

Environment Statistics

Environmental management and protection in industrial enterprises

2014

Industry expenditure for control and protection activities reached 323.1 million euros in 2014

In 2014, about 13% of industrial enterprises had environmental expenditure with prevention and control of pollution.

Between 2010 and 2014, the environmental expenditure decreased at an average annual rate of 5.4% due to the decrease in capital expenditure which in this period was 15.0%, with a slight decrease on current expenditure.

The measures taken by the industry in 2014 to minimize the environmental impacts of its activities cost more than 323 million euros. This amount represented 0.19% of Gross Domestic Product (GDP), around 31 euros/inhabitant year, which places Portugal in a modest position compared to other Member States of EU28.

The industries of "Food, beverages and tobacco" and "Electricity, gas and water" had the highest spending with environment, having applied in 2014, about 103 million euros in expenditure for control and prevention of pollution, representing 1/3 of the total environment expenditure for the industry.

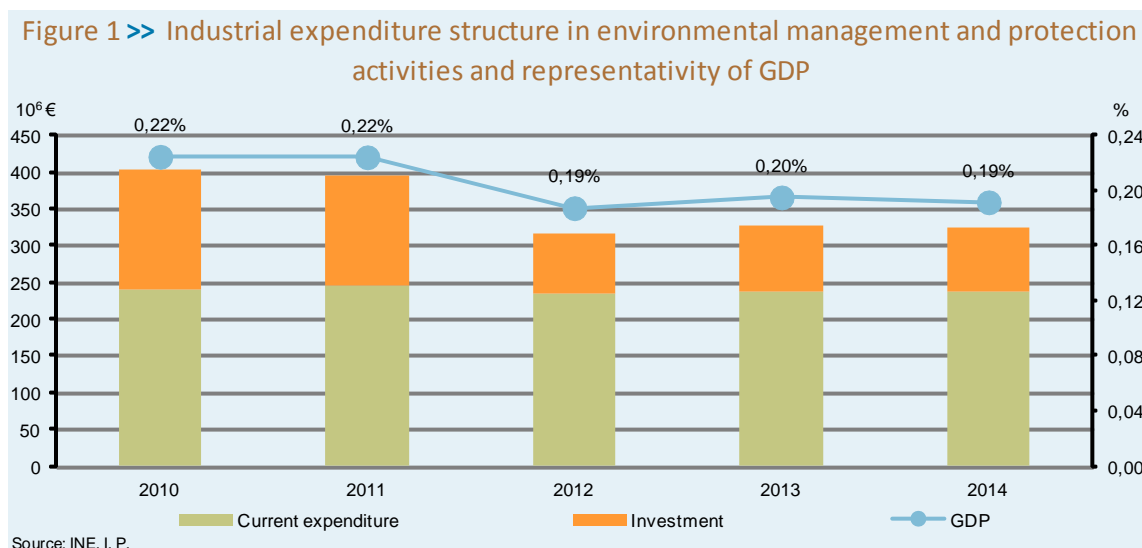
The majority of environmental expenditure (114 million euros in 2014 comparing with the 121 million euros in 2013) was allocated for "Waste Management" domain. The domains "Protection of Ambient Air and Climate" and "Wastewater Management" absorbed, respectively, 22.2% e 22.9% of total expenditure for 2014.

Environmental certification in the industry developed positively in 2014. Yet this type of accreditation, by European Eco-Management and Audit Scheme (EMAS) and ISO 14 001 is still scarce (6.7% of the industrial enterprises in 2014 plus 3 p.p. than in 2013).

Statistics Portugal presents a statistical analysis on the results of the Survey for Enterprises in Environmental Management and Protection, which characterizes the development of environmental actions of protection and control on industrial activity. In this analysis a time series of environmental expenditure is also presented, segmented by industrial units dimension and by economic activity, region and environmental domains. The placement of the countries on EU28 is also mentioned in this publication. This dissemination occurs simultaneously with the publication "[Waste Statistics 2014](#)".

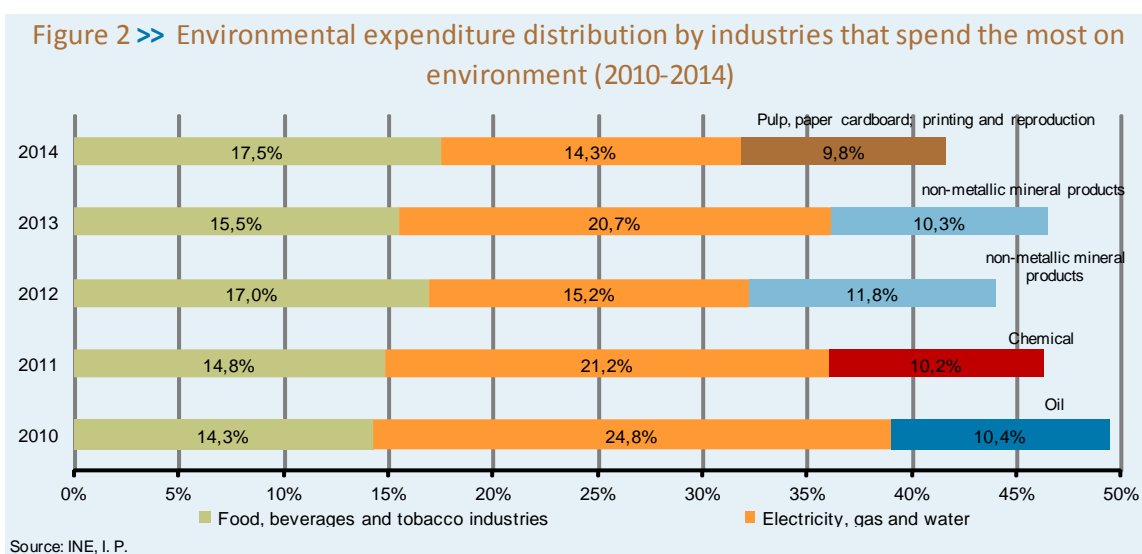


Industry expenditure with environmental protection stood close of 324 million euros, corresponding to 0.19% of GDP



In 2014, the industry expenditure with environmental activities of protection and control reached 323.1 million euros, from which 26.5% were applied in investments for pollution prevention and treatment. In the period comprised between 2010 and 2014 the current expenditure was always superior to 59% of the total environmental expenditure. Comparing the expenditure in environmental protection with the GDP, for the period of analysis, there's a reduction of expenditure in environment protection, promoted by the decrease of capital expenditure.

"Food, beverages and tobacco industries" and "Electricity, gas and water" spent the most in environment protection: in 2014 the expenditure in environment control and protection reached 103 million euros



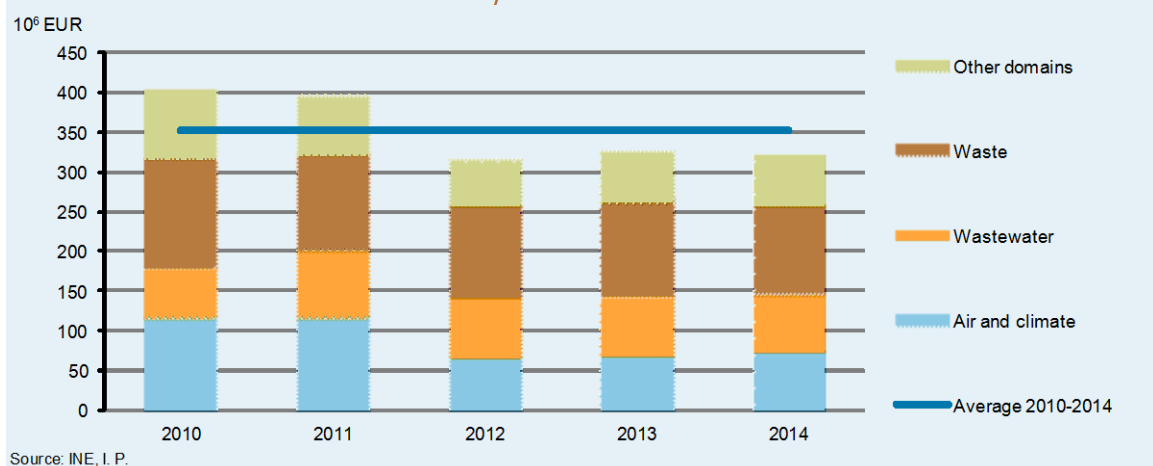
In five years of analysis, the expenditure applied to environment activities for control and protection by the manufacturing industry amounted to 1.3 billion euros (75.9% of total industry), of which 1/5 was associated with "Food, beverages and tobacco industries". The industry of "Electricity, gas and water" spent, between 2010 and 2014, 20% of the total expenditure. Ensuring public water supply to the population, promoting the sustainability of the resource "water", diversifying sources of primary energy, limiting emissions of Greenhouse Effect Gases (GHG) and promoting competitiveness are some of the guidelines in this sector that justify the significant amount spent on monitoring activities and environmental protection.

The third industry sector with more spending for prevention and treatment of pollution varied over the period under analysis. In 2010 the expenditure of "Oil industries" accounted for 10.4% of the total expenditure. In 2011, it were the "Chemical and pharmaceutical industries" which occupied this position. In 2012 and 2013 the "Chemical and pharmaceutical industries" gave way to "Industries of non-metallic mineral products" while in 2014, "Pulp, paper and cardboard; printing and reproduction industries" accounted for 9.8% of the total expenditure.

The portuguese industry spent 72 million euros to improve air quality, 74 million euros in the wastewater management and treatment, 114 million euros in waste management and 64 million euros in other areas

In 2014, changes to the industrial processes on the adaptation of facilities or processes to reduce environmental pollution through waste, as well as its collection and disposal cost the industry 114 million euros.

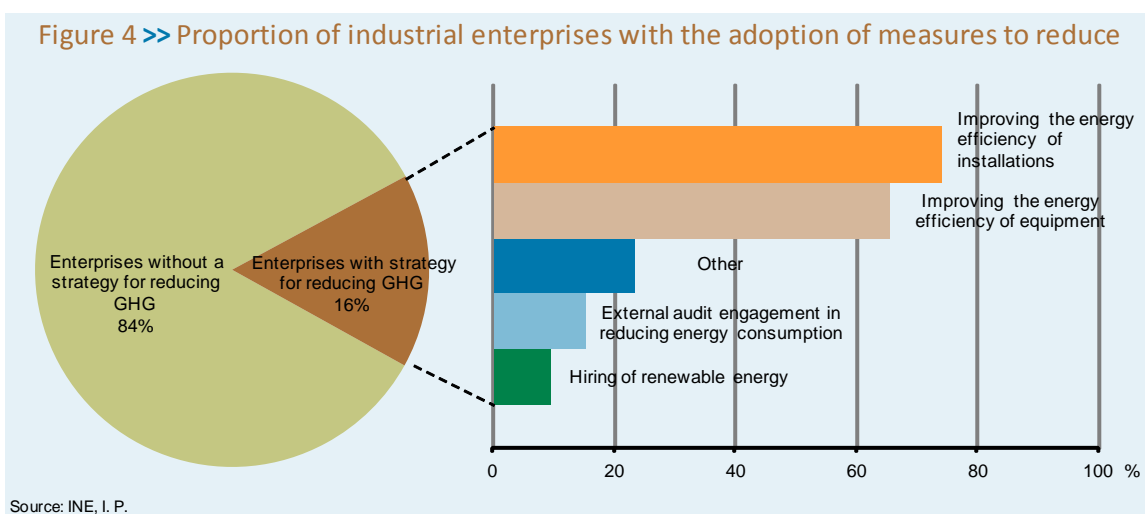
Figure 3 >> Industrial enterprises expenditure in environmental management and protection activities by environmental domains



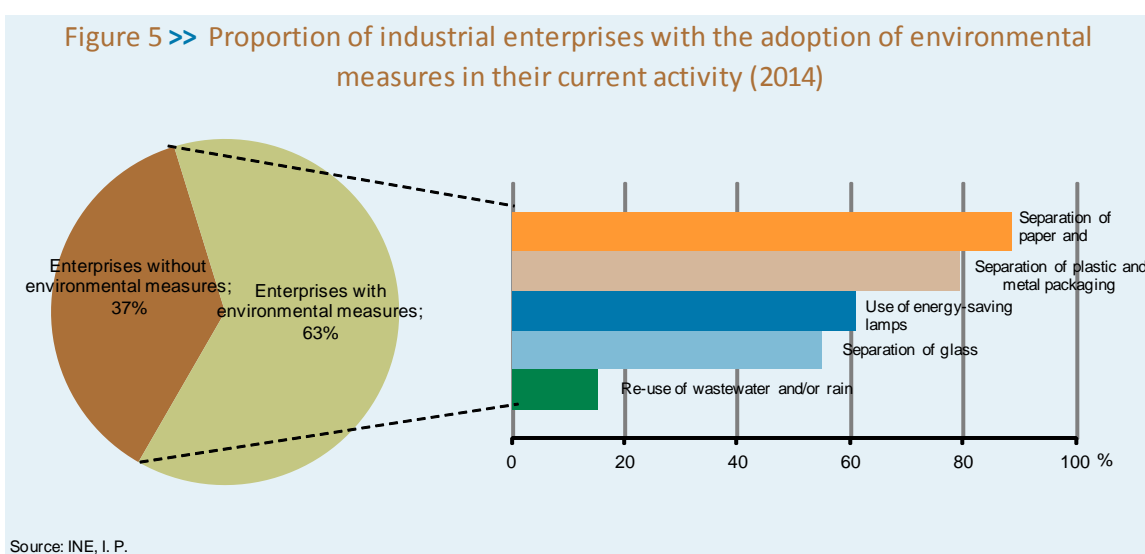
The adoption of water pollution abatement measures, treatment of wastewater and the purchase of equipment to evacuate the wastewater from its production point to the treatment plant or to the point where they are leaked, corresponded to 22.9 % of total expenditure. Measures to reduce air pollution cost about 72 million euros, 22.2% of the total.

Less than 7% of the industrial enterprises had environmental certification in 2014

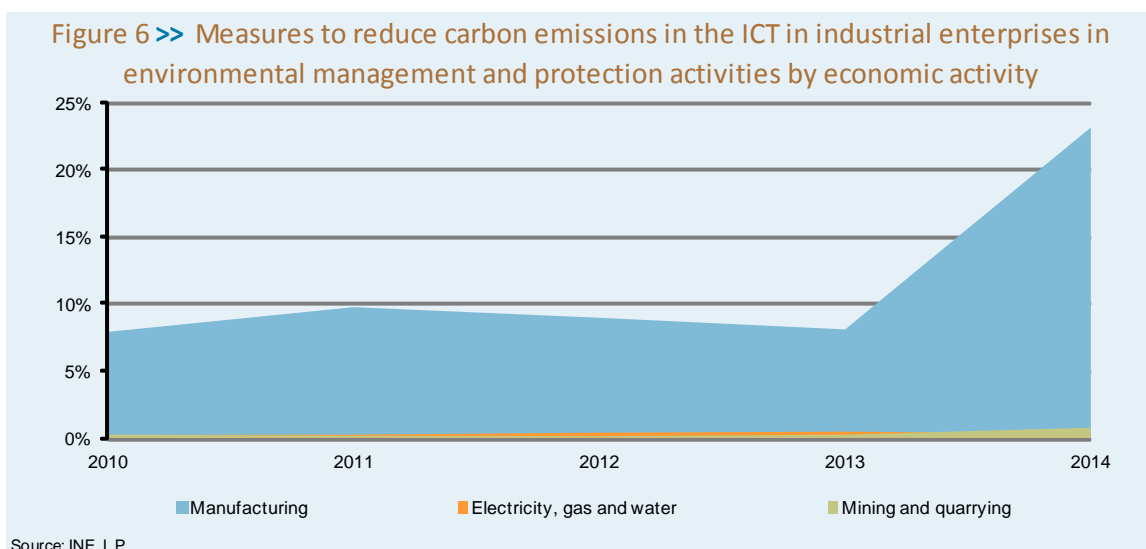
The dimension of the environmental commitment in enterprises may also be assessed through the adherence to various environmental management tools available, such as EMAS and ISO 14 001, which aim to ensure an effective environmental management and improve the environmental performance. In 2014, only 6.7% of enterprises (3.7% in 2013) had some kind of environmental certification. Despite the poor adherence to integrated environmental management systems, industries showed some *ad hoc* initiatives to mitigate environmental impacts caused by its activity.



In 2014, 15.9% of industrial enterprises adopted several strategies to reduce GHG. The most common were the implementation of measures to improve the energy efficiency of installations and equipment. Together summed up to about 74% of total GHG reduction measures implemented by the industry.



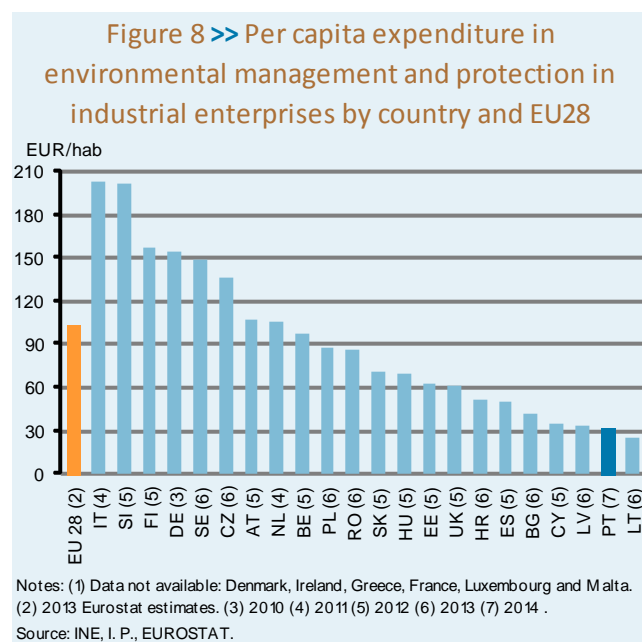
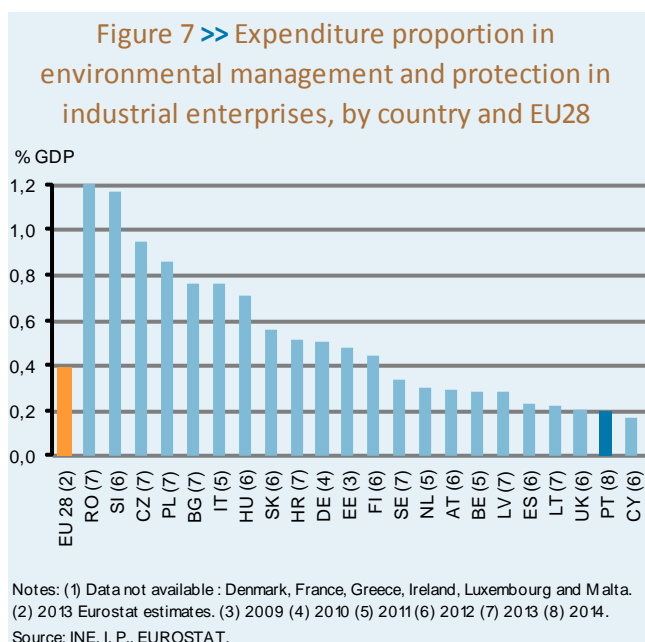
As part of its current activity, most industrial enterprises have already adopted several environmental measures. In 2014, the proportion of enterprises that adhered to such practices amounted to 63% of the total, of which, about 75% consisted in the selective separation of paper and cardboard, packaging and glass.



The collection and recycling of consumables of Information and Communication Technologies (ICT) associated with management policies of the respective equipments is also a concern for the industrial enterprises, where in 2014, 24.2% of the total adhered to such practices.

The environmental expenditure of national industrial enterprises corresponded to 0.19% of GDP and 31.1 euros/inhabitant year, which places Portugal in a modest position comparing with other Member States of the EU28

Using the GDP in volume as a reference, it is found that the majority of the Member States industry enterprises expend an amount for environmental protection ranging from 0.4% to 1.2% of their respective GDP. Portugal is in the last positions of the ranking, with less than 0.2 p.p. comparing with the average of the EU28.



The picture does not change when considering the expenditure of the EU28 industry per capita. The national industry spent an amount of environmental protection corresponding to 31.1 euros/inhabitant year, less than 1/3 of the EU28 average (101.9 euros/inhabitant year) and less than 1/6 of Italy (201.9 euros/inhabitant year). Only Lithuania had a lower indicator than Portugal (25.2 euros/inhabitant year).

Technical Sheet:

The "Survey for Enterprises in Environmental Management and Protection" (IEGPA) is an annual survey conducted via web and occasionally via postal service, a sample of enterprises whose economic activity is included in the economic sectors corresponding to the following sections of CAE Rev. 3: B - Mining and quarrying; C - Manufacturing, D - Electricity, gas, steam, hot and cold water and cold air and E - Water supply; sewerage, waste management and remediation activities, only the division Water collection, treatment and supply.

Concepts

Eco-Management and Audit Scheme (EMAS): voluntary participation instrument which has as main objectives the promotion of continuous improvement of the overall environmental performance of an organization through the design and implementation of an Environmental Management System, as well as a systematic, objective and periodic performance evaluation of that system and to provide relevant information for the public and other interested parties, through the publication of the Environmental Statement.

Classification of Activities and Environmental Protection and expenditure

Domain 1 - Protection of Ambient Air and Climate

It comprises all activities related to production processes, the activities related to construction, maintenance and repair of facilities, whose main objectives are air pollution reduction, as well as measurement activities and control of gas emissions which affect the ozone layer. It also includes the equipment to eliminate/reduce particles or substances which pollute the atmosphere from fuel combustion, such as filters, dedusting equipment and other techniques, as well as activities that increase the dispersion of gases in order to reduce the concentration of air pollutants.

Domain 2 - Wastewater Management

It comprises modifications in production processes, adaptation of facilities or processes destined to reduce water pollution. It is also included the collecting systems, pipes, conduits and pumps destined to evacuate the waste water from its point of production to the treatment plant, or to the point where they are evacuated, as well as the treatment of cooling waters.

Domain 3 - Waste Management

It comprises the changes in production processes and adaptation of facilities or processes in order to reduce environmental pollution through waste. It is also included the waste collection activities by municipal services or similar institutions, whether by companies in the public or private sector, specialized companies or public administration, as well as the transport of waste to treatment centers or disposal. The collection of municipal waste can be selective (made in a specific way, for such given product), or undifferentiated (covering all waste), not including cleaning services (debris removal) in the winter period. It is also considered the disposal of toxic waste activities (physicochemical, thermal, biological, and radioactive) as well as non-toxic waste (physicochemical treatment, incineration, biological treatment or any other type of treatment).

Domains 4 to 9 - Consult publication "Survey for Enterprises in Environmental Management and Protection 2014".