

EXECUTIVE SUMMARY

Sint Maarten Solid Waste Management Strategy and Action Plan (2021)



Overview

The Sint Maarten Solid Waste Management Strategy and Action Plan (2021) sets out a clear goal to move the country from a traditional “collect and dump” approach toward a modern solid waste management system that protects public health and the environment while becoming financially self-sustaining over time. The strategy examines the full waste management chain, including how much waste Sint Maarten generates and its composition, how waste is collected and transported, how it is treated through recycling or composting, and how it is ultimately disposed of. It also defines the “rules of the game” by addressing the legal framework, institutional responsibilities, financing mechanisms, and data systems needed to support effective implementation. The plan establishes both short-term actions, extending from the present through approximately 2027–2029, and long-term measures looking ahead to 2030–2040.

The strategy responds to significant system challenges. Sint Maarten generates a high volume of waste for its size—approximately 128,000 tonnes per year—driven largely by tourism and commercial activity. The existing Pond Island landfill is old, unlined, and unsafe, with recurring fires, slope stability issues, odors, and potential water pollution, and it has only a limited remaining lifespan even with operational improvements. Recycling rates remain low at around 11 percent, and the island lacks a modern materials recovery facility, island-wide separation of recyclables or organic waste, and any form of energy recovery. In addition, fragmented institutional responsibilities, outdated legislation, and the absence of a strong, independent waste authority undermine system performance. Without user fees or tipping fees, the sector depends heavily on government subsidies, highlighting the need for structural and financial reform.

Objectives and Audiences

The objectives for the strategy are as follows:

- **Build an integrated system:** more reducing, reusing, and recycling; safe disposal for what's left.
- **Set up good governance:** separate day-to-day operations from regulation by creating a new Integrated Solid Waste Management Authority and passing a modern solid waste law.
- **Make funding stable and fair:** introduce tipping fees and user charges gradually, with protections for low income households. Keep this money in a dedicated waste fund.
- **Use data to manage better:** fix the weighbridge, require regular reporting, and build a simple waste information system.

The target audiences are the Government of Sint Maarten (VROMI, Ministry of Finance, Office of the Prime Minister) to set policy, pass laws, fund, and oversee the system; the National Recovery Program Bureau (NRPB) to align investments; the World Bank and the Government of the Netherlands to guide financing and technical support; private contractors and recyclers to prepare for new standards, contracts, and investment opportunities; and the public and civil society to support sorting waste at the source, fee reforms, and accountability.

Findings

- Waste levels are very high, especially from visitors. A large share is organic or recyclable, so a lot could be diverted from the landfill.
- Collection works for households but is uneven for businesses. Commercial haulers operate without clear rules, and most waste is mixed together.
- The landfill is the weak link—no liner, no gas/leachate collection, recurring fires—and is running out of space.
- Recycling is small scale and focused on what can be exported (metals, some plastics, batteries). Organics (food and green waste) are not managed separately but represent the biggest chance to cut landfill volumes and methane.
- There is no comprehensive law, weak enforcement, and not enough staff or tools to plan, monitor, and manage contracts.
- Financing is fragile: no tipping fees, no household fees, and costs are relatively high for the quality of service delivered.

Lessons Learned

Private companies can collect waste effectively when contracts include clear performance standards and strong oversight. Local recyclers can also expand their operations when they receive a reliable supply of clean, separated materials and have access to an appropriate sorting facility, while community groups play an important role in driving behavior change and public participation. At the same time, the system highlights approaches that have not worked well. Assigning a single agency both operational and regulatory responsibilities reduces accountability, while the absence of user fees removes incentives and leads to unstable funding. Continued reliance on an old, unlined dump has resulted in fires and pollution and has increased long-term costs, and decision-making without reliable data has proven to be high risk.

Political will and the existence of a draft waste management law provide a strong foundation for reform, alongside growing private sector capacity and a demonstrated willingness among the public to participate in improved waste practices. However, limited land availability, the small scale of the island, volatile shipping and commodity prices, and gaps in technical and institutional capacity continue to present significant challenges that must be managed carefully.

Methodology

- Reviewed existing data and studies and observed operations in the field (landfill, debris site, collection routes, recycling yards).
- Spoke with government, haulers, recyclers, and community groups to understand constraints and options.
- Built and compared several technical and financial scenarios to estimate investment and operating costs and likely gate fees.

Recommendations

Phase 1 (now to ~2026): Fix the basics and reduce immediate risks

- Create a strong waste authority and pass a modern law with clear rules for permits, data, and enforcement.
- Switch on the weighbridge and standardize reporting. Publish simple performance dashboards.
- Start charging fair, gradual tipping fees and commercial tariffs, with social safeguards; keep revenues in a ring-fenced fund. Prepare extended producer responsibility (EPR) for items like tires, batteries, and e-waste.
- Stabilize the landfill: better compaction and daily cover, manage stormwater, prevent and fight fires, and improve slope stability.
- Start pilots to separate and collect commercial cardboard and green waste. Set up a temporary debris and C&D processing area to sort, shred/mulch, and crush materials.
- Begin designs and procurement for a central facility that includes sorting (MRF) and organics processing.

Phase 2 (~2027–2029): Build and transition

- Open a new, right-sized sanitary landfill with proper liners and leachate/gas systems; start closing and covering the old landfill safely.
- Roll out source separation across the island, beginning with big waste producers. Register recyclers and set quality standards.
- Put EPR and possibly a deposit refund for beverage containers into practice.
- Decide on a waste-to-energy (WTE) plant only after confirming waste amounts, costs, and environmental safeguards.

Phase 3 (~2030–2040): Optimize and maintain

- Run the full system (sorting, organics, sanitary landfill, optional WTE). Keep improving organics diversion to cut methane and extend landfill life.
- Maintain strong finances with dedicated funds and regular audits. Update the strategy every five years.

Costs

The cost analysis shows that building the full solid waste system without a waste-to-energy (WTE) plant would require approximately US\$97 million, while including a WTE facility would increase capital costs to about US\$170 million. Although operating the complete system over a 20-year period would cost more with WTE, this option can significantly reduce long-term landfill requirements. Gate fees, paid by haulers at disposal or treatment facilities, would begin at lower levels and increase as new facilities come online, with landfill operations estimated at roughly US\$35 per tonne and rising to approximately US\$57–63 per tonne under a fully developed system that includes WTE. Final fee levels would depend on detailed design

decisions and potential revenues from energy generation. To ensure affordability, the plan emphasizes phasing in fees over time, protecting vulnerable households, and using grants or low-cost financing for major infrastructure investments, while directing all waste-related revenues into a dedicated fund to support system sustainability.

This summary was produced with the assistance of an AI language model based on the original report. The full report is available at sintmaartenrecovery.org/analytical-studies