



Waste Management

GRI Standards:

306-2, 306-4: Effluents and Waste

EXECUTIVE SUMMARY

Waste is a cause of direct and indirect environmental pollution and greenhouse gas emissions that contribute to climate disruption. As a pharmaceutical company, we believe it is important to reduce both environmental and health impacts of waste and to improve resource efficiency. As part of its Planet Mobilization program, Sanofi considers that waste management is a key approach to take actions about resource depletion and we are committed to reduce the impact of our waste on the environment.

Sanofi takes a multifaceted approach to address the industrial waste challenges, which generates substantial costs to the environment and to our business, since waste must be collected, sorted and transported before being treated. Proper waste management requires appropriate reuse, recycling and energy recovery in order to optimize resource efficiency.

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1. Strategic approach



Sanofi takes a multifaceted approach to waste management, designed to limit the amount of waste generated by our activities and to encourage appropriate sorting, reuse and recycling to minimize the need to extract additional natural resources. As a pharmaceutical company, we believe it is important to reduce both environmental and health impacts of waste and to improve resource efficiency.

Our direct waste stream generally includes:

- hazardous waste (including solvents), solid and liquid residues primarily from the chemical synthesis of active pharmaceutical ingredients, and other production and research activities; and
- non-hazardous waste generated by production (industrial) and administrative activities.

One of our indirect waste streams consists of unused and expired medicines, which contain active pharmaceutical ingredients with a potential environmental impact.

Each Sanofi site is responsible for its own waste management initiatives based on the following waste hierarchy:

- avoid waste production and reduce waste flow at the source;
- reuse, recycle and recover on-site or with selected validated providers;
- incinerate, with energy recovery wherever possible; and
- send waste to authorized landfills as a solution of last resort, provided that the landfill complies with local regulations and control systems. Landfills should be audited on a yearly basis for hazardous waste landfilling and audited every three years for non-hazardous waste landfilling.

We have designed three waste management programs:

- **"Be landfill free" program** to avoid landfill with targets of less than 3% in 2020 and less than 1% in 2025;
- **"3R (Reuse-Recycle-Recover)"** program with a target >90% of volumes recycled or recovered. We include in this program the **avoidance** of waste, especially hazardous waste; and
- **"Performance & digitalization"** program to simplify/standardize our processes, leverage partnerships with major waste companies and implement on sites apps and software.

2. Highlights

2.1. OUR RESULTS IN 2021

Waste (tonnes)	2021	2020	2019 (baseline year)	Change vs 2019 (%)
Hazardous waste				
Recycled hazardous waste	17,747	20,179	27,908	-36%
Hazardous waste incinerated with thermal recovery	56,296	55,177	57,997	-3%
Hazardous waste incinerated without thermal recovery	40,744	42,371	38,482	+6%
Hazardous waste sent to authorized landfills	1,807	2,630	2,067	-13%
Sub-total: hazardous waste	116,594	120,357	126,454	-8%
Non-hazardous waste				
Recycled non-hazardous waste	86,574	96,499	90,306	-4%
Non-hazardous waste incinerated with thermal recovery	27,752	26,065	23,237	+19%
Non-hazardous waste incinerated without thermal recovery	7,211	13,432	7,413	-3%
Non-hazardous waste sent to authorized landfills	16,599	15,835	18,000	-8%
Sub-total: non-hazardous waste	138,136	151,831	138,956	-1%
TOTAL hazardous and non-hazardous waste	254,730	272,188	265,410	-4%

NB: Data provided in this section relate to waste from Sanofi's production activities. Data for waste not related to our production activities and for non-recurring waste are not consolidated; this can include waste generated by construction of new buildings or decontamination of land, and other types of non-recurring waste generation.

Table 1: Total waste in tonnes

The decrease for waste compared to 2019 (-4%) is primarily due to different investments in chemistry.

Hazardous waste sent to landfills represents less than 2% of the total quantity of hazardous waste emitted by the Company. Landfill treatment is used only when local incineration treatment infrastructure is not available.

2.2. OPTIMIZING SOLVENT USE FOR BETTER WASTE MANAGEMENT

At different steps of manufacturing we use solvents, which may contribute to the emissions of volatile organic compounds (VOCs) and result in the output of hazardous waste. Sanofi has developed tools and performance indicators to optimize the use of solvents in our industrial processes (chemical synthesis, cleaning equipment, etc.) while minimizing their environmental impact. It is crucial to make sound choices at the earliest stages of product development since it is often difficult to change processes later. To help our development teams make decisions, we update our internal standards with the aim of providing guidance to choose the most appropriate solvents:

- selecting the least toxic solvents;
- reducing the quantities of solvents used;
- promoting the use of recycled solvents whenever possible; and
- making the best use of blister packaging materials.

To reduce waste at the source, we seek to optimize the utilization of blisters made of PVC/aluminum and aluminum/aluminum, which is used for the packaging of many of our products. This optimization initiative concerns 46 Sanofi production sites. We carry out studies to limit package sizes to decrease the consumption of cardboard, PVC and aluminum. Another aspect of our optimization approach involves increasing the number of boxes per pallet transported and filling trucks, barges, and other means of transportation to maximize occupancy.

We also perform a life cycle analysis of our packaging, using specially designed software. An expert third party reviews the resulting analysis to help quantify the environmental impact of our packaging materials.

2.3. ACTIONS TO COMBAT FOOD WASTE

In France, many sites (tertiary, R&D and industrial) have already started taking action to avoid food waste. They implemented organizational initiatives that can be classified into three categories:

- reduction of waste at the source, by respecting precise weights set out in contracts and by regular surveys, particularly during low-attendance periods;
- responsible food management and matching quantities to needs, establishing a “just-in-time” flow for certain stands, asking people to pay for bread to avoid routinely taking bread that then goes to waste, reducing offerings at the end of the service and introducing payment by weight (self-service salads and fruits); and
- management of leftovers and waste at the end of the chain by reusing vegetables from the day before, installing sorting bins for better waste recovery, and setting up contracts for food donations with approved associations for people in need.

For more information, see our [Document Center](#):

- *HSE Policy*
- *HSE Management System Factsheet*
- *Pharmaceuticals in the Environment Factsheet*
- *Eco-Design Factsheet*
- *A Responsible and Sustainable Chemistry Factsheet*
- *Eco-Packaging Factsheet*
- *Protection of the Atmosphere Factsheet*
- *Water Stewardship Factsheet*