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**Environment Statistics** 

Waste Statistics 2014

# Apparent labour productivity and investment rates higher than the total of non-financial societies characterized the business sector of waste

In 2014 the business sector of waste employed nearly 14 000 people (a thousand less than in 2010) and reached a turnover of 1,5 billion euros. Consisting mainly of private societies or equivalent, these companies reported between 2010 and 2014 apparent labour productivity and investment rates higher than the total of non-financial societies.

In terms of economic performance, there has been a contraction of activity expressed by significant decreases in the GVA, employment and investment.

On the contrary, the financial performance indicators of these societies improved with the degree of financial autonomy increasing and the level of debt decreasing.

The transactions in the international market of recyclable materials (plastic, glass and paper and cardboard) tended to a stabilization of average trading prices and, with the exception for paper and cardboard, for a lower price volatility.

The comparison of Greenhouse Gases emissions, from the waste sector between 1990 and 2013, places Portugal in the group of Member States which decreased the emissions from waste, but at the lowest pace of reduction.

INE releases the publication "Waste Statistics 2014" as a statistical analysis of the sector taking into account the characteristics of societies and infrastructures associated with waste collection. It also presents the evolution of the sector's performance against national targets and a comparison with the EU28.

This dissemination occurs simultaneously with the publication "<u>Environmental</u> management and protection in industrial enterprises 2014".





#### **CHARACTERIZATION OF THE BUSINESS SECTOR OF WASTE**

In the period 2010-2014 the waste sector societies were characterized by presenting apparent labor productivity and investment rates higher than the average of non-financial societies and a clear predominance of male labour force.

With 805 companies operating in 2014, the waste sector accounted for 0.2%, 0.5% and 0.6%, respectively, for the number of companies, employment and GVA, as proportion of the total non-financial societies. The size of these companies, measured through the ratio of the number of persons employed by the number of companies, reached an average of 19,1 workers per production unit in the five years period analysis, almost 3 times above the average of the total of non-financial societies. This distribution was symmetrical over the period under analysis with the average value very close to the median.

Comprised mainly by private societies or similar, these production units employed about 14 thousand people (less 1 000 people than in 2010) and generated a turnover around 1,5 billion euros (annual average variation rate of -3.4% in the period 2010-2014). The gross value added (GVA) exceeded 450 million euros and gross operating surplus stood at 211 million euros. These indicators developed negatively in the analysis period, recording negative variation rates more than twice the recorded for total non-financial societies.

For all five years period in analysis, this sector presented an annual average growth rate for the number of production units of 2.6%, higher than the annual average of 0.1% recorded for the total of non-financial societies. Employment in the waste sector was characterized by male labour force mainly, being the female labour force participation less than 22% in any of the years under analysis, about half the percentage observed for total non-financial societies. The annual average salary per employee in 2014 was 13 430 euros, close to the average earnings observed in the total of non-financial societies.







Chart 1 >> Economic indicators for total non financial businesses and waste sector in Portugal

Kind of businesses	Year	Enterprises			Emplo	loyment			Gross Fixed	Apparent labor	Spendin g on	Proporti on of	Invest-
		TOTAL	SME	Expor ters	TOTAL	Women	Turnover	GVA cf	Capital Formation	producti vity	staff per employe e	spending on staff on GVA cf	ment rate
		Nº	o,	<b>%</b>	Nº	%		10 <sup>3</sup> Euros		10 <sup>3</sup> Euros	/person	%	
Total non financial businesses	2014 2013 2012	362 415 355 660 354 895	99,7 99,7 99.7	- /	2 594 232 2 538 659 2 585 221	41,9 41,7 41.3	308 434 150 303 025 612 304 568 637	70 254 181 67 452 115	12 476 153 11 204 534 10 399 585	27,1 26,6 25,9	16,7 16,7 16,8	61,75 62,97	17,76 16,61
	2011 2010	360 994 360 409	99,7 99,7 99,7	5,6 5,4 4,6	2 756 157	41,3 41,0 40,4	323 719 897 329 534 148	72 597 792	15 411 168 17 824 607	26,3 27,4	16,8 16,8	64,71 59,72 61,22	15,52 21,23 23,08
Annual average change rate 2010-2014 (%)	9	0,1			-2,1		-1,6	-2,3	-8,5				
Division 38 Collection, treatment and waste disposal; M aterials recovery	2014 2013 2012 2011 2010	805 794 782 770 727	98,9 98,9 98,7 98,7 98,5	9,4 9,6 10,5 9,7 9,8	14 266 14 714 14 883 15 342 15 008	20,7 21,3 21,3 20,3 20,1	1530 437 1590 498 1772 202 1863 714 1757 177	455 553 479 582 503 383 528 452 554 253	136 363 96 963 226 045 277 626 308 377	31,9 32,6 33,8 34,4 36,9	16,8 17,2 16,5 17,1 18,0	52,73 52,62 48,92 49,64 48,75	29,93 20,22 44,91 52,54 55,64
Annual average change rate 2010-2014 (%)	е	2,6			-1,3		-3,4	-4,8	-18,5				
Proportion of division 38 non financial businesses in		0,2			0,5		0,5	0,6	1,1				

Source: INE, SCIE

GVA per person employed was higher in the waste sector societies (31,9 thousand euros, in 2014) than the recorded in the total of non-financial societies (27,1 thousand euros). Also the investment rate was higher in the waste sector societies, around 30% in 2014, when compared with nearly 18% of the total of non-financial societies.

The annual average decrease in gross fixed capital formation of the waste sector companies was around 19%, more than twice as high in absolute value to the one observed for the total of non-financial societies (-8.5%). The employment, the turnover and GVA recorded negative annual average variation rates, in line with the trend for the total of societies.

#### STRUCTURE AND FINANCIAL PERFORMANCE OF WASTE SECTOR

Chart 2 >> Economic indicators for total non financial businesses and waste sector in Portugal

Kind of businesses	Finan	cial autonom	ıy (%)	(liabilitie	Debt ratio s / own cap	ital) (%)	Return on equity (%)			
	2010	2014	Var p.p. 2010-2014	2010	2014	Var p.p. 2010-2014	2010	2014	Var p.p. 2010-2014	
Total non financial businesses	29,9	29,5	-0,40	2,3	2,4	0,1	9,80	3,35	-6,5	
Division 38 Collection, treatment and waste disposal; Materials recovery	24,4	35,6	11,2	3,1	1,8	-1,3	17,26	11,77	-5,5	

Source: INE, SCIE



In opposition to the overall financial performance of societies in the period, in which there was no improvement in the degree of financial autonomy, the waste sector, despite the turnover reduction, showed a significant improvement of its financial autonomy from 24.4% in 2010 to 35.6% in 2014.

Also related to the debt ratio, the waste industry has improved substantially over the period, presenting in 2014 a liability 1,8 times the equity (in 2010 this ratio was 3.1) while for the total of societies this indicator was almost 2.5 times higher. This relative evolution reflected, in part, the most significant contraction in gross fixed capital formation (GFCF) observed in the sector.

The return on equity decreased for the total of societies and the waste sector in the analysis period. However, the profitability of the waste sector was clearly greater than the total of societies (about 3.5 times higher than in 2014, when in 2010 was of 1.8).

#### MAIN ECONOMIC INDICATORS OF BUSINESS ACTIVITY OF WASTE AT GROUP LEVEL

The three main groups of activities which encompass the division 38 of Statistical Classification of Economic Activity (CAE Rev. 3) have different ratios and also showed different behaviors in the analysis period.

Material recovery companies increased the rate of investment and the number of active units between 2010 and 2014. On average 12% of companies have an exporting profile.

Of the three economic activities that compose the waste sector, material recovery (group 383 of CAE Rev.3) has been the one that over the years comprehend more companies (55.7% in 2014) and has the highest proportion of companies with exporting profile, about 12%. In the analysis period this was the only branch of the three economic activities in the waste sector that increased the investment rate (about 19 p.p.) and the one in which the number of companies increased. Nevertheless recorded decreases on employment and GVA.





Figura 3 >> Economic indicators for total non financial businesses and waste sector in Portugal

Kind of business		Enterprises		Emplo	Emplo yment		GVA cf	Gross Fixed	Apparent labor	Spending on staff	Proportio n of spending	Invest- ment	
	Year	TOTAL	SME	Export ers	TOTAL	Women	Turnover	GVA cf	Capital Formation	productiv ity	per employee	on staff on GVA cf	rate
		Nº		%	Nº	%		10 <sup>3</sup> Euro	S	10 <sup>3</sup> Euro	s/pessoa	%	
381	2014 2013	252 244	98,8 99,2	6,7 8,2	6 123 6 035	16,2 16,7	346 954 344 254	144 358 141836	15 414	23,6 23,5	14,8 15,2	62,62 64,56	17,04 10,87
Waste collection	2012 2011 2010	249 246 223	98,8 98,8 98,7	9,6 8,5 8,1	5 851 6 186 6 179	17,0 16,8 16,9	351373 363 031 363 338	141942 143 927 155 968	20 897 34 987 36 247	24,3 23,3 25,2	15,1 15,4 16,1	66,26	14,72 24,31 23,24
Annual average change r 2010-2014 (%)	ate	3,1			-0,2		-1,1	-1,9	-9,2				
Proportion of 381 in tot (Waste Sector) in 2014		31,3			42,9		22,7	31,7	18,0				
382 Waste treatment and disposal	2014 2013 2012 2011 2010	107 113 109 108 104	95,3 94,7 94,5 94,4 93.3	7,5 5,3 4,6 3,7 3.8	4 848 5 223 5 438 5 558 5 436	22,9 22,2 22,3 21,0 20,3	503 723 498 226 495 957 525 545 547 752	212 743 237 834 243 235 253 022 259 181		43,9 45,5 44,7 45,5 47,7	19,7 20,0 18,5 19,6 20,9	44,95 43,96 41,34 42,95 43,79	29,03 20,17 71,17 76,00 87,75
Annual average change r 2010-2014 (%)		0,7	00,0	0,0	-2,8	20,0	-2,1	-4,8	-27,8	17,1	20,0	43,79	01,13
Proportion of 382 in to (Waste Sector) in 2014		13,3			34,0		32,9	46,7	45,3				
383 Waste recovery	2014 2013 2012 2011 2010	446 437 424 416 400	99,8 99,8 99,8 99,8	11,4 11,4 12,5 12,0 12,3	3 295 3 456 3 594 3 598 3 393	25,8 28,0 26,9 25,3 25,6	679 760 748 018 924 872 975 138 846 087	98 452 99 912 118 207 131503 139 104	33 588 32 041	29,9 28,9 32,9 36,5 41,0	16,4 16,3 15,9 16,2 16,8	55,04 56,32 48,42 44,30 41,06	50,78 33,62 27,11 38,28 32,13
Annual average change r 2010-2014 (%)	rate	2,8	,	,	-0,7	·	-5,3	-8,3	2,8	·	,	,,,,	- ,.0
Proportion of 383 in to (Waste Sector) in 2014		55,4			23,1		44,4	21,6	36,7				

Fonte: INE. SCIE

The increase in the investment had an impact on the amount of recovered waste. The recovery of municipal waste (MW) grew at an annual average rate of 3.7% and the proportion of sectoral waste sent for recycling increased from 71% in 2010 up to 80% in 2014.

# Societies with treatment and disposal activities with the highest apparent labor productivity and net investment levels.

Waste treatment and disposal activities (group 382 of CAE Rev.3) stood out with highest proportion of GVA and net investment generated in 2014, 46.7% and 45.3%, respectively. Throughout the analysis period, this activity also has a higher proportion of large companies (about 6% to the average of the five years period), with the highest labour productivity levels and spending on employment per capita, respectively, 43,9 and 19,7 thousand euros per capita in 2014. With almost 50% (46.7% in 2014) of the total GVA of the three economic activities, the waste treatment and disposal activities have a a preponderance which is due by the fact that the landfill of waste is still the major method used to the disposal of MW in Portugal (49% in 2014).



Companies with waste collection service activities are the main employers in the waste sector.

The waste collection activity (group 381 of CAE Rev.3) was the one that in 2014 took the largest share of employment in total waste sector (42.9%) and also the one that has shown over the years the most representativity of expenses with personnel in GVA, 63% in 2014. The level of remuneration by employee, reached 12 071 euros in 2014, almost 1 400 euros below the sector average, reflecting the relatively less qualified degree of personnel.

Between 2010 and 2014 the cost of municipal waste management (MWM) increased 8.94 euros/t due to higher capital expenditures and lower quantities of MW received.

The MW management in Portugal is provided by 23 MW management systems (SGRU), 12 multimunicipal, 11 intermunicipal and it results mainly of the waste generated by households and small businesses. There is a great heterogeneity between systems regarding the number of municipalities, geography, demography and socio-economic conditions. This affects the costs associated to waste management (measured through the ratio of major expenses of the managing entities of MW management systems and the amounts of municipal waste) which in 2014 ranged from a minimum of 34,03 euros and a maximum of 181,23 euros per tonne of waste managed. The Portugal mainland MW management systems supported on average, 71,73 euros per ton of MW operated.

Chart 4 >> Municipal waste management cost per ton of waste operated by the multimunicipal systems acting in Portugal mainland (a)

					Unit: €t
M unicipal waste management cost indicator (Total expenditure / Quantity of waste managed by the systems)	Unit	2011	2012	2013	2014
M unicipal waste management cost indicator		62,79	69,24	71,23	71,73
$\label{eq:main_expenditure} \textbf{M}  \text{ain expenditure of MW management systems (Portugal Mainland)}$	€	306 948 863	313 426 983	310 779 645	320 967 094
Tons of municipal waste managed by the M W management systems in Portugal M ainland	t	4 888 485	4 526 449	4 362 980	4 474 942

Source: INE, I.P.

 $\hbox{(a) Total main expenditure/Tons of municipal waste operated by the municipal waste management systems}\\$ 

The indicator of waste management cost (SGRU in the mainland) recorded between 2011 and 2014, an absolute increase of 8,94 euros per tonne of managed waste, representing an increase of 14.2%. In this period there was a reduction in the quantities of waste managed by the systems (-8.5% between 2011 and 2014). The expenses, although with a slight decrease between 2012 and 2013, sum up 320,9 million euros in 2014, about 21 million above the amount accounted in 2011 (306,9 million euros).

The increase in waste management costs were due, in part, to an increase of investments in the organic recovery plants and an improvement of multimaterial selective collection of waste, as the result of new EU requirements which result in increasing operating costs and investment efforts.





# **Specific waste streams**

Management entities (ME) of specific waste streams are comprised of non-profit, non-financial corporations, duly licensed, to manage integrated systems created for the organized management of specific waste streams (packaging, tires, mineral oils, electrical and electronic equipments, end of life vehicles, batteries and accumulators). Over the analysis period, the turnover of these entities was mainly generated by services, with emphasis on financial performance - Ecovalor - paid by producers for each product placed on the market, to meet the several generic costs and specific allocation of waste management from each stream. The Ecovalor charged by the ME has been decreasing since 2010, showing a slight recovery in 2014, in line with the turnover trend.

Chart 5 >> Average cost per ton of waste recovery by specific flows

Specific flows of waste	2010	2011	2012	2013	2014
Specific flows of waste			EUR/t		
Packaging	112	102	106	111	97
Used mineral lubricants	258	264	268	350	377
Used tires	113	107	110	115	104
Electrical and electronic equipment	442	536	448	295	232
Batteries and accumulators	63	59	51	61	58
End of life vehicles	3	7	4	3	4

Source: APA LP

In 2014, the average cost per tonne of recovered waste from each waste stream ranged from 377 euros for mineral oils and 4 euros for end-of-life vehicles. Over the analysis period, the average cost of valued packaging fell from 112 euros in 2010 to 97 euros in 2014, reflecting an annual average change of -3.5%. The electrical and electronic equipment waste stream showed the largest negative annual average change (-14.9%) reflecting the combined effect of the decrease in total spending (average annual change rate of -11.6%) and the annual average increase of 3.5% for the amount of recovered waste of this stream.

#### INTERNATIONAL TRANSACTIONS OF RECYCLABLE MATERIALS

Generally, the average prices for transactions of recyclable materials (glass, plastic, paper and cardboard) tended to stabilize in recent years and the traded quantities of glass and plastic increased signficantly compared to modest variations in traded quantities of recyclable paper and cardboard.

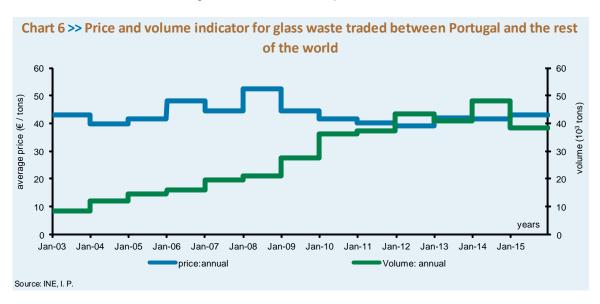
Over the analyzed period (2003 to 2015), it is possible to identify two distinct evolution phases in the glass waste transactions in the international market. Until 2008 it was possible to observe a growth trend in the average price which increased from 43 euros/t in 2003 up to 53 euros/t, despite some price volatility. Alongside the rise in the average price during this period, it was also possible to see a progressive increase in trading volumes of waste glass, related to the commercial incentive given by the price increase and a greater availability of this material as a result of increased separation of glass waste for recovery. Between 2003 and 2008, the quantity of separate municipal waste glass for 7/12 Environment Statistics - Waste Statistics - 2014





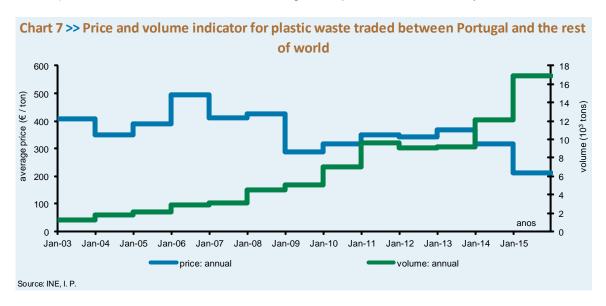


multimaterial recovery has almost doubled (1.9 times), with an annual average growth rate of 13.4% compared with an average annual increase of 19.8% of the traded quantities of waste glass. After 2008 there has been a significant price decrease, coupled with the global economic crisis and pointed as a cause for this downward trend in prices which continued into the following four years, despite a slight price increase over the last two years. A special highlight in the the sustainabled and continuous increase in monthly average amounts traded over the period, except in 2015 with a decrease of 19.1% in the volume of waste glass traded when compared to 2014.



In what concerns the price volatility per tonne of waste glass traded, it is noted that in the first six years of the analysis period (2003-2008) for an average price of 45 euros/t was calculated a corresponding standard deviation of 5 euros/t. From 2009 to 2015 both indicators registered decreases, reaching an average price of 42 euros/t with the respective standard deviation reducing to 2 euros/t, showing a smaller price variation.

Portugal exported, in annual average terms, about 1.85% of waste glass separated for recovery operations (municipal and sectoral waste), a total of 108 thousand tons of waste glass exported in those seven years.



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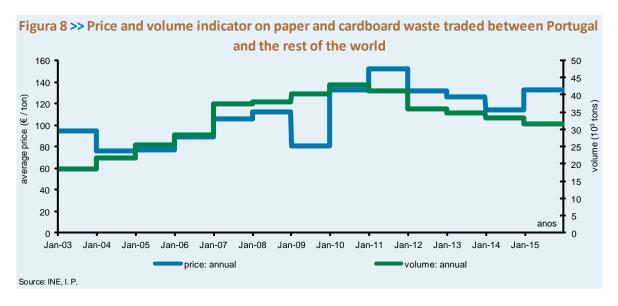


Plastic, although in a different order of magnitude, presented a similar evolution as the one verified for glass.

In the first six years of the series (2003-2008), the annual average price was of 413 euros/t with a standard deviation of 47 euros/t. In 2006 it reached the value of 493 euros/t, the maximum recorded in the series under analysis.

In 2009 started a new stage of evolution of the average price for traded plastic waste, , decreasing from 425 euros/t in 2008 (second highest year of the series and the starting year of the international financial crisis) to 290 euros/t in 2009.

In the period comprised between 2009 and 2015, the average is reduced to 314 euros/t of transacted plastic waste with a standard deviation of 52 euros/t, meaning major differences and significant volatility of the price.



Paper and cardboard presented a different variation pattern when comparing with the two previous materials. A similarity in the evolutionary trend of prices and traded volumes, without the price volatility in the first half of the time series that was obvious for the two previous materials.

In the times series analysis 2009 should be highlighted as the year where the average price of paper and cardboard records a significant downward trend compared to 2008 and previous years, decreasing from 112 euros/t to 81 euros/t, despite a slight increase in the monthly average volumes traded that year.

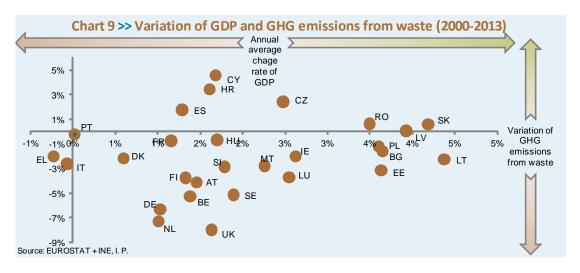
In terms of international trade price volatility of waste paper and cardboard, it is also verified a different situation comparing with the two materials above. The waste paper and cardboard shows an higher price volatility in the second half of the time series.

In the first six years of the series (2003-2008) it is registered an average price of 92 euros/t with a standard deviation of 15 euros/t. In the second half of the series, the average prices of traded waste paper and cardboard reached 125 euros/t with the standard deviation increasing up to 22 euros/t.

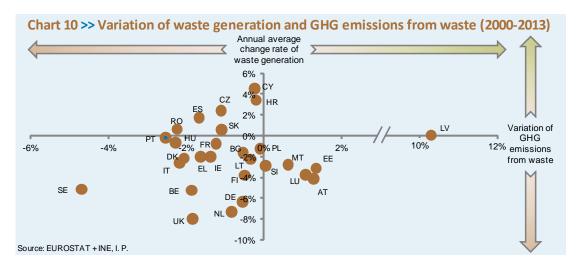
In the period comprised between 2008 and 2014, Portugal exported on average about 39.3% of paper and cardboard wastes, which were recorded as having been managed separately for multimaterial recovery operations (municipal and sectoral waste), totaling in the last seven years, 3 million tonnes of material sent to the rest of the world.



Between 1990 and 2013, Portugal was the Member State with the minimal positive GDP growth (+ 0.3%) and the lowest decrease in the generation of emissions from the waste sector.



With a direct emission of Greenhouse Gases in 2013 of 7 602,6 kt CO2 eq. the emissions from the waste sector evolved between1990 and 2013 at an annual average growth rate of 0.8%. Also, in relative terms, there was an increase in the importance of the emissions from this sector (9.9% in 1990 to 13.6% in 2013) as a result of the absolute increase in emissions and emission reduction from other emitting sectors. In EU28, GDP grew in almost every Member State (the exceptions were Greece and Italy, where the annual average variation rates were, respectively, -0.2% and -0.1%). Portugal had in this period an annual average variation rate of zero. For the same period, almost every Member State decreased its GHG emissions from the waste sector. Portugal is included in this group, but with the smallest reduction in emission levels (average annual growth rate of -0.2%).



A cross-analysis with the annual average rate of the amounts of generated waste, by MS, shows good environmental performance by the two MS which generate the most waste in EU28. Germany with an average of 21% of the total waste generated by EU28, presented an average annual reduction of emissions from the waste sector eleven times higher than the average annual reduction of generated waste. United Kingdom reveals identical trend (in the analysis period, generated on average 14.1% of the total waste of EU28) with annual average emission reductions almost five

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times higher than the average reduction in waste generation. Spain, on the contrary, corresponding on average to 7% of the waste generated in the EU28, decreased the amount of generated waste at an annual average rate of 1.7% and at the same time show an annual average change rate of emissions increasing in the same order of magnitude (+ 1.7%). With the exception of Sweden, Portugal was the MS which reduced more in the waste generation, but without a corresponding magnitude in the reduction of emissions.

# Em resumo:

#### Setor empresarial dos resíduos:

Mais de 98,5% das empresas do setor dos resíduos são PME

Em cinco anos o setor perdeu mais de 1 000 trabalhadores (14% da mão-de-obra de 2014)

Os valores de faturação e os excedentes brutos de exploração apresentaram no período 2010-2015 taxas médias de variação anual negativas e mais de duas vezes superiores em valor absoluto ao total das sociedades não financeiras

A percentagem de mulheres ao serviço é metade da verificada para o total das sociedades não financeiras

A produtividade aparente do trabalho e a taxa de investimento são mais elevados no setor dos resíduos comparativamente ao total das sociedades não financeiras

A autonomia financeira é maior e o endividamento é menor face ao total das sociedades não financeiras

A rentabilidade de capitais próprios é 3,5 vezes superior ao total das sociedades não financeiras

# Atividade de valorização de resíduos:

É a que concentra maior número de empresas (55,7% em 2014)

É a que apresenta maior proporção de empresas com perfil exportador (média de 12% para 2010-2014)

Foi a única atividade do setor dos resíduos cuja taxa de investimento aumentou entre 2010 e 2014 (cerca de 19 p.p.)

# Atividade de tratamento e eliminação de resíduos:

É a que apresenta maior representatividade em termos de VAB e investimento líquido gerados em 2014

É a que detém maior proporção de grandes empresas (6% em média no período 2010-2014)

É a que apresenta maiores níveis de produtividade do trabalho e de gastos com o pessoal por pessoa ao serviço

#### Atividade de recolha de resíduos:

É a principal empregadora (42,9% do total do pessoal ao serviço neste setor em 2014)

É a que apresenta menor nível de remunerações por pessoal remunerado (menos 1 400 euros que a remuneração média do setor em 2014)

# A geração de resíduos e as emissões resultantes:

Portugal, à exceção da Suécia, foi o EM em que a geração de resíduos mais diminuiu

A crise económica e financeira terá sido a principal causa de diminuição da geração de resíduos pois o impacto nas emissões provenientes deste setor foi marginal







#### **Economic Activity**

Result for the combination of production factors (labour, raw materials, equipment, etc.), for the production of goods and services. Regardless of the production factors integrating the good or service produced, all activity requires, in general, an input of products (goods or services), a process of incorporation of added value and an output (goods or services).

#### **Financial Autonomy**

Expresses the global financial autonomy of an enterprise indicating to what extent the total assets are financed by capital's own the shareholders's own capital / partners of the company. (Equity / total assets)

#### **Indebtedness**

Reflects the participation of external capital in the enterprise's financing. (Total liabilities / total assets)

#### **Gross Operating Surplus (GOS)**

It is the difference between, on the one hand, the gross value added and on the other, expenses on staff and taxes net of product subsidies. Synthesizes all the value affected to the remuneration of the capital factor.

#### **Gross Capital Formation (GCF)**

Corresponds to the net acquisitions of disposals of fixed assets during the period. Fixed assets ar etangible fixed or intangible fixed resulting from production processes that are themselves used repeatedly or continuously in the production process for more than one year.

# Micro, small and medium enterprises (MSME)

Enterprises that employ less than 250 persons and whose annual turnover does not exceed 50 million euros or whose total annual balance sheet does not exceed 43 million euros.

# Weight of expenses on service personnel in GVA at market prices

It corresponds to the ratio of the total expenses on service personnel and GVA at market prices, and indicates the portion of the value created for which is intended to remunerate the labour factor. (Service personnel expenses / GVA at market prices \* 100).

# **Service Personnel**

Individuals who, in the reference period, participated in the company/institution activity, regardless of the duration of this participation, under the following conditions: a) staff bound to the enterprise / institution by an employment contract, receiving a remuneration; b) staff bound to the enterprise / institution, which, not being bound by an employment contract, does not receive regular remuneration for time worked or work provided (eg. owner-managers, family members without remuneration, active members of cooperatives); c) personnel with ties to other enterprises / institutions that have worked in the enterprise/ institution being directly paid by the latter; (d) persons in the above situations, temporarily absent for a period not less than one month for vacations, work conflict, professional training, as well as disease and work accident. Are not considered as service personnel who: i) meet the conditions described in a), b) and c) and are temporarily absent for a period exceeding one month; ii) workers with ties to the enterprise / institution moved to other enterprises / institutions being directly paid by the latter; iii) the employees working in the enterprise / institution and whose remuneration is supported by other enterprises / institutions (eg. temporary workers); iv) self-employed workers (eg. service providers, also known as "green receipts").

#### Paid staff

Individuals who perform an activity in the enterprise / institution in terms of an employment contract, subject or not to a writing form, giving them the right to a regular payment in cash and / or in kind. It includes employees of other enterprises that are working in the observed enterprise / institution being directly paid by it, but keeping the link to the enterprise / institution of origin. Excludes employees of other enterprises who are working in the observed enterprise / institution, being paid by the enterprise / institution of origin while keeping the employment contract.

#### Apparent labour productivity

It is the contribution of labour used by the enterprise, measured by GVA generated by each individual unit of service personnel. (GVA at factor cost of service personnel / personnel expenses \* paid staff / service personnel \* 100).

#### **Exporting company**

In this publication it were considered as exporting, only companies that export goods or services which meet the following criteria:

Companies in which at least 50% of turnover is from exports of goods or services, or;

Companies in which at least 10% of turnover is from exports of goods or services and the value of exported goods or services exceeds 150 000 €.

### **Investment rate**

Represents the weight of gross fixed capital formation related to gross value added (gross fixed capital formation / GVA at factor cost \* 100).

#### <u>Turnover</u>

Net value of sales and provision of services relating to the normal enterprise activities, after reductions in sales and not including the value-added tax nor other taxes directly related to sales and services. Corresponds to the sum of accounts 71 and 72 of Accounting Standards System (CNS).