU-Indonesia FTA	Completed	August 2019
4	SIA in support of negotiations of comprehensive economic & trade agreement between the European Union and Canada	Ex-ante	CETA	Completed	June 2011
5	Sustainability Impact Assessment in Support of Negotiations with Partner Countries in Eastern and Southern Africa in view of Deepening the Existing Interim Economic Partnership Agreement	Ex-ante & Ex Post	EU-Eastern and Southern Africa EPA & Deepening of the EU-Eastern and Southern Africa EPA	Completed	July 2022
6	Sustainability Impact assessment (SIA) in support of trade negotiations with Angola for EU-SADC EPA accession	Ex-ante	EU-SADC EPA - Angola's accession	Completed	September 2021
7	Sustainability Impact Assessment (SIA) in support of Free Trade Agreement (FTA) negotiations between the European Union and the Philippines	Ex-ante	EU-Philippines FTA	Completed	May 2022
8	Sustainability Impact Assessment (SIA) in support of Free Trade Agreement (FTA) negotiations between the European Union and Malaysia	Ex-ante	EU-Malaysia	Completed	May 2022
9	Trade Sustainability Impact Assessment in support of FTA negotiations between the European Union and New Zealand	Ex-ante	EU-New Zealand FTA	Completed	March 2020
10	Sustainability Impact Assessment in Support of the Negotiations for the Modernisation of the Trade Part of the Association Agreement with Chile	Ex-ante	EU-Chile trade pillar modernisation negotiations	Completed	May 2019
11	Sustainability Impact Assessment (SIA) in support of the negotiations for the modernisation of the trade part of the Global Agreement with Mexico	Ex-ante	EU-Mexico trade pillar modernisation negotiations	Completed	September 2019

12	Trade SIA in support of negotiations on a plurilateral Trade in Services Agreement (TiSA)	Ex-ante	Trade in Services Agreement (TiSA)	Completed	June 2017
13	SIA in support of the negotiations on a Transatlantic Trade and Investment Partnership (TTIP)	Ex-ante	EU-USA (TTIP)	Completed	March 2017
14	Trade Sustainability Impact Assessment of the Free Trade Agreement between the European Union and Japan	Ex-ante	EU-Japan Economic Partnership Agreement	Completed	April 2016
15	Trade Sustainability Impact Assessment on the Environmental Goods Agreement	Ex-ante	Environmental Goods Agreement	Completed	April 2016
16	Trade Sustainability Impact Assessment in support of negotiations of a DCFTA between the EU and Egypt	Ex-ante	EU-Egypt deep and comprehensive free trade area (DCFTA)	Completed	November 2014
17	Trade Sustainability Impact Assessment in support of negotiations of a DCFTA between the EU and Jordan	Ex-ante	EU-Jordan deep and comprehensive free trade area (DCFTA)	Completed	September 2014
18	Trade Sustainability Impact Assessment in support of negotiations of a DCFTA between the EU and Morocco	Ex-ante	EU-Morocco DCFTA	Completed	November 2013
19	Trade Sustainability Impact Assessment in support of negotiations of a DCFTA between the EU and Tunisia	Ex-ante	EU-Tunisia DCFTA	Completed	November 2014
20	Trade Sustainability Impact Assessment in support of negotiations of a DCFTA between the EU and the Republic of Armenia	Ex-ante	EU-Armenia DCFTA	Completed	June 2014
21	Trade Sustainability Impact Assessment in support of negotiations of a DCFTA between the EU and the Republic of Moldova	Ex-ante	EU and the Republic of Moldova DCFTA	Completed	October 2012
22	Trade Sustainability Impact Assessment in support of negotiations of a DCFTA between the EU and Georgia	Ex-ante	EU and Georgia DCFTA	Completed	October 2012
23	EU-Andean Trade Sustainability Impact Assessment	Ex-ante	EU-Andean Community Association Agreement	Completed	October 2009
24	Trade Sustainability Impact Assessment (SIA) of the EU-Libya Free Trade Agreement	Ex-ante	EU-Libya FTA	Completed	October 2009

25	Trade Sustainability Impact Assessment of the Association Agreement to be negotiated between the EU and Central America	Ex-ante	EU-Central America Association Agreement	Completed	2009
26	Trade Sustainability Impact Assessment of the FTA between the EU and ASEAN	Ex-ante	EU - ASEAN FTA	Completed	June 2009
27	Trade Sustainability Impact Assessment of the FTA between the EU and India	Ex-ante	EU - INDIA FTA	Completed	May 2009
28	Trade Sustainability Impact Assessment (SIA) of the Association Agreement under Negotiation between the European Community and Mercosur	Ex-ante	EU-Mercosur Association Agreement Negotiations	Completed	March 2009
29	Trade Sustainability Impact Assessment of the negotiations of EU-China Partnership and Cooperation Agreement (PCA)	Ex-ante	EU-China Partnership and Cooperation Agreement (PCA)	Completed	August 2008
30	Trade Sustainability Impact Assessment of the EU-Korea FTA	Ex-ante	EU-Korea FTA	Completed	June 2008
31	Trade Sustainability Impact Assessment of the EU-UkraineFTA	Ex-ante	EU-Ukraine FTA	Completed	December 2007
32	Sustainability Impact Assessment of the Euro-Mediterranean Free Trade Area	Ex-ante	Euro-Mediterranean Free Trade Area (EMFTA)	Completed	November 2007
33	Sustainability Impact Assessment of the EU-ACP Economic Partnership Agreements (African, Caribbean and Pacific Group of States) Economic Partnership Agreements (EPA)	Ex-ante	EU-ACP EPA	Completed	May 2007
34	Final Global Overview Trade SIA of the Doha Development Agenda	Ex-ante	WTO - Doha Development Agenda (Doha round)	Completed	July 2006
35	Sustainability Impact Assessment (SIA) of the negotiations of the trade agreement between the European Community and the Countries of the Cooperation Council for the Arab States of the Gulf (GCC)	Ex-ante	EU-Arab States of the Gulf (GCC) Trade Agreements	Completed	May 2004
36	Sustainable Impact Assessment (SIA) of the trade aspects of negotiations for an Association Agreement between the European Communities and Chile	Ex-ante	EU-Chile Association Agreement	Completed	December 2002
37	Sustainability Impact Assessment of WTO negotiations in the major food crops sector	Ex-ante	WTO Negotiations in the major food crops sector	Completed	May 2002
38	Sustainability Impact Assessment Study of WTO NEW ROUND	Ex-ante	WTO - Seattle round	Completed	November 1999

39	Trade Sustainability Impact Assessment (SIA) in support of Free Trade Agreement and Investment Protection Agreement negotiations between the European Union and the Republic of India	Ex-ante	EU-India FTA	Initial/Inception Phase	April 2023
40	Ex-post evaluation of the implementation of part IV of the Association Agreement (Trade Pillar) between the EU and its Member States and Central America		EU - Central America Association Agreement	Completed	September 2022
41	Ex-post evaluation of the implementation of the Deep and Comprehensive Free Trade Area between the EU and its Member States and Georgia	Ex-Post	EU - Georgia DCFTA	Draft/Interim Phase	July 2022
42	Ex-post evaluation of the implementation of the Deep and Comprehensive Free Trade Area between the EU and its Member States and Moldova, Republic of	Ex-Post	EU – Moldova DCFTA	Draft/Interim Phase	July 2022
43	Ex-post Evaluation of the impact of trade chapters of the Euro-Mediterranean Association Agreements with six partners (Algeria, Egypt, Jordan, Lebanon, Morocco and Tunisia)	Ex-Post	Euro-Mediterranean Association Agreements with six partners (Algeria, Egypt, Jordan, Lebanon, Morocco and Tunisia)	Completed	March 2021
44	Ex-post evaluation of the EPA between the EU and its Member States and the CARIFORUM Member States	Ex-Post	EU - CARIFORUM EPA	Completed	January 2021
45	Evaluation of the Implementation of the Free Trade Agreement between the EU and its Member States and the Republic of Korea	Ex-Post	EU - Korea FTA	Completed	March 2019
46	Ex-post evaluation of the implementation of the EU-Mexico Free Trade Agreement	Ex-Post	EU - Mexico FTA	Completed	February 2017
47	Evaluation of the economic impact of the Trade Pillar of the EU-Chile Association Agreement	Ex-Post	EU - Chile Association Agreement	Completed	March 2012
48	Ex post evaluation of the implementation of the Trade Agreement between the EU and its Member States and Colombia, Peru and Ecuador	Ex-Post	EU - Colombia, Ecuador and Peru	Draft/Interim Phase	July 2021
49	Ex-post evaluation of the EU-SADC Economic Partnership Agreement	Ex-Post	EU-SADC EPA	Initial/Inception Phase	June 2023

Table 17. List of impact assessments of trade agreements in the EU Source: UNU-CRIS

No.	EIAs	Approach	Trade Agreement	Status	Publication Date
1	Initial Environment Assessment of the Canada – Andean Community Free Trade Negotiations ((Peru, Colombia, Ecuador and Bolivia)	Ex-ante	Canada-Andean Community countries FTA	Stopped negotiating	January 2008
2	Final Environmental Assessment of the Canada-United States-Mexico Agreement (CUSMA)	Ex-ante & Ex-post	Canada-United States-Mexico Agreement (CUSMA)	Completed	July 2020
3	Final Environmental Assessment of the Comprehensive and Progressive Agreement for Trans-Pacific Partnership	Ex-ante	СРТРР	Completed	October 2019
4	Final Environmental Assessment of the Canada-European Union Comprehensive Economic and Trade Agreement	Ex-ante	Canada- European Union Comprehensive Economic and Trade Agreement (CETA)	Completed	May 2017
5	Initial Environmental Assessment of the Canada-U.K. Bilateral Trade Agreement Negotiations	Ex-ante & Ex Post	Canada-U.K. FTA	Ongoing	August 2022
6	Initial Environmental Assessment of the Canada-CARICOM Free Trade Agreement (FTA) Negotiations	Ex-ante	Canada-CARICOM FTA	Ongoing	July 2008
7	Initial Strategic Environmental Assessment Report of the Canada-Central America Four Free Trade Negotiations (El Salvador, Guatemala, Honduras and Nicaragua)	Ex-ante	Canada-Central America Four (El Salvador, Guatemala, Honduras and Nicaragua) FTA	Not signed/ stopped negotiating	No date
8	Final Environmental Assessment of the Canada-Chile Government Procurement Chapter to be added to the Canada-Chile Free Trade Agreement	Ex-ante	Canada-Chile FTA	Completed	No date
9	Final Environment Assessment of the Canada-Colombia Free Trade Agreement (FTA) Negotiations	Ex-ante	Canada-Colombia FTA	Completed	No date
10	Final Environment Assessment of the Canada-Peru Free Trade Agreement (FTA) Negotiations	Ex-ante	Canada-Peru FTA	Completed	No date

11	Notice of Intent to Conduct an Environmental Assessment of the Modernization of the Canada-Costa Rica Free Trade Agreement	Ex-ante	Modernized Canada-Costa Rica FTA	Ongoing	January 2012
12	Initial Environmental Assessment of the Canada-Dominican Republic Free Trade Agreement Negotiations	Ex-ante	Canada-Dominican Republic FTA	Ongoing	No date
13		Ex-ante	Canada-Honduras FTA	Completed	October 2013
14	Notice of Intent to Conduct a Strategic Environmental Assessment of the Canada- India Comprehensive Economic Partnership Agreement	Ex-ante	Canada-India FTA	Ongoing	November 2011
15	Notice of intent to conduct impact assessments, including an initial environmental assessment and genderbased analysis plus (GBA+), on a possible Canada-Indonesia Comprehensive Economic Partnership Agreement	Ex-ante	Canada-Indonesia Comprehensive Economic Partnership Agreement (CEPA)	Ongoing	No date
16	Final Environmental Assessment of the Canada-Israel Free Trade Agreement	Ex-ante	Modernized Canada-Israel FTA	Completed	January 2016
17	Notice of Intent to Conduct a Strategic Environmental Assessment of the Canada- Japan Economic Partnership Agreement	Ex-ante	Canada-Japan Economic Partnership Agreement	Ongoing	No date
18	Final Environment Assessment of the Canada-Jordan Free Trade Agreement (FTA) Negotiations	Ex-ante	Canada-Jordan FTA	Completed	No date
19	Final Environmental Assessment of the Canada-Korea Free Trade Agreement	Ex-ante	Canada-Korea FTA	Completed	2014
20	Notice of Intent to Conduct an Environmental Assessment of a Canada- Morocco Free Trade Agreement	Ex-ante	Canada-Morocco FTA	Ongoing	No date
21	Final Environmental Assessment of the Canada-Panama Free Trade Agreement Negotiations	Ex-ante	Canada-Panama FTA	Completed	No date
22	Initial Environmental Assessment of the Canada-Pacific Alliance Free Trade Agreement (Pacific Alliance: Chile, Colombia, Mexico, Peru)	Ex-ante	Canada-Pacific Alliance FTA	Ongoing	June 2019

23	Initial Environmental Assessment Report of the Proposed Canada-Singapore Free Trade Agreement	1	Canada-Singapore FTA	Ongoing	May 2004
24	Initial Environmental Assessment on the Trade in Services Agreement	Ex-ante	Trade in Services Agreement (TISA)	Ongoing	No date
25	Final Environmental Assessment of the Canada-Ukraine Free Trade Agreement	Ex-ante	Canada-Ukraine FTA	Completed	January 2016
26	Initial Environmental Assessment: Trade Negotiations in the World Trade Organization	Ex-ante	WTO negotiations (Doha round)	Ongoing	No date
27	Initial Environmental Assessment of the Environmental Goods Agreement Negotiations	Ex-ante	Environmental Goods Agreement	Ongoing	July 2015
28	Initial Environmental Assessment on the Negotiations to Expand Product Coverage under the WTO Information Technology Agreement	Ex-ante	WTO - Information Technology Agreement (ITA) Expansion	Ongoing	No date
29	Initial Environmental Assessment of the Canada-Mercosur Free Trade Agreement Negotiations	Ex-ante	Canada-Mercosur FTA	Ongoing	November 2020

Table 18. List of EIAs of trade agreements in Canada Source: UNU-CRIS Compilation¹

¹ See at https://policy.trade.ec.europa.eu/analysis-and-assessment/sustainability-impact-assessments_en and https://policy.trade.ec.europa.eu/analysis-and-assessment/ex-post-evaluations_en

No.	EIAs	Approach	Trade Agreement	Status	Publication date
1	Final Environmental Review of the U.S Australia FTA	Ex-ante	U.SAustralia FTA	Completed	July 2004
2	Final Environmental Review of the United States - Mexico - Canada Agreement (USMCA)	Ex-ante	USMCA	Completed	2019
3	Final Environmental Review of the United States - Bahrain Free Trade Agreement	Ex-ante	US - Bahrain FTA	Completed	September 2004
4	Final Environmental Review of the Dominican Republic – Central America – United States Free Trade Agreement	Ex-ante	CAFTA-DR	Completed	June 2005
5	Final Environmental Review of the U.SChile Free Trade Agreement	Ex-ante	US - Chile FTA	Completed	June 2003
6	Final Environmental Review United States – Colombia Trade Promotion Agreement	Ex-ante	US - Colombia TPA	Completed	September 2011
7	Interim Environmental Review Environmental Goods Agreement	Ex-ante	Environmental Goods Agreement	Ongoing	October 2016
8	Final Environmental Review of the Agreement on the Establishment of a Free Trade Area Between the Government of the United States and the Government of the Hashemite Kingdom of Jordan	Ex-ante	US - Jordan FTA	Completed	No date
9	Final Environmental Review United States – Korea Free Trade Agreement	Ex-ante	US - Korea FTA	Completed	September 2011
10	Final Environmental Review of the United States - Morocco Free Trade Agreement	Ex-ante	US - Morocco FTA	Completed	July 2004
11	Final Environmental Review of the United States – Oman Free Trade Agreement	Ex-ante	US - Oman FTA	Completed	no date
12	Final Environmental Review United States – Panama Trade Promotion Agreement	Ex-ante	US - Panama TPA	Completed	September 2011
13	Final Environmental Review United States - Peru Trade Promotion Agreement	Ex-ante	US - Peru TPA	Completed	no date
14	Final Environmental Review of the U.S Singapore Free Trade Agreement	Ex-ante	US - Singapore FTA	Completed	June 2003

 $\textbf{Table 19}. \ \, \text{List of EIAs of trade agreements in the USA to } \ \, \text{date}^{2}$

² https://ustr.gov/issue-areas/environment/environmental-reviews

No	EIA	Approach	Trade agreement	Status	Publication date
1	The UK's approach to trade negotiations with the US	Ex-ante	UK-US FTA	On going/ Strategic approach	2 March 2020
2	Impact Assessment of the Agreement between the United Kingdom of Great Britain and Northern Ireland and Japan for a Comprehensive Economic Partnership	Ex-ante	UK-Japan CEPA	Completed	23 October 2020
3	UK approach to joining the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP)	Ex-ante	СРТРР	On going/ Strategic approach	22 June 2021
4	Free trade agreement between the United Kingdom and Norway, Iceland and Liechtenstein: impact assessment	Ex-ante	UK-Norway, Iceland, and Liechtenstein FTA	Completed	08 Jul 2021
5	Impact assessment of the Free Trade Agreement between the United Kingdom of Great Britain and Northern Ireland and Australia	Ex-ante	UK-Australia FTA	Completed	16 December 2021
6	Impact assessment of the Free Trade Agreement between the United Kingdom of Great Britain and Northern Ireland and New Zealand	Ex-ante	UK-New Zealand FTA	Completed	28 February 2022
7	UK approach to negotiating a free trade agreement with India	Ex-ante	UK-India FTA	On going/ Strategic approach	13 January 2022
8	UK approach to negotiating a free trade agreement with Canada	Ex-ante	UK-Canada FTA	On going/ Strategic approach	24 March 2022
9	Information notes for the call for input on a prospective free trade agreement between the UK and Switzerland	Ex-ante	UK-Switzerland FTA	On going/ Call for input	28 April 2022
10	UK approach to negotiating a free trade agreement with Mexico	Ex-ante	UK-Mexica FTA	On going/ Strategic approach	20 May 2022
11	UK approach to negotiating a free trade agreement with the Gulf Cooperation Council (GCC)	Ex-ante	UK-GCC FTA	On going/ Strategic approach	22 June 2022
12	UK approach to negotiating a free trade agreement with Israel	Ex-ante	UK-Israel FTA	On going/ Strategic approach	20 July 2022
13	Information notes for the call for input on a prospective free trade agreement between the UK and South Korea, Republic of	Ex-ante	UK-Korea FTA	On going/ Call for input	09 December 2022
14	Information Note for the Call for Input on a prospective Free Trade Agreement between the United Kingdom and Maldives	Ex-ante	UK- Maldives FTA	On going/ Call for input	June 2023

 $\textbf{Table 20}. \ List \ of impact \ assessments \ of \ trade \ agreements \ in \ the \ UK^3$

³ only IAs that include an environmental impact assessment are counted. See more at https://www.gov.uk/search/policy-papers-and-consultations?keywords =impact+assessment+of+trade+agreement&order=relevance&organisations%5B%5D=department-for-international-trade&page=1&parent=department-for-international-trade

No	NIA	Approach	Trade agreement	Status	Publication date
1	National Interest Analysis: New Zealand- Thailand Closer Economic Partnership Agreement	Ex-ante	New Zealand-Thailand CEPA	Completed	2 March 2005
2	National Interest Analysis: Regional Comprehensive Economic Partnership (RCEP)	Ex-ante	RCEP	Completed	No date
3	National Interest Analysis: Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP)	Ex-ante	СРТРР	Completed	February 2018
4	National Interest Analysis: Digital Economy Partnership Agreement	Ex-ante	DEPA	Completed	June 2020
5	National Interest Analysis: Pacific Agreement on Closer Economic Relations (PACER) Plus	Ex-ante	PACER Plus	Completed	June 2017
6	National Interest Analysis: Protocol on Investment to the New Zealand – Australia Closer Economic Relations Trade Agreement	Ex-ante	New Zealand – Australia CER	Completed	No date
7	National Interest Analysis: ASEAN- Australia-New Zealand free trade agreement (AANZFTA)	Ex-ante	AANZFTA	Completed	2010
8	National Interest Analysis: New Zealand - Hong Kong, China Closer Economic Partnership	Ex-ante	New Zealand-Hong Kong, China CEP	Completed	No date
9	National Interest Analysis: New Zealand - Malaysia Free Trade Agreement	Ex-ante	New Zealand-Malaysia FTA	Completed	No date
10	National Interest Analysis: Trans-Pacific Strategic Economic Partnership Agreement	Ex-ante	Trans-Pacific CEPA	Completed	July 2005
11	National Interest Analysis: Korea-New Zealand Free Trade Agreement	Ex-ante	Korea-New Zealand FTA	Completed	No date
12	National Interest Analysis: Protocol to Upgrade the New Zealand-China Free Trade Agreement	Ex-ante	New Zealand-China FTA	Completed	January 2021
13	National Interest Analysis: NZ-Singapore Closer Economic Partnership upgrade	Ex-ante	CEP upgrade	Completed	November 2018
14	New Zealand-United Kingdom Free Trade Agreement National Interest Analysis	Ex-ante	New Zealand-United Kingdom FTA	Completed	February 2022

Table 21. List of NIAs of trade agreements in New Zealand Source: UNU-CRIS compilation from the website of the New Zealand government⁴

⁴ https://www.mfat.govt.nz/en/trade/free-trade-agreements/

Appendix D - Summary main points of selected of environmental impact assessments in RTAs

Source: UNU-CRIS compilation

EIAs	Actors	Year Published	Methodology	Highlights/Main Points
Final Environmental Assessment of the Canada-United States- Mexico Agreement (CUSMA)	Canada	2018	Qualitative Methods: Stakeholder consultation and public participation; Regulatory/legal analysis; the review of several academic papers	*CUSMA's impacts on the environment will be more positive than NAFTAs as the new Agreement is expected to strengthen environmental protection and governance practices in North America. *CUSMA could have positive impacts on the environment as a result of enhanced environmental protection and governance provisions
Final Environmental Assessment of the Canada-European Union Comprehensive Economic and Trade Agreement	Canada	2017	Quantitative Methods: CGE model Qualitative methods: Stakeholder consultation and public participation; Case studies and sector studies; Regulatory/legal analysis	CETA is expected to have only minor environmental impacts in Canada.
Final Environmental Assessment of the Comprehensive and Progressive Agreement for Trans-Pacific Partnership	Canada	2018	Quantitative Methods: CGE model Qualitative methods: Stakeholder consultation and public participation; Case studies and sector studies	* The CKFTA is expected to have only minor environmental impacts in Canada. * A quantitative analysis concluded that the net impact of increased bilateral trade with Korea on Canada's environment would be characterized by only minor increases in GHG emissions, and lower energy and water use. This Environmental Assessment concludes that CPTPP is expected to have only minor environmental impacts in Canada (minor increases in GHG emissions, energy and water use)
Final Environmental Assessment of the Canada-Korea Free Trade Agreement	Canada	2014		* USMCA is unlikely to cause significant adverse environmental impacts in the United States. * USMCA's environmental provisions are likely to have a net positive effect on conservation of forest resources in North America

Final Environmental Review of the The United States - Mexico - Canada Agreement (USMCA)	The US	2019	Qualitative methods (mainly Regulatory/legal analysis and Stakeholder consultation)	The U.SAustralia FTA does not have any significant environmental impacts in the United States
Final Environmental Review of the U.S Australia FTA	The US	2004	Qualitative methods (mainly Stakeholder consultation)	* In terms of the potential impact of the AA, the two most important environmental issues are greenhouse gas emissions and deforestation. * The SIA concludes that the impact of the AA on global GHG emissions would be negligible. * As regards deforestation, the model predicts a small increase in production of various land-use related products. Moderate concerns in terms of the impact of the AA on deforestation is envisaged, in particular in Brazil.
Final Report: Sustainability Impact Assessment in Support of the Association Agreement Negotiations between the European Union and Mercosur	The EU	2020	Quantitative Methods: CGE model, indicators Qualitative methods: causal chain analysis, interviews and literature review)	
Final Report: SIA in support of negotiations of comprehensive economic & trade agreement between the European Union and Canada	The EU	2011	Quantitative Methods: CGE, E3MG, gravity models Qualitative methods: causal chain analysis, interviews and literature review, Baseline scenario	*The analysis suggests that overall greenhouse gas emissions associated with UK-based production are estimated to be largely unchanged from the agreement. * The increase in emissions associated with the transport of goods could be between around 0.1r and 0.3 MtCO2e each year *The agreement preserves the UK's right to regulate to meet its climate commitments.

Final Report: Trade Sustainability Impact Assessment in support of FTA negotiations between the European Union and New Zealand	The EU	2020	model, indicators, gravity model Qualitative methods: literature review, case studies, stakeholder	*The SIA findings indicate that from an environmental perspective, the most substantial impacts of the FTA will relate to climate change, land use and biodiversity. * With regard to climate change, the SIA notes that the FTA has a negligible impact on non-CO2 greenhouse gases (GHG) emissions in the conservative scenario2. In the ambitious scenario, non-CO2 emissions would increase slightly by 0.012% globally.
Final Report: Impact assessment of the Free Trade Agreement between the United Kingdom of Great Britain and Northern Ireland and Australia	The UK	2021	Quantitative Methods: CGE, gravity models, indicators Qualitative methods: literature review, stakeholder consultations	*The analysis suggests that overall greenhouse gas emissions associated with UK-based production are estimated to be largely unchanged from the agreement. * The increase in emissions associated with the transport of goods could be between around 0.1r and 0.3 MtCO2e each year *The agreement preserves the UK's right to regulate to meet its climate commitments.
Final Report: Free trade agreement between the United Kingdom and Norway, Iceland and Liechtenstein: impact assessment	The UK	2021	Quantitative Methods: CGE, gravity models, indicators Qualitative methods: literature review, stakeholder consultations	The Agreement is not expected to have significant impacts on greenhouse gas emissions (CO2 and non-CO2), traderelated transport emissions, and wider environmental impacts such as air quality, biodiversity, forestry, waste, water use/quality, and fisheries
National Interest Analysis: ASEAN- Australia-New Zealand free trade agreement (AANZFTA)	New Zealand	2009	Quantitative methods: literature review, stakeholder consultations	On balance, the overall economic impact of AANZFTA on the New Zealand economy is not expected to generate substantive negative scale effects that cannot be addressed by New Zealand's current framework of environment and sustainable development-related legislation, policies and practices.
National Interest Analysis: Korea-New Zealand Free Trade Agreement	New Zealand	2015	Quantitative methods: literature review, stakeholder consultations	The FTA is not expected to have any discernible negative effects on the environment in New Zealand that cannot be managed using existing policy and regulatory frameworks

Appendix E - Comparison between Ex-post Evaluation and Sustainability Impact Assessment

	Sustainability Impact Assessment (SIA)	Ex-post Evaluation (EE)	
Publish website	https://policy.trade.ec.europa.eu/analysis-and-assessment/sustainability-impact-assessments_en	https://policy.trade.ec.europa.eu/analysis- and-assessment/ex-post-evaluations_en	
Start year	1999	2012	
Quantity	38	10	
Focus	Sustainability (social, environmental, and human right impact)	Economic impact and Sustainability (social, environmental, and human right impact)	
Approach	Mostly ex-ante and some ex-post (for deepening and modernizing RTAs)	ex-post	
Process	Terms of Reference 2. Inception Report 3. Interim Report 4. Final Report 5. Position paper	Evaluation Roadmap 2. Terms of Reference 3. Inception Report 4. Interim Report 5. Final Report 6. Staff Working Document (summaries results)	
Guidelines and toolbox	-Main documentation: (1) Handbook for sustainability impact assessment - Others: (2) Guidelines on the analysis of human rights impact in impact assessments of traderelated policy initiatives; (3) Better Regulation Guidelines	(1) Better Regulation Guidelines; (2) Better Regulation Toolbox	
Methodology	almost the same (CGE, indicators, case study, etc.,)	almost the same (CGE, indicators, case study, etc.,)	
Criteria	almost the same (CO2 emissions, natural resources, etc.,)	almost the same (CO2 emissions, natural resources, etc.,)	

Table 22. Comparison between Ex-post Evaluation (EE) and SIA Assessment Source: UNU-CRIS compilation

Trade Agreement	Ex-ante SIA findings	Ex-post evaluation findings	Ex-post evaluation findings compared to SIA findings
Association Agreement (Trade Pillar) between the EU and Central America	***Others Overall pressure on land use could increase if effects of mining, deforestation and biofuels production are taken into account. Impacts – both positive and negative - are predicted in terms of environmental quality, notably related to the increase of production and trade. More than in other areas, the study points out how the overall balance – especially in the Central American countries - largely depends on the internal regulatory and policy framework and on the existence both of environmental standards in Central	reductions increased GHG emissions in Costa Rica, the EU and rest of the world, but decreased GHG emissions in El Salvador, Guatemala, Honduras, Nicaragua and Panama. This resulted in a marginal global decrease in GHG emissions (of by 0.2 Mtonne CO2-eq.) in 2019 resulting from the	The ex-ante SIA predicted only minor increases in CO2 emissions, however the ex-post evaluation revealed a decrease in emissions. Overall, the ex-post evaluation shows that the environmental impact of this trade agreement is more positive than the SIA.
Deep and Comprehensive Free Trade Area between the EU and its Member States and Georgia	The estimated environmental effects of the DCFTA in terms of CO2 emissions and land-use intensity in Georgia were expected to be very small. CO2 emissions were estimated to increase by 0.2% and land intensity by 2%. Moreover, air emissions of other pollutants were expected to rise by up to 3.1%.	The ex-post estimated impact on CO2 emissions was negligible. According to the CGE results, overall CO2 emissions were estimated to decrease by 0.02%. More specifically, the ex-post estimated impact on household CO2 emissions was -0.23%, while the impact on firms' CO2 emissions was +0.04%. Among firms, the sectors that were estimated to experience the largest negative impact in terms of CO2 emissions were non-ferrous metals (+2.01%) and iron and steel (+0.77%). The sectors with the estimated largest positive impacts were processed food (-1.15%) and rubber and plastics (-1.12%).	The ex-ante estimated impacts of the SIA on CO2 emissions were slightly overestimated with respect to the ex -post impacts estimated by the CGE modelling (0.2% of the former versus -0.02% of the latter)

			,
Free Trade Area	According to the SIA, the estimated environmental effects in terms of CO2 emissions and land-use intensity in Moldova were expected to be very small. CO2 emissions were estimated to increase by 0.1%, and land use intensity by 1.9%. Moreover, air emissions of other pollutants were expected to rise by less than 3%. These would translate into EUR 15 millions of total external costs of the DCFTA for Moldova. At the sectoral level, air emissions were expected to increase from agriculture, ferrous metals, and land and other transport. The emissions from the mineral products sector were expected to be the only ones to decrease significantly.	The ex-post estimated impact on CO2 emissions was negligible. According to the CGE results, overall CO2 emissions were estimated to decrease by 0.11%. More specifically, CO2 emissions were estimated to decrease by 0.18% across firms and increase by +0.13% across households. Among firms, the sectors that were estimated to have the largest impact on CO2 emissions were chemicals (-3.11%) and machinery and equipment (-2.9%) in positive terms, and textiles (+10.76%) and wearing apparel (+9.2%) in negative terms.	Overall, the ex-ante analysis of the SIA slightly overestimated the impact on CO2 emissions (0.1% versus -0.11% ex-post estimated impact).
Euro- Mediterranean	No SIA	CGE modelling results in the Egypt and the other countries SMCs covered in the CGE model show that the FTAs reduced CO2 emissions, mainly because some sectors with higher emission levels contracted.	
Association Agreements with six partners		With respect to water and waste, the SMCs clearly face challenges, but based on stakeholder consultations the effect of the FTAs is mixed. On land use and biodiversity, no strong conclusions could be drawn.	
Economic Partnership Agreement (EPA) between the European Union and CARIFORUM	No SIA with clear conclusion	No significant changes in social or environmental indicators have been identified over the evaluation period. While at sectoral level there is variation, they have not been able to identify specific groups that have suffered or benefitted from significant environmental impacts that occurred because of this.	е

EU-Korea Free Trade Agreement

The expansion of trade, production and investment that is expected once the FTA takes effect is unlikely to have significant adverse environmental effects since an adequate framework for environmental regulation and protection EU, already.

According to the CGE modelling, the EU-Korea FTA has led to a limited, but notable reduction of global CO2 emissions. No other environmental impacts could be attributed to the FTA.

exists in both, Korea, Republic of and the Specifically, due to the EU-Korea FTA, CO2 emissions in the EU would have increased by 0.12 percent if there were no emissions trading system in place in the EU. Since the Overall, the ex-post ETS covers most industrial CO2 emissions in Europe, it most likely has prevented the realization of these CO2 emission changes.

> In Korea, emissions increased by 0.19 percent compared to the counterfactual situation of not having an FTA.

However, the EU-Korea FTA leads overall to a net reduction of global emissions by 4.1 million Tonnes CO2. The global CO2 reduction can almost be fully ascribed to just two countries that suffer from trade diversion effects, namely China and the United States, whose relatively emissionintensive exports were replaced by cleaner ones from the EU or Korea.

The descriptive analysis of indicators concerning other environmental areas, such as air pollution, water quality, biodiversity, waste management and deforestation, does not indicate any observable effect of the EU-Korea FTA in these areas.

The conclusions of the SIA were mainly based on qualitative assessment, while the ex-post evaluation findings are more clearly quantified using the CGE model.

evaluation shows that the environmental impact of this trade agreement is more positive than the SIA.

EU-Mexico Free Trade Agreement	No SIA	For the EU, all environmental impacts are even smaller in relative terms and very close to zero. For Mexico, based on the modelling results, the FTA contributed to a reduction of some air pollutants, most notably in the emissions of Sulphur oxides (-0.28 percent), and an increase in others, but the effects are estimated to be quite small. In respect of resources, land use is estimated to have increased in Mexico because of the FTA, by 0.13 percent. For other environmental elements (e.g., water, waste, biodiversity) the effects of the FTA are ambiguous, but, based on the overall economic and environmental results, are expected to be small.	
EU-Chile Association Agreement	The 2002 ex-ante SIA stressed the potential negative environmental impact of the EU-Chile agreement in the forestry, mining sector. The scale effect will outweigh benefits from technique effects for air, water and land quality. Land and water quality are also affected negatively by agricultural intensification. Concerning these three environmental indicators They also note the potential local seriousness of mine-induced pollution	Given the very small impact of the EU-Chile FTA on the EU economy, one should not expect to find strong linkages with environmental degradation or improvement in the EU. It is difficult to draw conclusions on the role of EU imports of forestry and wood products on biodiversity, given that they come from planted forests, whose link with the destruction of primary forest is controversial. Some authors claim that these forests were planted long after initial deforestation took place, while NGOs tend to link the two issues.	The concern on the issues raising in the ex-ante SIA appears surprising given that the E)-Chile FTA has not changed significantly the trade condition prevailing between Chile and the EU, most minerals and ores being already duty free in the EU. The ex-ante assessment anticipated that growth in exports of forestry products to the EU would have adverse environmental effects. The ex-post assessment indeed finds a possible role in the export of plywood, but a very limited one.

The Trade	***Impacts in the EU:	***Impacts in the EU:	***Impacts in the EU:
Agreement	Overall: no significant impacts	Overall: no significant impacts	Same finding
between the EU			
and its Member	*** Impacts in the Andean partner	*** Impacts in the Andean partner countries	*** Impacts in the
States and	countries	Overall: very limited impact, with some	Andean partner
Colombia, Peru,	Overall: significant environmental	positive and some negative effects	countries
and Ecuador	challenges.		
		Small negative impact in Colombia on	Rather than
	Key sources of pollution are	water and air quality; marginal effects	significant negative
	discharges from mining activities,	in Ecuador and Peru. Localised/regional	impact, small and mixed
	industrial and agricultural processing,	negative effects.	impacts are found.
	and agricultural runoffs.		Mostly, lower negative
		Small impact on permanent deforestation	impacts than anticipated
	Increased market access for	in Colombia resulting from the expansion	
	processed timber products can be	of commercial agriculture. It is unlikely that	
	expected to add to existing deforestation		
	trends.	(biodiverse) intact areas in Colombia. For	
		Ecuador and Peru, there is no evidence that	
	Expansion of production and trade	deforestation driven by agriculture is linked	
	in agricultural and agricultural processed	_	
	products that results will have potentially		
	adverse biodiversity impacts.		

Table 23. Differences Between Ex-Post Evaluation Outcomes and Sustainability Impact Assessment (SIA) Findings Source: UNU-CRIS compilation

Environmental Impact Assessments of Trade Agreements

UNU-CRIS Research Report #1 2024

Copyright © United Nations University Institute on Comparative Regional Integration Studies 2024

The views expressed in this publication are those of the authors and do not necessarily reflect the views of the United Nations University.

Published by: United Nations University Institute on Comparative Regional Integration Studies

Cover Image: Reijotelaranta/Pixabay

Suggested citation: Bui, L., Dewitte, R., Happersberger, S., Nagabhatla, N. and Rayp G. (2024). Environmental Impact Assessments of Trade Agreements. UNU-CRIS Research Report Series 2404/1. Bruges: UNU-CRIS