

# WASTE



*In 2015, the volume of recovered waste reached 25,562 metric tons, representing 54.9% of total generated waste. This was an increase of 9.8% over the previous year.*

In 2015, a total of 46,554 metric tons was generated, a 9.3% increase on the previous year. However, the relative values confirm a 6.8% reduction in total generated waste relative to revenues.

Compared with 2014, there was an increase of 9.8% in recovered waste, and an increase of 8.7% in treated waste.

Grifols' waste management strategy prioritizes preventing and minimizing waste and encouraging recovery whenever possible, as opposed to landfill or incineration. In 2015, Grifols continued its commitment to waste management treatments such as recycling, anaerobic digestion, and energy recovery.

## GENERATED WASTE ABSOLUTE VALUE · t

	2013	2014	2015	Variation
 RECOVERED WASTE	21,970	23,281	25,562	↑ 9.8%
 WASTE DISPOSED OF	20,080	19,314	20,992	↑ 8.7%
<b>TOTAL</b>	<b>42,050</b>	<b>42,595</b>	<b>46,554</b>	↑ 9.3%

## RELATIVE VALUE · t/million euros

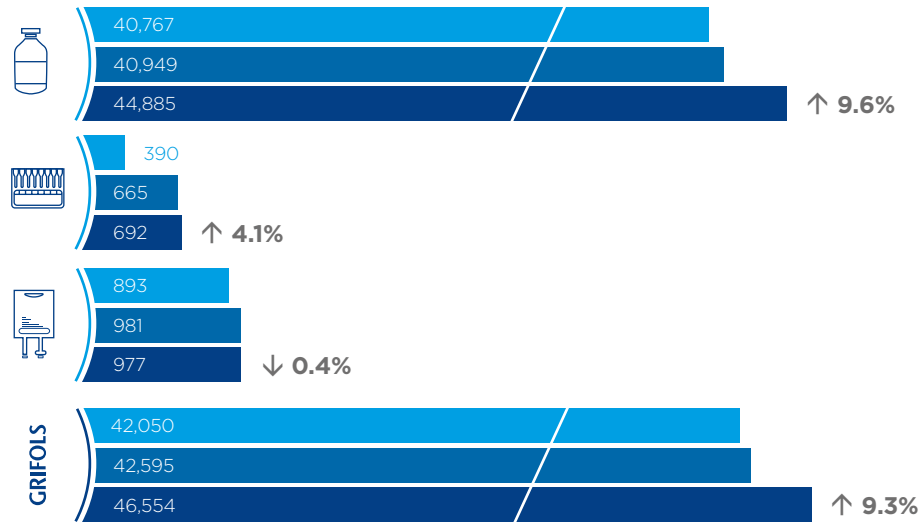
 RECOVERED WASTE	8.0	6.9	6.5	↓ 6.4%
 WASTE DISPOSED OF	7.3	5.8	5.3	↓ 7.3%
<b>TOTAL</b>	<b>15.3</b>	<b>12.7</b>	<b>11.8</b>	↓ 6.8%

## ENVIRONMENTAL PERFORMANCE

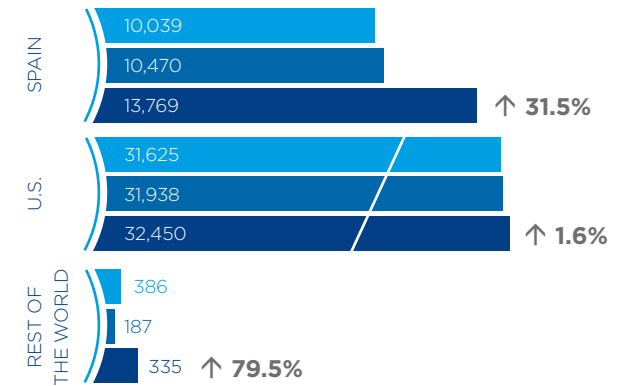
### WASTE

#### WASTE GENERATED

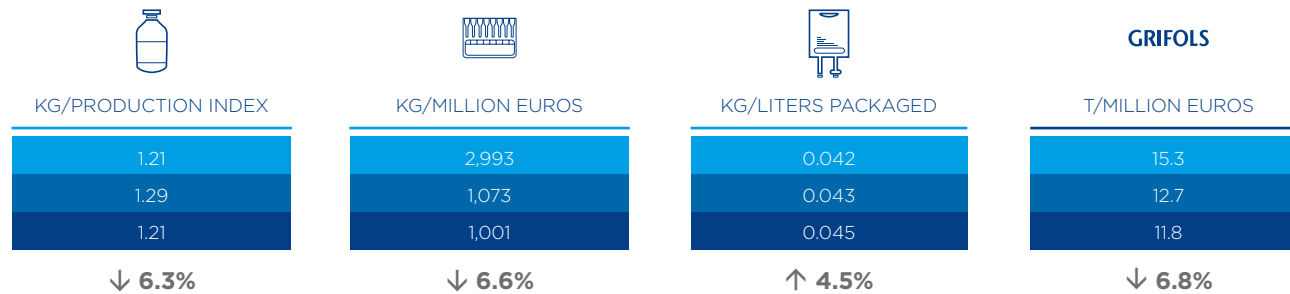
ABSOLUTE VALUE · t



ABSOLUTE VALUE · t



RELATIVE VALUE





















Bioscience | 
 Diagnostic | 
 Hospital | 
 2013 | 
 2014 | 
 2015

## ENVIRONMENTAL PERFORMANCE

### WASTE

#### PRIMARY RECOVERED WASTE

ABSOLUTE VALUE · t

	2013	2014	2015	Variation	Outcome
POLYETHYLENE GLYCOL AND SORBITOL	8,931	8,372	9,641	↑ 15.2%	  
CONCRETE AND ASPHALT		1,697	4,324	↑ 154.8%	
WASTEWATER SLUDGE	2,337	3,044	2,759	↓ 9.4%	
WATER ALCOHOL SOLUTION	5,849	4,923	2,226	↓ 54.8%	
PAPER - CARDBOARD	2,026	1,762	1,881	↑ 6.7%	
PRODUCTION PASTES	569	1,285	1,459	↑ 13.5%	
CLEAN PLASTIC AND PLASTIC PALLETS	490	585	724	↑ 23.7%	
GLASS	538	564	671	↑ 19.0%	
NON-HAZARDOUS SRF (SOLID RECOVERED FUEL)	323	305	379	↑ 24.2%	
WOOD/PALLETS	223	258	307	↑ 18.9%	 
METALS	145	249	235	↓ 5.6%	
CHEMICAL-PRODUCT PACKAGING	51	49	59	↑ 20.4%	 
CATERING PACKAGING	15	49	53	↑ 8.2%	
OTHERS	473	138	844	↑ 512.3%	
<b>TOTAL</b>	<b>21,970</b>	<b>23,280</b>	<b>25,562</b>	<b>↑ 9.8%</b>	

A highlight of 2015 was the 2,697-metric-ton reduction in water-alcohol solution waste, a 54.8% decrease over 2014. During 2015, validation of the ethanol distillation tower at the Bioscience Division's plant in Los Angeles, California was carried out. This allowed us to reduce the volume of ethanol treated externally by an authorized agent. This waste is expected to decrease significantly when the ethanol can be reincorporated into the production process.

The increase in polyethylene glycol and sorbitol waste is directly related to the increase in Flebogamma® DIF production at the Bioscience Division's Parets del Vallès plant. Other waste, such as production pulp, clean plastic, glass, and chemicals packaging also increased as a result of this output. Relative values indicate a 6.8% reduction in total waste relative to production in this division.

The increase in concrete and asphalt waste is due to the construction work on the new raw materials storage facility, and to the start of work on the new office building located at the Clayton, North Carolina plant.

Recycling of plastic plasma bottles –already under way at the Los Angeles plant in California– has now begun at the Bioscience Division's facilities in Clayton and Parets del Vallès.





 By-product  Compost  Recycling  Re-use  Energy recovery

## ENVIRONMENTAL PERFORMANCE

### WASTE

Grifols participates in several integrated waste management programs to guarantee correct handling of certain waste generated by its activities. In Spain, it participates in the SIGRE program that handles the packaging and remains of domestic medications, and in the ECOASIMELEC scheme to ensure correct handling of electronic and electrical waste. In Chile, Grifols collaborates with Recycla to collect and recycle this equipment.

A significant part of the total increase in waste disposed of is due to the increase in the production of Flebogamma® DIF at the Bioscience Division's facilities in Barcelona. This resulted in 1,607 metric tons of waste that could not be reused as a by-product due to lack of demand, and were therefore disposed of by an external waste management company.

		PRIMARY WASTE DISPOSED OF ABSOLUTE VALUE · t			
		2013	2014	2015	Variation
	GENERAL WASTE	12,857	13,048	13,512	↑ 3.6%
	MEDICAL WASTE	4,923	3,869	3,225	↓ 16.6%
	WASTEWATER SLUDGE	624	604	370	↓ 38.7%
	OTHERS	1,676	1,793	3,885	↑ 116.5%
<b>TOTAL</b>		<b>20,080</b>	<b>19,314</b>	<b>20,992</b>	<b>↑ 8.7%</b>

**WASTE**

 RECOGNITION FOR APPROPRIATE WASTE HANDLING



**DUPONT SUSTAINABILITY AWARD**

In 2015, Grifols' efforts to reduce generation of medical waste were recognized with the DuPont Sustainability award. Grifols began to work with state regulators to establish a more accurate process for identifying types of medical waste in 2013. Only a small percentage of the medical waste incinerated at the North Carolina plant was biologically hazardous, so a larger percentage of this waste could be treated or recycled.



**KIMBERLY-CLARK PROFESSIONAL AWARD**

Grifols also received another award for its work with waste in North Carolina. The Kimberly-Clark Professional award recognizes Grifols' participation in the RightCycle program, which focuses on recycling non-hazardous waste generated in laboratories and clean rooms on a large scale. The program is designed to help pharmaceutical and research companies reduce solid waste destined for landfill by facilitating recycling of items such as robes, gloves, masks, etc.

This waste is recycled and turned into raw materials that can be used to manufacture environmentally friendly products. In 2015, Grifols separated close to 4.5 metric tons of these materials, avoiding disposal of them at landfill sites.