

## The high and medium-high technology sector generated 9.4% of value added and nearly 99,000 jobs in the Basque Country in 2022

*With regard to Spain as a whole, it accounted for 7.8% of GVA and in the case of manufacturing industry, it represented 10.5%*

In 2022, the high and medium-high technology sector (HTS) generated 9.4% of the total gross value added of the Basque economy, according to Eustat data. This sector, which covers all activities with a sound technological base and a fast renewal of knowledge, generated 98,653 jobs, 8.8% of the total, following an increase of 3.4%. The number of companies carrying out these activities was 5,032, with a total turnover of 24,979 million euros.

As regards the high and medium-high technology sector in Spain, the Basque Country accounted for 5.3% of companies and generated 7.8% 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 10.5% of value added.

## Main magnitudes from the high technology sector in the Basque Country by province and economic activity (thousands of euros). 2022

	Enterprises (1)	Turnover	Gross value added cf	Jobs
<b>High and medium-high-tech sector</b>	<b>5.032</b>	<b>24.979.314</b>	<b>7.258.862</b>	<b>98.653</b>
<b>Province</b>				
Araba / Álava	722	7.459.086	1.234.464	16.561
Bizkaia	2.650	7.981.571	3.001.005	39.418
Gipuzkoa	1.805	9.538.657	3.023.393	42.674
<b>High- and medium-high-tech manufacturing industry</b>	<b>1.473</b>	<b>21.127.403</b>	<b>5.060.990</b>	<b>66.278</b>
High technology	180	2.559.717	865.923	10.658
Medium-high technology	1.293	18.567.686	4.195.067	55.620
<b>High-tech or state-of-the-art services</b>	<b>3.559</b>	<b>3.851.911</b>	<b>2.197.872</b>	<b>32.375</b>

(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, 2024

Source: Eustat. High technology scoreboard

Compared to the previous tax year, with the exception of the number of companies, which fell by one unit, all the key figures improved. Thus, the number of jobs rose by 3.4%, turnover increased by 14.5% and value added grew by 7.9%, resulting in an average size in 2022 in companies dedicated to this activity of 19.6 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 (1.1%). Furthermore, this sector, representing 3.4% of total companies, accounted for 44.1% of those undertaking R&D in the commercial sector and, with 1,027.8 million euros, carried out 74.2% of the total expenditure on internal R&D in the commercial sector.

With regard to people working in R&D in this sector, it should be pointed out that in 2022 there were 11,076 people employed in "full-time equivalent jobs (FTE)", 71.8% of personnel dedicated to R&D in the commercial sector, or 50.9% if the comparison is made with personnel dedicated to these activities across all sectors. There were 3,599 women, representing 32.5%. Of the total number of personnel in full time equivalent jobs, 7,414 belonged to the category of researchers; 2,432 (32.8%) were women.

## 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. 2022

	Number or establishments	FTE personnel			Researchers FTE		
		Total	Women	Women %	Total	Women	Women %
<b>TOTAL R&amp;D</b>	<b>1.567</b>	<b>21.746,2</b>	<b>8.032,5</b>	<b>36,9</b>	<b>15.230,3</b>	<b>5.524,0</b>	<b>36,3</b>
<b>Business Sector R+D</b>	<b>1.497</b>	<b>15.421,7</b>	<b>4.765,3</b>	<b>30,9</b>	<b>10.337,8</b>	<b>3.229,8</b>	<b>31,2</b>
<b>High and medium-high-tech sector I+D</b>	<b>660</b>	<b>11.076,2</b>	<b>3.598,8</b>	<b>32,5</b>	<b>7.414,2</b>	<b>2.431,7</b>	<b>32,8</b>
<b>Province</b>							
Araba / Álava	87	1.071,4	355,7	33,2	708,8	229,5	32,4
Bizkaia	269	4.023,0	1.373,0	34,1	2.869,6	957,9	33,4
Gipuzkoa	304	5.981,8	1.870,1	31,3	3.835,8	1.244,3	32,4
<b>High- and medium-high-tech manufacturing industry R+D</b>	<b>306</b>	<b>4.070,7</b>	<b>942,9</b>	<b>23,2</b>	<b>2.203,7</b>	<b>519,5</b>	<b>23,6</b>
High technology	60	1.242,2	328,1	26,4	761,3	186,6	24,5
Medium-high technology	246	2.828,5	614,8	21,7	1.442,4	332,9	23,1
<b>High-tech or state-of-the-art services I+D</b>	<b>354</b>	<b>7.005,5</b>	<b>2.655,9</b>	<b>37,9</b>	<b>5.210,5</b>	<b>1.912,2</b>	<b>36,7</b>

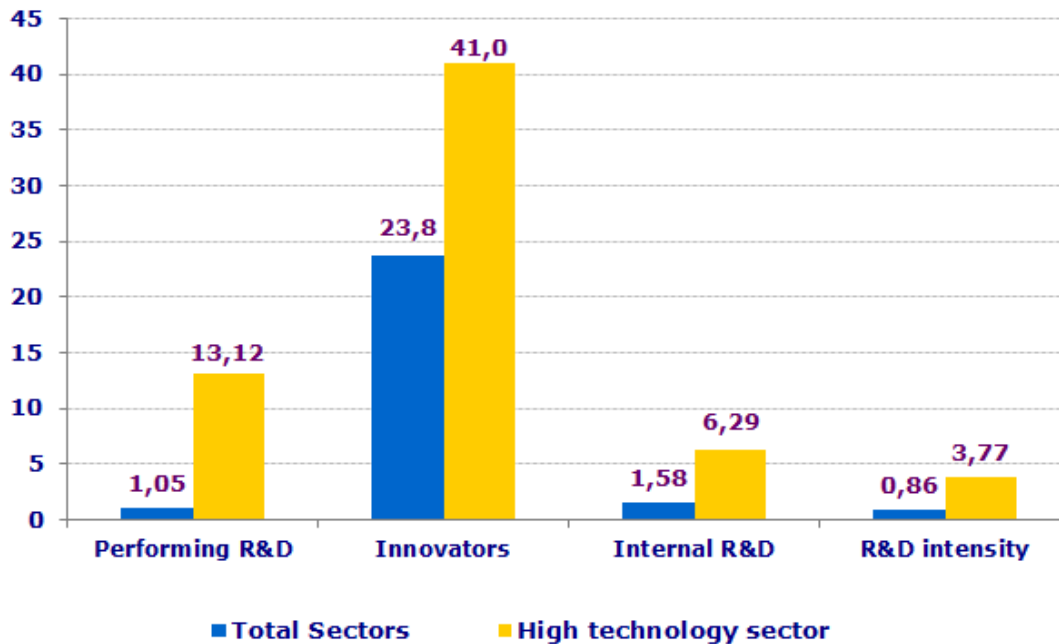
E.D.P.: Equivalent to full time

Date August 30, 2024

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 2022, 41.0% of establishments in this sector were innovators compared to 23.8% of the total for all sectors. For establishments with 10 or more employees, these percentages reached 57.0% in the first case and 35.4% in the second.

**R&D and innovation in companies within the high technology sector and in all sectors (%). 2022**



Source: Eustat. High technology scoreboard

High and medium-high technology establishments spent a total of 1,750 million euros on innovation activities in 2022, more than half of the total expenditure of all sectors, specifically 53.2%. Of this expenditure, 1,573 million corresponded to establishments with 10 or more employees, which was 54.8% 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 6.29% compared to 1.58% for all economic sectors as a whole. In the case of internal R&D, the ratio was 3.77% for the sector and 0.86% 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 (%). 2022

	Total		10 or more employees	
	Innovation Intensity (1)	Internal R&D Intensity (2)	Innovation Intensity (1)	Internal R&D Intensity (2)
<b>TOTAL SECTORS</b>	<b>1,58</b>	<b>0,86</b>	<b>2,14</b>	<b>1,25</b>
<b>High and medium-high tech sector</b>	<b>6,29</b>	<b>3,77</b>	<b>6,20</b>	<b>3,96</b>
<b>Province</b>				
Araba / Álava	4,57	1,84	4,18	1,66
Bizkaia	7,29	4,09	7,62	4,33
Gipuzkoa	6,07	4,31	5,75	4,68
<b>High- and medium-high-tech manufacturing industry</b>	<b>3,22</b>	<b>1,52</b>	<b>3,33</b>	<b>1,62</b>
High technology	6,03	2,28	6,06	2,39
Medium-high technology	2,62	1,36	2,74	1,45
<b>High-tech or state-of-the-art services</b>	<b>19,00</b>	<b>13,09</b>	<b>19,58</b>	<b>14,88</b>

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

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

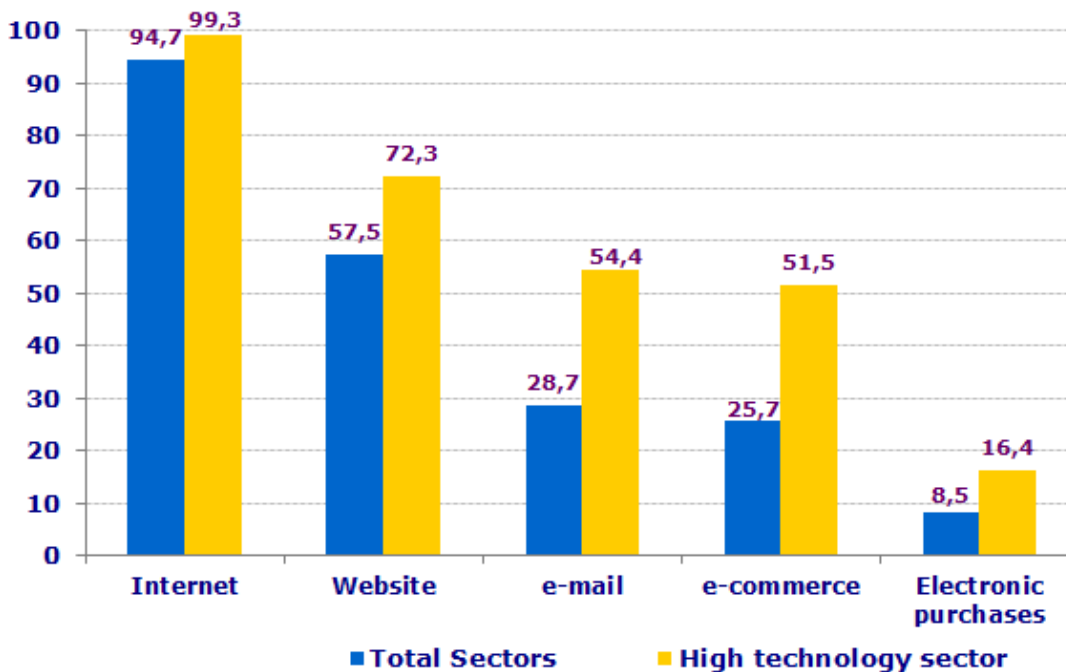
Date August 30, 2024

Source: Eustat. High technology scoreboard

Likewise, both the use of Information & Communications Technology (ICT) and e-commerce were more widespread among companies in this sector than in the total of all sectors. In 2022, 54.4% of establishments in this sector engaged in e-commerce, compared to 28.7% of those in all sectors as a whole.

These percentages were a result of the 51.5% of establishments in this sector that made electronic purchases, compared to 25.7% of establishments that did so across all sectors, and the 16.4% of establishments in the technology sector that made electronic sales, a figure that stood at 8.5% in the case of all sectors.

## Use of ICT technologies in the Basque Country (%). 2022



Source: Eustat. High technology scoreboard

The impact of this sector on the foreign trade of goods was not particularly significant. Whilst exports accounted for 1,009.4 million euros out of a total of 32,721.4 million, imports stood at 697.4 million out of the 29,661.6 million of total imports. These figures represented 3.1% and 2.4%, respectively, out of total exports and imports.

Standing out among the most common products traded in terms of exports were: “Machinery and Mechanical Equipment” (35.0%), “Manufacture of Aircraft and Spacecraft” (18.6%), “Arms and Ammunition” (18.5%) and “Electronic material, Radio, TV, and Communications Equipment” (13.8%). Of particular note in imports were “Electronic Material, Radio, TV and Communications Equipment” (29.9%), “Scientific Instruments” (22.6%) and “Machinery and Mechanical Equipment” (10.6%), with none of the remaining categories reaching 10%.

### **Turnover in the high and medium-high technology sector has increased by 42.6% 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 began to recover in 2021 and by 2022 had achieved the highest figures of the series in terms of turnover, gross value added and number of jobs. The number of companies fell by one unit compared to 2021, the year that recorded the highest figure.

Since 2010, turnover in the HTS sector has remained above 16,800 million euros, having exceeded 20,000 million in 2017 and reaching its record in 2022 with 24,979 million. However, in 2020, this figure dropped to 19,836 million, before recovering in 2021 and hitting its peak in 2022, with 14.5% more than a year earlier and up 42.6% in respect of 2010.

In same period, 2010-2022, the total number of people employed in HTS companies saw a rise of 7,139 people, after having remained below 90,000 between 2011 and 2017. During the last year of this analysis, the total figure reached 98,653 people in employment, the highest figure of the series, exceeding that recorded in 2010 by 7.8%.

In turn, the number of High and Medium-High technology companies has remained above the threshold of 4,600 throughout this period, with percentages out of the total of Basque companies standing at around 3%, going from 2.9% in 2010 to 3.4% in 2022. In absolute numbers, this translates to 202 more HTS companies than in 2010.

Lastly, the gross value added stood at 7,259 million in 2022, 1,152 million more than in 2010, having always remained above 5,700 million.

## Main magnitudes of the high-tech sector. 2010-2022

	Number of companies	Jobs	Turnover (1)	Gross value added at factor cost (1)
<b>2022</b>	5.032	98.653	24.979.314	7.258.862
<b>2021</b>	5.033	95.412	21.812.167	6.727.658
<b>2020</b>	4.946	93.732	19.836.024	6.391.263
<b>2019</b>	4.927	94.777	22.430.228	7.010.523
<b>2018</b>	4.881	93.458	21.336.764	6.777.987
<b>2017</b>	4.789	89.710	20.306.692	6.516.869
<b>2016</b>	4.852	87.727	19.198.452	6.251.960
<b>2015</b>	4.787	85.100	17.696.422	5.989.997
<b>2014</b>	4.745	84.419	16.872.644	5.746.375
<b>2013</b>	4.718	86.571	17.085.535	5.806.417
<b>2012</b>	4.646	87.746	17.847.872	6.134.652
<b>2011</b>	4.742	89.726	18.748.825	6.373.258
<b>2010</b>	4.830	91.514	17.511.934	6.106.721

(1)Thousand euros

Date August 30, 2024

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](#)