

CIRCULAR ECONOMY & ECODESIGN

GRI Standards :

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EXECUTIVE SUMMARY

The circular economy concept is an economic system that aims at limiting the environmental impacts of human activities. It is based on three principles:

1. Preserve and enhance natural capital
2. Optimise resource yields
3. Foster system effectiveness

Sanofi believes that implementing projects to promote circular economy principles can foster innovation, reduce costs and decrease the environmental impact of its activities while developing the social dimension of its projects.

Fully integrated in our “Planet Mobilization” roadmap, circular economy principles span all aspects of our environmental strategy. In order to embrace these principles, Sanofi considers ecodesign as a relevant approach to reach circularity. Ecodesign is defined by the integration of environmental aspects into product specifications with the aim of improving its environmental performance, throughout its whole life cycle.

Many projects are already implemented with this mindset such as improving our supply chain sustainability, fostering a responsible consumption of raw materials, energy, or water for manufacturing activities, or promoting a responsible use of medicines by patients.

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1. BACKGROUND

Sanofi believes that implementing projects to promote circular economy principles can foster innovation, reduce costs and decrease the environmental impact of its activities while developing the social dimension of its projects.

This is a great challenge for the pharmaceutical sector since medicines and vaccines are not ordinary goods; they must meet many different regulatory requirements to guarantee the quality of each unit sold. Marketing authorization for medicines and vaccines requires the approval of the Health authorities for manufacturing procedures with regards to quality, as well as strict safety standards for active ingredients, excipients and packaging materials.

The Health authorities must also approve any significant change in the processes, substances or materials used to manufacture a drug or vaccine, including the environmental risk assessment. Sanofi integrates environmental aspects when developing and manufacturing medicines.

Ecodesigning medicinal products implies to address many challenges. However, Sanofi strongly believes that is part of the responsibility of a healthcare company to ensure the best environmental profile of products for the patients and the planet.

Thanks to the many case-by-case initiatives implemented worldwide as part of our environmental strategy, Sanofi already complies with many of the circular economy principles such as:

- A sustainable supply chain
- Promoting ecodesign
- Encouraging industrial and territorial ecology to optimize resources management in collaboration with several local economic partners
- Responsible consumption by promoting better use of our products including the proper disposal of our products after use by patients
- Recycling

In addition, Sanofi is involved in many associations in our industry to develop solutions that respect the principles of the circular economy and to share practices with our stakeholders.

Considering the nature of our biologically active products (medicines and vaccines) that degrade over time, with potential by-products, it is not possible to reuse or recover them for obvious health and regulatory reasons.

2. ACTIONS

2.1. Defining Sanofi's environmental roadmap

In 2015, Sanofi set out to define a new and ambitious environmental strategy across its entire value chain by deploying the "Planet Mobilization" program.

The objective was to define a roadmap to better integrate the environmental management system into the company's decision-making process, especially by considering the circular economy as a major component of our environmental, economic and social approach.

This project has received the support of the company's senior management and is organized around numerous workshops to bring together the expertise of many internal and external stakeholders. This initiative aims to make Sanofi a leader of environmental management within the pharmaceutical industry by 2025.

2.2. Implementing a sustainable supply chain

Sanofi's transportation strategy is to guarantee the continuous supply of drugs and vaccines to our patients without any disruption. In order to minimize his environmental footprint, Sanofi's Transportation Department has already engaged actions with the following approaches:

- Choose sea instead of air transportation for long-distance shipments.
- Increase the level of occupancy for truck and sea containers.
- Develop railway transportation.
- Consolidate flows and mutualize transport to reduce the number of trucks on the road.
- Promote green models of transportation with all forwarders.

Opportunities and examples of sustainable supply chain are presented in the Transporting Medicines and Vaccines factsheet.

2.3. Ecodesign: limiting the environmental impact of our medicines

In order to better understand the environmental impact of medicines, Sanofi conducts life cycle analysis on key products, develops tools and performance indicators. This approach allows us to be more efficient on action plans.

It is crucial that these improvements take place at the earliest stages of designing manufacturing processes, as it is often difficult to change them later on.

Since 2013, Sanofi has developed an internal standard to guide teams when choosing solvents based on the following principles:

- Select the least toxic solvents
- Reduce the amount of solvents used
- Encourage the use of recycled solvents when possible

Opportunities and examples of ecodesign in chemistry are presented in the Green Chemistry factsheet.

In addition, Sanofi strives to reduce the consumption of packaging materials for many of its products. Studies are performed in order to limit the size of packaging, which reduces the amount of cardboard, PVC and aluminum consumed. This helps to increase the number of boxes transported per pallet and optimizes the occupation of the selected means of transport (trucks, barges, etc.). Opportunities and examples of ecodesign in packaging are presented in the Responsible Packaging factsheet.

2.4. Industrial and territorial ecology: sharing resources with local communities

Sanofi promotes local economic development by encouraging the sharing of infrastructures that are necessary for the manufacture of vaccines and drugs, and by promoting projects to share materials with local economic players.

At Val De Reuil, Veolia received a green light beginning of 2020 to build a biomass combustion unit for the industrial platform. This plant will use wood-waste to produce a decarbonized steam. This steam will be used by three different industrials.

At Aramon (Gard), after the phase-out of a fossil-fuel electrical power plant, a cluster "Clean Tech Valley" has been created with EDF, SANOFI, ADEME. A wide 4 MW photovoltaic solar plant has been signed.

2.5. Encouraging the responsible use of our medicines

Many initiatives have been developed to raise awareness among citizens about the proper use of medicines as part of responsible consumption in order to ensure patient safety, to limit wastes and to reduce emissions of pharmaceutical residues to the environment.

These actions are complemented by an active support to take-back programs to ensure a proper disposal of unused medicines in many countries in Europe, Asia, North America and South America

2.6. Reusing and recovering raw materials such as solvents and water

A significant proportion of Sanofi industrial waste (45%) is recycled, representing 119 000 tons in 2019.

In each of our facilities, Sanofi also systematically collects and sorts many types of waste (excluding industrial waste) such as batteries, paper, plastic, ink cartridges, catering waste, etc., for recycling or recovery by local waste management services.

Opportunities of waste and wastewater recycling are presented in the Waste Management and the Water Resource Management factsheets.

The Aramon site, has implemented in 2019 a new solvent recovery unit with high efficient technology as the pervaporation for complex segregation. In 2019, the site has reused 22 500 tons of solvents so 64% of its need. It saves 8 trucks of solvent per day on the road.

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

- Waste Management factsheet
- Green Chemistry factsheet
- Carbon Footprint (scope 1, 2 &3) factsheet
- Water Resource Management factsheet
- Pharmaceuticals in the Environment factsheet
- Responsible Packaging factsheet
- Transporting Medicines and Vaccines factsheet