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Fourth meeting of the Conference of the Parties
to the Regional Agreement on Access to Information,
Public Participation and Justice in Environmental Matters
in Latin America and the Caribbean

Nassau, 21–24 April 2026

EXECUTIVE SUMMARY

REPORT BY THE SECRETARIAT ON POLLUTANT RELEASE AND TRANSFER REGISTERS IN LATIN AMERICA AND THE CARIBBEAN

CURRENT STATUS, GOOD PRACTICES AND RECOMMENDATIONS

UNITED NATIONS

ECLAC

This document contains the executive summary of the report by the Secretariat entitled "Pollutant release and transfer registers in Latin America and the Caribbean: current status, good practices and recommendations," prepared in accordance with paragraph 8 of decision III/1 of the Third Conference of the Parties to the Escazú Agreement. The Secretariat invites States Parties and observers to submit comments and observations by 1 June 2026. Thereafter, the final version of the document will be published.

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The views expressed in this document, an unofficial, artificial intelligence-generated translation of a Spanish original which did not undergo formal editing, are those of the authors and do not necessarily reflect the views of the Organization or the countries it represents.

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A. INTRODUCTION

Pollutant Release and Transfer Registers (PRTRs) are key instruments for guaranteeing the right of access to environmental information, strengthening transparency, accountability, and informed public participation in environmental decision-making processes. By systematizing and publishing verifiable data on the release of pollutants into the air, water, soil, and subsoil from point and non-point sources, and on their transfer off-site, PRTRs strengthen environmental governance, reinforce countries' institutional capacity to fully and effectively implement their regulatory frameworks, and facilitate progressive improvement in environmental management and control. In this regard, PRTRs constitute strategic tools for addressing the structural development traps identified by ECLAC (2025), particularly the trap of low institutional capacity and ineffective governance, contributing to the strengthening of more coherent, efficient, and sustainable development-oriented environmental policies.

In Latin America and the Caribbean, the establishment and implementation of PRTRs have followed varied trajectories, reflecting both the progress and the structural, regulatory, and technical challenges facing the region. While some countries have consolidated operational systems with national coverage, others are in the initial stages of design or regulatory recognition or have not yet developed specific instruments in this area. Nevertheless, there is growing regional interest in strengthening these systems, driven by international commitments —such as the Regional Agreement on Access to Information, Public Participation, and Justice in Environmental Matters in Latin America and the Caribbean (Escazú Agreement), the Sustainable Development Goals (SDGs), and the standards promoted by the Organization for Economic Cooperation and Development (OECD) regarding reporting, transparency, and the management of chemicals—as well as by greater demands for governance, accountability, and the preventive management of environmental impacts.

B. OBJECTIVE

This study, "Pollutant Release and Transfer Registers (PRTRs) in Latin America and the Caribbean: current status, good practices, and recommendations," was prepared by the Secretariat of the Escazú Agreement pursuant to Decision III/1, adopted at the Third Conference of the Parties (COP3) held in Santiago, Chile, in April 2024. That decision requested the Secretariat to prepare a report on national good practices regarding the establishment, operation, and content of PRTRs, in accordance with Article 6, paragraph 4, of the Escazú Agreement, with the aim of providing a comprehensive overview of the status of PRTRs in the region, identifying good practices, and offering key recommendations for their implementation and improvement.

C. REPORT METHODOLOGY

The work was based on a mixed methodology that included four phases:

(i) literature review,

(ii) analysis of the PRTRs in the region and globally,

(iii) interviews with various key stakeholders, and

(iv) data collection through a survey sent to the 33 countries in the region.

The first phase of the study consisted of a comprehensive review of the existing literature on PRTRs, both globally and in Latin America and the Caribbean. This included a compilation of reports, technical documents, academic articles, and publications from international organizations and regional entities. In addition, the information available on the Observatory on Principle 10 in Latin America and the Caribbean[1] was reviewed.

Subsequently, an in-depth analysis was conducted of the PRTRs implemented in Latin America and the Caribbean as well as in other regions of the world to evaluate the characteristics of the systems, their content, and their accessibility.

Third, qualitative interviews were conducted with a wide range of key stakeholders, such as government authorities, private companies, nongovernmental organizations, and international experts on transparency and information systems.

Finally, in order to obtain direct data from Latin American and Caribbean countries, a structured survey was designed and distributed to all 33 countries in Latin America and the Caribbean, regardless of whether they are Parties to the Escazú Agreement. It was also shared with some countries outside the region that have operational and fully implemented PRTRs.

The Secretariat wishes to thank the 13 countries in Latin America and the Caribbean (Antigua and Barbuda, Argentina, Barbados, Brazil, Chile, Colombia, Costa Rica, Ecuador, Guyana, Mexico, Panama, Saint Kitts and Nevis, and Uruguay) that completed the survey within the established timeframe. For the other countries in the region, an additional search of public sources was conducted to ensure the greatest possible representativeness of this report. However, in most cases, it was not possible to determine the current status of implementation or to identify potential obstacles or enabling factors associated with it. Additionally, a response was received from Canada, a country outside the region, which was considered in the section on good practices.

D. THE PRTRs UNDER THE ESCAZÚ AGREEMENT AND REGIONAL ENVIRONMENTAL GOVERNANCE

The Regional Agreement on Access to Information, Public Participation, and Justice in Environmental Matters in Latin America and the Caribbean—adopted in Escazú, Costa Rica, on March 4, 2018, and in force since April 22, 2021— establishes in Article 6.4 that each Party shall take measures to establish a pollutant release and transfer register covering air, water, soil and subsoil pollutants, as well as materials and waste in its jurisdiction. This register will be established progressively and updated periodically.

This provision is not isolated but is part of Article 6 of the Agreement, which establishes a comprehensive regime of active transparency: the obligation of competent authorities to generate, compile, make available to the public, and disseminate environmental information in a systematic, proactive, timely, and regular manner, in accessible, understandable, and reusable formats, without restrictions on reproduction (Art. 6.1 and 6.2).

Article 6 further requires that such access be guaranteed to persons or groups in vulnerable situations, in the languages used in the country and through formats and communication channels appropriate to their needs (Art. 6.6). These obligations anchor the design and operation of the PRTCs in the principles of Article 3 of the Agreement, particularly those of transparency and accountability, maximum

[1] https://observatoriop10.cepal.org/en

disclosure, equality and non-discrimination, and non-regression and progressive realization. By virtue of the latter, the phrasing shall be progressively established does not authorize indefinite inaction but establishes an obligation of continuous and verifiable progress that does not allow for setbacks once a certain level of implementation has been reached.

The PRTRs are one of the instruments that enable progress toward the full and effective implementation of Article 6 of the Escazú Agreement, by translating the obligation of proactive transparency into concrete, accessible, and reusable information for individuals and authorities. By systematizing and making verifiable data on the release and transfer of pollutants available to the public, they transform complex technical information into an accessible resource for citizens, regulatory authorities, and other relevant stakeholders. In this sense, PRTRs are not merely environmental management tools: they are the institutional expression of the right of access to environmental information enshrined in the Escazú Agreement, simultaneously strengthening accountability, informed public participation, and democratic environmental governance.

The PRTRs also support compliance with the main multilateral environmental agreements (MEAs) regarding chemicals and hazardous waste. The data they systematize constitute a direct input for the national reporting mechanisms required by the Stockholm Convention on Persistent Organic Pollutants (2001), the Minamata Convention on Mercury (2013), the Rotterdam Convention on the Prior Informed Consent Procedure (1998), and the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes (1989), by documenting the release, transfer, and management of the substances regulated by each of these instruments. Likewise, the information on industrial emissions collected by PRTRs serves as a key input for the preparation of national greenhouse gas inventories and the National Communications that States submit under the United Nations Framework Convention on Climate Change (UNFCCC, 1992). In all these cases, PRTRs improve the traceability of substances and emissions, enhance consistency among national environmental information systems, and strengthen compliance with the obligation established in Article 6 of the Escazú Agreement to make environmental information available to the public in a systematic, organized, and up-to-date manner.

Within the framework of the 2030 Agenda for Sustainable Development, PRTRs can play a cross-cutting role in monitoring multiple Sustainable Development Goals. Their contribution is particularly relevant to SDG 3 (good health and well-being, by helping to reduce exposure to toxic pollutants), SDG 6 (clean water, through the identification of sources of water pollution), SDG 11 (sustainable cities and communities), SDG 12 (responsible consumption and production, including Target 12.4 on chemicals and waste management), SDG 13 (climate action, through greenhouse gas inventories), and SDG 16 (strong institutions, access to public information, and accountability).

E. DEFINITION, FUNCTIONING, AND ESSENTIAL COMPONENTS

(a) Definition

Pollutant Release and Transfer Registers (PRTRs) are public information systems that collect, process, and disseminate verifiable data on releases of pollutants to air, water, soil, and subsoil, and on the off-site transfer of substances and wastes for final disposal, treatment, recycling, or recovery (Escazú Agreement, Art. 6.4 and Kiev Protocol, 2003, Art. 4). PRTRs are designed to be publicly accessible, free of charge, and unrestricted.

In this sense, PRTRs are not merely technical monitoring tools: they are instruments of active transparency and accountability. By systematizing data on the sources, types, and volumes of pollutants entering the environment from industrial facilities and others emission sources, they provide the information base necessary to design evidence-based emission reduction policies, assess regulatory

compliance, identify areas and populations at higher risk of exposure, and create conditions for informed and meaningful public participation in environmental decision-making processes.

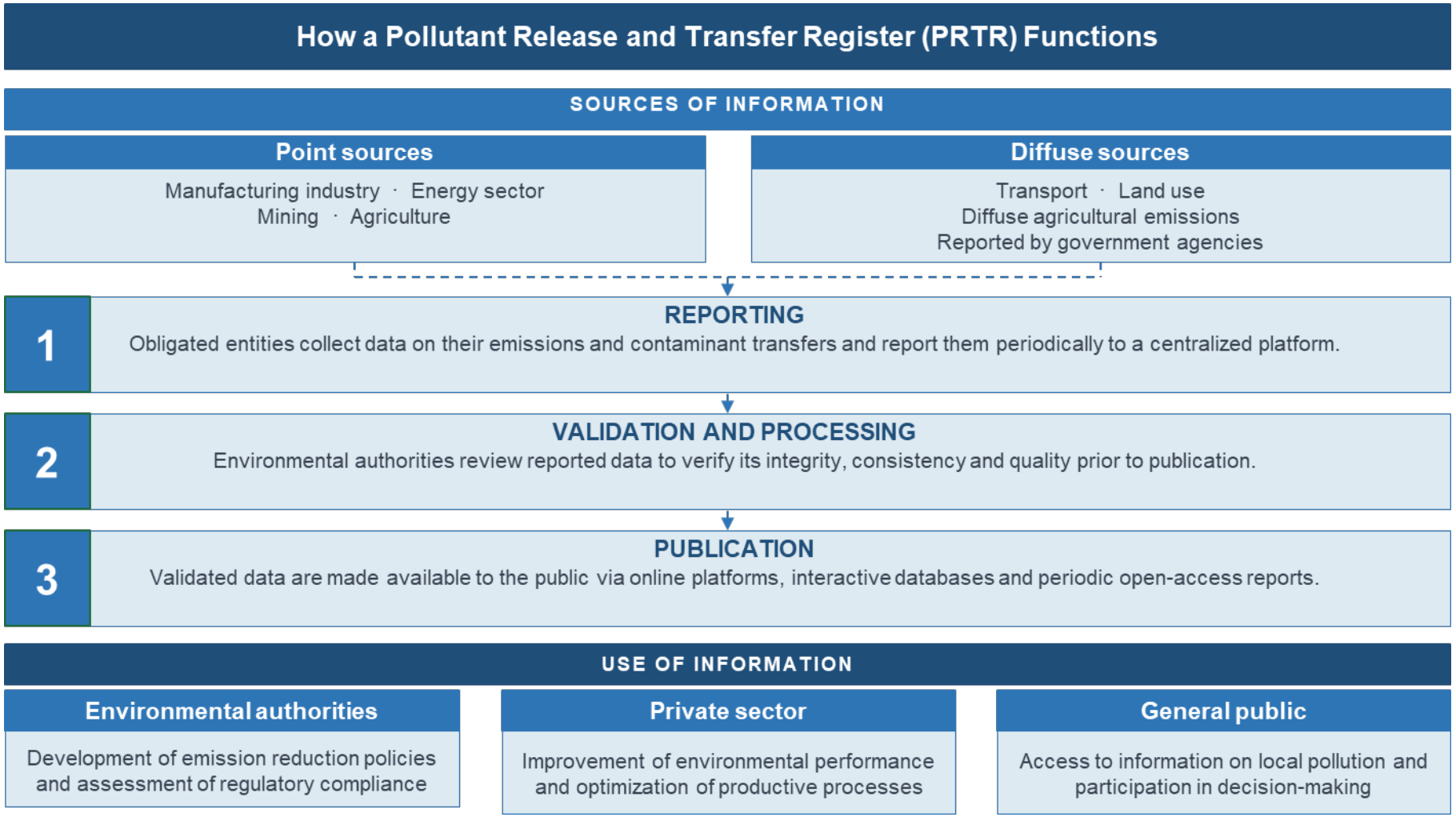
(b) Functioning

PRTRs enable the collection, organization, and public availability of verifiable and standardized information on pollutant emissions to air, water, and soil, as well as on the transfer and management of waste toward its final disposal or treatment. Their operation follows a systematic structure that encompasses the collection, validation, and publication of data from various industries and emission sources. The main stages of a PRTR's operation are as follows:

1. **Reporting by regulated entities.** Companies subject to environmental obligations must collect data on their pollutant emissions and transfers and report periodically to a centralized platform. The pollutants included depend on national regulations and may cover substances emitted to air, water, and soil, as well as waste transported to disposal or treatment sites. In the case of diffuse sources—such as transportation or agriculture—sector-specific government agencies are usually responsible for uploading the information.
2. **Validation and processing of information**. Environmental authorities review the reported data to detect inconsistencies or errors. Depending on the system, automatic audits or verifications—or even external audits—may be conducted to ensure the quality and reliability of the information.
3. **Publication of information.** Once validated, the data is made available to the public and other stakeholders through online platforms, interactive databases, or periodic reports.
4. **Use of information by different stakeholders**. Environmental authorities use the data to design emission reduction policies, assess regulatory compliance, and establish maximum permissible limits. Companies use the information to improve their environmental performance and optimize production processes, and the public uses it to learn about pollution levels in their communities and participate in environmental consultations and decision-making.

The following diagram provides a general overview of the stages of an PRTR system's operation:

Diagram 1
Operation of a PRTR



Source: Prepared by the author.

(c) Essential Components of a PRTR System

For the purposes of this report, a system is recognized as a PRTR if it contains the essential components established by two international regulatory frameworks: the Escazú Agreement, which establishes principles and obligations related to access to environmental information and environmental information systems and the Kiev Protocol on Pollutant Release and Transfer Registers (UN, 2003), which defines the minimum technical requirements for the structure, operation, and disclosure of these systems. These components are organized into four dimensions:

(1) **Content and coverage:** requires a defined list of pollutants and wastes released into the environment or transferred off-site, with multi-media coverage (air, water, soil, and subsoil) that includes point and non-point sources, and allows for disaggregated searches by facility, receiving medium, and destination of transfers (Escazú Agreement, Art. 6.4, and Kiev Protocol, Arts. 4(a), 4(c), 4(d), 4(e), and 5(1)-(2)).

(2) **Data quality and updating** require a system of periodic and mandatory reporting, with standardized data and consistent methodologies that ensure coherence, verifiability, and credibility, and strictly limited and duly justified exceptions to confidentiality (Escazú Agreement, Arts. 6.1 and 6.2 and the Kiev Protocol, Arts. 4(f), 4(g), 8, and 12).

(3) **Accessibility and use of information** implies that data be made available to the public in a timely, understandable, and accessible format—preferably electronic—without the need to invoke a particular interest and integrated with other national environmental information systems (Escazú Agreement, Arts. 5.1, 5.2, 6.2, 6.3, and 6.10; and the Kiev Protocol, Arts. 4(h) and 4(j)).

(4) **Participation and governance** require adequate opportunities for public involvement in the design, review, and modification of the system, ensuring timely and inclusive participation (Escazú Agreement, Arts. 7.2, 7.3, and 7.14; and Kiev Protocol, Arts. 4(i) and 13).

These components make it possible to determine whether a system effectively constitutes an PRTR, regardless of the name it is given in each national jurisdiction.

F. REGIONAL ASSESSMENT: STATUS OF IMPLEMENTATION OF PRTRs IN LATIN AMERICA AND THE CARIBBEAN

Overview of the status of implementation of PRTRs in the region

The regional analysis reveals a heterogeneous landscape that, in many cases, is still in its early stages. For methodological purposes, six phases of PRTR implementation are distinguished: **(1) full implementation; (2) partial implementation; (3) initial phase; (4) regulatory framework established but not implemented; (5) no reported implementation; and (6) no information available**.

Within the first category, only **Chile** and **Mexico** have fully implemented PRTRs: operational systems with mandatory reporting and public access. Both countries also have significant experience in their implementation, having been among the first to begin establishing their registries in 2007 and 2005, respectively.

In the second category, **Colombia** and **Ecuador** stand out with partial implementations: Colombia began mandatory reporting for the manufacturing sector in 2025, with plans to incorporate other sectors in 2026; Ecuador has been operating on a voluntary basis since 2020, without guaranteeing the publication or public access to data, which significantly limits its functionality.

Nine countries are in the initial phase, which includes stages such as conceptual design, pilot implementation, and initial rollout. **Antigua and Barbuda**, **Brazil**, **Costa Rica**, and **Uruguay** are working on system design, while **Argentina** has moved toward a pilot project in the Matanza-Riachuelo basin. In turn, **Peru** and **Honduras** have an established regulatory framework and related information that can be viewed on official websites. However, the current status of implementation could not be verified. For its part, **Belize** began work toward its establishment in 2010, although due to capacity constraints, it was unable to complete the implementation of its PRTR.

Based on publicly available sources, it could also be considered that **Jamaica** has begun establishing its system; its National Environment and Planning Agency indicates on its website[2] that a PRTR was launched in 2017. However, no additional information was found, and the current status of implementation could not be verified.

The fourth category includes **the Bahamas, Cuba, Saint Kitts and Nevis**, and **Trinidad and Tobago**. In all four cases, there are regulations mandating the establishment of an PRTR or components thereof as part of a broader environmental registry. However, no information regarding their initiation or current status has been found in publicly available sources.

The fifth category includes **Barbados**, **Guyana, and Panama**, which, as indicated in their questionnaires, have not begun the design or implementation of an PRTR, and no institutional progress has been reported to date.

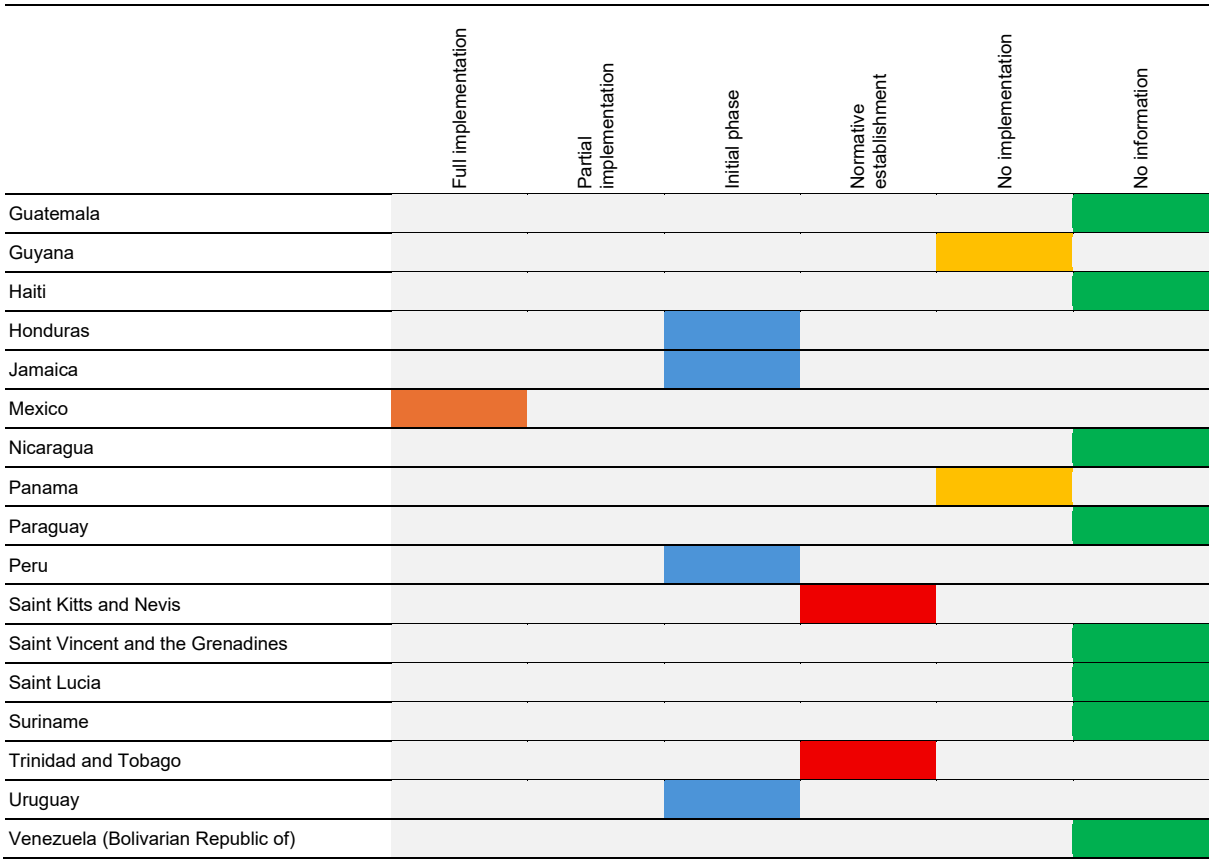
For the remaining countries in the region, no official information was received—nor was it possible to identify relevant information through a review of public sources—so they are classified as "no information" in Map 1. This categorization reflects the absence of verifiable data and does not rule out the existence of unreported internal initiatives.

[2] https://www.nepa.gov.jm/environment-management

Map 1

Status of PRTR implementation in the region

	Full implementation	Partial implementation	Initial phase	Normative establishment	No implementation	No information
Antigua and Barbuda			■			
Argentina			■			
Bahamas (The)				■		
Barbados					■	
Belize			■			
Bolivia (Plurinational State of)						■
Brazil			■			
Chile	■					
Colombia		■				
Costa Rica			■			
Cuba				■		
Dominica						■
Dominican Republic						■
Ecuador		■				
El Salvador						■
Grenada						■



Source: ECLAC.

Note: The boundaries and names shown on this map do not imply official endorsement or acceptance by the United Nations.

Finally, the regional assessment also reveals encouraging signs within the framework of the Escazú Agreement, with a clear prioritization of PRTRs among the States Parties. The eight States Parties that have developed or are finalizing their Roadmaps for national implementation have incorporated actions related to Pollutant Release and Transfer Registers (PRTRs) into their national implementation roadmaps, positioning this instrument among the most common priority actions in the region. The commitments made reflect varying levels of progress and ambition. Argentina, Panama, and Uruguay expressly committed to establishing or implementing a PRTR; Chile and Ecuador, which already have full and partial implementation, respectively, included actions aimed at strengthening and improving their systems; while Belize has committed to redesigning its register, and Grenada and Saint Kitts and Nevis have committed to assessing its feasibility.

Together, these commitments constitute a concrete basis for regional monitoring, technical cooperation, and progressive advancement in the implementation of PRTRs, in line with the standards for access to environmental information established by the Agreement.

Table 1
Priority actions related to PRTRs in the roadmaps for national implementation of the Escazú Agreement

Country	Description
Argentina	Implement a Pollutant Release and Transfer Register (PRTR)
Belize[a]	Redesign the PRTR System
Chile	Strengthen the PRTR system
Ecuador	Strengthen the PRTR system
Grenada	Conduct an assessment to determine the appropriate approach for establishing a PRTR system
Panama	Establish a Pollutant Release and Transfer Register (PRTR)
Saint Kitts and Nevis[a]	Conduct an assessment to determine the appropriate approach for establishing a PRTR system
Uruguay	Implement a Pollutant Release and Transfer Register (PRTR)

Source: Prepared by the authors.
[a] In the process of being published.

- **The Parties to the Escazú Agreement and progress in the implementation of PRTRs**

An analysis of the status of implementation of RETCs in relation to membership in the Escazú Agreement reveals a positive and significant correlation. Of the 19 countries that are Parties to the Agreement to date, the vast majority have made some concrete progress in the design or implementation of a PRTR, demonstrating the catalytic effect of the binding commitments undertaken under this regional instrument.

(1) PRTRs in operation[3]

Chile implemented its PRTR in 2007 under Law No. 19.300 on General Environmental Principles, which in Articles 70(p) and 70(q) mandates the Ministry of the Environment to administer the registry and establish a public environmental information system. Its legal nature is hybrid: the obligations to report emissions stem from sectoral regulations coordinated through the One-Stop Shop platform and Supreme Decree No. 1 of 2013. The system covers emissions to air and water from point and diffuse sources, making it the only one in the region to incorporate both, and annually publishes data on more than 200 pollutants with an emphasis on 15 priority substances, including mercury, benzene, PM2.5, NOx, SOx, CO_2, and lead. The website offers the public consolidated reports, interactive maps, and downloadable data. Its integration with the green tax and other economic instruments constitutes a good practice benchmark for the region. The country has the institutional capacity to play an active role in the methodological harmonization of PRTRs at the regional level.

Mexico began preparations for its PRTR in 2001, driven by Agenda 21 of the United Nations (1992), the United Nations Framework Convention on Climate Change (1992) and the OECD's promotion of

[3] **Methodological Note**: This categorization considers only regulatory frameworks and instruments that comprehensively address the reporting of pollutant emissions and transfers, that is, covering multiple environmental media (air, water, and soil) and economic sectors. Partial sectoral or thematic registries—such as air emissions registries, hazardous waste inventories, or liquid effluent reporting systems—are not included, even when these are operational and represent significant progress in environmental transparency. Such is the case, for example, with the air pollutant registry administered by the Environmental Management Authority (EMA) of Trinidad and Tobago. These sectoral instruments, while valuable, do not constitute a PRTR in the technical sense of the term as defined by the OECD and the Kiev Protocol on PRTRs.

pollutant release and transfer registers (1996). That year, article 109 Bis of the General Law on Ecological Equilibrium and Environmental Protection (*Ley General del Equilibrio Ecológico y la Protección al Ambiente*, LGEEPA) was amended, establishing the legal foundation of the system. In 2002, the Federal Law on Transparency and Access to Public Information (*Ley Federal de Transparencia y Acceso a la Información Pública*) was enacted, followed in 2004 by the LGEEPA Regulations on the PRTR. The system was officially launched in 2005, with the publication of a list of 104 substances subject to reporting, various ministerial agreements, an electronic declaration format and the establishment of mandatory reporting obligations.
Currently, the PRTR covers releases to air, water and soil from 11 industrial sectors under federal jurisdiction, including mining, energy, manufacturing, chemicals, petrochemicals and automotive industries, and encompasses information on waste transfers, production volumes, input use and pollution prevention measures. The substances subject to reporting are defined in Official Mexican Standard NOM-165-SEMARNAT-2013, and facilities subject to the obligation submit their annual declaration through the Annual Operations Certificate (*Cédula de Operación Anual*, COA). PRTR data are publicly accessible through the institutional web platform.

Colombia established its PRTR through Resolution No. 0839 of 2023 of the Ministry of Environment and Sustainable Development, which replaced Resolution No. 0941 of 2009. Its design process stands out as one of the most participatory in the region: since 2016, a Technical Working Group (GTT) and a National Advisory Committee (CCN) have been in operation, composed of government institutions, industry associations, and academia. The system covers emissions to air, water, and soil from point sources, with publicly accessible data, except for exceptions expressly justified under Law No. 1712 of 2014. The list of reportable substances is defined in Annex 1.2 of Resolution No. 0839 of 2023 and may be updated as the country's environmental regulations evolve; although the system has largely aligned with the international standards of the OECD and the Kiev Protocol, not all substances contained in their reference lists are currently included. In 2025, mandatory reporting began for the manufacturing sector, with the first data scheduled for publication in November of that year. In 2026, the system will be progressively extended to all economic sectors. The prior existence of instruments such as the Single Environmental Registry (RUA) and the Natural Resource Use Information System (SIUR) has facilitated the development of the PRTR on a consolidated institutional foundation, positioning Colombia as a regional leader in participatory design and progressive implementation.

Ecuador launched its reporting platform in 2020, under Ministerial Agreement No. 061 of 2015, whose Article 52 establishes the obligation of the National Environmental Authority to create a registry of emissions and transfers of pollutants to air, water, soil, and subsoil, as well as hazardous materials and waste. The system operates through a specific submenu of the Single Environmental Information System (SUIA) and covers emissions to air and water from point sources—currently excluding soil and diffuse sources—with annual reporting on hazardous waste and residues, chemical use, resource consumption in the production process, and notification of pollution and emergency events. However, the system operates on a voluntary basis, which has resulted in low levels of participation by facilities and limited representativeness of the data; in addition, the reported information is not publicly accessible. These limitations—lack of mandatory status, lack of transparency, and access restrictions—prevent the system from being considered, strictly speaking, a fully implemented PRTR in accordance with the standards and obligations of the Escazú Agreement and the Kiev Protocol. However, the existing operational platform constitutes a concrete technological foundation upon which to progressively advance toward a mandatory and transparent system. International technical cooperation, participation in regional initiatives, and strengthening coordination among environmental authorities, productive sectors, and civil society represent the main opportunities to drive this transition.

(2) Countries in the initial phase

Currently, nine countries —**Antigua and Barbuda, Argentina, Belize, Brazil, Costa Rica, Honduras, Jamaica, Peru**, **and Uruguay**— are actively designing or launching their PRTRs, at various stages ranging from conceptual design and feasibility studies to the implementation of pilot projects. Four of them—Antigua and Barbuda, Argentina, Belize, and Uruguay—are States Parties to the Escazú Agreement, which makes the commitment to progressively advance the implementation of the system legally binding.

Antigua and Barbuda has taken the first steps toward designing an PRTR, based on the Environmental Protection and Management Act (EPMA, 2019) and the Freedom of Information Act (2004), which provide the legal framework for environmental management and transparency in public information. As a State Party to the Escazú Agreement, the country has made explicit commitments regarding access to environmental information, public participation, and access to justice. Government, industry, and civil society actors have expressed interest in developing the system, which provides a basis of legitimacy for moving toward a participatory and inclusive design. The main challenge identified is the need for external funding to cover the system's technological, training, and operational costs, making regional and international cooperation an indispensable enabler for progress in this direction.

Argentina is developing a pilot project in the Matanza-Riachuelo basin—one of the country's most complex and closely monitored industrial zones—in coordination with the Matanza Riachuelo Basin Authority (ACUMAR), with support from the UNDP Project ARG 20/G27 funded by the GEF. In 2023, a technical collaboration agreement was signed between the Ministry of Environment and Sustainable Development and ACUMAR to develop an environmental inventory of emissions and releases. The country has published a national implementation guide and uses the Integrated Environmental Information System (SInIA) as its foundational platform. A key milestone is the inclusion of the PRTR as a priority action (Action A.6) in the national implementation roadmap for the Escazú Agreement, with the explicit aim of promoting proactive access to environmental information. The planned system will cover point source emissions to air, water, and soil, as well as waste transfers for disposal or treatment. The main challenge is to move from the pilot phase toward a national system with a specific regulatory framework and mandatory reporting.

In **Belize**, the Department of Environment has a legal mandate[4] to establish a PRTR. This includes maintaining a register of all wastes, discharges, emissions, deposits, or other sources of emission or substances that are hazardous or potentially hazardous to the environment. In 2010, Belize benefited from a regional project to design a PRTR with the Central American Commission on Environment and Development (CCAD) and the Spanish Ministry of the Environment (Spanish Ministry of the Environment and Rural and Marine Affairs) with technical support from UNITAR. An assessment was prepared, and an Inter-agency Coordination Mechanism was established to support its implementation. However, its implementation is pending due to capacity constraints.

Brazil is making progress in designing its PRTR, led by the Ministry of the Environment, with a proposed resolution from the National Environment Council (CONAMA) and backed by a Regulatory Impact Analysis that is currently undergoing approval. The design includes integration with the existing Relatório Anual de Atividades Potencialmente Poluidoras e Utilizadoras de Recursos Ambientais

[4] The Department of the Environment shall maintain a register of all wastes, discharges, emissions, deposits, or other sources of emission or substances that pose a hazard or a potential hazard to the environment.

(Rapp) system —under a one-stop-shop approach— initial coverage of priority sectors (chemicals, metallurgy, pulp and paper, oil and gas, and mining), and a freely accessible public portal with visualization tools, download options, and an open API. Implementation is projected to take place gradually over a period of more than five years following regulatory approval. The robust technological and institutional infrastructure available —which includes platforms such as MONITORAR, SNIRH, SINIR, and SISLIMA— provides favorable conditions for the progressive consolidation of the system. Brazil has signed the Escazú Agreement, although it has not yet ratified it, which represents an opportunity to strengthen its environmental transparency commitments within the framework of the PRTR implementation process.

Since 2022, **Costa Rica** has relied on Executive Decree No. 43272-S-MINAE as the regulatory basis for its PRTR, which defines it as a publicly accessible web-based information system under the responsibility of the Ministry of Health. Accession to the OECD in 2021 has been a key driving factor: the country has formally accepted the OECD Council Recommendation on Pollutant Release and Transfer Registers. The system is projected to be operational by 2026, beginning with data collection from boilers and furnaces and progressively expanding to other sources and media. The country has the support of the GEF and United Nations agencies and has existing platforms —such as the National Environmental Information System (SINIA)— that can be integrated with the PRTR. Its institutional framework, focused on transparency, accountability, and access to information —and reinforced by the Escazú Agreement once it is ratified— constitutes a strategic asset for the system's consolidation.

Uruguay has made progress in the conceptual design of its PRTR, with technical work on identifying priority substances and sectors and projecting operations through the end of 2026. The country has the National Environmental Observatory —created by Law No. 19.147 of 2013— as a centralized platform for environmental information, and General Law No. 17.283 on Environmental Protection as its foundational regulatory framework. It has incorporated the PRTR as a priority action in its roadmap for the national implementation of the Escazú Agreement, with the aim of analyzing the technical, legal, and economic requirements for the progressive incorporation of environmental information corresponding to this type of system. The main challenges identified are the lack of a specific regulatory framework, sustained financing for the system's development, and the strategic definition of its initial scope.

In the case of **Peru**[5] **and Honduras**[6] , a review of public sources reveals indications of processes related to the design and implementation. Both countries have an established regulatory framework[7] and related information that can be viewed on official websites.

(3) Countries with regulatory frameworks for PRTR

A third group consists of countries that, although they have not established an EPR system as a standalone framework, have explicit legal provisions that provide for or authorize its creation within the framework of their general environmental legislation. Four countries are identified in this group: the Bahamas, Cuba, Saint Kitts and Nevis, and Trinidad and Tobago. In each case, the regulatory basis is incorporated into the country's framework environmental law: Section 38 of the *Environmental Planning and Protection Act* of the Bahamas[8] ; Articles 75 and 76 of Cuba's Law

[5] https://www.minam.gob.pe/investigacion/registro-de-emisiones-y-transferencia-de-contaminantes-retc/
[6] https://hn-serna-retc.firebaseapp.com/retc
[7] Peru published a Supreme Decree establishing the Pollutant Release and Transfer Register (No. 018-2021-MINAM of 2021), and Honduras issued the Ministerial Agreement approving the Regulations of the Pollutant Release and Transfer Register (No. 1070-2014 of 2014).
[8] The Director shall establish a registry called the Environmental Registry, hereinafter the "Registry." Said registry shall contain the following: […] (g) information regarding sources of pollution.

on the Natural Resources and Environment System[9] ; Section 87 of the *National Conservation and Environmental Management Act* of Saint Kitts and Nevis[10] ; and Articles 26 and 49 of the *Environmental Management Act* of Trinidad and Tobago[11] . The existence of these provisions represents a significant regulatory starting point, as they establish the legal obligation or authority to implement the registry without requiring new legislation, thereby constituting an enabling condition for moving toward operational PRTR systems with adequate technical and institutional support.

(4) Countries without PRTRs: Initial conditions and opportunities

Barbados, Guyana, and Panama have not begun the design or implementation of an PRTR system, and no formal institutional progress has been reported in this area. However, Guyana and Panamá have ratified the Escazú Agreement, which establishes a binding regulatory framework for progressively moving toward compliance with Article 6.4 of the Agreement. In all cases, foundational environmental legal frameworks, sectoral administrative registries, and technological infrastructure have been identified that can serve as a starting point for the progressive design of an PRTR system.

Barbados has expressed interest in moving toward an Environmental Pollution Control Act that could incorporate emissions reporting requirements, opening a relevant regulatory and window for the future development of an PRTR. The country is a party to the Basel, Stockholm, Rotterdam, and Cartagena Conventions, which facilitate coordination with international technical support mechanisms. Growing public interest in access to environmental information serves as an additional catalyst for the development of more open and participatory environmental policies.

Guyana has the Environmental Protection Agency (EPA), which possesses robust technological infrastructure—servers, cloud-based databases, and real-time environmental monitoring platforms for water and air quality—and requires periodic emissions reports from facilities that obtain environmental permits. The Open Data Act enacted in 2024 represents a concrete regulatory advance that strengthens the framework for transparency and public access to information. Accession to the Escazú Agreement and the major conventions on chemicals—including the Basel, Stockholm, Rotterdam, and Cartagena Conventions—further facilitates access to international technical and financial support to initiate a structured design process.

Panama has a well-established environmental legal framework, which includes the General Environmental Law No. 41 of 1998 and Law No. 6 of 2002 on transparency and access to public information. The Ministry of the Environment has declared its intention to address the development of

[9] The Pollutant Release and Transfer Control System is established as a digital database with publicly accessible information, containing data on the release and transfer into the environment of potentially harmful chemicals or pollutants and identifying the nature, quantity, and location of these releases or transfers. The Pollutant Emissions and Transfers Control System has the following objectives: a) To maintain a reliable and up-to-date information base on the emission and transfer of specific pollutants in the different media —air, water, and soil— that is useful for policy formulation, the evaluation of the environmental regulatory framework, and the development of research studies; b) to simplify and systematize the collection of information regarding the emission and transfer of specific pollutants, as well as the reporting requirements to which different sectors are subject; c) to identify the sources, sectors, and geographic areas with the highest concentration of pollutant emissions and transfers; d) to provide information for the identification and assessment of health and the environment associated with pollutant emissions; e) identify, quantify, and evaluate trends in emissions of specific pollutants, with the aim of promoting efforts toward comprehensive pollution prevention and control; and f) provide information to the general public on pollutant emissions and transfers in a manner that contributes to the exercise of the right to enjoy a healthy and balanced environment.

[10] The National Law on Environmental Conservation and Management establishes that a registry of pollutant sources shall be created as part of the National Environmental Information System. Said registry shall contain data identifying the source, quality, and conditions or concentrations relevant to the identification of a pollutant25 and shall be open for public consultation during normal business hours, upon payment of the applicable fee, if any.

[11] The Minister may, in accordance with Article 27, issue regulations subject to negative resolution by Parliament, relating to the following: a) procedures for the registration of sources from which pollutants may be released into the environment and the characterization of such sources; b) the quantity, state, or concentration of pollutants or substances containing pollutants that may be released into the environment in general or by specific sources or categories of sources;

the PRTR as an institutional priority, incorporating the creation of this system as a priority action in its roadmap for the national implementation of the Escazú Agreement. The existence of the National Center for Cleaner Production and the available environmental monitoring infrastructure offer concrete starting points for forging public-private partnerships aimed at the progressive design of the system.

In all these countries, the most common gaps center on specialized technical capacities for the system's design and operation, sustained financing for technological platforms and training, and specific regulatory frameworks that make emissions and transfers reporting mandatory and standardized. International technical cooperation—including support from the OECD, UNITAR, UNEP, and financial mechanisms such as the GEF—represents the primary pathway to addressing these gaps in a progressive manner tailored to each country's context.

G. GOOD PRACTICES IN THE INITIATION, OPERATION, AND CONTINUOUS IMPROVEMENT PHASES OF PRTRs

The study identified and systematized good practices drawn from national experiences and international benchmarks, organized into three phases of the PRTR life cycle: initiation, operation, and continuous improvement. These practices are based on principles of transparency, public participation, continuous improvement, and alignment with international standards established by the OECD, UNECE, PIGRPQ, and UNITAR.

Initial Phase

The initial phase is the critical moment that lays the foundation for the system's success. The identified good practices include:

(i) Early and flexible legislative support: The case of the U.S. Toxic Release Inventory (TRI) illustrates how having legal backing from the earliest stages facilitates the gradual institutionalization of the system.

(ii) Multisectoral advisory committees: The Canadian model of the National Pollutant Release and Transfer Register (NPRTR) demonstrates that a participatory design involving the public, private, academic, and civil society sectors contributes to the system's social legitimacy and technical relevance.

(iii) National infrastructure assessment: Moldova's experience, supported by international cooperation, shows that feasibility studies conducted prior to implementation help identify gaps, available capacities, and relevant stakeholders.

(iv) Pilot programs: Japan's experience in 1997 demonstrates that pilot projects with selected industries allow for the refinement of methodologies, the generation of lessons learned, and the building of trust among stakeholders prior to national rollout.

(v) Structured design process: The case of Colombia illustrates the value of a formal and progressive process for establishing the system, with clear stages of design, consultation, and sectoral deployment.

Operational phase

The operational phase requires ensuring the quality, consistency, and accessibility of data. Identified good practices include:

(i) Integrated reporting systems: the optimization of single-window reporting platforms (Ventanilla Única in Chile; the SINIA/COA system in Mexico) reduces administrative burdens and improves data comparability.

(ii) Data quality assurance through cross-verification processes and periodic audits of received reports.

(iii) Accessible dissemination and reusable formats: publishing data in open formats, with interactive visualization interfaces and download options, expands effective access to information.

(iv) Multiple uses of data: the cases of TRI (U.S.) and Israel illustrate how PRTR data can be used in public policy development, environmental performance assessment, risk analysis, and environmental justice.

(v) Promoting citizen use: the TRI for Tribes program (U.S. and Canada) shows that designing specific tools for historically marginalized communities broadens the system's impact and reinforces the rights-based approach.

Continuous improvement phase

The sustainability and relevance of an PRTR over time depend on the existence of formal evaluation and updating mechanisms. Good practices include regular performance evaluations, progressive expansion of covered substances and sectors, incorporation of diffuse sources, harmonization with updated international standards, and openness to emerging technologies (artificial intelligence, remote sensing, blockchain) to improve data quality and timeliness.

H. ENABLING AND LIMITING FACTORS: THE TOPP CAPABILITIES FRAMEWORK

A comparative analysis of national experiences allows for the identification of a structured set of factors that determine the viability, sustainability, and effectiveness of PRTRs. The study adopts the TOPP Capabilities framework (technical, operational, political, and prospective) as an analytical tool to categorize and diagnose these factors in terms of their enabling and limiting dimensions.

- **Technical capabilities:** These include specialized knowledge, the availability of reliable information, and the technological tools needed to design, operate, and improve PRTRs. Among the enabling factors, the availability of international technical cooperation for the system's design and technological development stands out, as does the existence of pre-existing reporting systems that facilitate building upon consolidated institutional foundations. The most common limitations include a lack of emissions inventories, the fragmentation of data sources, the lack of standardized methodologies, and high turnover of technical staff.

- **Operational capabilities:** These refer to the infrastructure, management processes, and institutional organization necessary for the system's operation. Effective inter-institutional coordination and the existence of coordination mechanisms are the main enabling factors in this dimension. The most common limitations are low interoperability between databases, obsolete technological platforms, weak intersectoral coordination, and a lack of sustained funding for platforms, dissemination, and training.

- **Political capabilities:** These encompass the political will, legitimacy, governance, and regulatory frameworks that underpin implementation. International commitments arising from OECD membership or the Escazú Agreement, along with clear regulatory frameworks establishing the system's mandatory nature, act as key enabling factors. Limiting factors include institutional instability, lack of coordination between levels of government, weak

specific regulatory support, limited coordination among public institutions, and the lack of mechanisms for collaboration with private and civil society actors.

- **Prospective capabilities:** these enable anticipating changes, adapting to new contexts, and orienting the system toward the future. Linkages with emerging agendas—such as the circular economy, decarbonization, and just transition—and access to international cooperation for long-term capacity building represent significant enabling opportunities. Common limitations include the absence of long-term strategies, the lack of systematic evaluation of the system's performance, the public's limited awareness of the PRTR, and the low quality, coverage, and standardization of available environmental data.

I. CONCLUSIONS AND RECOMMENDATIONS

The maturity and sustainability of an PRTR system are directly related to a country's ability to simultaneously coordinate and strengthen the technical, operational, political, and forward-looking dimensions throughout the system's entire life cycle. These findings reaffirm that the successful implementation of PRTR systems does not depend solely on technical aspects but requires a solid framework of complementary capacities, adequate funding, and active public participation.
Only through a comprehensive, progressive, and rights-based approach will it be possible to consolidate PRTRs as effective tools for environmental management, accountability, and evidence-based decision-making in Latin America and the Caribbean.

Recommendations for the Progressive Strengthening of PRTRs

Based on the regional assessment and analysis of good practices, the study makes the following recommendations for countries in Latin America and the Caribbean:

(i) Promote early and flexible legislative support, engaging the legislative powers and regulatory authorities from the initial stages, to ensure a robust regulatory framework that provides legitimacy, political backing, and long-term legal viability for the PRTR.

(ii) Establish multisectoral advisory committees and participatory working groups to ensure that the system is designed on the basis of broad consensus and the effective representation of the private sector, academia, civil society, and the various levels of government.

(iii) Conduct a comprehensive assessment of national infrastructure prior to implementation, taking into account legal frameworks, institutional capacities, existing systems, and relevant stakeholders, to identify gaps and opportunities.

(iv) Define clear and shared objectives for the PRTR, both at the national and regional levels, based on broad consultation processes, guiding the system's design toward better environmental management and greater alignment with international standards.

(v) Design the PRTR with a comprehensive scope and harmonized technical criteria, establishing rigorous parameters for the selection of substances, sectors, thresholds, and types of emissions, in line with the recommendations of the OECD, the Kiev Protocol, and other specialized agencies.

(vi) Promote the continuous improvement of the system through formal mechanisms for review, updating, and training, enabling it to adapt to regulatory, technological, and contextual changes, ensuring its relevance and effectiveness over time.

Funding and International Cooperation

Financial sustainability is a critical condition for the development and continuity of PRTRs. It is recommended to explore the allocation of specific funding from the Global Environment Facility (GEF) for PRTRs, following the model of support provided under the Stockholm and Minamata Conventions. Likewise, it is possible to leverage existing funds allocated to related issues—such as climate change or chemicals management—to incorporate the development of PRTRs as part of those investments. However, once the initial phase is complete, countries must ensure long-term sustainable financing, guaranteeing the operationality, updating, and continuous improvement of the systems.

Regional integration and cooperation

PRTRs also represent a strategic opportunity to promote technical and institutional integration among countries in the region. The main opportunities identified include: the exchange of good practices, methodologies, and technological tools; the harmonization of standards and technical criteria to facilitate regional comparability; the development of shared or interoperable platforms, inspired by experiences such as the North American PRTR (North American Registry); and the creation or consolidation of regional networks for technical cooperation and training. In this context, the Escazú Agreement and a possible future mandate to be issued by COP4 in Nassau (Bahamas, April 2026) provide a conducive institutional framework for States Parties to consolidate concrete commitments in this direction.