

**From Gaps to Governance:
A Global Legislative Review on Diffuse Abandoned Waste**

Ethan McDowell - *Brown University*

Jemma Stubington - *Trinity College Dublin*

Lau Wei Sin - *The University of Hong Kong*

In collaboration with MakeSense in Paris, France and MerTerre in Marseille France

This research was supported by the Laidlaw Foundation through the Laidlaw Scholars

Leadership in Action Program

August 12th, 2025

Table of Contents

Abstract.....	2
I. Background and Scope.....	3
II. Methodology.....	5
III. Legislative Frameworks on Diffuse Abandoned Waste and Waste Management.....	7
France: National Legal Measures.....	7
European Union Framework: Regional Policy and Directives.....	10
Canada: Federal and Provincial Waste Management.....	12
Japan: National Marine Waste Governance.....	14
IV. Findings: International Frameworks and Emerging Treaties.....	18
V. Strategic Implications for MerTerre’s Data-Driven Work.....	20
Bibliography.....	24

Abstract

This report examines the legal and practical treatment of diffuse abandoned waste, defined here as small, easily dispersed items such as cigarette butts, wrappers, tissues, cutlery, and straws that fall outside conventional waste systems. Using a comparative approach, it analyzes the European Union framework and three national systems, France, Japan, and Canada, to identify strengths, gaps, and opportunities for reform. The findings show that no jurisdiction studied provides a formal legal category for diffuse abandoned waste, which leaves monitoring fragmented and enforcement inconsistent. France relies on the Code de l'Environnement, expanded producer responsibility, and penal provisions that target abandonment in general terms, yet lacks targeted obligations for micro scale litter. Japan couples a dedicated marine debris statute with strong municipal implementation and life cycle plastics policy, which reduces leakage in practice but does not isolate diffuse litter inland. Canada combines a federal Zero Plastic Waste Agenda and single use plastics prohibitions with provincial producer responsibility schemes and municipal cleanups, which create clear levers for upstream reduction and cost recovery, yet still do not define or track diffuse litter as a distinct stream. Across all cases, data from citizen science platforms remain under-integrated into binding policy. The report recommends adopting a harmonized definition, creating targeted monitoring requirements tied to producer responsibility, and embedding standardized citizen science data into statutory reporting, so that organizations like MerTerre can translate localized evidence into enforceable, system level change.

I. Background and Scope

Throughout this report, “**diffuse abandoned waste**” shall hereby be defined as “waste abandoned that hasn’t entered the conventional waste-management system. They are small items (cigarette butts, wrappers, tissues, cutlery, straws) easily dispersed across varied environments, from dense urban areas to isolated natural settings. They should not be confused with concentrated illegal dumps.”¹ However, it should be noted that this definition does not come from any official legislation of France, nor any other country in the world. It comes from Citeo, which is France’s national eco-organization for packaging and paper waste management. No legislation in the world specifically addresses diffuse abandoned waste. In most frameworks, waste is defined in broad terms, focusing primarily on illegal dumping, marine litter in general, and other forms of general waste practices.

The absence of a formal legal definition has significant consequences. Without a precise category, diffuse abandoned waste is rarely monitored systematically, and enforcement actions tend to focus on larger, more visible dumping events. This legal gap also limits the ability of policymakers to create targeted funding mechanisms, to assign clear producer responsibility, or to mandate standardized monitoring. While many governments have adopted ambitious policies on marine litter or single-use plastics, these often fail to address the cumulative environmental impact of small, scattered debris that can persist for decades and harm ecosystems.

It is this very gap between practice and legislation that is central to the work of MerTerre. This Marseille-based organization addresses diffuse waste through data-driven monitoring and partnerships with municipalities, eco-organizations, and other large actors. Unlike many NGOs

¹ Citeo, “Déchets sauvages diffus : état des lieux des connaissances et des initiatives préventives et curatives,” *Citeo*, accessed August 1, 2025, <https://www.citeo.com/le-mag/dechets-sauvages-diffus-etat-des-lieux-des-connaissances-et-des-initiatives-preventives-et>.

focused on volunteer cleanup efforts, MerTerre positions itself as a technical partner capable of supporting long-term structural solutions.² By building standardized data protocols and fostering collaboration across scales, MerTerre provides a model for how citizen science and institutional partnerships can bridge policy blind spots.

This report aims to situate the challenge of diffuse abandoned waste within a broader legal and policy context. It examines international frameworks, the European Union approach, and three national case studies—France, Japan, and Canada—to identify how current laws address, or fail to address, this specific waste stream. In doing so, it seeks to inform future advocacy and policymaking by highlighting both gaps and promising practices, with particular attention to how localized data collection efforts like MerTerre’s can be embedded into formal governance structures.

² MerTerre, “Accueil,” *MerTerre*, accessed August 1, 2025, <https://www.mer-terre.org/>.

II. Methodology

This report employs a comparative policy analysis approach to benchmark national, regional, and international legislative frameworks that address diffuse abandoned waste, whether explicitly or implicitly. Since the term itself is not codified in any legal system, the research process began by identifying relevant laws and regulations pertaining to littering, illegal dumping, marine debris, and producer responsibility across multiple jurisdictions. These included France, Japan, Canada, the European Union, and selected international agreements relevant to marine litter governance.

Primary legal texts were sourced from official government databases and repositories, such as Legifrance for French law, the e-Gov Law Search system for Japanese statutes, the Justice Laws Website for Canadian federal acts, and Eur-Lex for EU directives. International treaty documents were obtained from official sources including the United Nations Treaty Collection and the International Maritime Organization (IMO). Supplementary materials included reports and publications from recognized institutions such as Citeo, ADEME, the Ministry of the Environment (Japan), Environment and Climate Change Canada, the European Commission, and the United Nations Environment Programme (UNEP).

Given the absence of a formal legal definition for “diffuse abandoned waste,” the analysis interprets related statutory and regulatory categories to determine relevance. These categories include, but are not limited to, anti-littering provisions, extended producer responsibility frameworks, single-use plastics bans, and marine debris prevention measures. This interpretive process necessarily involves a degree of subjectivity, as no uniform policy framework exists to directly govern this waste stream.

Limitations of this research include the uneven availability of up-to-date translations for non-English legal texts, particularly for subnational regulations; possible mistranslations affecting interpretation; and variation in enforcement practices between jurisdictions, which may not be fully captured by statutory language alone. To mitigate these limitations, all legal references have been cross-verified where possible with secondary sources and official summaries in English or French.

The jurisdictions selected for this analysis (France, Japan, Canada, the European Union framework, and the international level) were chosen to represent a diverse cross-section of legislative and policy approaches to waste management, marine litter, and extended producer responsibility. France was selected as both the home jurisdiction of MerTerre and a country with ambitious circular economy legislation. Japan was included for its globally recognized waste management efficiency and advanced recycling systems. Canada offers a contrasting federal framework with strong marine conservation policies, particularly relevant to its extensive coastline. The EU framework provides a supranational layer of directives and regulations that influence member states, while the international level captures binding and non-binding agreements that set global norms. Together, these case studies illustrate both the breadth of existing governance tools and the gaps that persist in addressing diffuse abandoned waste.

III. Legislative Frameworks on Diffuse Abandoned Waste and Waste Management

This section examines legislative frameworks in France, the European Union, Japan, and Canada to better understand how existing policies address marine litter and, by extension, the issue of diffuse abandoned waste. While each jurisdiction approaches waste management through its own combination of environmental law, producer responsibility schemes, and anti-littering measures, none has yet developed a formal, codified definition of diffuse abandoned waste. By comparing these systems, this analysis identifies not only the regulatory tools currently in place (ranging from circular economy legislation to targeted marine debris strategies) but also the legal and definitional gaps that persist. Together, these case studies highlight the difficulty of translating the growing public awareness of small, dispersed waste into enforceable, structural policy solutions.

France: National Legal Measures

In France, waste management is primarily regulated through an interconnected framework of national statutes, administrative decrees, and ministerial orders, with the *Code de l'Environnement* serving as the principal legislative instrument governing all aspects of waste prevention, collection, treatment, and disposal. The Code consolidates a variety of environmental protections, including those on pollution prevention, public sanitation, and extended producer responsibility (EPR) schemes. While it defines general categories of waste and sets forth obligations for both public authorities and private actors, it does not explicitly recognize “diffuse abandoned waste” (déchets abandonnés diffus) as a distinct legal category. The absence of such a definition means that small, scattered waste items, such as cigarette butts, single-use food

packaging, and plastic cutlery, are generally regulated under broad anti-littering and public hygiene provisions rather than through targeted legislative measures. This structural omission creates a regulatory blind spot, where persistent and cumulative forms of litter escape systematic classification and policy prioritization despite their measurable environmental impact.³

One of the most significant modern legislative developments in the French waste framework is the Loi Anti-Gaspillage pour une Économie Circulaire (AGEC), enacted in February 2020. The AGEC law represents a major pivot toward a circular economy model, seeking to reduce waste at the source, phase out single-use plastics, and increase the accountability of producers through enhanced EPR schemes. Article L541-10-1 of the Code de l'Environnement, as amended by AGEC, obliges producers, distributors, and other relevant actors to take responsibility for the entire lifecycle of their products, from design to end-of-life management. This framework has led to the creation or expansion of multiple waste stream-specific EPR channels, including those for packaging, textiles, furniture, and construction materials. While certain categories covered under AGEC, such as plastic food containers and beverage bottles, overlap with common sources of diffuse waste, the law stops short of framing these items as part of a unique environmental problem requiring specialized collection or monitoring systems.⁴

France's anti-littering regime operates under both environmental and criminal law. Article R.634-2 of the Code pénal establishes a fourth-class contravention for abandoning waste in non-designated places, punishable by a fixed fine of €135 (rising to €375 if not paid promptly), with a maximum penalty of €750. Moreover, if the offense involves the use of a

³ *Code de l'Environnement*, art. L541-1 à L541-2, Legifrance, accessed August 2, 2025, <https://www.legifrance.gouv.fr/codes/id/LEGITEXT000006074220/>.

⁴ *Loi n° 2020-105 du 10 février 2020 relative à la lutte contre le gaspillage et à l'économie circulaire*, Legifrance, accessed August 2, 2025, <https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000041553759/>.

vehicle, Article R.635-8 applies, escalating the violation to a fifth-class contravention with a maximum fine of €1,500 and potential vehicle confiscation.⁵ Enforcement is largely delegated to municipal authorities, who have discretion in identifying violations and issuing penalties. In practice, these provisions tend to address visible, large-scale littering incidents or illegal dumping sites rather than the gradual accumulation of small debris across public and natural areas. This enforcement gap is compounded by resource limitations among local enforcement bodies, as well as challenges in identifying offenders for waste items that are not traceable to a specific source.

In addition to statutory penalties, France has invested in public education and awareness campaigns, often in collaboration with eco-organizations such as Citeo, which manages EPR schemes for household packaging and graphic paper, and Surfrider Foundation Europe, which engages in advocacy and citizen science initiatives to combat marine litter.⁶ These partnerships are essential in extending outreach to both urban and coastal communities, but they remain largely voluntary and project-based. As a result, they complement but do not substitute for statutory measures, leaving diffuse waste prevention largely in the realm of behavioral change initiatives rather than embedded legislative obligations.

MerTerre's work within this landscape highlights a significant divergence between official legal frameworks and grassroots technical expertise. Through programs such as Zéro Déchet Sauvage, MerTerre has developed standardized protocols for monitoring and quantifying litter, enabling more consistent data collection across municipalities and coastal regions.⁷ This data serves not only to inform local decision-making but also to reveal patterns in waste

⁵ *Code pénal*, art. R.634-2 and art. R.635-8, Legifrance, accessed August 2, 2025, https://www.legifrance.gouv.fr/codes/article_lc/LEGIARTI000042662252 and https://www.legifrance.gouv.fr/codes/article_lc/LEGIARTI000022375979.

⁶ Citeo, "Notre Impact," accessed August 2, 2025, <https://v2.citeo.com/notre-impact/>.

⁷ MerTerre, "Zéro Déchet Sauvage," accessed August 2, 2025, <https://www.mer-terre.org/>.

dispersion linked to environmental factors such as wind and rainfall, elements that are rarely accounted for in national waste policies. Despite its potential utility for shaping more precise legislation, this work currently exists in parallel to, rather than integrated within, France's formal waste governance structure. Without a statutory framework for diffuse waste, the long-term incorporation of such data into national policy remains contingent upon future legislative reforms.

European Union Framework: Regional Policy and Directives

The European Union (EU) maintains one of the most comprehensive legislative frameworks in the world for waste management, marine litter reduction, and environmental protection. This framework, while robust in scope, does not explicitly define or regulate the category of “diffuse abandoned waste” as understood by MerTerre and certain French eco-organizations. Instead, EU legislation tends to address broader categories of waste, such as municipal waste, packaging waste, and marine litter, through directives and strategies that aim to prevent waste generation, encourage reuse, and promote recycling across Member States.

At the core of EU waste policy lies the Waste Framework Directive (Directive 2008/98/EC), which sets out the overarching definitions, principles, and obligations for waste management. The directive establishes the waste hierarchy (prevention, preparing for reuse, recycling, other recovery, and disposal) as the guiding principle for all waste-related activities within the Union. While it is instrumental in shaping Member State policies, its definition of “waste” remains broad: “any substance or object which the holder discards or intends or is required to discard.” This includes marine litter and abandoned materials but does not differentiate between large-scale illegal dumps and small, scattered items like cigarette butts or wrappers. Consequently, “diffuse” waste remains a subcategory that is acknowledged in practice by environmental organizations, but not codified in EU law.⁸

⁸ European Parliament and Council, *Directive 2008/98/EC on Waste and Repealing Certain Directives*, November 19, 2008, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32008L0098>.

The EU's Marine Strategy Framework Directive (Directive 2008/56/EC) is another key legal instrument, aiming to achieve "Good Environmental Status" (GES) of marine waters by 2020, a goal extended in practice due to ongoing challenges. One of its eleven descriptors of GES is the requirement that "properties and quantities of marine litter do not cause harm to the coastal and marine environment."⁹ This directive has driven Member States to implement monitoring programs for marine litter, including the assessment of litter on coastlines, floating litter, and litter on the seabed. However, monitoring programs typically focus on aggregated quantities and composition, often missing the granularity needed to track and address diffuse abandoned waste patterns inland or upstream.

Complementing these frameworks, the Single-Use Plastics Directive (Directive (EU) 2019/904) specifically targets the ten most commonly found single-use plastic items on European beaches, as well as abandoned fishing gear.¹⁰ This legislation is particularly relevant to diffuse waste, given that many of the targeted items, such as cutlery, straws, and food containers, are those often found scattered in urban and natural environments. The directive mandates bans, consumption reduction targets, product design requirements, labeling obligations, and extended producer responsibility (EPR) schemes. However, its scope is limited to plastic materials, leaving non-plastic diffuse waste like cigarette butts (covered partially under tobacco product legislation) and paper waste outside its primary regulatory ambit.

EU waste management policies are also strongly influenced by the Circular Economy Action Plan (CEAP), adopted in 2020 as part of the European Green Deal.¹¹ The CEAP focuses on designing out waste, keeping products and materials in use, and regenerating natural systems. While it addresses marine litter indirectly, its approach remains systemic, aimed at reducing waste generation across supply chains rather than tackling diffuse abandoned waste specifically. It promotes measures like eco-design, improved waste sorting, and harmonized waste collection systems, which can indirectly benefit the fight against diffuse waste by improving upstream prevention.

⁹ European Parliament and Council, *Directive 2008/56/EC Establishing a Framework for Community Action in the Field of Marine Environmental Policy (Marine Strategy Framework Directive)*, June 17, 2008, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32008L0056>.

¹⁰ European Parliament and Council, *Directive (EU) 2019/904 on the Reduction of the Impact of Certain Plastic Products on the Environment*, June 5, 2019, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32019L0904>.

¹¹ European Commission, *A New Circular Economy Action Plan: For a Cleaner and More Competitive Europe*, March 11, 2020, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52020DC0098>.

Despite these ambitious directives, implementation challenges persist across Member States. The lack of a harmonized definition or targeted strategy for diffuse abandoned waste means that data collection remains inconsistent, making it difficult to compare figures or design targeted interventions. NGOs like MerTerre fill this gap by developing methodologies for tracking and categorizing diffuse waste, partnering with municipalities, and feeding data into national and EU-level reporting systems. However, without a formal legal category for diffuse abandoned waste, these efforts remain supplementary rather than integrated into binding EU waste policy.

While the EU legislative framework provides a strong foundation for addressing waste and marine litter, its treatment of diffuse abandoned waste remains indirect and fragmented. Bridging this gap would require either an amendment to existing directives or the development of a targeted legislative instrument recognizing and addressing the specific challenges posed by diffuse waste. Such a measure could standardize definitions, improve monitoring, and create binding obligations for prevention and cleanup, thereby aligning policy more closely with the realities observed on the ground by organizations like MerTerre.

Canada: Federal and Provincial Waste Management

Canada's approach to waste management is shaped by its federal system, which delegates much of the authority for regulation and enforcement to provinces and municipalities. At the federal level, the Canadian Environmental Protection Act (CEPA) serves as the cornerstone environmental law, empowering the federal government to control toxic substances and address pollution prevention.¹² However, CEPA does not specifically address litter or diffuse abandoned waste as a legal category. Instead, such waste is handled indirectly through broader pollution control, waste diversion, and recycling policies.

¹² Government of Canada, "Canadian Environmental Protection Act, 1999," Justice Laws Website, last modified January 3, 2024, <https://laws-lois.justice.gc.ca/eng/acts/c-15.31/>.

In 2018, Canada launched the Zero Plastic Waste Agenda, a national strategy aimed at eliminating plastic waste by 2030.¹³ This plan involves collaboration with provinces, territories, industry, and municipalities, and it identifies marine litter and plastic leakage into the environment as critical concerns. A major policy outcome of this agenda was the Single-Use Plastics Prohibition Regulations, which came into force in December 2022.¹⁴ These regulations ban the manufacture, import, and sale of six categories of single-use plastics, including plastic checkout bags, cutlery, food service ware, stir sticks, and certain straws—items frequently found in diffuse abandoned waste. The federal government framed these bans as a way to target plastic items most likely to pollute waterways, shorelines, and urban environments.

At the provincial level, Extended Producer Responsibility (EPR) programs play a growing role in waste governance. British Columbia’s Recycling Regulation requires producers of packaging and printed paper to finance the collection, sorting, and recycling of these materials, including coverage of litter cleanup costs.¹⁵ While this links producer responsibility to environmental outcomes, there is no mandate to track waste by dispersal pattern or to specifically categorize diffuse abandoned waste. Other provinces, such as Ontario, are in the process of transitioning to similar full EPR models.¹⁶

Local governments are also active in litter management, often working in partnership with NGOs or community groups. For example, Toronto’s Clean Toronto Together campaign

¹³ Environment and Climate Change Canada, “Canada’s Zero Plastic Waste Agenda,” Government of Canada, last modified June 20, 2023,

<https://www.canada.ca/en/environment-climate-change/services/managing-reducing-waste/zero-plastic-waste.html>.

¹⁴ Government of Canada, “Single-Use Plastics Prohibition Regulations,” *Justice Laws Website*, last modified December 20, 2022, <https://laws-lois.justice.gc.ca/eng/regulations/SOR-2022-138/>.

¹⁵ Government of British Columbia, “Recycling Regulation,” *BC Laws*, accessed August 6, 2025, https://www.bclaws.gov.bc.ca/civix/document/id/complete/statreg/449_2004.

¹⁶ Government of Ontario, “Producer Responsibility Framework,” Ministry of the Environment, Conservation and Parks, accessed August 6, 2025, <https://www.ontario.ca/page/producer-responsibility>.

engages thousands of volunteers annually in street and park cleanups.¹⁷ While such initiatives contribute to reducing diffuse waste, they rely heavily on voluntary participation and do not represent systemic monitoring or regulatory control. This reliance on community mobilization reflects a broader pattern in Canada's approach: diffuse abandoned waste is recognized as an environmental problem, but legal and policy frameworks address it only indirectly through bans on certain products, general anti-litter laws, and producer responsibility schemes.

For MerTerre, Canada offers two notable lessons. The first is the integration of single-use plastic bans into a national zero-waste agenda, which provides a legislative pathway for targeting problematic waste items. The second is the linkage of EPR programs to cleanup costs, which could be expanded to include systematic monitoring of diffuse waste. While Canada has yet to define diffuse abandoned waste legally, its evolving policy landscape shows potential for scaling up producer accountability and integrating citizen science data into waste governance.

Japan: National Marine Waste Governance

Japan's legal and policy framework for addressing marine litter is one of the most advanced in Asia, shaped by both environmental necessity and political commitment. As an island nation with extensive coastlines, Japan faces constant challenges from both domestically generated litter and debris carried by ocean currents from neighboring countries. In response to growing environmental, economic, and public health concerns, the government enacted the Act on the Promotion of Marine Litter Disposal in 2009, a dedicated law that directly targets marine litter as a distinct problem rather than subsuming it under general waste management

¹⁷ City of Toronto, "Clean Toronto Together," City of Toronto, accessed August 6, 2025, <https://www.toronto.ca/services-payments/recycling-organics-garbage/litter-reduction/clean-toronto-together/>.

regulations.¹⁸ This Act establishes the roles and responsibilities of the national government, prefectures, municipalities, businesses, and citizens, mandating the development of national and regional action plans, the promotion of inter-prefectural cooperation, and the provision of financial assistance for cleanup operations. Crucially, it authorizes local governments to conduct cleanup activities beyond their jurisdictions, a provision designed to address the cross-boundary nature of marine litter accumulation.

Under the 2009 Act, the Ministry of the Environment (MOE) coordinates marine litter policy in partnership with the Ministry of Land, Infrastructure, Transport, and Tourism (MLIT), ensuring that litter prevention aligns with broader coastal zone management and marine biodiversity objectives. The Act has been periodically updated to incorporate new strategies, such as enhanced monitoring through aerial surveys and the use of standardized data collection formats for litter characterization, which facilitate both domestic policy evaluation and compliance with international reporting requirements.¹⁹ In parallel, the Basic Act on Ocean Policy of 2007 serves as a foundational statute for integrated marine governance, setting out the government's responsibility to maintain marine environmental quality and prevent pollution.²⁰ Through this framework, marine litter control is embedded in a larger suite of ocean-related policies, such as fisheries management, maritime safety, and climate change adaptation.

Diffuse abandoned waste does not have a formal legal definition in Japan. Instead, these materials are addressed indirectly through the Waste Management and Public Cleansing Act of 1970, which governs the generation, storage, transportation, and disposal of all forms of waste.²¹

This Act imposes strict obligations on waste producers to ensure proper disposal, prohibits

¹⁸ Government of Japan, *Act on the Promotion of Marine Litter Disposal*, Law No. 82 of 2009, https://www.env.go.jp/en/water/marine_litter/

¹⁹ Ibid.

²⁰ Government of Japan, *Basic Act on Ocean Policy*, Law No. 33 of 2007, <https://www.kantei.go.jp/jp/singi/kaiyou/>

²¹ Government of Japan, *Waste Management and Public Cleansing Act*, Law No. 137 of 1970 (as amended), <https://www.japaneselawtranslation.go.jp/en/laws/view/4529/en>

littering in public spaces, and empowers municipalities to create local ordinances imposing fines or other penalties for violations. Many prefectures, particularly those with high tourist traffic along their coastlines, have enacted such ordinances, pairing enforcement measures with public awareness campaigns to reduce littering behavior. In some cases, municipalities have also implemented “designated smoking areas” to reduce cigarette butt litter, reflecting an incremental but targeted approach to a significant category of diffuse waste.

Japan’s policy approach is further reinforced through international engagement. The country is a member of the Northwest Pacific Action Plan (NOWPAP), a regional initiative under the United Nations Environment Programme that facilitates cooperation among Japan, China, Russia, and South Korea to monitor, assess, and reduce marine pollution.²² Participation in NOWPAP provides Japan with access to shared monitoring protocols, transboundary cleanup coordination, and scientific research on litter dispersal patterns. Domestically, Japan’s alignment with the United Nations’ Sustainable Development Goal 14 (“Life Below Water”) has also driven investment in litter prevention infrastructure and public education.

Beyond legislative measures, Japan has pioneered technological innovations for litter collection and monitoring. The MOE has supported the deployment of specialized collection nets for fishing vessels, incentivizing fishers to collect floating debris encountered during operations. Additionally, the government has partnered with research institutions to develop microplastic detection and quantification methods, recognizing that the fragmentation of diffuse abandoned waste into microplastics represents a significant long-term environmental threat. These technical measures are complemented by community-driven cleanup programs, such as the Umi to Nippon Project, which mobilizes volunteers nationwide for coastal cleanups and public outreach. While

²² Northwest Pacific Action Plan (NOWPAP), “About NOWPAP,” accessed August 11, 2025, <https://www.nowpap.org/>

these programs are not embedded in binding legislation, they are often supported by local ordinances and national subsidies, illustrating the blended top-down and bottom-up character of Japan's approach.

However, despite these advances, the absence of a formal definition or dedicated category for diffuse abandoned waste represents a policy gap. The current framework treats these items primarily as part of general litter prevention rather than as a discrete problem requiring targeted upstream interventions. Given that diffuse waste items are among the most common forms of debris found in coastal cleanups, integrating a specific legal recognition of this category could improve prevention strategies, enhance data comparability with international partners, and strengthen policy coherence between land-based litter control and marine litter reduction. For an organization like MerTerre, Japan's example demonstrates how a clear legislative framework, paired with active local enforcement and international cooperation, can create measurable reductions in marine litter even in a complex coastal environment, while also underscoring the importance of closing definitional and legislative gaps in addressing diffuse abandoned waste.

IV. Findings: International Frameworks and Emerging Treaties

While national and regional legislation forms the backbone of waste management policy, two major global processes are now shaping a future in which diffuse abandoned waste could gain traction as a recognized legal and policy concern. These are the United Nations Ocean Conference 2025 (Nice, France) and ongoing negotiations for a global plastics treaty via the United Nations Environment Assembly (UNEA).

The United Nations Ocean Conference (UNOC3), held in Nice, France from 9 to 13 June 2025, brought together over 15,000 participants, including more than 60 heads of state and 190 ministers. The concluding political declaration, “Our Ocean, Our Future: United for Urgent Action,” emphasized marine plastic pollution and biodiversity protection but did not provide specific legislative language on diffuse waste in coastal zones.²³ While non-binding, the conference produced over 800 voluntary commitments and reaffirmed the 30×30 biodiversity target, urging countries to conserve 30 percent of marine and coastal areas by 2030.²⁴

A critical outcome of UNOC3 was the accelerated momentum behind the High Seas Treaty, also known as the Agreement on Biodiversity Beyond National Jurisdiction (BBNJ). Nineteen countries ratified the agreement during the conference, increasing the total to 50 and moving closer to the 60 required for entry into force, which is expected by early 2026.²⁵ Once implemented, the treaty will enable the creation of protected areas in international waters, many of which are affected by drifting coastal plastics and ocean-borne litter, which are key concerns for MerTerre’s monitoring scope.

²³ “Statement: UN Ocean Conference Ends with Momentum – and Missed Chances to Protect the Ocean,” *World Resources Institute*, June 14, 2025, <https://www.wri.org/news/statement-un-ocean-conference-ends-momentum-and-missed-chances-protect-ocean>.

²⁴ “UN Ocean Conference 2025: Key outcomes for marine animals,” *World Federation of Advertisers*, June 2025, <https://wfa.org/unoc3/>.

²⁵ “Third UN Ocean Conference (UNOC3) (Nice, 9-13 June 2025),” *Permanent Mission of France to the United Nations*, June 2025, <https://onu.delegfrance.org/third-un-ocean-conference-unoc3-nice-9-13-june-2025>.

At the same time, UN member states endorsed a “Nice call for an ambitious plastics treaty”, recommitting to global negotiations that would regulate the full life cycle of plastics from design to disposal. Although the treaty is still in draft stages, it explicitly references microplastics and environmental leakage, covering forms of diffuse pollution that MerTerre operationalizes in its characterizations of waste.²⁶ The next negotiation round is scheduled for August 2025 in Geneva.

For MerTerre, these global initiatives are more than symbolic. They represent strategic alignment opportunities. By calibrating Zero Wild Waste metrics and protocols to align with treaty text and UNOC commitments, MerTerre can position itself as a technical partner for French and European authorities engaged in treaty implementation. This approach aligns with their structural focus of offering standardized monitoring and data aggregation services that can help translate international declarations into actionable domestic policy and enforcement.

²⁶ “UN Urges Ratification of Treaty to Protect Planet’s Fragile Oceans,” Reuters, June 9, 2025, <https://www.reuters.com/sustainability/climate-energy/un-urges-ratification-treaty-protect-planets-fragile-oceans-2025-06-09/>.

V. Strategic Implications for MerTerre's Data-Driven Work

The comparative review of France, the European Union, Japan, and Canada underscores a common structural gap that international processes are beginning to expose. Diffuse abandoned waste is not yet a legal category, yet it is increasingly referenced implicitly through marine litter targets, single-use plastics controls, and circular economy programs. The UN Ocean Conference in Nice and the ongoing negotiations toward a global plastics treaty create a near-term window where technical standards and monitoring expectations will be written or revised. MerTerre, as a data-driven organization with established collection protocols, is well positioned to translate its field data into reference practices that national and regional authorities can cite while these frameworks are still taking shape.

The Nice political declaration and the renewed push to ratify the High Seas Treaty point to more rigorous conservation planning in marine areas and to stronger reporting on pollution pressures. Even though the High Seas Treaty focuses on biodiversity beyond national jurisdiction, domestic agencies will need methodologies that connect land-based sources to coastal and offshore impacts in order to justify protected area design and management measures. MerTerre can meet this need by formalizing a traceable data chain from inland diffuse litter observations to shoreline accumulation patterns, and by publishing a methods note that shows how *Zéro Déchet Sauvage* datasets can be aggregated for marine spatial planning and Good Environmental Status reporting under EU law. Doing this now would allow French authorities to reference an existing, tested dataset rather than create new monitoring systems from scratch.

The Nice call for an ambitious plastics treaty and the next negotiation round in Geneva create a second track for influence. The treaty text under discussion touches the full life cycle of plastics, including upstream design requirements and downstream leakage controls. Negotiators

and national focal points will need examples of robust, scalable indicators that capture small, dispersed items and microplastic precursors without excessive reporting burden. MerTerre's standardized taxonomy and geolocated datasets provide a ready-made basis for such indicators. A concise, data-backed submission framed as a readiness package for Parties would make it easier for France to champion a definition of diffuse litter in treaty guidance and for the European Commission to harmonize Member State reporting later.

At the scale of French and EU implementation, MerTerre's most immediate lever is alignment. The organization should map each Zéro Déchet Sauvage variable to existing EU descriptors for marine litter and to likely plastics treaty indicator families, then publish a crosswalk that public authorities can adopt. This includes clarifying how volunteer-generated counts, mass estimates, and spatial metadata roll up into policy-relevant metrics. A short data quality assurance note should distinguish high-confidence citizen science outputs from anecdotal campaigns. If MerTerre provides this crosswalk and quality tiering, ministries can directly cite the methodology in decrees and guidance, and municipalities can integrate it into local enforcement and prevention plans.

The international momentum also opens up partnership and funding routes that are tied to concrete data deliverables. MerTerre could propose pilot monitoring corridors from urban catchments to specific shoreline segments in Marseille and in two additional Mediterranean communes. Each corridor would test an indicator bundle linking source profiles, transport pathways, and deposition patterns for the top five waste items in French datasets. Publishing the findings in both EU reporting formats and treaty evidence templates would make the work eligible for programs like LIFE, Interreg Med, or ADEME calls, and would also give French negotiators an in-country, data-backed example to reference in Geneva.

Advocacy should be targeted and anchored in evidence. Rather than pushing immediately for a new statute, MerTerre can lobby for a ministerial instruction or circular that recognizes diffuse abandoned waste as an operational monitoring category under existing law. The instruction could define a short controlled vocabulary for priority items, endorse standardized data collection sheets and digital intake, and authorize municipalities to use these metrics in anti-litter ordinances and procurement requirements. Once these practices are normalized, a later legislative update can integrate the definition into the Code de l'Environnement or implementing texts under EU directives.

MerTerre should treat communications as part of its data strategy. Registering voluntary commitments that reflect the Nice outcomes, publishing a public indicator crosswalk, and inviting peer review from academic partners will all increase the likelihood that MerTerre's methodology is named explicitly in future guidance and national plans. The goal is straightforward: when authorities need a credible, field-tested system to monitor and reduce diffuse litter, the simplest and most defensible choice should be the Zéro Déchet Sauvage protocol MerTerre already operates across Marseille and the Mediterranean coast. There is hope for the future, for our seas, for a cleaner Earth, and MerTerre has the opportunity to be at the forefront of it all.

Bibliography

City of Toronto. “Clean Toronto Together.” *City of Toronto*. Accessed August 6, 2025.

<https://www.toronto.ca/services-payments/recycling-organics-garbage/litter-reduction/clean-toronto-together/>.

Citeo. “Déchets sauvages diffus : état des lieux des connaissances et des initiatives préventives et curatives.” *Citeo*. Accessed August 1, 2025.

<https://www.citeo.com/le-mag/dechets-sauvages-diffus-etat-des-lieux-des-connaissances-et-des-initiatives-preventives-et->

———. “Notre Impact.” Accessed August 2, 2025. <https://v2.citeo.com/notre-impact/>.

Code de l’Environnement. Art. L541-1 à L541-2. *Legifrance*. Accessed August 2, 2025.

<https://www.legifrance.gouv.fr/codes/id/LEGITEXT000006074220/>.

Code pénal. Art. R.634-2 and art. R.635-8. *Legifrance*. Accessed August 2, 2025.

https://www.legifrance.gouv.fr/codes/article_lc/LEGIARTI000042662252.

https://www.legifrance.gouv.fr/codes/article_lc/LEGIARTI000022375979.

Environment and Climate Change Canada. “Canada’s Zero Plastic Waste Agenda.” *Government of Canada*. Last modified June 20, 2023.

<https://www.canada.ca/en/environment-climate-change/services/managing-reducing-waste/zero-plastic-waste.html>.

European Commission. *A New Circular Economy Action Plan: For a Cleaner and More Competitive Europe*. March 11, 2020.

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52020DC0098>.

European Parliament and Council. *Directive 2008/56/EC Establishing a Framework for Community Action in the Field of Marine Environmental Policy (Marine Strategy Framework Directive)*. June 17, 2008.

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32008L0056>.

———. *Directive 2008/98/EC on Waste and Repealing Certain Directives*. November 19, 2008.

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32008L0098>.

———. *Directive (EU) 2019/904 on the Reduction of the Impact of Certain Plastic Products on the Environment*. June 5, 2019.

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32019L0904>.

Government of British Columbia. “Recycling Regulation.” *BC Laws*. Accessed August 6, 2025.

https://www.bclaws.gov.bc.ca/civix/document/id/complete/statreg/449_2004.

Government of Canada. “Canadian Environmental Protection Act, 1999.” *Justice Laws Website*.

Last modified January 3, 2024. <https://laws-lois.justice.gc.ca/eng/acts/c-15.31/>.

———. “Single-Use Plastics Prohibition Regulations.” *Justice Laws Website*. Last modified

December 20, 2022. <https://laws-lois.justice.gc.ca/eng/regulations/SOR-2022-138/>.

Government of Japan. *Act on the Promotion of Marine Litter Disposal*, Law No. 82 of 2009.

https://www.env.go.jp/en/water/marine_litter/.

———. *Basic Act on Ocean Policy*, Law No. 33 of 2007.

<https://www.kantei.go.jp/jp/singi/kaiyou/>.

———. *Waste Management and Public Cleansing Act*, Law No. 137 of 1970 (as amended).

<https://www.japaneselawtranslation.go.jp/en/laws/view/4529/en>.

Government of Ontario. “Producer Responsibility Framework.” *Ministry of the Environment, Conservation and Parks*. Accessed August 6, 2025.

<https://www.ontario.ca/page/producer-responsibility>.

Loi n° 2020-105 du 10 février 2020 relative à la lutte contre le gaspillage et à l'économie circulaire. *Legifrance*. Accessed August 2, 2025.

<https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000041553759/>.

MerTerre. “Accueil.” *MerTerre*. Accessed August 1, 2025. <https://www.mer-terre.org/>.

———. “Zéro Déchet Sauvage” Accessed August 2, 2025. <https://www.mer-terre.org/>.

Northwest Pacific Action Plan (NOWPAP). “About NOWPAP.” Accessed August 11, 2025.

<https://www.nowpap.org/>.

Permanent Mission of France to the United Nations. “Third UN Ocean Conference (UNOC3) (Nice, 9-13 June 2025).” June 2025.

<https://onu.delegfrance.org/third-un-ocean-conference-unoc3-nice-9-13-june-2025>.

Reuters. “UN Urges Ratification of Treaty to Protect Planet’s Fragile Oceans.” June 9, 2025.

<https://www.reuters.com/sustainability/climate-energy/un-urges-ratification-treaty-protect-planets-fragile-oceans-2025-06-09/>.

World Federation of Advertisers. “UN Ocean Conference 2025: Key Outcomes for Marine Animals.” June 2025. <https://wfa.org/unoc3/>.

World Resources Institute. “Statement: UN Ocean Conference Ends with Momentum – and Missed Chances to Protect the Ocean.” June 14, 2025. <https://www.wri.org/news/statement-un-ocean-conference-ends-momentum-and-missed-chances-protect-ocean>.