

Appendix

Regulations, policies, and institutional arrangements in place to deal with solid waste in Brazil and Canada

Level / Regulations	Regulation	Description	Regulation	Description
Federal				
	Brazil		Canada	
Brazilian Constitution (1988)	Art. 23 (power division between federal entities)	The Union, states, Federal District and municipalities have the collective power to protect the environment and to fight pollution in any of its forms,	Constitution Act, 1867; section 92a)	Although there is this specific section on “Non-renewable natural resources, forestry resources and electrical energy” the regulations proposed have its focus on the economic use of these resources.
Canadian Constitution Acts (1867 to 1982)	Art. 225 (Chapter IV – Environment)	Lists several governmental responsibilities, which should ensure that “Everyone has the right to an ecologically balanced environment, which is an asset of common use and essential to a healthy quality of life, and both government and community shall have the duty to defend and preserve it for present and future generations”. However, no specific clues with regard to solid waste or climate change	Canada Act 1982	No environmentally relevant regulations have been added with the Canada Act 1982.
Federal solid waste related policies	National Solid Waste Policy (Federal Law on Solid Waste Nº 12.305/10)	<i>Provides on the principles, objectives, instruments, and guidelines related to the integrated management of solid waste, including hazardous waste, the responsibilities of generators and of the public authorities, and the applicable economic instruments.</i>	Canadian Environmental Protection Act - CEPA	-Imposes costs of recovery, recycling and disposal of goods on the producers of waste (since 1999). -Implements Extended Producer Responsibility (EPR) and Product Stewardship (PS) programmes. -Proposes guidelines for municipal and hazardous waste management

	National Basic Sanitation Policy (Federal Law on Basic Sanitation Nº 14.026/2020)	- Proposes an order of priority related to waste management: non-generation, reduction, reuse, recycling, and treatment of solid residues, as well as the environmentally adequate final disposal of waste - Establishes shared responsibility among manufacturers, importers, distributors or traders, with a view to implementing shared responsibility for the product's life cycle. - Prioritizes selective collection and reverse logistics integrating waste picker organizations <i>Updates the legal framework for basic sanitation and amends the National Solid Waste Policy to address deadlines for the environmentally adequate final disposal of waste</i> - Determines the collection of fees and rates for solid waste services, which is still not the case in more than 40% of Brazilian municipalities.	National Parks Act (Garbage Regulations) Indian Act (Reserve Waste Disposal Regulations) Sanitary Landfilling Guidelines for Federal Agencies	- Controls international and interprovincial movements of hazardous waste and hazardous recyclable material. Identifies approaches and best practices that will reduce pollutant and greenhouse gas emissions from waste management. Permit to collect and dispose wastes in parks. Permits to operate a garbage dump or to store or dispose of wastes on Indian lands. Approval and monitoring of waste management facilities and operations.
Main Environmental Agencies/Institutions	National Secretariat of the Urban Environment and Environmental Quality of the Ministry of the Environment and Climate Change	Responsibilities: -to propose policies, plans and strategies related to the management of solid waste, including hazardous waste; to coordinate, follow up, monitor and evaluate the implementation of the National Solid Waste Policy -to provide for environmental quality of human settlements, in articulation with the Ministry of Cities	Canadian Council of Ministers of the Environment (CCME)	<i>The CCME is an intergovernmental forum consisting of the 14 federal, provincial, and territorial ministers with the environment in their portfolios.</i> -Meets at least once a year to discuss collective action on national and international environmental issues. -Involves interjurisdictional issues (e.g., climate change, air pollution, waste management, contaminants in water and soil). -CCME recommendations may be adopted by member jurisdictions but

	National Secretariat of Environmental Sanitation within the Ministry of Cities Brazilian Institute of Environment and Renewable Natural Resources – IBAMA - <i>Environmental licensing body</i> National Environment Council – CONAMA – <i>Consultative and deliberative body</i>	-to coordinate the activities inherent to the elaboration of studies and projects for water supply systems, sanitary sewage, solid waste, drainage, and sanitary home improvements. <i>-to propose norms and criteria for the licensing of effectively or potentially polluting activities, granted by the states.</i> <i>-proposes governmental policy guidelines for the environment and deliberates on norms and standards compatible with the environment under its jurisdiction</i> - establishes, upon IBAMA's proposal, norms and criteria for the licensing of effectively or potentially polluting activities, granted by the States.	Environment and Climate Change Canada (ECCC)	are not binding as the CCME has no authority to implement or enforce legislation. Each Minister remains responsible to act and to be held accountable within his or her jurisdiction. <i>-Develops Canada-wide Standards) to protect and reduce risk to the environment and human health.</i> -ECCC is the department of the Government of Canada responsible for coordinating environmental and climate change related policies and programs, as well as preserving and enhancing the natural environment and renewable resources. -It is governed by the Department of the Environment Act and headed by the federal Minister of the Environment.
Main instruments	National Solid Waste Plan (Decree No. 11,043, of April 13, 2022) National Program of Reverse Logistics (Decree Nº 10,936) National Solid Waste Management	-Sets national and regional targets for reverse logistics for recyclable waste. <i>-Instrument of coordination and integration of reverse logistics systems for the various types of waste, coordinated by the Ministry of the Environment.</i> -Integrated into the National Solid Waste Plan - PLANARES. -To receive, analyze, classify, systematize, consolidate, and	Guidelines and recommendations developed by CCME. Canadian Environmental Protection Act (CEPA) National Packaging Protocol (1989)	CCME develops an industry-driven approach to reduce non-recyclable packaging, reduce greenhouse gas emissions, and increase recycled content in packaging. Canada-wide Action Plan for Extended Producer Responsibility (EPR) and Product Stewardship (PS) programmes By 2000, packaging waste reduced by 50% compared to 1988

	Information System – SINIR National Sanitation Plan (PLANSAB) Sector Agreements	disseminate qualitative and quantitative data and information on solid waste management. -Proposes integrated planning of potable water supply, sanitary sewage, solid waste collection and management, and urban rainwater drainage and management. -Acts of a contractual nature signed between the federal level and the private sector for the various types of waste listed in the National Policy for Solid Waste	Single-Use Plastics Prohibition Regulations 2022 Legislation across Canada is widely used to impose some or all of the costs of recovery, recycling and disposal of goods on the producers of waste. Funding through ECCC	Manufacture, import, export and sale of six categories of single-use plastics will be banned by the end of 2025. Producers or consigners remain liable for any damage caused while waste was in their possession or in transport. -For projects from individuals, small business and other interested organizations to support Canada's climate plan. -Financial support for environmental projects and for participation in impact assessments
State/Provincial				
	Brazil		Canada	
Constitution	National Constitution -Art. 23 (power division between federal entities) State constitutions -general statements -demands specific laws to be elaborated and approved by the state legislative assemblies	The states share with the Union and the Municipalities responsibilities in environmental protection. -reiterate the state's responsibilities in environmental policies as a common task of the three federal entities -a specific law should provide "technical orientation for programs aiming at the treatment of urban and industrial waste and solid residues, and promotion of the implementation of common solutions, through regional integrated action plans"	National Constitution -Section 45 of the Constitution Act, 1982 states "Subject to section 41, the legislature of each province may exclusively make laws amending the constitution of the province."	Canada has multiple constitutional-amending procedures under Part V of the Constitution Act (1982), which apply to different subjects and require different thresholds for approval.

		(example of the São Paulo Constitution - Art. 216)		
Solid waste related policies at state level	State solid waste policy	The National Solid Waste Policy (NSWP) defines that the States are also responsible, when applicable, for the preparation of micro-regional solid waste plans, as well as the plans for metropolitan regions or urban agglomerations The NSWP -defines that the States are responsible, when applicable, for the preparation of micro-regional solid waste plans, as well as for the plans of metropolitan regions or urban agglomerations -the NSWP, through its article 16, combined with article 55, established that the elaboration of the State Plan for Solid Waste (SSWP), by August 2, 2012, is a condition for the States to have access to Federal resources, or resources controlled by the Federal Government.	Provinces deal with solid waste through environmental statutes or by municipal statutes Provincial recycling regulations	-EPR and PS programs apply. Product liability for waste depends on provincial legislation (e.g., automatic ownership transfer provision triggered once waste is accepted by an authorized waste management facility, limiting further liability of producers or consigners). -Municipalities are required by most provinces to prepare and implement solid waste plans in accordance with the 3 Rs approach -Requires major generators of industrial, commercial, and institutional waste, and major packaging users to develop waste and/or packaging reduction plans. -Most provinces have developed policies emphasizing the reduction, re-use, and recycling of wastes (the "3 R's") in priority over disposal.
	Solid Waste plans	-shall organize and provide the general management guidelines for the municipalities belonging to each Federative Unit.	Deposit refund systems	-Most provinces have legislation dealing with specific refund systems
Main Environmental Agencies/Institutions	State agencies for environmental protection and control	State entities whose function is to execute programs and projects, in addition to controlling and inspecting activities that may degrade the environment. They can be Environmental Secretariats, Coordinating Offices, Institutes and Foundations.	Ministry or Department of Environment	Provincial government agencies responsible for environmental and climate action affairs.

	State environmental councils	Instituted by State Laws, they are collegiate bodies, with representation from civil society which may have a normative, consultative or deliberative character, and are administratively subordinated, in general to the Secretary of State for the Environment.		
Main instruments	State solid waste plans -Environmental licensing and monitoring -Environmental Standards State Environmental Fund	Main instruments aimed at integrated waste management at the state /regional level. Financing environmental initiatives at state and municipal level, including in the area of waste management		
Municipal				
	Brazil		Canada	
Organic Law Canada (State constitution)	As federative unities municipalities have their own organic laws (local constitutions)	-in general, reiterate their responsibility with “the defense and preservation of the territory, the natural resources and the and the environment of the municipality” (organic law city of São Paulo); -Organic laws used to have specific chapters defining municipalities’ duties related to the environment. -Solid waste treated as part of basic sanitation.	Municipality is the constitutional authority to deal with solid waste in Canada. Federation of Canadian Municipalities (FCM)	

		-As in the case of São Paulo, climate policy generally not incorporated in the organic laws as a specific challenge for the municipalities.		
Solid waste related policies at municipal level	Federal Law 11.445/2007 (National Sanitation Law). Municipal solid waste policies	Responsibilities and competences for carrying out urban cleaning and waste management services, defined in specific national law. The municipalities are advised to develop their own waste management concepts and policies, frequently carried by the private sector, in cooperation with waste picker associations.	Municipalities are the Constitutional authority to deal with solid waste. -Municipal garbage collection is provided by the municipality itself or is contracted out to the private sector.	-Municipalities establish and maintain systems for waste collection, removal, and disposal. Operator needs to obtain a provincial or territorial permit or licence to collect, store, or dispose of solid waste. -Municipality passes regulations controlling the use of garbage collection systems. -Generally, the siting of solid waste facilities is dealt with by municipalities and regional districts. -A municipality often has the right to buy or expropriate land that is to be used for waste disposal activities.
Main Environmental Agencies/Institutions	Municipal agencies for environmental policy and control Conselhos Municipais de Meio Ambiente	Each municipality has its own environmental inspection agencies, responsible for controlling activities that may cause environmental damage. -The same mission as the state agencies: inspection, promotion of environmental awareness, environmental licensing, and the creation of laws and complementary rules, which may be more restrictive than federal laws, provided that they are duly justified or motivated by local public interest. Collegiate bodies, with representation from civil society, providing environmental norms and guidelines, in addition to advising the municipal		

		Executive Power - the City Hall and the Municipal Environmental Body (secretariat, foundation, agency etc.) - on issues related to the environment, forwarding demands to the responsible bodies.		
Main instruments	Municipal/Intermunicipal Solid Waste Plan Municipal Sanitation Plan Municipal Environmental Fund	Main instruments aimed at integrated waste management at the local/regional level. Financing environmental initiatives, including in the area of waste management		