

Towards Sustainable Development: Responses of Vietnam to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes*

Abstract

Vietnam acceded to the Basel Convention on the control of transboundary movements of hazardous wastes in 1995 and has since undertaken substantial efforts to harmonize its domestic policies with international standards on hazardous wastes management. The country maintains stringent controls over the transboundary movement of hazardous waste, not only through strict regulatory oversight but also by imposing a complete ban on the import of hazardous waste for any purpose. In alignment with international obligations and to deter environmental violations, Vietnam has also criminalized the illegal importation of such waste, incorporating specific penalties and sanctions within its legal framework. These measures reflect the country's commitment to safeguarding environmental and public health while fulfilling its responsibilities as a party to the Basel Convention. To ensure alignment with the Convention's provisions, Vietnam has incorporated its core principles into the Law on Environmental Protection – specifically through the versions enacted in 2005, 2014, and 2020 – as well as into other relevant legal and

THI HUONG GIANG PHAN – MA in law, University of Economics and Law, Vietnam National University, Ho Chi Minh City, ORCID – 0000-0001-9948-2705, e-mail: giangpth@uel.edu.vn

XUAN THI THANH NGUYEN – PhD in law, University of Economics and Law, Vietnam National University, Ho Chi Minh City, ORCID – 0009-0008-9194-6008, e-mail: xuanntt@uel.edu.vn

* This research is funded by Vietnam National University, Ho Chi Minh City, Vietnam (VNUHCM) under grant number C2026-34-11.

regulatory frameworks governing hazardous waste management. This paper examines Vietnam's legislative and institutional implementation of the Basel Convention, highlighting the country's adherence to international commitments aimed at mitigating the environmental and health impacts associated with hazardous wastes and its transboundary movement. In particular, the paper analyzes Vietnam's compliance with key obligations under the Convention, including the Prior Informed Consent procedure and the submission of annual national reports. Additionally, we also explore Vietnam's participation in international and regional cooperation initiatives aimed at controlling hazardous wastes and mitigating its environmental and health impacts. While these efforts reflect Vietnam's commitment to contributing to global sustainable development, several challenges remain. Notably, limitations in enforcement mechanisms hinder full compliance with international and regional regulatory frameworks. Accordingly, the paper proposes strategic orientations tailored to Vietnam's current context, with the aim of enhancing the effectiveness of hazardous wastes management and minimizing its adverse impacts nationwide.

KEYWORDS: hazardous wastes, the Basel Convention, environmental protection, Vietnam

1 | Introduction

The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (hereinafter referred to as the Basel Convention) is a global environmental treaty adopted on 22 March 1989, under the United Nations Environment Programme.^[1] It officially came into force on 5 May 1992, with the primary objective of regulating the international movement of hazardous waste. The Convention was established in response to concerns that industrialized nations were exporting hazardous waste to developing countries with weaker environmental regulations, creating serious health and environmental risks. The main goals of the Basel Convention are to reduce hazardous waste generation, ensure environmentally sound waste management, and regulate transboundary movements of hazardous waste. It also seeks to prevent illegal trafficking of hazardous materials and encourages international cooperation through

¹ Basel Convention, Overview. <https://www.basel.int/theconvention/overview/tabid/1271/default.aspx>. [accessed: 7.7.20205].

technical assistance and training programs. By implementing these objectives, the Convention aims to minimize environmental and human health risks associated with hazardous waste disposal.

One of the key provisions of the Convention is the Prior Informed Consent Procedure, which requires any country exporting hazardous waste to first obtain consent from the receiving country before the shipment takes place.^[2] Additionally, hazardous waste can only be traded between countries that are parties to the Basel Convention unless there is a separate bilateral or regional agreement. Another important requirement is the Environmentally Sound Waste Management (hereinafter referred to as ESWM) principle,^[3] which mandates that all hazardous waste must be treated, recycled, or disposed of in a manner that does not harm the environment or public health. The Convention also enforces strict regulations against illegal traffic of hazardous waste, holding exporting countries responsible for addressing any violations.^[4] Historically, a significant development within the Basel Convention is the Basel Ban Amendment, which was adopted in 1995 and officially enforced in December 2019.^[5] This amendment prohibits the export of hazardous waste from OECD countries (developed nations) to non-OECD countries (developing nations) for final disposal or recycling. The ban was introduced to prevent developing nations from becoming dumping grounds for hazardous waste from wealthier countries.

Recently, the Conferences of the Parties (hereinafter referred to as COP) to the Basel Convention have addressed a wide range of hazardous waste streams through technical, legal, and collaborative measures. Key waste categories include e-waste, waste batteries, waste tyres, plastic waste, mercury wastes, POPs wastes, and household waste, each supported by technical guidelines, working groups, meetings, and specific projects or partnerships.^[6] Specialized areas such as ship dismantling and specially

² Overview. <https://www.pic.int/TheConvention/Overview/History/Overview/tabid/1360/language/en-US/Default.aspx>. [accessed: 6.9.20203].

³ United Nations Environment Programme (UNEP), *Environmentally Sound Management of Hazardous Wastes*. 1987.

⁴ Basel Convention, Cases of Illegal Traffic. <https://www.basel.int/Implementation/LegalMatters/IllegalTraffic/CasesofIllegalTraffic/tabid/3424/Default.aspx>. [accessed: 2.12.2024].

⁵ Basel Convention, Ban Amendmen. <https://www.basel.int/Implementation/LegalMatters/BanAmendment/Overview/tabid/1484/Default.aspx>. [accessed: 7.3.2025].

⁶ Basel Convention, Cases of Illegal Traffic.

engineered landfill and incineration are also covered through capacity building, legal aspects, and technical standards. On the one hand, legal matters under the Convention include the Ban Amendment, compliance mechanisms, enforcement against illegal traffic, legal clarity, and frameworks related to trade and ship regulation. On the other hand, technical matters focus on developing and updating guidelines, including those on hazard characteristics. Additionally, harmonized system codes are used to ensure standardized classification and reporting, supported by progress reports and calls for information.

Despite its positive impact, the Basel Convention faces several challenges. Illegal waste trafficking continues to occur due to weak enforcement mechanisms^[7] and mislabeling of waste shipments.^[8] For example, the e-waste loophole is a major issue, as many old electronic products are shipped to developing countries under the label of “second-hand goods” rather than hazardous waste, leading to unsafe recycling practices.^[9] Additionally, differences in national implementation mean that some countries lack the necessary resources or infrastructure to fully enforce the Convention’s provisions. Overall, the Basel Convention remains a crucial international agreement for protecting both human health and the environment from hazardous waste. By promoting strict regulations, strengthening international cooperation, and encouraging sustainable waste management, the Convention plays a vital role in reducing the global risks associated with hazardous waste disposal and trade.

⁷ Karola Maxianova, “Shipments of Electronic Waste: Providing the Right Incentives through Regulation and Enforcement” *Review of European Community & International Environmental Law*, No. 3 (2008). <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1467-9388.2008.00612.x>. [accessed: 9.7.20205].

⁸ Katharina Kummer, “The International Regulation of Transboundary Traffic in Hazardous Wastes: The 1989 Basel Convention” *International and Comparative Law Quarterly*, No. 3 (1992): 530-562.

⁹ Michikazu Kojima, *Chapter 1: Issues Relating to the International Trade of Second-Hand Goods, Recyclable Waste, and Hazardous Waste* (2013), 1.

2 | Vietnam's Commitment to the Basel Convention and its Response in Practice

Vietnam became a party to the Basel Convention in 1995 and has since made significant efforts to align its policies with international regulations.^[10] The country enforces strict control over the import and export of hazardous waste, requiring prior informed consent from relevant authorities before any transboundary movement occurs. To ensure compliance, Vietnam has integrated the Convention's principles into its Law on Environmental Protection and other regulatory frameworks governing hazardous waste management.^[11] Additionally, as a member to the Basel Convention, Vietnam is committed to strengthening monitoring and enforcement measures to prevent illegal dumping and improper handling of hazardous materials. The government also promotes waste reduction, recycling, and the use of sustainable disposal methods to minimize environmental risks.^[12] By adhering to the Basel Convention, Vietnam aims to balance industrial development with environmental sustainability while contributing to global efforts in responsible hazardous waste management.

As a party to the Basel Convention since 1995, Vietnam has actively fulfilled its obligations by submitting required reports and documents to the Basel Convention Secretariat. Under Article 13(3) of the Basel Convention, all Parties are required to submit annual national reports to monitor the implementation of the Convention and track the transboundary movement of hazardous and other wastes.^[13] These reports help the Conference of the Parties assess compliance and make informed decisions.

¹⁰ "Vietnam Join Basel Convention: Managing Hazardous Waste Movement", 20 September 2024. <https://znorecycle.com/vietnams-participation-in-the-basel-convention-controlling-hazardous-waste-transboundary-movements/>.

¹¹ From 1999, after 4 year of ratification of the Basel convention, Vietnam had its own regulation on controlling HW shipment (to guide the Law on environmental protection 1993). See some regulations Vietnam had reported to the Basel convention at: Basel Convention, National Legislation. <https://www.basel.int/countries/nationallegislation/tabid/1420/default.aspx>. [accessed: 9.7.2025].

¹² "Thúc đẩy tái chế chất thải tại Việt Nam" *Môi Trường Á Châu*. <https://moi-truongachau.com/vn/thuc-day-tai-che-chat-thai-tai-viet-nam.html>. [accessed: 9.7.2025].

¹³ Basel Convention, "Coming Soon: New Improved Electronic Reporting System for the Basel Convention". <https://www.basel.int/?tabid=2314>. [accessed: 10.7.2025].

Besides, reporting activities help ensure transparency in hazardous waste management, compliance with international regulations, and alignment with global environmental protection efforts. The reports must include detailed information, such as the names and contacts of national focal points and competent authorities, data on waste exports and imports (including transit routes and disposal methods), and any discrepancies from agreed disposal procedures. Beside the annual reporting on issues mentioned above, Parties to the Basel Convention must report on national measures for implementing the Convention, incidents or accidents related to waste movement or disposal, and efforts to reduce waste generation.^[14] Specifically, the information on environmental and human health impacts, domestic disposal infrastructure, and any bilateral or multilateral agreements concerning hazardous waste management is also required. The Secretariat issues an annual reminder, and countries complete a standardized questionnaire. Since 2013, Parties have used the Electronic Reporting System to submit data.^[15] Then, the Secretariat reviews submissions for quality control and may follow up with Parties to clarify or complete missing information. The collected data is made publicly available through an interactive online dashboard, allowing users to view, filter, and download reports by country, region, or year. Parties can also cross-check import/export data with other countries for consistency. A Compliance Committee of the Basel Convention monitors reporting practices and identifies Parties that fail to report on time or in full.^[16] Persistent non-compliance may lead to formal classification and public disclosure, prompting corrective measures. To assist countries, the Secretariat provides guidance documents, templates, and reporting manuals in all six UN languages.^[17] This robust reporting mechanism promotes transparency, supports global decision-making, and reinforces accountability in the environmentally sound management of hazardous waste.

¹⁴ Basel Convention, Cases of Illegal Traffic.

¹⁵ Basel Convention, Electronic Reporting System. <https://www.basel.int/Countries/NationalReporting/ElectronicReportingSystem/tabid/3356/Default.aspx>. [accessed: 10.7.2025].

¹⁶ Basel Convention, Mandate. <https://www.basel.int/TheConvention/ImplementationComplianceCommittee/Mandate/tabid/2296/Default.aspx>. [accessed: 11.8.2024].

¹⁷ Basel Convention, Reports. <https://www.basel.int/TheConvention/ImplementationComplianceCommittee/Reports/tabid/2289/Default.aspx>. [accessed: 10.7.2025].

In response, Vietnam had its first report in 2002, which provided detailed information on its regulatory and administrative framework for managing hazardous and other wastes. The designated Competent Authority and Focal Point is the Ministry of Natural Resources and Environment (MONRE), represented by the Vietnam Environmental Protection Agency (VEPA).^[18] Vietnam has established national definitions of both waste and hazardous waste. Waste is broadly defined as any material discarded from households, production processes, or other activities, while hazardous waste includes substances that are flammable, explosive, toxic, corrosive, infectious, or otherwise harmful to human health and the environment.^[19] Although Vietnam had not formally ratified the Basel Ban Amendment (Decision III/1) by 2002, its Law on Environment Protection at that time strictly prohibited the import and export of hazardous waste. The country positively imposed comprehensive restrictions on the transboundary movement of such waste for both final disposal and recovery, including import, export, and transit. Some exceptions were allowed for specific categories of cleaned and treated scrap materials intended for industrial reuse. Vietnam used the Basel Convention's notification and movement document forms for controlling transboundary waste movement and accepted documentation in both Vietnamese and English. However, a full border control system was still under development at the time.^[20]

Furthermore, to reduce hazardous waste generation, Vietnam had adopted several legislative and policy measures, including mandatory treatment of toxic substances and requirements for industrial compliance with environmental standards. Key regulations included the Law on Environment Protection (1994),^[21] and decisions on hazardous waste management and the use of treated scrap as industrial input.^[22] Entities responsible for environmental harm were subject to economic penalties under national legislation. In the first report, in 2002, Vietnam also recorded the generation of approximately 160,000 metric tons of hazardous waste and

¹⁸ FeedbackServer Administration. <https://ers.basel.int/ERS-Extended/FeedbackServer/fsadmin.aspx?fscontrol=respondentReport&surveyid=58&voterid=40854&readonly=1&nomenu=1>. [accessed: 10.7.2025].

¹⁹ Ibidem.

²⁰ Ibidem.

²¹ Luật Bảo vệ Môi Trường 1993 29-L/CTN, Thư Viện Pháp Luật, 10 January 2025. <https://thuvienphapluat.vn/van-ban/Tai-nguyen-Moi-truong/Luat-Bao-ve-moi-truong-1993-29-L-CTN-38694.aspx>.

²² FeedbackServer Administration.

12.8 million metric tons of other waste, but no hazardous waste was imported or exported, and no accidents or disruptions in disposal were reported.^[23] The report noted the absence of bilateral or multilateral agreements under Article 11 and indicated that no domestic facilities treated imported hazardous waste. Technical assistance was available through national agencies such as the National Environment Agency and ministries responsible for industry, agriculture, and construction. However, no financial assistance institutions were listed.

The last report of Vietnam was submitted in 2020, showing its continued efforts to implement the Basel Convention through updated legislation, institutional structures, and waste management policies. The MONRE and its agencies remain the country's designated Competent Authority and Focal Point.^{[24][25]} Key updates include reaffirming strict bans on the import, export, transit, or re-export of hazardous and other wastes, with limited allowances for specific pre-approved scrap materials for industrial use. Besides, Vietnam still has its national definitions for both waste and hazardous waste, with criteria rooted in toxicity, radioactivity, flammability, and other hazardous traits. Moreover, Vietnam now uses its own waste list aligned with EU classifications and has developed regulations and technical standards to manage such waste in the Circular No. 36/2015 and national technical regulations define hazardous waste thresholds and control procedures.^[26] In terms of legal enforcement, Vietnam's Law on Environmental Protection (2020) – effective from January 2022 – prohibits all transboundary movements of hazardous waste, unless it falls within narrowly permitted categories like cleaned and sorted scrap.^[27] This law imposes fines, license revocations, and mandatory re-export for violations and considers illegal traffic a criminal offense. The important thing was Vietnam has ratified the Ban Amendment in practice, even if not formally under international treaty law. In brief, Vietnam uses Basel Convention

²³ Ibidem.

²⁴ Ibidem.

²⁵ However, from 01 July 2025, due to changes in the structure of the state apparatus, it has now been restructured and changed to the Ministry of Agriculture and Environment; see more at: Công, Bộ Nông nghiệp và Môi trường. <https://mae.gov.vn/>. [accessed: 14.7.2025].

²⁶ FeedbackServer Administration.

²⁷ Luật Bảo vệ Môi Trường 2020 Số 72/2020/QH14 Mới Nhất Áp Dụng Năm 2025 Mới Nhất. Thư Viện Pháp Luật. <https://thuvienphapluat.vn/van-ban/Tai-nguyen-Moi-truong/Luat-so-72-2020-QH14-Bao-ve-moi-truong-2020-431147.aspx>. [accessed: 10.7.2025].

notification and movement documents, accepts submissions in English, and has added national information requirements. There are total bans on the import and transit of hazardous wastes for final disposal, and partial restrictions on imports for recovery, especially concerning used seagoing vessels and specific types of industrial scrap. Also, to reduce hazardous waste generation, Vietnam has developed multiple national strategies and legal instruments, including support for a circular economy and Extended Producer Responsibility policies.^[28] Laws in Vietnam now mandate waste separation at source, eco-design, recycling targets, and integration of environmental requirements into business licensing. For example, Vietnam encourages cleaner production practices and ISO 14001 adoption in industries,^[29] particularly for facilities handling hazardous waste. Additionally, Vietnam reported the generation of over 1.13 million metric tons of hazardous waste in 2020 – its highest recorded amount.^[30] While some hazardous waste was exported, no imports, accidents, illegal traffic, or failed disposals were reported. Data on waste management impacts on human health and the environment is limited but available through official State of the Environment Reports (2011, 2017, 2019, 2020) published by MONRE and the World Bank.^[31] It is obvious that Vietnam's 2020 report shows strong institutional and legislative progress, with a focus on enforcement, waste reduction, and movement control, aligned with Basel Convention obligations.

Following the enforcement of the Basel Ban Amendment in 2019, Vietnam has strengthened its legal measures to prohibit the import of hazardous waste from developed countries. To demonstrate compliance, Vietnam submits updates on its legal enforcement actions, monitoring activities, and challenges faced in implementing the Basel Ban. The Law on Environmental Protection 2020, which took effect on 1 January 2022, includes clear provisions to prohibit hazardous waste imports and regulate scrap material imports. Vietnam has shown a clear commitment to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, particularly by strictly prohibiting the import, temporary import, re-export, and transit of waste from foreign countries

²⁸ FeedbackServer Administration.

²⁹ Ibidem.

³⁰ Ibidem.

³¹ Ibidem.

in any form, as stated in Article 6 of the Law on Environmental Protection.^[32] These measures align with international commitments, such as the Basel Convention, to prevent Vietnam from becoming a dumping ground for global waste. One of the most critical aspects of the law is the prohibition of hazardous waste imports. This regulation is accompanied by strict monitoring and enforcement mechanisms, ensuring that illegal hazardous waste shipments do not enter Vietnamese territory. Violators face severe penalties, including fines and revocation of business licenses. Furthermore, Clause 5, Article 83 of this Law assigns the Ministry of Natural Resources and Environment the authority to provide technical guidance on hazardous waste management, including registration and transboundary movements in accordance with Basel standards.

To implement these obligations, Circular 02/2022/TT-BTNMT was issued, with Article 38 specifically regulating hazardous waste exports from Vietnam – affirming that Vietnam participates in the Basel Convention as an exporting country, not as an importer or transit state.^[33] This Article also incorporates the official Basel technical guidelines on notification procedures, with direct reference to the Convention's forms and standards.^[34] Importantly, the regulation requires compliance with the Prior Informed Consent procedure, meaning any export of hazardous waste from Vietnam must obtain formal approval from both the importing and any transit countries before shipment can occur, reinforcing Vietnam's strict adherence to international environmental commitments and legal enforcement. These efforts help Vietnam align with global commitments to reduce hazardous waste trade and promote sustainable waste management. Although Vietnam permits the import of certain recyclable materials, these activities are strictly regulated. Only businesses with proper environmental protection measures are allowed to import scrap for production purposes. These businesses must obtain an import license from the Ministry of Natural Resources and Environment and comply with environmental standards. Additionally, any waste materials that fail to

³² Luật Bảo vệ Môi Trường 2020 Số 72/2020/QH14 Mới Nhất Áp Dụng Năm 2025 Mới Nhất.

³³ Thông Tư 02/2022/TT-BTNMT Hướng Dẫn Luật Bảo vệ Môi Trường Mới Nhất, Thư Viện Pháp Luật. <https://thuvienphapluat.vn/van-ban/Tai-nguyen-Moi-truong/Thong-tu-02-2022-TT-BTNMT-huong-dan-Luat-Bao-ve-moi-truong-500694.aspx>. [accessed: 8.7.2025].

³⁴ <http://www.basel.int/Portals/4/Basel%20Convention/docs/techmatters/forms-notif-mov/vCOP8.doc>.

meet Vietnam's strict regulations must either be re-exported or properly treated. Government Decree No. 08/2022/ND-CP further details the responsibilities of businesses engaged in scrap imports, ensuring proper waste management.^[35] In brief, Vietnam maintains a strict ban on the import of household waste, mixed municipal waste, and non-recyclable materials. This prevents pollution and reduces the risk of environmental degradation caused by poor waste management. Additionally, the country restricts the export of hazardous waste, ensuring that it is treated domestically under safe and controlled conditions rather than being sent to other nations.

In addition to reporting and compliance, Vietnam actively participates in Basel Convention regional meetings. These events allow Vietnam to discuss policy updates, share best practices, and report on its progress in implementing the Convention's regulations. In the ASEAN region,^[36] the Basel and Stockholm Conventions Regional Centre in Indonesia, known as the Basel Convention Regional Centre and Stockholm Convention Regional Centre Indonesia, is located in Jakarta, Indonesia.^[37] The Basel Convention Regional Centre was established through a Framework Agreement in October 2004, while the Stockholm Convention Regional Centre was officially nominated in August 2011.^[38] This centre is hosted by the Ministry of Environment of Indonesia and serves ten countries in the Southeast Asian region: Brunei Darussalam, Cambodia, Lao People's Democratic Republic, Malaysia, Myanmar, Indonesia, Singapore, the Philippines, Thailand, and Viet Nam.^[39] The centre's areas of expertise include the environmentally sound management and inventory of electronic waste, the management

³⁵ Nghị Định 08/2022/NĐ-CP Hướng Dẫn Luật Bảo vệ Môi Trường Mới Nhất. Thư Viện Pháp Luật. <https://thuvienphapluat.vn/van-ban/Tai-nguyen-Moi-truong/Nghi-dinh-08-2022-ND-CP-huong-dan-Luat-Bao-ve-moi-truong-479457.aspx>. [accessed: 14.3.2025].

³⁶ The Association of Southeast Asian Nations, known as ASEAN, was founded on 8 August 1967 in Bangkok, Thailand, through the signing of the ASEAN Declaration, also referred to as the Bangkok Declaration. The founding members of ASEAN were Indonesia, Malaysia, the Philippines, Singapore, and Thailand. Brunei Darussalam became a member on 7 January 1984, followed by Viet Nam on 28 July 1995. Lao People's Democratic Republic and Myanmar joined on 23 July 1997, and Cambodia became the tenth member on 30 April 1999. Together, these countries form the current ten Member States of ASEAN. See more at: About ASEAN, n.d. <https://asean.org/about-asean/>. [accessed: 13.7.2025].

³⁷ *About Us – Basel & Stockholm Conventions Regional Centre for Southeast Asia in Indonesia*, n.d. <https://rc-sea.org/about-us/>. [accessed: 12.7.2025].

³⁸ Ibidem.

³⁹ Ibidem.

of hazardous waste, the updating of National Implementation Plans, and other related activities. As a member of ASEAN Regional Centre, Vietnam has actively participated in various center's activities such as workshops and trainings to reach the common goals of the Center.^[40] Furthermore, Vietnam benefits from technical assistance and capacity-building programs offered by Regional center and the Basel Convention Secretariat, which help strengthen Vietnam's waste management capabilities and enforcement mechanisms.^[41]

Besides, in order to enforce the requirements stipulated in the Basel Convention, Vietnam has strengthened border control measures and customs inspections. Authorities work closely with international organizations to monitor and prevent illegal waste trade. For example, Vietnam has its National Training in Vietnam helps to implement the Basel Convention for plastic waste in 2021.^[42] Additionally, within the framework of the

⁴⁰ Basel Convention Regional Centre for South-East Asia in Indonesia (BCRC Indonesia). <https://www.basel.int/?tabid=4845>. [accessed: 14.7.2025].

⁴¹ For example, the current actions bring benefits to Vietnam include the implementation of a full-sized project aimed at reducing the use and release of chemicals of concern, including persistent organic pollutants, in the textiles sector. The Centre is also engaged in the development of regional standard requirements for the transboundary movement of plastic waste into the Association of South-east Asian Nations region, along with a pilot study focused on the optimisation of domestic plastic waste utilisation. Additionally, the Centre is implementing a project under the pilot project programme of the Basel Convention Partnership on Plastic Waste. Capacity building efforts are further supported through the organisation of workshops on the response to hazardous chemicals and waste emergencies, as well as on the prevention of illegal transboundary movement of hazardous waste under the Asian Network. Research activities include the study of mercury fate from seawater flue-gas desulphurisation. Moreover, the Centre is conducting training and capacity building in continuous emission monitoring and emission monitoring, as well as in the utilisation of fly ash, including the recovery of rare earth elements. See more at: Basel Convention Regional Centre for South-East Asia in Indonesia (BCRC Indonesia).

⁴² As part of the Asia Pacific Border Management Waste Project, the World Customs Organization held a virtual workshop on plastic waste for Vietnamese authorities from 25 to 27 October. The workshop supported the General Department of Vietnam Customs and the Vietnam Environment Administration, aiming to strengthen their capacity to manage legal plastic waste trade, combat illegal shipments, and raise awareness of the Basel Convention's plastic waste amendments effective from 1 January 2021. Training was provided on customs enforcement, the role of World Customs Organization standards, and advance information exchange. The United Nations Office on Drugs and Crime–World Customs Organization Container Control Programme also shared its efforts in preventing illegal cross-border

Container Control Program, in cooperation with the United Nations Office on Drugs and Crime, the General Department of Customs, in collaboration with United Nations Office on Drugs and Crime has organized a practical training course on combating illegal transportation of hazardous waste in 2023.^[43] Besides those actions, the Vietnam government has also introduced harsh penalties for violators, including heavy fines, business shutdowns, and even criminal prosecution in severe cases.

Specifically, according to Article 27, Decree No. 45/2022/ND-CP on Penalties for Administrative Environmental Protection Offences, the fine for illegal import of hazardous wastes can be reached at VND 500,000,000 (equivalent to USD 20,000).^[44] For special types of wastes such as persistent pollutants, raw materials, fuels, materials, products, goods and equipment containing persistent pollutants, the fine can be double (equivalent to USD 40,000), according to Article 28 Decree No. 45/2022/ND-CP.^{[45][46]} More strictly, such activities can be the subject of criminal law. Under Article 239 Criminal Code 2015, the fine might reach USD 25,000. However, the fine has been changed under the new regulation amended the Article 239 above, in 2025, the current fine may reach USD 560,000 and

waste movement. Participants took part in practical exercises on targeting, inspection, and investigation. A National Implementation Plan for Vietnam, developed after a 2020 Diagnostic Mission, was presented and discussed, with the outcomes to be shared at a regional conference in February 2022. See more at: World Customs Organization. <https://www.wcoomd.org/en/media/newsroom/2021/november/national-training-in-vietnam-helps-to-implement-the-basel-convention-for-plastic-waste.aspx>. [accessed: 14.7.2025].

⁴³ “Hải quan Đà Nẵng tập huấn về chống vận chuyển trái phép chất thải nguy hại” *Tạp chí Tài chính*, 27 October 2023. <https://tapchitaichinh.vn/hai-quan-da-nang-tap-huan-ve-chong-van-chuyen-trai-phep-chat-thai-nguy-hai.html>. [accessed: 27.10.2023].

⁴⁴ Nghị Định 45/2022/NĐ-CP Xử Phạt vi Phạm Hành Chính Lĩnh Vực Bảo vệ Môi Trường Mới Nhất. Thư Viện Pháp Luật. <https://thuvienphapluat.vn/van-ban/Vi-pham-hanh-chinh/Nghi-dinh-45-2022-ND-CP-xu-phat-vi-pham-hanh-chinh-linh-vuc-bao-ve-moi-truong-484772.aspx>. [accessed: 21.5.2025].

⁴⁵ *Ibidem*.

⁴⁶ Vietnam government always pays attention on regulating strictly the penalties or illegal transboundary movement of hazardous wastes; see more at: In enforcement, there are some cases relating to implementation of those regulations. For example, Ho Chi Minh City People’s Committee has fined a company VND450 million for violations in scrap export in 2020; see more at: “Xuất chất thải nguy hại, một doanh nghiệp bị phạt 450 triệu đồng” *Tạp chí điện tử Hải quan Online*, 11 December 2020. <https://haiquanonline.com.vn/xuat-chat-thai-nguy-hai-mot-doanh-nghiep-bi-phat-450-trieu-dong-138465.html>.

the criminals have to permanently shut down their business. In brief, Vietnam's regulations on environmental protection with a robust legal framework to prohibit hazardous waste trade, control waste imports, and enforce strict environmental protections help the country safeguard its natural resources, protect public health, and ensure compliance with global waste management standards.

In addition to Legal Integration and Policy Alignment mentioned above, Vietnam has its own Institutional Implementation Mechanisms. In Vietnam, the MONRE (the current name is MAE as explained above) holds the primary responsibility for overseeing hazardous waste management nationwide. MAE is tasked with formulating policies, drafting legislation, and establishing technical regulations and standards related to hazardous chemicals and wastes. The Ministry leads the implementation of key environmental laws, including the Law on Environmental Protection, 2020, which mandates the classification, treatment, and tracking of hazardous wastes.^[47] MAE also issues licenses for hazardous waste treatment facilities and transporters, maintains the national hazardous waste inventory, and ensures Vietnam's compliance with international agreements such as the Basel, Rotterdam, and Stockholm Conventions. It works through agencies to guide industries in the environmentally sound management of hazardous substances and conduct monitoring and reporting activities. Also, the coordination between national and local authorities is crucial for the effective enforcement of hazardous waste regulations in Vietnam. While MAE develops and oversees national-level policies and guidance, provincial Departments of Natural Resources and Environment (now Departments of agriculture and environment-DsAE- is due to change of Vietnam government structure) are responsible for implementing these regulations locally. Provincial DsAE are empowered to inspect waste-generating facilities, issue environmental permits, enforce penalties for violations, and provide technical support to industries and communities.^[48] Collaboration also extends to other state agencies, such as customs departments, environmental police, and the Ministry of Public Security, especially in controlling illegal

⁴⁷ Luật Bảo vệ Môi Trường 2020 Số 72/2020/QH14 Mới Nhất Áp Dụng Năm 2025 Mới Nhất.

⁴⁸ Thông Tư 19/2025/TT-BNNMT Chức Năng Cơ Quan Chuyên Môn Nông Nghiệp Môi Trường Thuộc Ủy Ban Tỉnh Mới Nhất. Thư Viện Pháp Luật. <https://thuvienphapluat.vn/van-ban/Bo-may-hanh-chinh/Thong-tu-19-2025-TT-BNNMT-chuc-nang-co-quan-chuyen-mon-Nong-nghiep-Moi-truong-thuoc-Uy-ban-tinh-662421.aspx>. [accessed: 1.7.2025].

waste imports and unauthorized dumping. The national hazardous waste tracking system, developed under MAE supervision, supports coordination efforts by enabling real-time reporting and traceability of hazardous waste movements.^[49] These multi-tiered coordination mechanisms help ensure that national regulations are effectively enforced at the grassroots level.

3 | Challenges and Opportunities for Strengthening the Enforcement of the Basel Convention in Vietnam

Similar to neighbour countries in the ASEAN area, Vietnam has to face common obstacles to effectively implement the Basel Convention. Those include the lack of transparency, enforcement limitations, monitoring gaps, financial and technical constraints as follows:

According to Vietnam's national reports submitted to the Basel Convention Secretariat, the country has generally fulfilled its obligations regarding national reporting on hazardous waste. Reports covering the years from 2002 to 2023 indicate that Vietnam has consistently participated in the reporting process. However, the information presented reveals a lack of transparency in the documentation of transboundary movements of hazardous waste. Specifically, the reports for the years 2002, 2003, 2004, 2005, 2006, 2007, 2009, 2014, 2015, 2016, 2017, 2018, and 2020 do not record any imports or exports of hazardous waste.^[50] Additionally, Vietnam did not submit national reports for the years 2008, 2010, 2011, 2012, 2013, 2021, 2022, and 2023.^[51] In 2019, although a report was submitted, it did not include any declaration regarding transboundary movements of hazardous waste.^[52] Generally, the data in Vietnam's reports lack transparency, especially when compared to figures published in the media, which report thousands of tons of waste entering the country each year.^[53] Notably, following China's

⁴⁹ Công, Bộ Nông nghiệp và Môi trường. <https://mae.gov.vn/?>.

⁵⁰ FeedbackServer Administration.

⁵¹ Ibidem.

⁵² Ibidem.

⁵³ “Việt Nam là điểm đến hàng đầu của rác thải” *BBC News Tiếng Việt*, 2 May 2024.

import ban on waste in 2018, Vietnam was reported to have returned several waste shipments to their countries of origin, underscoring the gap between official records and actual waste movements.^[54] Therefore, in its national reports, Vietnam should provide more detailed and comprehensive information to enable an objective assessment and to facilitate potential support from Basel Convention bodies in preventing the illegal transboundary movement of hazardous waste. Although Vietnam has officially banned the import of hazardous waste, documented cases of illegal imports and exports indicate that such incidents must be fully reported. Accurate and transparent reporting is essential to properly evaluate the effectiveness of the Basel Convention's implementation in the country.

Furthermore, there are some enforcement limitations for ASEAN countries, including Vietnam. In the latest plan of the Basel Convention Regional Centre for South East Asia and the Stockholm Convention Regional Centre Indonesia (hereinafter referred to as BSCRC-SEA) for the period from 1 January 2024 to 31 December 2027 submitted by Dr. Anton Purnomo, Director of the Centre, on 29 September 2023, the plan reflects the Centre's continued commitment to supporting the implementation of the Basel and Stockholm Conventions in the Southeast Asian region.^[55] It details the Centre's objectives, key focus areas, and operational strategies to address regional challenges related to the environmentally sound management of hazardous chemicals and wastes. Through this plan, BSCRC-SEA aims to strengthen regional cooperation, build national capacities, and promote compliance with the conventions among its member countries. However, the implementation of the planned activities is expected to face several constraints, as there may be difficulty in obtaining information or collecting data from government institutions and industries, and there may also be challenges in communication or arranging meetings with government bodies.^[56] In addition, the internal affairs and sudden commitments of the beneficiary parties may interfere with the project timeline. Moreover, there is often a lack of available data within the beneficiary parties to support the planned activities, and national inventories of hazardous chemicals and wastes – such as persistent organic pollutants, plastic waste, electronic

⁵⁴ Dean Dougn, "Vietnam Rejected over 500 Containers of Waste in First-Half of 2019" *Vietnam Insider*, 5 September 2019.

⁵⁵ Basel Convention Regional Centre for South-East Asia in Indonesia (BCRC Indonesia).

⁵⁶ *Ibidem*.

waste, mercury, and mercury-containing wastes – are scarce. Furthermore, industries and associations may be reluctant to share or publish data, and gaps in national regulations and policies, as well as the absence of national standards regulating chemicals and hazardous wastes under the conventions, may hinder progress. Finally, the lack of response from countries or stakeholders in returning questionnaires further complicates the effective implementation of the project.

Based on the business plan of BSCRC-SEA with the regulations in the Law on environmental protection 2020 of Vietnam, this country may participate in a wide range of regional and international initiatives aimed at enhancing the management of chemicals and hazardous waste in accordance with the Basel Convention. These initiatives include the full-sized project titled “reducing uses and releases of chemicals of concern, including persistent organic pollutants, in the textiles sector,” as well as the development of regional standard requirements for the transboundary movement of plastic waste into the Association of Southeast Asian Nations region, along with a pilot study on the optimisation of domestic plastic waste utilisation.^[57] In addition, Vietnam was involved in a project under the pilot programme of the Basel Convention Partnership on Plastic Waste, and took part in a workshop focused on emergency responses to incidents involving hazardous chemicals and wastes.^[58] The country also contributed to a workshop organised by the Asian Network for the Prevention of Illegal Transboundary Movement of Hazardous Waste, and participated in scientific research on the fate of mercury derived from seawater flue-gas desulphurisation systems.^[59] Furthermore, Vietnam engaged in training and capacity building related to continuous emission monitoring systems, as well as in the utilisation of fly ash, including the recovery of rare earth elements. By the way, Vietnam should update information on its Designated Focal Point to the Basel Convention from Ministry of Natural Resources and Environment (MONRE) to Ministry of Agriculture and Environment (MAE), due to the change of authority’s names in Vietnam from 1 July 2025.^[60]

⁵⁷ Ibidem.

⁵⁸ Ibidem.

⁵⁹ Ibidem.

⁶⁰ NGHỊ QUYẾT SỐ 76/2025/UBTVQH15 SẮP XẾP ĐƠN VỊ HÀNH CHÍNH NĂM 2025. <https://xaydungchinh sach.chinhphu.vn/nghi-quyet-so-76-2025-ubtvqh15-sap-xep-don-vi-hanh-chinh-nam-2025-119250415130519882.html>. [accessed: 14.7.2025].

Vietnam also faces persistent challenges in detecting and preventing illegal transboundary movements of hazardous and non-hazardous waste, despite its commitments under the Basel Convention. Weak customs inspection procedures, insufficient border monitoring equipment, and the lack of an integrated, real-time waste tracking system hinder the country's ability to control cross-border waste flows. Cases of mislabeled or concealed shipments of plastic waste, e-waste, and other hazardous materials have been reported, especially following the 2018 regional waste import surge after China's National Sword policy.^[61] According to the provisions of Decree No. 45/2022 of Vietnam Government, illegal shipments of waste must either be returned to the country of origin or destroyed. However, a key challenge lies in Vietnam's limited capacity to accurately determine the origin of such shipments.^[62] As a result, in cases where the waste cannot be sent back, the shipments must be disposed of domestically. This outcome inadvertently fulfills the original objective of the illegal importers, as the waste is ultimately discarded within a country other than its source, effectively shifting the burden of disposal to Vietnam. To minimize risks related to detecting and preventing illegal transboundary shipments, Vietnam Customs needs to enhance its capacity to avoid receiving and storing shipments of hazardous waste at ports in Vietnam.

Moreover, one of the challenges Vietnam has to face is in adopting advanced technologies and developing a skilled workforce for hazardous waste treatment. Many existing technologies, such as incinerators and recycling equipment, are imported from countries like Japan, Germany, and Spain.^[63] However, these technologies often do not align well with the specific characteristics of Vietnam's waste streams, leading to inefficiencies and increased costs.^[64] For instance, in Ho Chi Minh City, a high-tech

⁶¹ Greenpeace Malaysia, *Southeast Asia's Struggle Against the Plastic Waste Trade*. <https://www.greenpeace.org/malaysia/publication/1905/southeast-asias-struggle-against-the-plastic-waste-trade/>. [accessed: 27.7.2024].

⁶² "Loay hoay trả lại 600 container phế liệu độc hại vì chủ hàng đã bỏ chạy" *Tou Tre Online*, 28 September 2020. <https://tuoitre.vn/loay-hoay-tra-lai-600-container-phe-lieu-doc-hai-vi-chu-hang-da-bo-chay-20200927233045145.html>. [accessed: 28.9.2020].

⁶³ "City Uses High-Tech to Treat Hazardous Waste" *Vietnam News*, 2 May 2018. <https://vietnamnews.vn/environment/427098/city-uses-high-tech-to-treat-hazardous-waste.html>. [accessed: 14.7.2025].

⁶⁴ "Outdated Waste Treatment Technology in Vietnam" *Báo Sài Gòn Đầu Tư Tài Chính*, 29 August 2022. <https://dttc.sggp.org.vn/outdated-waste-treatment-technology-in-vietnam-post97464.html>. [accessed: 14.7.2025].

incineration plant treats hazardous medical and industrial waste, but the city anticipates the need for additional capacity and private investment as public funding diminishes.^[65] Financial constraints are also a major barrier to the development and implementation of effective hazardous waste management programs in Vietnam. The government has allocated substantial funds for waste treatment infrastructure; for example, Hanoi's first waste-to-energy plant, utilizing Japanese technology, was built with an investment exceeding VND 645 billion, of which over VND 472 billion was non-refundable aid from Japan's New Energy and Industrial Technology Development Organization.^[66] However, such investments are not widespread, and many regions still lack adequate facilities. Additionally, the reliance on public funding is unsustainable. In Ho Chi Minh City, the municipal budget initially covered 70% of the costs for hazardous waste collection, transport, and treatment, but this subsidy is expected to decrease to zero by 2020.^[67] This shift underscores the urgent need for private sector involvement and innovative financing models to ensure the continuity and expansion of hazardous waste management services.

To deal with these problems and address the shortage of skilled personnel and technical constraints in hazardous waste management, Vietnam should implement a comprehensive strategy that combines education, policy reform, international cooperation, and private sector engagement. This includes developing specialized training programs through universities and vocational centers, offering scholarships and incentives to attract talent, and integrating practical skill development in partnership with industry. The government should also leverage international cooperation – such as technical assistance and knowledge exchange with countries like Japan or Germany – to strengthen capacity. Investing in scalable, locally-adapted technologies and supporting domestic innovation will help align treatment systems with Vietnam's waste characteristics. National policies should mandate ongoing training and certification for waste management personnel, supported by the creation of a national center for research and workforce development. Encouraging public-private partnerships and offering incentives for investment in both infrastructure and human

⁶⁵ “City Uses High-Tech to Treat Hazardous Waste.”

⁶⁶ *Policy Support Necessary to Facilitate Energy-from-Waste Development*. <https://xaydung.gov.vn/en/news/47506/policy-support-necessary-to-facilitate-energy-from-waste-development.aspx>.

[accessed: 14.7.2025].

⁶⁷ *Ibidem*.

resources can enhance sector resilience. Finally, raising public and industrial awareness about the importance of skilled waste handling, particularly in high-risk areas like ports and industrial zones, is essential for sustainable and safe hazardous waste management.

4 | Conclusion

Vietnam has demonstrated strong commitment to fulfilling its obligations under the Basel Convention through both legislative measures and practical enforcement. One of the most notable legislative actions is the explicit prohibition of the importation of hazardous waste, as well as the importation of waste in general. In cases where hazardous waste is exported from Vietnam, the exporting entities are required to strictly comply with the Prior Informed Consent procedure, as stipulated by the Basel Convention. Furthermore, Vietnamese law provides for robust sanctions and penalties for violations related to the illegal importation of waste, which stands out as a significant strength in the legislative framework. In terms of practical implementation, Vietnam has made considerable efforts to enforce the Basel Convention effectively. The country has consistently fulfilled its obligation to submit national reports and has actively participated in the activities organized by the Regional Centre for the Basel Convention. These actions collectively reflect Vietnam's ongoing efforts to prevent itself from becoming a dumping ground for hazardous waste.

Nevertheless, as a developing country, Vietnam faces a dual challenge: promoting economic development while ensuring environmental protection and sustainable growth. Compared to developed countries, Vietnam encounters more complex and resource-intensive obstacles in achieving the targets set out in the Sustainable Development Goals. Among these challenges, addressing the illegal transboundary movement of hazardous waste remains particularly critical. In order to effectively tackle this issue, Vietnam must further enhance its institutional capacity, strengthen international cooperation, and improve enforcement mechanisms. These efforts are essential not only for fulfilling its international commitments under the Basel Convention, but also for supporting long-term sustainable development.

Bibliography

- About ASEAN, n.d. <https://asean.org/about-asean/>.
- About Us – Basel & Stockholm Conventions Regional Centre for Southeast Asia in Indonesia. n.d. <https://rc-sea.org/about-us/>.
- “City Uses High-Tech to Treat Hazardous Waste” *Vietnam News*, 2 May 2018. <https://vietnamnews.vn/environment/427098/city-uses-high-tech-to-treat-hazardous-waste.html>.
- Dougn Dean, “Vietnam Rejected over 500 Containers of Waste in First-Half of 2019” *Vietnam Insider*, 5 September 2019. <https://vietnaminsiders.com/vietnam-rejected-over-500-containers-of-waste-in-first-half-of-2019/>.
- FeedbackServer Administration. <https://ers.basel.int/ERS-Extended/Feedback-Server/fsadmin.aspx?fscontrol=respondentReport&surveyid=58&voterid=40854&readonly=1&nomenu=1>.
- Greenpeace Malaysia, *Southeast Asia & #8217. Struggle Against the Plastic Waste Trade*. <https://www.greenpeace.org/malaysia/publication/1905/southeast-asias-struggle-against-the-plastic-waste-trade/>.
- “Hải quan Đà Nẵng tập huấn về chống vận chuyển trái phép chất thải nguy hại” *Tạp chí Tài chính*, 27 October 2023. <https://tapchitaichinh.vn/hai-quan-da-nang-tap-huan-ve-chong-van-chuyen-trai-phep-chat-thai-nguy-hai.html>.
- History of the negotiations of the Rotterdam Convention*. <https://www.pic.int/The-Convention/Overview/History/Overview/tabid/1360/language/en-US/Default.aspx>.
- Kojima Michikazu, *Chapter 1: Issues Relating to the International Trade of Second-Hand Goods, Recyclable Waste, and Hazardous Waste*. 2013. <https://www.elgaronline.com/edcollchap/edcoll/9781782547853/9781782547853.00006.xml>.
- Kummer Katharina, “The International Regulation of Transboundary Traffic in Hazardous Wastes: The 1989 Basel Convention” *International and Comparative Law Quarterly*, No. 3 (1992): 530-562. <https://doi.org/10.1093/iclqaj/41.3.530>.
- “Loay hoay trả lại 600 container phế liệu độc hại vì chủ hàng đã bỏ chạy” *Tou Tre Online*, 28 September 2020. <https://tuoitre.vn/loay-hoay-tra-lai-600-container-phe-lieu-doc-hai-vi-chu-hang-da-bo-chay-20200927233045145.html>.
- Maxianova Karola, “Shipments of Electronic Waste: Providing the Right Incentives through Regulation and Enforcement” *Review of European Community & International Environmental Law*, No. 3 (2008). <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1467-9388.2008.00612.x>.
- “Outdated Waste Treatment Technology in Vietnam” *Báo Sài Gòn Đầu Tư Tài Chính*, 29 August 2022. <https://dttc.sggp.org.vn/outdated-waste-treatment-technology-in-vietnam-post97464.html>.

- Policy Support Necessary to Facilitate Energy-from-Waste Development*. <https://xaydung.gov.vn/en/news/47506/policy-support-necessary-to-facilitate-energy-from-waste-development.aspx>.
- “Thúc đẩy tái chế chất thải tại Việt Nam” *Môi Trường Á Châu*. <https://moitruongachau.com/vn/thuc-day-tai-che-chat-thai-tai-viet-nam.html>.
- United Nations Environment Programme (UNEP), *Environmentally Sound Management of Hazardous Wastes*. 1987. <https://digitallibrary.un.org/record/42520>.
- “Việt Nam là điểm đến hàng đầu của rác thải” *BBC News Tiếng Việt*, 2 May 2024. <https://www.bbc.com/vietnamese/articles/c99zgondrn10>.
- “Vietnam Join Basel Convention: Managing Hazardous Waste Movement”, 20 September 2024. <https://znorecycle.com/vietnams-participation-in-the-basel-convention-controlling-hazardous-waste-transboundary-movements/>.
- World Customs Organization. <https://www.wcoomd.org/en/media/newsroom/2021/november/national-training-in-vietnam-helps-to-implement-the-basel-convention-for-plastic-waste.aspx>.
- “Xuất chất thải nguy hại, một doanh nghiệp bị phạt 450 triệu đồng” *Tạp chí điện tử Hải quan Online*, 11 December 2020. <https://haiquanonline.com.vn/xuat-chat-thai-nguy-hai-mot-doanh-nghiep-bi-phat-450-trieu-dong-138465.html>.

