PACKAGING

G4 Indicators: G4-DMA, G4-EN1, G4-EN27, G4-EN28

I. BACKGROUND AND POLICY

Pharmaceutical companies use many types of packaging for the medicines and vaccines they sell. Packaging is crucial to ensure the quality and integrity of these products throughout the distribution chain. It also contains important information for the proper use of medicines, precautions and regulatory information.

In each country, specific regulations govern packaging, for example, for the collection and recycling of packaging materials, marking and identification systems, and acceptable concentration levels of certain heavy metals in packaging. In Europe, Directive 94/62/EU is an example. Because packaging requires the use of raw materials, Sanofi has organized initiatives to reduce the environmental impact of packaging while taking into account current regulatory constraints.

Such initiatives include programs to reduce packaging size and weight, to set limits on packaging-related waste, and to develop ways to reduce the environmental impact of packaging used for transport, especially for temperature-sensitive medicines.

To coordinate these initiatives, Sanofi has a corporate function devoted to “Packaging Excellence” within Global Industrial Affairs. The Global Packaging Excellence team is supported by a dedicated network using site-based resources. It operates at 65 sites worldwide and includes more than 110 people.

At regional quarterly meetings, participants share best practices and identify opportunities for improvement. In addition, a dedicated shared platform is available on-line to facilitate team connections and access standards and reporting tools.

A special event was organized in the Paris area in November 2016 to bring together members of the packaging network (more than 50 participants) and provide an opportunity for effective interactions and alignment on major initiatives.

II. ACTIONS

A comprehensive initiative to reduce the consumption of packaging materials was introduced in early 2013 for all solid forms of our products packaged in blisters made of PVC/aluminum and aluminum/aluminum.

This initiative has been extended to all divisions including Injectables, Genzyme and Pasteur. It concerns 65 Sanofi production sites.

Based on a specific Sanofi methodology developed by Global Packaging Excellence, packaging workshops are organized at each site to simplify, harmonize and optimize existing products. In particular, in order to improve logistics efficiency and adopt harmonized packaging sizes, a multifaceted approach based on several steps is being implemented:

- Using pallet occupancy as the basis for logistics optimization, with a target pallet occupancy of over 85%
- Defining common shipment volumes to help maximize pallet occupancy
- Defining common box sizes

Major workshops for 2016 took place in Dubai (UEA), Kawagoe (Japan), Waltloo (South Africa), Rzeszow (Poland), Veres (Hungary), Bucharest (Romania) and Cologne (Germany).

Such initiatives ensure that high-quality projects are in the pipeline, in line with our expectations, with a material reduction of approximately:

- PVC: 182mt in 2014, and an expected 360mt for 2015-2017
- Aluminum: 59mt in 2014, and an expected 60mt in 2015-2017

Moreover, the number of pallets of finished goods thus avoided represents an additional major benefit, amounting to a five to 40% reduction, depending on the site’s portfolio. It may be estimated at several thousands of pallets avoided per year. In 2016, the benefit represented a reduction of 25,000 pallets to be transported (approximately 350 truckloads) for participating sites.

In 2017, we will pursue global consolidation and ongoing efforts to identify new opportunities.

III. BROADENING THE SCOPE OF SANOFI'S EFFORTS TO INCLUDE MEDICAL DEVICES

While optimization and simplification of packaging such as blisters and boxes are moving to a continuous improvement approach, specific studies are being conducted on other packaging-related factors.

As an example of these specific projects, Sanofi decided to switch to a new pipette for syrup, combining a better dispenser system, a mono-material design (all PP instead of PE + PS), and reduced weight.

Sanofi conducted an intensive study for rapid implementation: new device production capacity increase, packaging line adaptation, and all regulatory aspects. Thanks to these efforts, within just a few months, the new device has been approved for Doliprane syrup, the leading syrup for the company in terms of quantity. The switch will be effective in Q2 2017, with a weight reduction of 60 tons per year (33%). Subject to regulatory approval, this change will be extended to all syrups.

IV. CASE STUDY

Replacing plastic trays with full carton inserts for secondary packaging

Some primary packaging, mainly glass used for ampoules, vials and syringes, are packed in plastic blisters or trays before being inserted in a carton box with a leaflet.

Thanks to the "One syringe" packaging of Pasteur vaccines, described in last year's document, Sanofi acquired effective know-how about replacing plastic blisters with carton inserts.

The innovative character of this packaging was recognized with a packaging award in France in 2016, the *Oscar de l'emballage*.

For this project, the current PVC blister has been replaced by a carton wedge, and the overall volume of the carton folding box has been reduced by more than 40%. The overall benefit represents the avoidance of 80 tons of PVC per year and a 50% reduction in the number of pallets to be transported.

Sanofi's ambition is to replace plastic trays with carton-made systems for secondary packaging, as far as possible in terms of acceptance by final users (medical staff and patients).

This progressive approach has been started for Lovenox in the UK, and it is under study for some Lantus products packed in Anagni (Italy).

For more information, see our Download Center : Waste management Factsheet