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## Environmental protection expenditures in the business sector CHF 2.75 billion in 2009

In 2009, environmental protection expenditures in the business sector represented the equivalent of 0.5% of gross domestic product (GDP). In industry, these expenditures represented 1.1% of gross value added, a burden corresponding to less than half that borne by European industry.

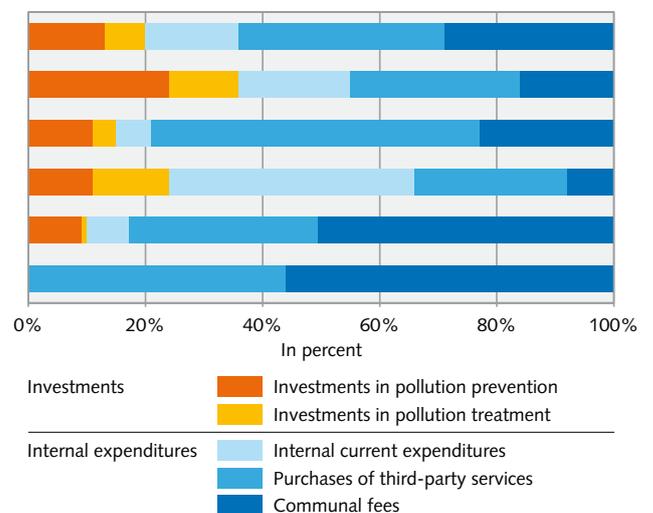
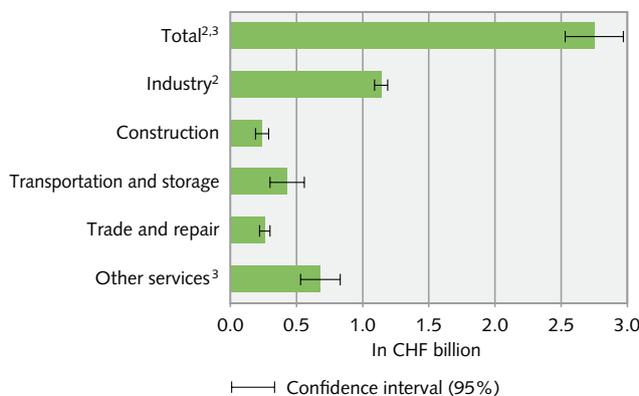
Environmental protection expenditures are a measure of the financial effort made to prevent, reduce or eliminate pollution and any other degradation of the environment.

They include investments in the prevention and treatment of pollution as well as internal current expenditures, purchases of third-party services and communal fees. Expenditures that have a favourable impact on the environment but primarily serve purposes other than environmental protection are excluded.

In 2009, environmental protection expenditures in the business sector were divided equally between the secondary and the tertiary sector (G1).

Environmental protection expenditures in the business sector<sup>1</sup> in 2009, total and by type of expenditure

G 1

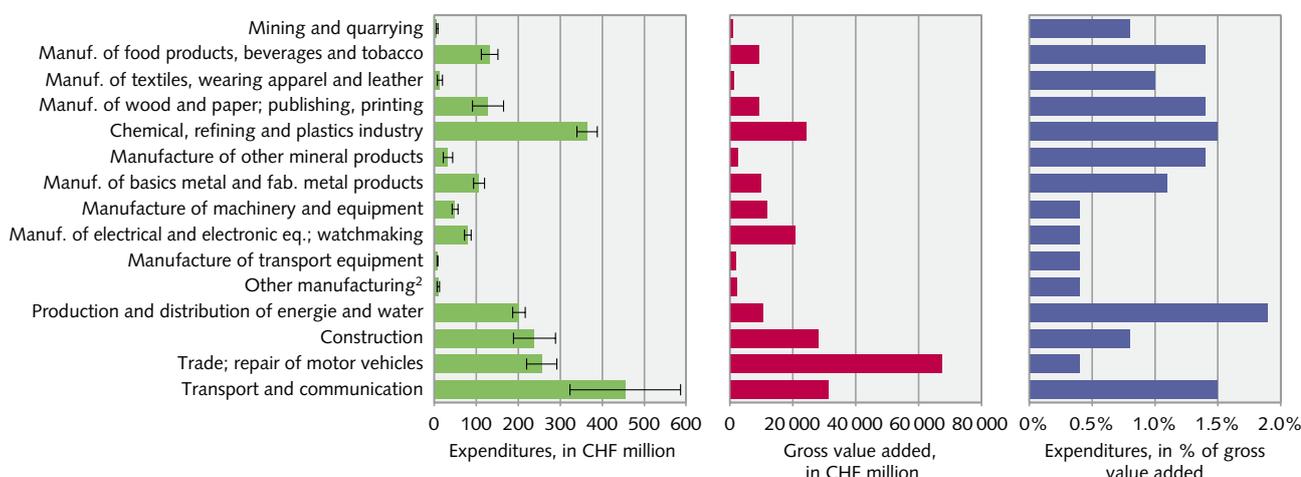


<sup>1</sup> Enterprises with more than two employees, excluding primary sector  
<sup>2</sup> Excluding branches 37, 38 et 39 "Sewerage, waste collection and remediation activities"  
<sup>3</sup> Excluding branch 84 "Public administration" and excluding investments and internal current expenditures

According to the General Classification of Economic Activities – NOGA 2008

## Environmental protection expenditures in the business sector<sup>1</sup> in 2009, total and in per cent of gross value added

G 2



<sup>1</sup> Enterprises with more than 2 employees

<sup>2</sup> Excluding branch 37 "Recovery and recycling", in which the main activity is environmental protection

According to the General Classification of Economic Activities – NOGA 2002

— Confidence interval (95%)

Source: Federal Statistical Office

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### Expenditure varies from branch to branch

Environmental protection expenditures vary greatly from one branch to another. This is on the one hand due to the level of the environmental protection effort that is necessary given the potential environmental impact of the activities carried out in a particular branch as well as to statutory provisions and, on the other hand, to the respective economic weights of the branches.

For example, in 2009 the chemical industry spent about one and a half times more resources on environmental protection (CHF 364 million) than the trade and repair branch (CHF 256 million), though it generated three times less gross value added. Thus, to the chemical industry, environmental protection represented a financial burden of 1.5% of its gross value added, compared with 0.4% to the trade and repair branch (G2).

The environmental protection expenditures for mining and quarrying totalled CHF 7 million, compared with CHF 239 million spent by the construction industry. The gross values added generated by these two branches varied in the same proportion; thus, the financial burden borne by them was the same, amounting to 0.8%.

The food, beverages and tobacco industry, as well as the wood, paper and publishing industry found themselves in an analogous situation. These two industries spent CHF 132 million and CHF 128 million, respectively, on environmental protection. As both of them generated about the same gross value added, they bore the same financial burden for environmental protection (1.4% of their gross value added).

The highest financial burden was observed in the production and distribution of energy and water, which earmarked the equivalent of 1.9% of its gross value added to environmental protection.

### Decrease in expenditures in the industrial sector

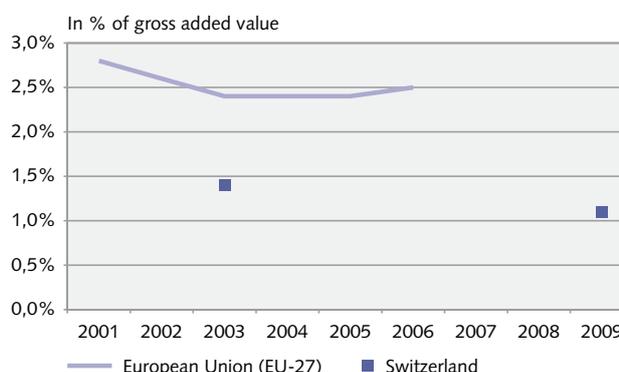
Between 2003 and 2009, expenditures on environmental protection in the industrial sector fell from CHF 1.18 billion to CHF 1.14 billion, representing a decline of approximately 3% at current prices and 10% in real terms.

Nevertheless, this decline does not necessarily imply a disengagement of the industrial sector from environmental protection or a deterioration of the environment. It may, in fact, also be attributable to structural changes, to the adoption of cleaner technologies and production processes as well as to more efficient treatment of the pollution generated.

In international comparison, the financial burden incurred by Swiss industry for environmental protection went from 1.4% to 1.1% of its gross value added between 2003 and 2009. In the European Union (EU-27) it was, on average, 2.5% between 2001 and 2006 (G3).

### Environmental protection expenditures by Swiss and European industry

G 3



Sources: Federal Statistical Office, Eurostat

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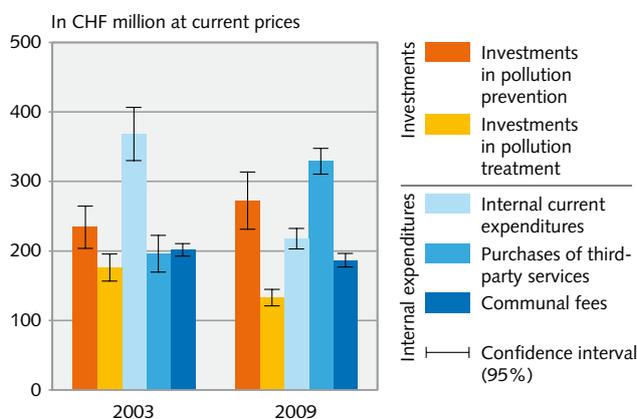
Both in Switzerland and in Europe, wastewater and waste management as well as air and climate protection accounted for more than 80% of industry's environmental protection expenditures. In 2009, investments and current expenditures represented 36% and 64%, respectively, of Swiss industry's environmental expenditures, compared with 22% and 78% on average in European industry between 2001 and 2006.

### Cleaner technologies are gaining ground

Between 2003 and 2009, Swiss industry's investments in pollution treatment decreased by 25% at current prices, from CHF 176 million to CHF 133 million (G4). Their share in total investments on environmental protection decreased from 43% to 33%, while that of investments in pollution prevention increased from 57% to 67%. This trend reflects an increased interest on the part of industry in cleaner technologies and production processes, which make it possible to reduce or even to prevent the generation of pollution instead of treating it once it is generated.

Overall, Swiss industry's total investments in environmental protection did not change to a statistically significant degree. These investments amounted to CHF 410 million in 2003 and CHF 405 million in 2009.

**Industry's environmental protection expenditures<sup>1,2</sup> in 2003 and 2009, by type of expenditure** G 4



<sup>1</sup> Enterprises with more than 2 employees  
<sup>2</sup> Excluding branches 37, 38 et 39 "Sewerage, waste collection and remediation activities"  
 According to the General Classification of Economic Activities – NOGA 2008  
 Source: Federal Statistical Office © FSO

### Outsourcing of environmental protection

Between 2003 and 2009, Swiss industry's current expenditures on environmental protection – i.e. the sum of internal current expenditures, purchases of third-party services and communal fees – did not develop to a statistically significant degree. They amounted to CHF 765 million and CHF 734 million, respectively (G4).

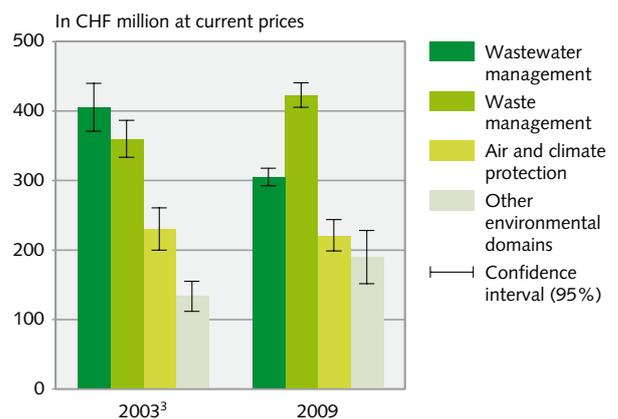
At the same time, communal fees for wastewater and waste management remained stable at current prices, and represented about one quarter of industry's total current expenditures.

On the other hand, internal current expenditures decreased by 41% at current prices, from CHF 368 million to CHF 218 million, whereas purchases of third-party services increased by 68%, from CHF 196 million to CHF 329 million. Thus, the share of internal current expenditures in total expenditures on environmental protection declined from 48% to 30%, while that of purchases of third-party services grew from 26% to 45%. This evolution reflects a trend in industry towards the outsourcing of certain environmental protection activities and measures, particularly in the domain of waste management. Indeed, the share of purchases of services in current expenditures grew from 36% to 62% between 2003 and 2009, whereas that of internal current expenditures declined from 37% to 18%.

### More than 8 out of 10 Swiss francs spent on waste, wastewater and air and climate protection

Between 2003 and 2009, industry's expenditures on wastewater management decreased by 25% at current prices, from CHF 405 million to CHF 305 million (G5). At the same time, expenditures on waste management increased by 18%, to CHF 423 million in 2009. These two environmental domains combined accounted for about two thirds of Swiss industry's total expenditures on environmental protection. If expenditures on air and climate protection are also taken into account, more than 8 out of 10 Swiss francs were spent by industry on these three domains in 2009. Expenditures earmarked to other environmental domains, such as noise abatement and the protection of biodiversity, landscape, soil and groundwater amounted, for their part, to CHF 190 million that year.

**Industry's environmental protection expenditures<sup>1,2</sup> in 2003 and 2009, by environmental domain** G 5



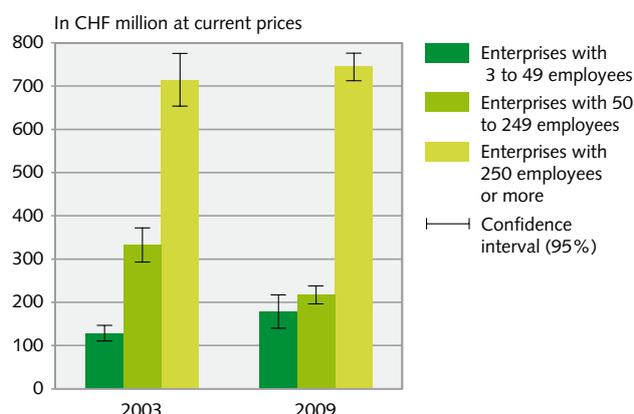
<sup>1</sup> Enterprises with more than 2 employees  
<sup>2</sup> Excluding branches 37, 38 et 39 "Sewerage, waste collection and remediation activities"  
<sup>3</sup> Excluding CHF 46 million that cannot be broken down by environmental domain  
 According to the General Classification of Economic Activities – NOGA 2008  
 Source: Federal Statistical Office © FSO

## Large enterprises account for nearly two thirds of expenditures

Between 2003 and 2009, environmental protection expenditures by industrial enterprises with 250 employees or more did not develop to a statistically significant degree (G6). They amounted to CHF 714 million and CHF 745 million, respectively, whereas their share in industry's total environmental expenditures rose from 61% to 65%. Environmental protection expenditures by enterprises with 50 to 249 employees decreased by 35%, from CHF 333 million to CHF 217 million. Their share in total environmental expenditures in this sector declined from 28% to 19%, while that of enterprises with 3 to 49 employees increased from 11% to 16%.

## Industry's environmental protection expenditures<sup>1,2</sup> in 2003 and 2009, by enterprise size

G 6



<sup>1</sup> Enterprises with more than 2 employees

<sup>2</sup> Excluding branches 37, 38 et 39 "Sewerage, waste collection and remediation activities"

According to the General Classification of Economic Activities – NOGA 2008

Source: Federal Statistical Office

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### Methodological notes

Environmental protection expenditures measure the financial effort dedicated to the prevention, reduction and elimination of pollution and any other degradation of the environment. (Eurostat, OECD). They include investments in the prevention and treatment of pollution as well as internal current expenditures, purchases of third-party services and communal taxes. Expenditures that have a favourable impact on the environment but primarily serve purposes other than environmental protection are excluded.

The results presented here are drawn from a representative survey based on a random sample of approximately 8850 secondary or tertiary sector enterprises with more than two employees. Branches 37, 38 and 39 of NOGA 2008<sup>1</sup>, "Sewerage, waste collection and remediation activities" were excluded because they provide environmental protection services to the surveyed enterprises, to households and to public administrations. In some services sectors, only purchases of third-party services and communal fees were collected. The response rate is 65%.

The data are available for four environmental domains: air and climate protection, wastewater management, waste management and other environmental domains (noise abatement, protection of biodiversity, landscape, soil and groundwater, research and development and other activities). The data are also available for three enterprise size categories: 3 to 49 employees, 50 to 249 employees and 250 employees or more.

For industry, the results can be compared with those of the European Union, whose member States, as well as Switzerland, must provide data to Eurostat on this sector's environmental protection expenditures.

The graphs show 95% confidence interval for the estimated values. If the confidence intervals of two values overlap, the two values do not differ to a statistically significant degree from each other.

<sup>1</sup> General Classification of Economic Activities 2008

### Environmental Accounts

The Environmental Accounts complement the National Accounts with an ecological dimension. They aim to improve our understanding and policy consideration of interactions between the economic and environmental spheres. They are compiled by the FSO based on the development of physical flow accounts (materials, energy, air emissions, etc.) or monetary flow accounts (expenditures, taxes, etc.) which can be integrated into NAMEA (National Accounting Matrix Including Environmental Accounts). This statistical tool developed by Eurostat makes it possible to combine these data, by branches, with data from the national accounts, such as value added.

### Additional information available on the internet

Environmental Accounts (in French and in German):  
[www.bfs.admin.ch/bfs/portal/fr/index/themen/02/05.html](http://www.bfs.admin.ch/bfs/portal/fr/index/themen/02/05.html)

Environmental protection expenditures  
 (in French and in German):  
<http://www.bfs.admin.ch/bfs/portal/fr/index/themen/02/05/blank/dos/01/01.html>

European Environmental Accounts:  
[http://epp.eurostat.ec.europa.eu/portal/page/portal/environmental\\_accounts/introduction](http://epp.eurostat.ec.europa.eu/portal/page/portal/environmental_accounts/introduction)

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