

## **Waste - disposal**

### **Chemical waste**

The synthesis of active pharmaceutical ingredients naturally also gives rise to secondary products, which must ultimately be disposed of as chemical waste, together with residues from the production of dosage forms. In 2011, a total of 30 170 metric tons of chemical waste were generated, reflecting an increase of 4% compared to the previous year. More than 95% of the total amount were incinerated, the rest, consisting of sewage sludge and of inert substances such as ash or slag from incineration, was landfilled. In addition, 940 metric tons of residual substances could be sold as valorised secondary products. Another 19 632 metric tons consisting mainly of solvents were recycled, the major partition on site. Responsible use of resources in the context of sustainable development also results in a reduction in quantities of waste. The success of these efforts to make better use of raw materials is clear from our performance in this respect over recent years, a 59% reduction in the quantity of chemical waste in relation to sales having been achieved since 1992.

### **General waste**

"General waste" encompasses all waste arising from activities other than chemical-pharmaceutical production and includes not only paper, cardboard, glass, plastics, wood and electronic equipment, but also construction waste. It is precisely this latter category which results in major fluctuations in the quantities arising because the construction projects which generate such waste are not carried out continuously. We therefore include construction waste as a separate category in our graph. In 2011 we generated a total of 24 121 metric tons of general waste. Around 26% of this amount were incinerated, the remainder being landfilled. 11 724 metric tons thereof were rubble from demolished buildings.

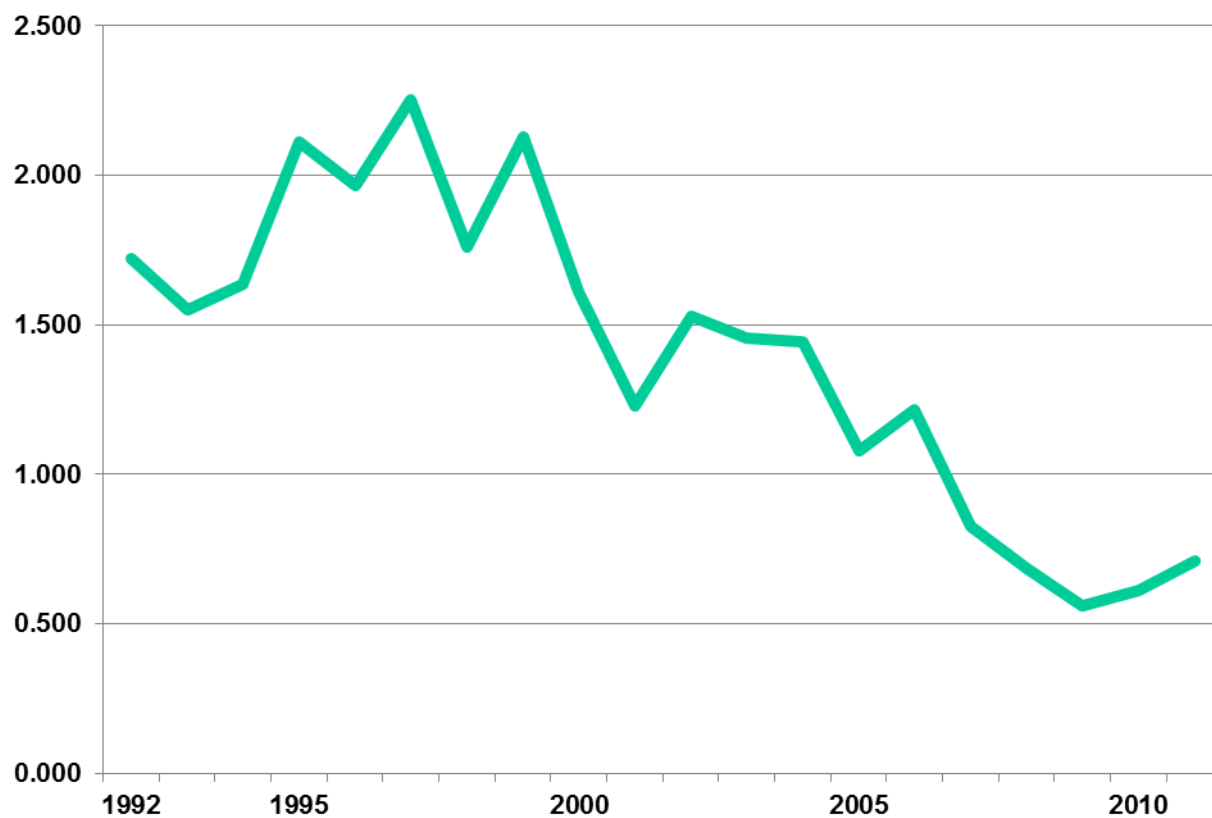
In addition, 61 438 metric tons of residual materials were recycled.

### Waste (t)



Year	2007	2008	2009	2010	2011
t chem. waste	38 167	31 295	27 605	29 020	30 170
t total gen. waste	17 480	42 823	19 828	27 249	24 121
t construct. waste	2 504	25 646	3 175	14 900	11 724

### Chemical waste (t) per million CHF sales



Year	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
t / mio CHF	1.720	1.551	1.634	2.110	1.965	2.252	1.760	2.127	1.610	1.230	1.530	1.458	1.445
Year	2005	2006	2007	2008	2009	2010	2011						
t / mio CHF	1.081	1.217	0.827	0.686	0.563	0.611	0.709						