

The high and medium-high technology sector generated 95,412 jobs, 8.7% of people employed in the Basque Country in 2021

This sector spent 73.2% of total internal expenditure on R&D and accounted for 44.4% of companies that carried out R&D

The high and medium-high technology sector (HTS) generated 95,412 jobs during 2021, 8.7% of total jobs in the Basque Country, following growth of 1.8%, according to Eustat data. The number of companies carrying out these activities was 5,033, with a total turnover of 21,812 million euros. This sector, which covers all activities with a sound technological base and a fast renewal of knowledge, contributed 8.6% of the total gross value added of the Basque economy.

As regards the high and medium-high technology sector in Spain, the Basque Country accounts for 5.4% of companies and generates 7.9% of its GVA. If we only take into account the manufacturing industry, the weight of this sector is greater, accounting for 7.1% of companies and 10.2% of value added.

Main magnitudes from the high technology sector in the Basque Country by province and economic activity (thousands of euros). 2021

	Enterprises (1)	Turnover	Gross value added cf	Jobs
High and medium-high-tech sector	5.033	21.812.167	6.727.658	95.412
Province				
Araba / Álava	734	6.280.969	1.119.141	16.205
Bizkaia	2.650	6.979.365	2.748.184	37.729
Gipuzkoa	1.791	8.551.833	2.860.333	41.478
High- and medium-high-tech manufacturing industry	1.495	18.362.853	4.719.451	64.821
High technology	183	2.151.948	766.072	10.149
Medium-high technology	1.312	16.210.905	3.953.379	54.672
High-tech or state-of-the-art services	3.538	3.449.314	2.008.207	30.591

(1) The territorial sum of the number of companies may not match the total

They have been counted once in each historical territory in which they have activity and only once in the total of the C.A. from Euskadi

Date August 30, 2023

Source: Eustat. High technology scoreboard

Compared to the previous tax year, all the key figures improved. Thus, both the number of companies and the number of jobs rose by 1.8%, turnover increased by 10.0% and value added by 5.3%, resulting in an average size in 2021 in companies dedicated to this activity of 19 people employed.

13.1% of companies in the high and medium-high technology sector carried out R&D activities, a percentage that is far higher than the total for all sectors (1.0%). Furthermore, this sector, representing 3.3% of total companies, accounted for 44.4% of those undertaking R&D in the commercial sector and, with 934.0 million euros, carried out 73.2% of the total expenditure on internal R&D in the commercial sector.

With regards to people working in R&D in this sector, it should be pointed out that in 2021 there were 10,542 people employed in "full-time equivalent jobs (FTE)", 70.8% of

personnel dedicated to R&D in the commercial sector, or 50.7% if the comparison is made with personnel dedicated to these activities across all sectors. There were 3,358 women, representing 31.9%. Of the total number of personnel in full time equivalent jobs, 7,039 belonged to the category of researchers; 2,301 were women (32.7%).

Establishments and F.T.E. staff dedicated to R&D within the high technology sector in the Basque Country by province and economic activity according to occupation and sex. 2021

	Number of establishments	FTE personnel			Researchers FTE		
		Total	Women	Women %	Total	Women	Women %
TOTAL R&D	1.551	20.804,2	7.533,7	36,2	14.366,6	5.207,3	36,2
Business Sector R+D	1.483	14.887,4	4.531,2	30,4	9.763,0	3.061,0	31,4
High and medium-high-tech sector I+D	658	10.542,0	3.358,0	31,9	7.038,5	2.300,5	32,7
Province							
Araba / Alava	86	954,6	328,9	34,5	647,9	207,1	32,0
Bizkaia	268	3.788,6	1.251,8	33,0	2.700,0	887,9	32,9
Gipuzkoa	304	5.798,9	1.777,2	30,6	3.690,6	1.205,5	32,7
High- and medium-high-tech manufacturing industry R+D	319	3.732,1	851,1	22,8	2.038,6	517,7	25,4
High technology	63	1.027,1	274,4	26,7	664,5	193,9	29,2
Medium-high technology	256	2.705,0	576,7	21,3	1.374,1	323,8	23,6
High-tech or state-of-the-art services I+D	339	6.810,0	2.506,8	36,8	4.999,9	1.782,8	35,7

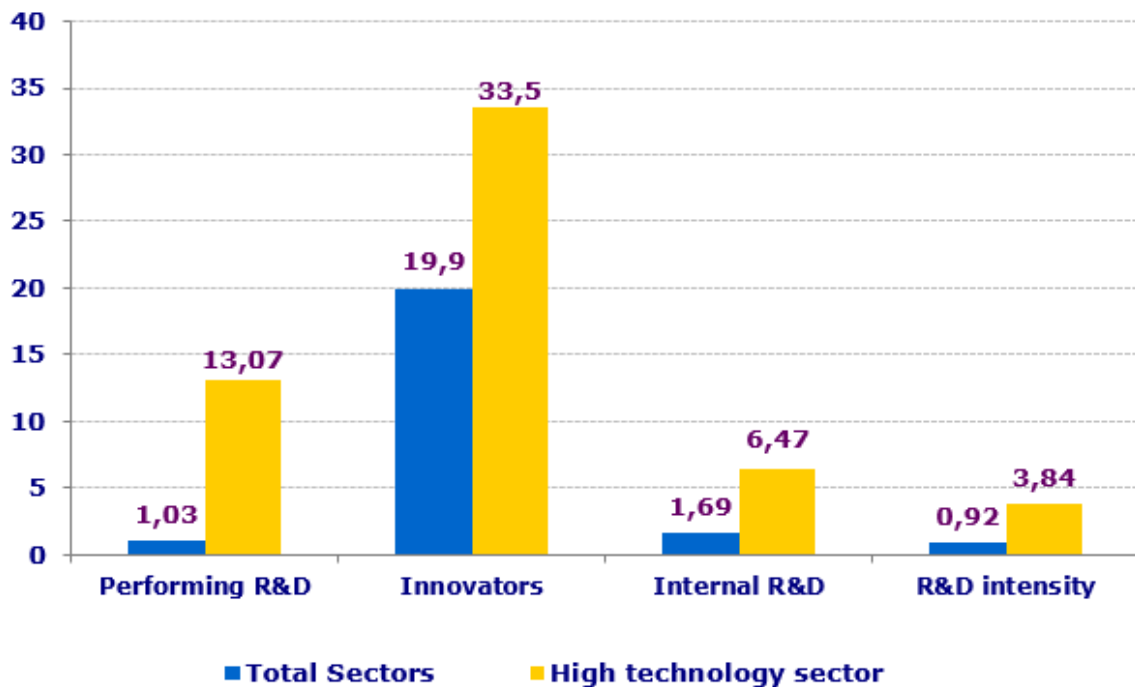
E.D.P.: Equivalent to full time

Date August 30, 2023

Source: Eustat. High technology scoreboard

Regarding innovation, as with R&D, there were significant differences between the total for all sectors and for the high and medium-high technology sector. In 2021, 33.5% of establishments in this sector were innovators compared to 19.9% of the total for all sectors. For establishments with 10 or more employees these percentages reached 55.6% in the first case and 32.6% in the second.

R&D and innovation in companies within the high technology sector and in all sectors in the Basque Country (%). 2021



Source: Eustat. High technology scoreboard

High and medium-high technology establishments spent a total of 1,654 million euros on innovation activities in 2021, more than half of the total expenditure of all sectors, specifically 54.6%. Of this expenditure, 1,531 million corresponded to establishments with 10 or more employees, which was 58.4% of the total expenditure by companies of that size on this activity.

This sector allocated a greater proportion of resources towards R&D+i and e-commerce than the average for all sectors as a whole

It was also clear that the high and medium-high technology sector allocated a greater proportion of resources towards R&D+i than the other sectors, observing the “innovation” and “internal R&D” intensity ratios, i.e. the amounts that this sector spends compared to the turnover figure. Specifically, *innovation intensity* in this sector was 6.47% compared to 1.69% for all economic sectors as a whole. In the case of internal R&D, the ratio was 3.84% for the sector and 0.92% for all the economic sectors.

Internal innovation and R&D intensity from the high technology sector in the Basque Country by province and economic activity (%). 2021

	Total		10 or more employees	
	Innovation Intensity (1)	Internal R&D Intensity (2)	Innovation Intensity (1)	Internal R&D Intensity (2)
TOTAL SECTORS	1,69	0,92	2,26	1,34
High and medium-high tech sector	6,47	3,84	6,47	4,01
Province				
Araba / Álava	2,99	1,42	3,06	1,46
Bizkaia	7,92	4,21	8,38	4,53
Gipuzkoa	6,86	4,79	6,47	4,96
High- and medium-high-tech manufacturing industry	3,31	1,75	3,34	1,81
High technology	6,54	2,86	6,21	2,92
Medium-high technology	2,66	1,53	2,77	1,59
High-tech or state-of-the-art services	19,17	12,25	21,12	14,32

(1) Innovation Intensity: (Spending on innovation/turnover)*100

(2) Internal R&D Intensity: (Spending on internal R&D/turnover)*100

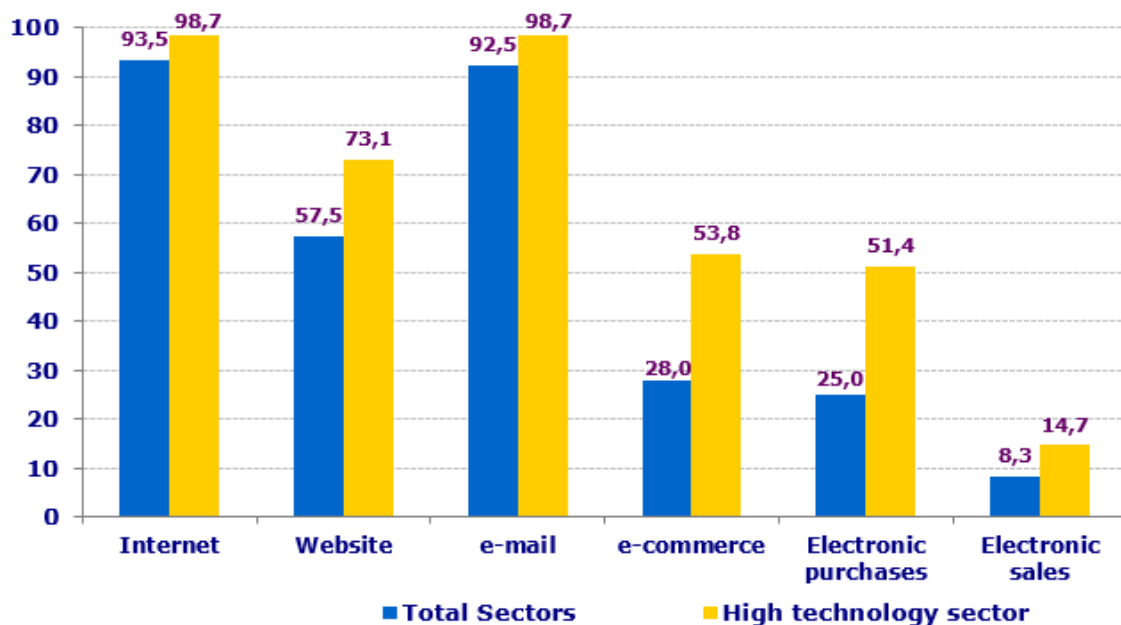
Date August 30, 2023

Source: Eustat. High technology scoreboard

Likewise, both the use of Information & Communications Technology (ICT) and e-commerce are much more widespread amongst the companies in this sector than in the total of all sectors. In 2021, 53.8% of establishments in this sector participated in e-commerce compared to 28.0% of those in all sectors as a whole.

These percentages were determined by the 51.4% of the establishments in this sector that made online purchases, compared to 25.0% of establishments that made online purchases across all sectors; and 14.7% of establishments in the technology sectors that made online sales, a figure that stood at 8.3% in the case of all sectors.

Use of ICT technologies in the Basque Country (%). 2021



Source: Eustat. High technology scoreboard

However, the impact of this sector on the foreign trade of goods was not particularly significant. Whilst exports accounted for 862.2 million euros out of a total of 26,021.9 million, imports stood at 665.0 million out of the 21,282.4 million of total imports. These figures represented 3.3% and 3.1%, respectively, out of total exports and imports.

Standing out among the most common products traded in terms of exports were: *Machinery and Mechanical Equipment* (40.1%), *Arms and Ammunition* (17.1%), *Manufacture of Aircraft and Spacecraft* (16.9%) and *Electronic material, Radio, TV, and Communications Equipment* (12.7%). Of particular note in imports were *Electronic Material, Radio, TV and Communications Equipment* (37.8%), and *Scientific Instruments* (21.0%), with none of the remaining categories reaching 10%.

Turnover in the high and medium-high technology sector increased by 24.6% since 2010

From a more long-term perspective, since 2010, this sector has continuously increased its contribution from 2015 until 2020, which was the year that marked the beginning of the COVID-19 pandemic. It recovered in 2021, until almost achieving the maximum figures obtained in 2019 as regards turnover and gross value added and obtained the highest figures of the series in respect of numbers of companies and jobs.

Since 2010, turnover in the HTS sector has been above 16,800 million euros, having exceeded 20,000 million in 2017 and reaching its record in 2019 with 22,430 million. However, in 2020 this figure dropped to 19,836 million going on to recover in 2021 with 21,812 million, 10% more than one year before and up 24.6% in respect of 2010.

For the same period, 2010-2021, the total number of employed people in HTS companies saw a rise of 3,898 people, after having been below 90,000 between 2011 and 2017. During the last year of this analysis, the total figure reached 95,412 people in employment, the highest figure of the series, exceeding that recorded in 2010 by 4.3%.

In turn, during the last 11 years the number of High and Medium-High technology companies has remained above the threshold of 4,600, with percentages out of the total of Basque companies standing around 3%, going from 2.9% in 2010 to 3.3% in 2021. In absolute numbers, this translates to 203 more HTS companies than in 2010.

Lastly, the gross value added stood at 6,728 million in 2021, 621 million more than in 2010, having always remained above 5,700 million. In this case, as in Turnover, the record was reached in 2019, with 7,011 million euros (14.8% more than in 2010).

Main magnitudes of the high-tech sector. 2010-2021

	Number of companies	Jobs	Turnover (1)	Gross value added at factor cost (1)
2021	5.033	95.412	21.812.167	6.727.658
2020	4.946	93.732	19.836.024	6.391.263
2019	4.927	94.777	22.430.228	7.010.523
2018	4.881	93.458	21.336.764	6.777.987
2017	4.789	89.710	20.306.692	6.516.869
2016	4.852	87.727	19.198.452	6.251.960
2015	4.787	85.100	17.696.422	5.989.997
2014	4.745	84.419	16.872.644	5.746.375
2013	4.718	86.571	17.085.535	5.806.417
2012	4.646	87.746	17.847.872	6.134.652
2011	4.742	89.726	18.748.825	6.373.258
2010	4.830	91.514	17.511.934	6.106.721

(1)Thousand euros

Date August 30, 2023

Source: Eustat. High technology scoreboard

Methodological note:

The sectors that belong to the high technology sector are those that, given their degree of complexity, require an ongoing research effort and a sound technological base. The activities included in this sector, according to the CNAE 2009, are listed on the [Eustat website](#). [Methodology file: The high technology statistics sector](#)

For further information:

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