THE GREAT OPPORTUNITY

Spain as a Global Hub for Pharmaceutical Innovation and Manufacturing



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Executive Summary

A competitive, globally oriented, and socially responsible industry

The pharmaceutical industry is one of the major strengths of the Spanish economy.

Few activities succeed in so comprehensively combining economic, social, environmental, innovation-related, and health benefits as this sector does. The more than 370 companies that make up the medicine manufacturing ecosystem are the spearhead of a globally oriented activity, which invests in cutting-edge technology and champions innovation and its social impact.

A sector internationally recognised for its commitment to medical advances and the development of innovative treatments. The investment in R&D made by pharmaceutical companies in Spain exceeds €1.5 billion annually, with 45% carried out in collaboration with hospitals, universities, and other research centres through public-private partnerships. These synergies with start-ups, biotech firms, and high-tech hubs accelerate the transfer of knowledge and the application of disruptive solutions. The more than 900 clinical trials authorised in Spain in 2024 position our country

as the undisputed European leader in testing, reflecting the sector's commitment to innovation and global health.

From an economic standpoint, the pharmaceutical industry drives growth and the creation of high-quality employment. With a direct contribution of €10.9 billion in value added and a significant multiplier effect, the overall economic impact of the pharmaceutical industry exceeds €27.2 billion annually, supporting more than 242,000 jobs. An industry that exports over €17 billion in pharmaceutical products each year, consolidating new markets and maintaining a constant outward-looking approach. Beyond the figures, the sector plays a fundamental role in the long-term wellbeing of society, improving our health and quality of life, and generating positive externalities in other sectors that enhance the country's competitiveness.

Spain's appeal is reinforced by an ecosystem that combines sustainability, technology,

and entrepreneurship. Our country boasts a network of both physical and digital infrastructures that are global leaders. Spain has one of the most extensive high-speed rail networks in the world. It also has the highest fibre-optic penetration in the European Union, and the fourth highest in the OECD. Both facilitate regional connectivity and help structure the country. In addition to this it has one of the most efficient healthcare systems in the world, comprising a network of public hospitals, laboratories, and internationally recognised research centres.

Moreover, in a complex geopolitical context such as the present, the pharmaceutical industry positions itself as a model to follow in the European autonomy strategy. Europe is a global powerhouse in drug manufacturing, with annual production exceeding €300 billion, although it is losing competitiveness at a global level and there is a risk of losing investments. Spain plays a key role in continental value chains thanks to its 181 pharmaceutical manufacturing plants.

This leadership not only strengthens the continent's competitive capacity but also contributes to international health security.

Spain is currently undergoing a thorough review of its pharmaceutical, sector regulatory framework with a Draft Medicines Law, a Draft Royal Decree on health technology assessment, and a forthcoming Royal Decree on pricing and reimbursement. This new regulatory framework is a great opportunity to make Spain an even more attractive destination for pharmaceutical investment.

In short, the pharmaceutical industry in Spain is a driving force for progress that promotes health, economic growth, and competitiveness in an increasingly uncertain global landscape. Through its commitment to innovation, openness, and social responsibility, the pharmaceutical sector positions itself as a strategic pillar for societal wellbeing and a sound investment for those seeking a prosperous and forward-looking industry.

The pharmaceutical industry in Spain: more than health

Over 180 medicine manufacturing plants generate more than

€27.2 billion

of value added considering direct, indirect, and induced effects

1.9% of national GDP

Its industrial weight has not stopped growing.

THE PHARMACEUTICAL INDUSTRY,
A STRATEGIC SECTOR FOR SPAIN'S
ECONOMY

of the 242,000

jobs supported by the industry,

55,500 are direct, 107,300 are indirect, and 79,600 are induced. The pharmaceutical industry

employs 1.2%

of our workforce.

THE PHARMACEUTICAL INDUSTRY
MAINTAINS MORE THAN 242,400 JOBS
IN SPAIN

Each worker in the industry generates over

€130,000 in value added per year.

High productivity linked to the sector's excellent level of qualification and technological intensity.

THE PHARMACEUTICAL INDUSTRY: A PRODUCTIVITY LEADER IN SPAIN

Employment in the sector stands out for its high level of qualification and quality:

30%

of workers hold a master's degree or PhD, and the rates of temporality and part-time contracts are significantly lower than the average in the Spanish economy.

HIGH-QUALITY AND HIGHLY SKILLED JOBS:
OVER TWO THIRDS OF WORKERS HOLD AT
LEAST A UNIVERSITY DEGREE

Spain is the European leader in the authorisation of clinical trials, with nearly

930 studies approved

in 2024, and also leads in the coordination of international trials.

A GLOBAL POWERHOUSE IN CLINICAL TRIALS AND A EUROPEAN LEADER

€1.5 billion in annual R&D investment.

Total investment reaches €3 billion when including digitalization and product-related investments.

INVESTS €1.5 BILLION ANNUALLY IN R&D, REPRESENTING 18% OF TOTAL INDUSTRIAL INVESTMENT Eighty percent of the national pharmaceutical industry's production is exported, reaching a value of over

€17 billion

annually—approximately

5% of Spain's total exports.

AN EXPORT-ORIENTED INDUSTRY
WITH A GLOBAL OUTLOOK

The pharmaceutical industry reduced its emissions by

42%

between 2008 and 2023, reaching an intensity of just 97 tonnes of CO₂ per million euros of value added, compared to 700 tonnes across the rest of the industrial sector.

A BENCHMARK IN SUSTAINABILITY AND ENVIRONMENTAL EFFICIENCY

Contributing to public health and the sustainability of the welfare state It is estimated that for every euro invested in pharmacy and hospital medicines, €0.40 is saved in pension expenditure and €0.30 in sick leave costs. The return on each euro invested in hospital medicines also results in savings of €0.27 in pensions and €0.31 in hospital expenditure, supporting the fiscal sustainability of public finances.

CONTRIBUTING TO PUBLIC HEALTH AND THE SUSTAINABILITY OF THE WELFARE STATE

For the people A productive and innovative industry

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A flagship of the Spanish industry

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A source of stable and high-quality employment

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A cornerstone of Spain's high-technology supply

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An export-oriented industry

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Committed to R&D: over €1.5 billion invested per year 22

A driver of alliances and a leader in clinical trials in Europe

24

An innovative industry

A flagship of the Spanish industry

The pharmaceutical industry has positioned itself as one of the sectors with greatest growth potential and economic traction in Spain.

In a complex economic landscape, the industry has demonstrated a differential performance, enabling it to gain ground and long-term economic relevance. This dynamism has been driven by a virtuous cycle involving efforts in innovation, outstanding production capacity, expansion into new markets, and attraction of both national and international talent.

1 | A growing and dynamic industry

The performance of the pharmaceutical industry has far exceeded that of the broader manufacturing sector and the Spanish economy. Between 2000 and 2022, the industry's economic contribution has multiplied by 2.5, rising from €3.4 billion to over €8.7 billion annually. This reflects a differential dynamism, resilience, and leadership capacity.

2 | With a solid and competitive business fabric

Sustained growth in a high value-added and technology-intensive sector such as medicine manufacturing is made possible by the companies that comprise it. In the pharmaceutical industry, 37% of companies have more than 50 employees, compared to just 3% in the overall manufacturing sector. This larger scale is associated with greater competitiveness, productivity, and resilience in the face of changing conditions.

3 | And strategic at both national and international levels

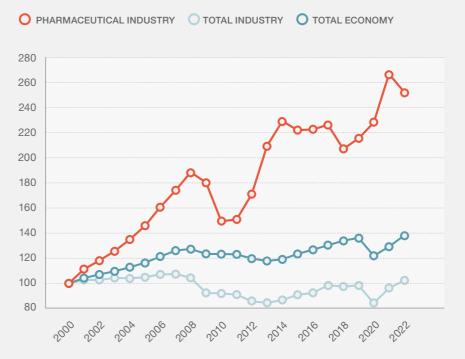
The pharmaceutical industry is one of the sectors in which Europe exercises recognisable global leadership, helping to reinforce our strategic autonomy. We are capable of competing with the most advanced companies, forming a market that exceeds €300 billion in annual production across the continent.

13 For the people

REAL GROSS VALUE ADDED IN SPAIN

Base 100=2000

Source: Afi from INE

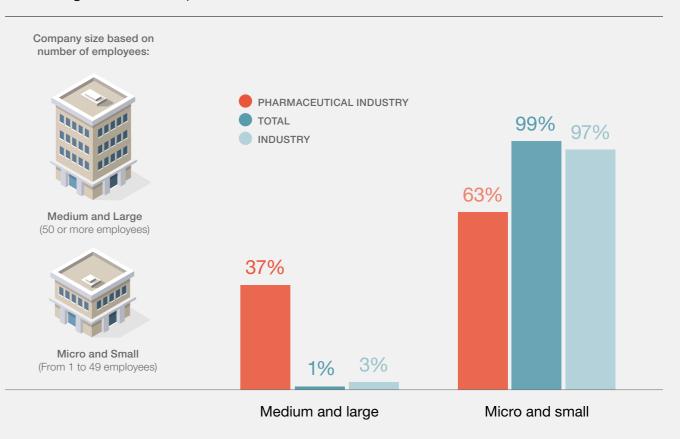


From 2000 to 2022, the industry's economic contribution has increased 2.5-fold

BUSINESS STRUCTURE SIZE IN SPAIN

Percentage of total companies, 2024

Source: Afi from INE



A source of stable and high-quality employment

The expansion of the pharmaceutical industrial activity has been accompanied by a significant increase in the number of workers in the sector.

Since 2009, the industry has incorporated more than 20,000 new professionals, recording employment growth of nearly 50% over the past 15 years. This trend attracts highly qualified profiles and consolidates the pharmaceutical industry as one of the most appealing sectors for students and professionals, equipping it with the capabilities needed to face future innovations.

In 2024, pharmaceutical companies operating in Spain employed over 63,500 people, making it one of the largest clusters in Europe in terms of employment. Cataluña and Madrid stand out as two of the main hubs of activity at the continental level, concentrating a large share of this workforce.

But it is not only a matter of quantity. In a complex economic and geopolitical context, the industry has succeeded in generating stable and high-quality jobs, with rates of temporary and part-time employment significantly below the country's average.

 LOW TEMPORARY **EMPLOYMENT**

7.4% pharmaceutical industry

15.9% Spanish average

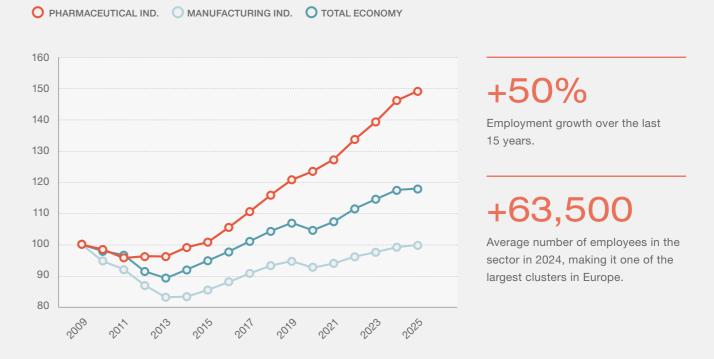
→ LOW PART-TIME **EMPLOYMENT**

> 3.1% pharmaceutical industry VS.

13.6% Spanish average 15 For the people

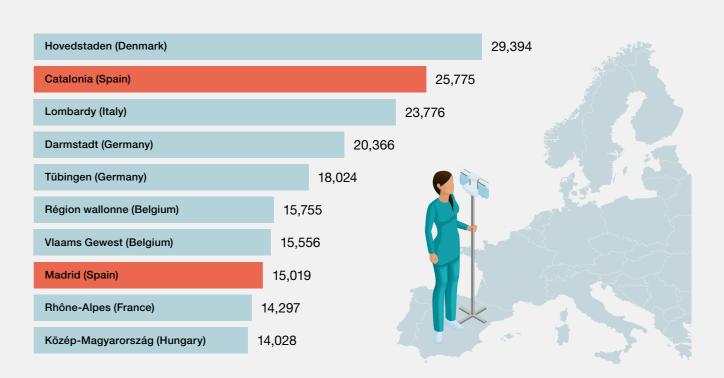
EMPLOYMENT TRENDS IN SPAIN AND ITS INDUSTRIAL SECTOR Average annual workers, 2009-2024

Source: Afi from INF



TOP 10 EUROPEAN REGIONS WITH THE HIGHEST **EMPLOYMENT IN THE PHARMACEUTICAL INDSUTRY** 2023

Afi from Eurostat



A cornerstone of Spain's high-technology supply

From the early stages of basic research to manufacturing and commercialisation, innovative medicines and therapies require a highly qualified workforce. In this regard, the pharmaceutical industry positions itself as a key sector within Spain's industrial offering: medicines account for six out of every ten euros of high-tech industrial value added generated in Spain.

- More than half of professionals in the pharmaceutical sector hold a university degree (58%), 35 percentage points above the industrial average and 25 points above the national average.
- Moreover, it is a highly professionalised sector across all phases of the value chain: 71% of those employed in the pharmaceutical industry work in managerial, scientific, or technical roles

 a proportion far higher than the 31% in the manufacturing sector and 36% across the economy as a whole.

This set of attributes translates into a key factor for economic development and its long-term sustainability: productivity. On average, a pharmaceutical industry worker generates €130,000 in value added per year

-81% higher than the average productivity of the industrial sector. This truly reflects the complexity of the medicine development process, its solid technological foundation, and a constant, determined investment in research and development (R&D).

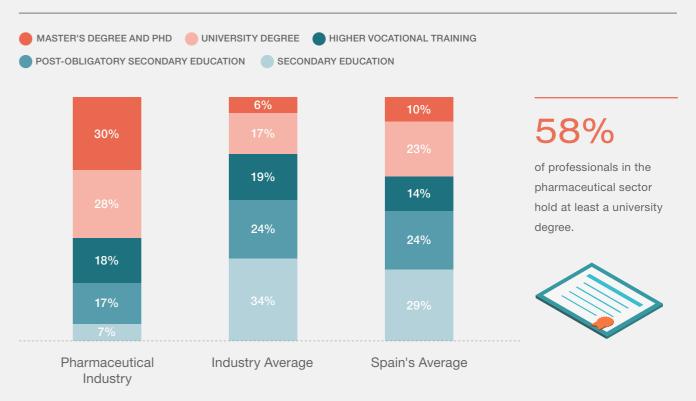
Medicines make up six out of every ten euros of Spain's high-tech industrial value added.

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EMPLOYMENT COMPOSITION BY EDUCATIONAL LEVEL

Percentage of total workers, 2024

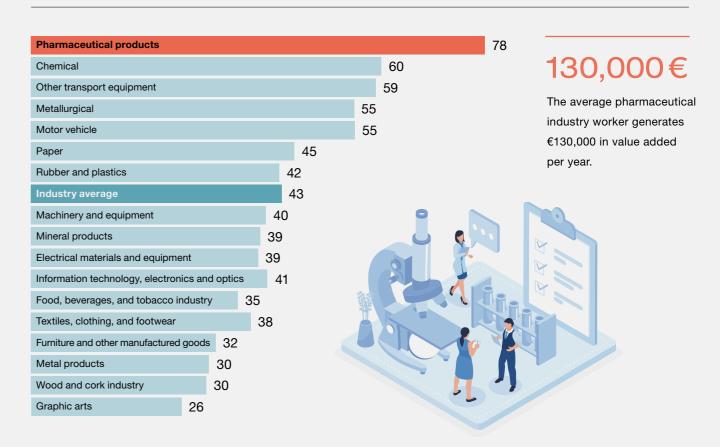
Source: Afi from INE



PRODUCTIVITY IN SPANISH INDUSTRY

Gross value added by hour worked (€), 2022

Source: Afi from INE



An export-oriented industry

The pharmaceutical industry has established itself as a strategic player in the Spanish economy due to its growing international orientation.

Foreign multinationals have chosen Spain as a platform for medicine production to be exported both to their home markets and to the rest of the world, making pharmaceuticals one of the flagship products of the Spanish economy.

80% of national production is sold in foreign markets.

A sector with a strong export orientation, driven by the presence of multinational companies

The Spanish pharmaceutical sector exports more than €17 billion annually, making it the fifth most exported category in the country, after automobiles, fuels, machinery, and electrical equipment, and accounting for around 5% of Spain's total exports.

1 | Companies in the sector have integrated Spain into the global pharmaceutical value chain

Eighty percent of national production is sold in foreign markets, placing the pharmaceutical industry's export propensity at six times the average of the Spanish economy.

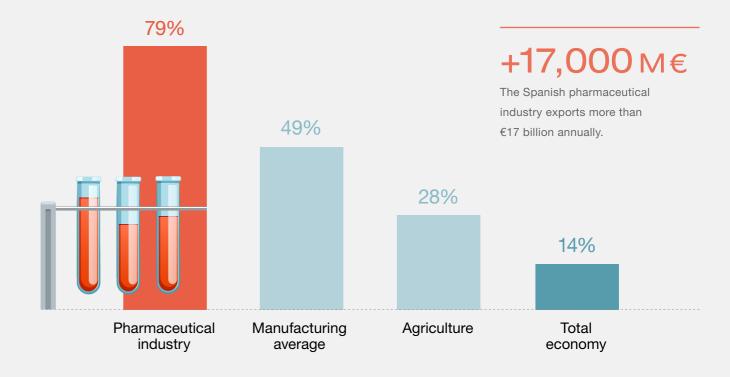
2 | This international dimension enhances its competitiveness and capacity for expansion

The Spanish pharmaceutical sector is among the most aligned with international regulations, with a strong ability to access the most demanding markets and reinforce its global positioning.

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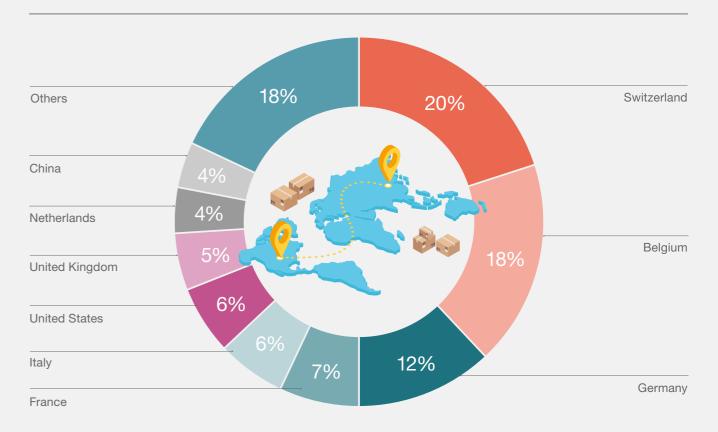
EXPORT PROPENSITY % of production value exported, average for the period 2013-2023

Afri from the Ministry of Economy, Business, and Trade



DESTINATION OF SPANISH PHARMACEUTICAL EXPORTS Cumulative total 2013-2023

Afri from the Ministry of Economy, Business, and Trade



Committed to R&D: more than €1.5 billion invested per year

Pharmaceutical companies allocate significant financial resources to research for the development of new medicines and the improvement of existing ones.

The industry not only funds a substantial portion of this research but also actively collaborates in all phases of development—from the identification of therapeutic targets to clinical validation and industrial scalability.

18%

of total investment in industrial R&D in Spain is attributable to the pharmaceutical industry.

- Approximately 80% of companies in the pharmaceutical sector invested in R&D, reaching a combined investment of €1 ±53 billion in 2024, the highest figure in the industry's history.
- These companies contributed 18% of total industrial R&D investment, making the pharmaceutical industry one of the sectors dedicating the most absolute resources to research.
- Moreover, in relative terms, the pharmaceutical industry also stands out for its research intensity, allocating 4.6% of its sales to R&D.
- The bulk of its R&D investment is dedicated to clinical research, which absorbs 60% of the total (around €900 million annually). This phase is essential for evaluating the safety and efficacy of new treatments and enables many patients to gain early access to innovative therapies.

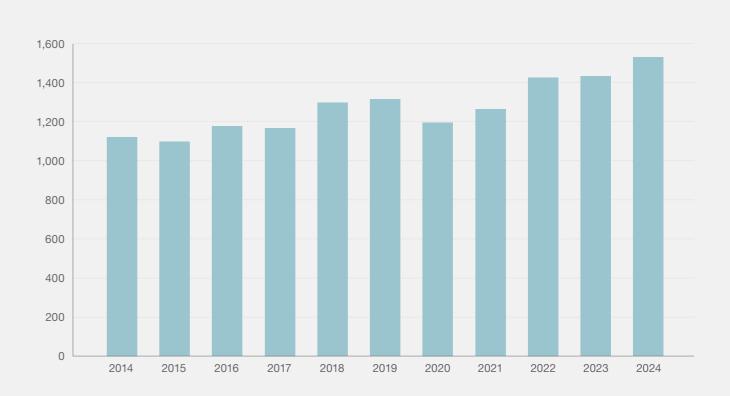
80% of companies in the pharmaceutical sector invest in R&D.



EXPENDITURE AND PERCENTAGE OF FIRMS THAT INVEST IN R&D IN THE PHARMACEUTICAL INDUSTRY

Source: Afi from INE and Farmaindustria

Millions of euros, 2014-2024



A driver of alliances and a leader in clinical trials in Europe

The pharmaceutical sector's strong commitment to innovation cannot be understood without its firm dedication to collaboration. The industry works in close partnership with both the public and private science, health, and technology systems, creating a robust and high-impact innovation ecosystem.

One of the most representative aspects of this collaboration is that 45% of pharmaceutical companies' R&D investment is carried out in cooperation with hospitals, universities, and research centres. These alliances not only enhance scientific and medical development

Spain has become a global leader in clinical research.

in Spain, but also accelerate the transfer of knowledge between academic, clinical, and industrial environments.

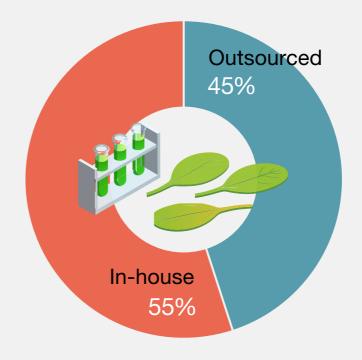
The close collaboration between all public and private stakeholders involved, the swift implementation of the European Clinical Trials Regulation (CTR), and the excellence of the Spanish healthcare system—particularly in terms of the preparedness of centres, the qualifications of research personnel, and the agility of regulatory processes—have made Spain a global benchmark in clinical research.

- Spain is the leading European country in clinical trial authorisations, with nearly 930 studies approved in 2024, ahead of Germany and France.
- It also leads the coordination of multinational clinical trials in Europe, managing 770 studies, which represents 28% of all trials authorised in the EU.

R&D EXPENDITURE BY LOCATION

2023

Source: Afi from Farmaindustria

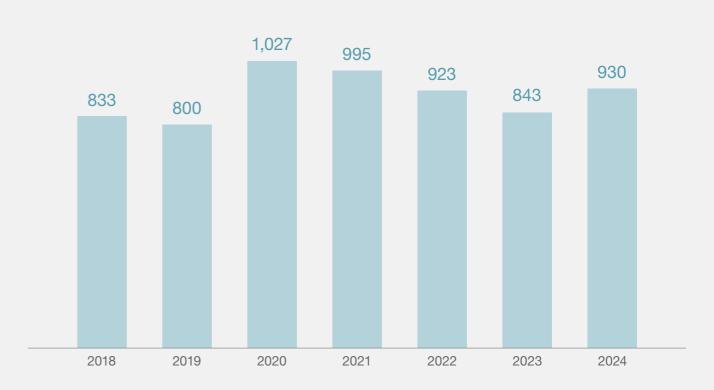


Knowledge transfer between the academic, clinical, and industrial environments is accelerating.

Note: <u>In-house</u> research refers to that carried out within the pharmaceutical companies' own facilities, while <u>outsourced</u> research refers to that conducted in hospitals, universities, and other public or private institutions with which they collaborate.

CLINICAL TRIALS AUTHORIZED BY THE SPANISH REGISTRY OF CLINICAL TRIALS (REEC)

Source: Afi from Farmaindustria



An innovative industry

Spain has a mature scientific network made up of more than 700 centres dedicated to R&D, which act as nodes in the generation of biomedical knowledge and technological transfer. In an environment shaped by digitalisation, precision medicine, and artificial intelligence, the pharmaceutical industry is integrating advanced technologies its R&D processes to accelerate development timelines, reduce scientific uncertainty, and generate innovation with real impact on patients.

1 | The innovative environment encourages major multinationals to choose Spain as a strategic base of operations.

Pharmaceutical companies, including leading global firms, generated nearly €20 billion in revenue in 2023. These cutting-edge companies, aware of the sectorys capabilities, invest close to €1.5 billion annually in material assets and digitalization (facilities, technical infrastructure, machinery, transport, etc.), in addition to their R&D investments.

2 | A centre for scientific and technological collaboration

The pharmaceutical industry in Spain has become a hub of cooperation between universities, research centres, and technology companies —an alliance that boosts the country's competitiveness and strengthens its biomedical leadership.

3 | High returns on innovation

Research efforts and technology transfers are yielding results: the pharmaceutical industry stands out among all sectors in terms of innovation outcomes. Since 1990, the percentage of patents granted linked to the pharmaceutical sector has quadrupled, rising from 2% in 1990 to over 8% in 2023.

4 | Attraction of Innovation Hubs

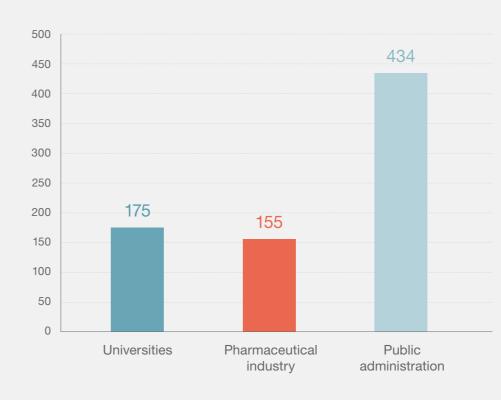
Spain has become an international benchmark in the development of digital innovation hubs, thanks to several leading pharmaceutical companies establishing their core centres for bioinformatics, artificial intelligence, clinical trials, and process digitalization in the country. These centres already employ thousands of highly qualified professionals from a wide range of nationalities, carry investments exceeding €500 million annually, and generate exports of high value-added services.

25 For the people

NUMBER OF R&D CENTRES

2023

Source: Afi from INE

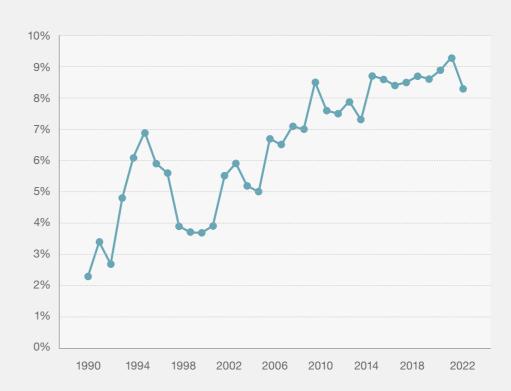


+700 R&D centres

Spain has a mature scientific network comprising more than 700 centres dedicated to R&D.

SHARE OF PHARMACEUTICAL PATENTS OVER TOTAL AWARDED IN SPAIN 1990-2023

Source: Afi from the World Intellectual Property Organization (WIPO)



>8% patents granted

Since 1990, the percentage of patents granted linked to the pharmaceutical sector has quadrupled, rising from 2% in 1990 to more than 8% in 2023.

For the economy a competitive and globally oriented industry

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A world-leading
platform for medicine
manufacturing

30
With a high economic impact

32
And a high social impact

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Open to foreign investment

36Owing to an attractive investment framework

38
As well as a
highly connected
and digitalized
environment

A world-leading platform for medicine manufacturing

The Spanish pharmaceutical industry has secured a prominent role within European value chains. Its adaptability and growth capacity have enabled it to become a benchmark in medicine production across the continent, playing a key role in Europe's strategic autonomy.

1 | Production capacity distributed across the country

Spain has 181 medicine manufacturing plants spread across 13 autonomous d/ [a`e, positioning the country as one of Europe's leading production centres. Of these plants, 111 are dedicated to the production of medicines for human use (synthetic or biological), 21 to veterinary medicines, and 49 to active pharmaceutical ingredients—reflecting the sector's broad diversity and capacity.

2 | Specialisation in original branded medicines

Seventy percent of the human-use medicine plants in Spain focus on the production of original branded drugs, underscoring the industry's commitment to the development of new therapies and reinforcing Europe's autonomy in the production of strategic medicines.

3 | A competitive sector in constant evolution

The Spanish pharmaceutical industry is focused on the manufacturing of biological medicines and other innovative treatments, such as advanced therapies, further strengthening the country's position as a reference point in the production of high-quality medicines.

PHARMACEUTICAL PRODUCTION PLANTS

Source: Afi from Farmaindustria



181

Spain has 181 drug manufacturing plants, making it one of Europe's leading manufacturing centres.

70%

Seventy per cent of human drug manufacturing plants in Spain focus on the manufacture of original branded _ W[U[We.

With a high economic impact:

€27.2 billion, equal to 1.9% of GDP

The pharmaceutical manufacturing industry constitutes a strategic sector for the Spanish economy. Beyond its essential role in improving public health, this activity generates over €10.9 billion in direct value added annually.

Adding up the direct, indirect and induced impact, the pharmaceutical sector generates €27.2 billion in value added, representing 1.9% of the national GDP.

However, the direct impact only partially reflects the sector's significance. When considering indirect effects—stemming from the demand for intermediate goods and services—and induced effects—linked to the wages of workers in the pharmaceutical sector and related activities—the total impact rises to €27.2 billion in value added, representing 1.9% of national GDP.

Within the industry's value chain, **the sector's strong spillover effect stands out**, particularly in relation to commercial activities, the chemical industry, and research or storage services.



The crowd-in effect on the rest of the economy highlights its strong multiplier effect:



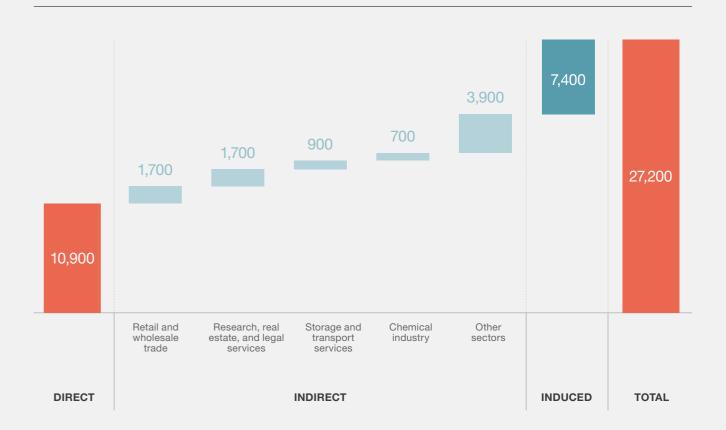
Every euro of direct value added generated by the pharmaceutical industry produces an additional €1.5 in the rest of the Spanish economy.

Source: Afi from INE.

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ECONOMIC IMPACT OF THE PARMACEUTICAL INDUSTRY IN SPAIN Gross value added. Millions of euros, 2023

Source: Afi from INE



And high social impact: it sustains more than 240,000 jobs

This value generation is supported by the work of thousands of individuals employed in medicine manufacturing companies—from directors to sales representatives, researchers, chemists, and administrative staff.

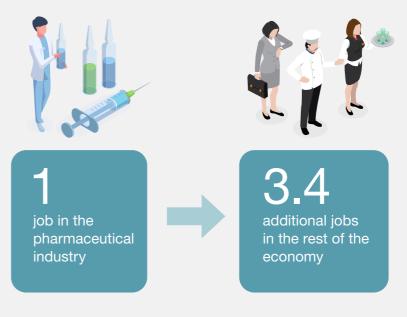
In total, the industry supported more than 242,400 jobs in Spain in 2023, representing 1.2% of the total employed workforce. In addition to the 55,500 full-time equivalent (FTE) jobs generated directly by the industry, there are 107,300 indirect jobs—thanks to the purchase of intermediate goods and services from its supply chain—and a further 79,600 induced jobs linked to income flows.

A sector also characterized by its commitment to gender diversity. According to a Farmaindustria survey for 2023, 56% of the workforce was female, compared to 26% across the industrial sector as a whole. Moreover, women held 45% of positions on Management Committees (compared to 22% in IBEX-35 companies) and represented 25% of top executive roles- well above the 7% seen in IBEX-35 firms.

This productive ecosystem rests on strong human capital: 23% of university graduates and 17% of master's degree holders in Spain come from science, technology, engineering, and mathematics (STEM) disciplines.

More than 242,400 jobs in 2023, including direct, indirect and induced employment, reflect the importance of the pharmaceutical industry in Spain: 1.2% of total employment, with strong support from STEM talent.

Once again, the data points to the existence of a notable multiplier effect on employment:



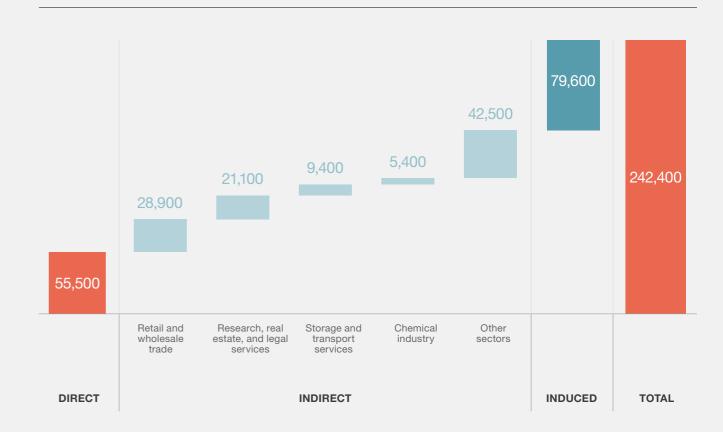
Each job in a pharmaceutical company leads to the creation of 3.4 additional jobs in the rest of the Spanish labour market.

Source: Afi from INE.

33

IMPACT ON EMPLOYMENT OF THE PHARMACEUTICAL INDUSTRY IN SPAIN Equivalent full time jobs, 2023

Source: Afi from INE



Open to foreign investment

Spain is a preferred destination for multinational pharmaceutical laboratories for the development and manufacturing of their products.

Since 2007, the industry has accumulated a stock of foreign direct investment exceeding €3.5 billion. This commitment has led to the establishment of new factories, laboratories, research centres, and the expansion of existing facilities.

1 | Multinational companies drive the national pharmaceutical supply

One in three pharmaceutical companies operating in Spain is a subsidiary of a multinational firm, promoting knowledge transfer, foreign direct investment, and integration into global value chains.

2 | Spain combines a highly qualified workforce, strong cost competitiveness, and a strategic geographic location

Parent companies of multinational firms invest substantial capital annually in their subsidiaries based in Spain, alongside newly launched projects, stimulating the inflow of foreign direct investment into the country.

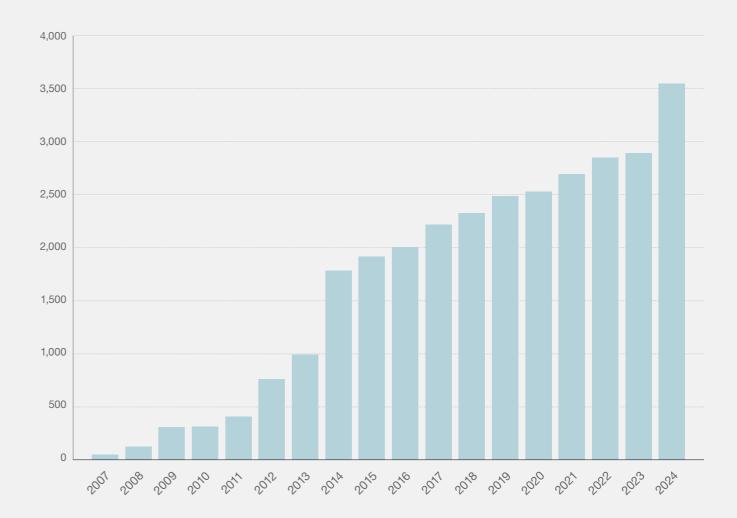
3 | Spain's regulatory framework is fully aligned with European and international standards

The regulations on Good Manufacturing
Practices (GMP) and the operation of the
national regulatory authority enable companies
to operate and compete in the world's most
demanding markets, thanks to legal certainty
and efficiency in permit processing.

35 For the economy

FOREIGN DIRECT INVESTMENT STOCK IN THE PHARMACEUTICAL INDUSTRY Millions of euros

Source: Afi from the Ministry of Economy, Trade, and Business



Since 2007, the industry has amassed a foreign direct investment stock of over €3.5 billion.



Owing to an attractive investment framework

Spain is a country committed to long-term impact investments, offering a highly favourable framework of tax incentives for attracting capital and supporting R&D activities.

It provides a particularly attractive environment for innovative sectors such as the pharmaceutical industry, due to a well-established network of promotion and internationalisation agencies, incentives for R&D investment, and tax relief for research personnel.

1 | Spain's tax treatment of R&D positions the country among one of the most competitive for promoting business research

Companies can benefit from tax deductions for R&D activities (generally 25%, rising to 42% or even 59% in exceptional cases), reductions in Social Security contributions for research personnel (up to 50% of employer contributions), and public grants (covering up to 85% of the approved R&D budget).

2 | Regional and national investment agencies play a key role in attracting and supporting industrial capital

Organisations such as ACCIÓ in Catalonia, Invest in Madrid, and the Directorate-General for International Trade and Investment provide direct support to investors through personalised guidance, regional tax incentives, and assistance with administrative procedures.

3 | The administrative and regulatory environment ensures agility, legal certainty, and alignment with international standards

Spain has efficient procedures for managing industrial permits and certifying production under GMP regulations, thereby facilitating the establishment of new plants and strategic projects related to innovative medicines.

of the pharmaceutical industry is an opportunity to attract investment

Spain is currently undergoing a comprehensive review of its pharmaceutical sector regulatory framework, including a Draft Medicines >Si, a Draft Royal Decree on health technology assessment, and a forthcoming Royal Decree on pricing and reimbursement. This new regulatory framework represents a major opportunity to make Spain an even more attractive

destination for pharmaceutical investment.

4 | Improving the regulatory environment



Companies can benefit from significant tax incentives for innovative activities: up to 42% in R&D deductions or up to 50% in bonuses for research staff.

As well as a highly connected and digitalized environment

Spain's cross-cutting capabilities reinforce the strategic role of the pharmaceutical industry as a key driver on the international stage. This transformation has positioned the sector as a central pillar of Spain's global standing.

1 International competitiveness driven by cutting-edge infrastructure

With one of the most extensive high-speed rail networks in the world and the highest fibre-optic penetration in Europe—fourth globally within the OECD-Spain is among the best-prepared countries to lead industrial transformation

2 | A growth engine linked to biotechnology

The pharmaceutical industry in Spain is closely connected to the biotechnology sector. EfSdfgbe and research centres are developing new medicines supported by venture capital, strengthening the country's position as a production hub and a benchmark in biomedical innovation.

3 | Digitalisation as a key factor of competitiveness

Technological adoption and digital transformation are essential pillars of the sector, with artificial intelligence and T[Y VSfS integrated across all stages of production and commercialisation. These technologies enable process optimisation, improved traceability, and accelerated innovation.

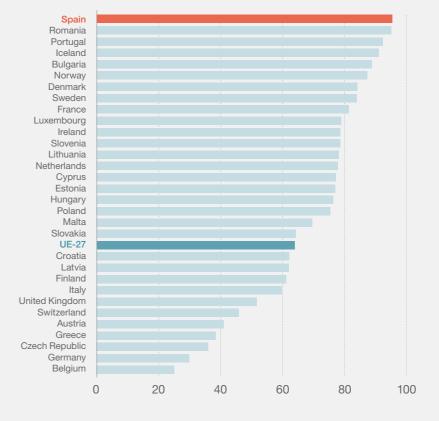


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FIBRE OPTIC PENETRATION

Percentage of households

Source: Afi from Eurostat

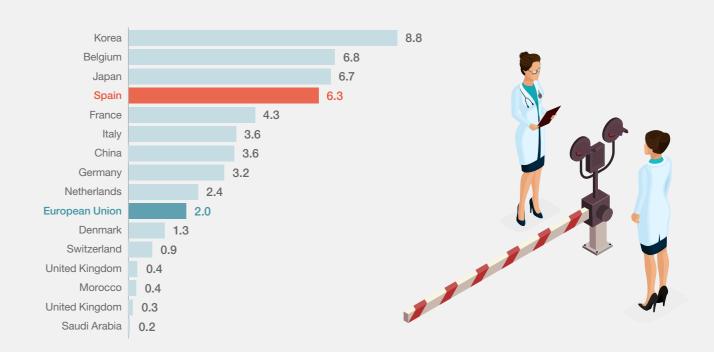


Spain has the highest fibre-optic penetration in Europe and ranks fourth among OECD countries.

HIGH SPEED RAILWAY LINES

Kilometres of track per thousand square kilometres of land area

Source: Afi from International Union of Railways



For the institutions An industry with a strong commitment to society

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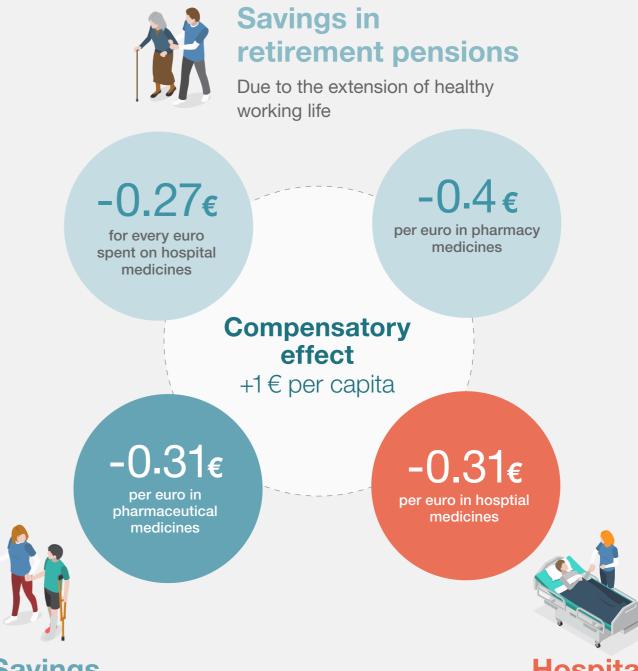
Investment with high social returns

The pharmaceutical industry contributes to the overall health of the population and the sustainability of the welfare state by reducing expenditure on pensions, sick leave, and hospitalisations, thanks to treatments that prevent chronic conditions and improve quality of life.

- 1 | Medicines have the capacity to improve the population's health, increasing productivity, extending working life, and reducing hospital costs.
 - Access to effective medicines improves public health, which shortens recovery times in hospitals and reduces sick leave, while also enabling workers to remain active for longer. All of this has the potential to ease the additional pressure that ageing will place on public finances, thereby improving long-term fiscal sustainability.

- 2 | In the context of demographic ageing, improving public health and promoting longer, healthier working lives is crucial.
 - Spain, like other advanced countries in its region, is undergoing a profound demographic transformation. It is expected that the population of retirement age will rise from 20% of those over 20 years old to 40% by 2050. Extending the retirement age could potentially reduce pension expenditure by more than 1.5 percentage points of GDP, according to estimates (AIReF, 2023).
- 3 | Beyond its direct fiscal contribution, investment in medicines produces a compensatory effect on public spending.

Overall, it is estimated that spending on medicines in community pharmacies and hospitals generated around €14.2 billion in savings across other budgetary areas in 2022. Furthermore, according to some estimates, each additional euro of public investment in medicines generates €3.90 in value added for the Spanish economy in the form of positive externalities.



Savings in sick leave

Thanks to the improvement of worker's health status

Hospital expenditure savings

Thanks to the reduction of the average length of hospital stay

A state-of-the-art healthcare system

Spain's National Health System (@: S) is a central pillar of the welfare state and is organised as a system of universal coverage, with a strong focus on primary care and funded primarily through taxation. Since the decentralisation process initiated in the 1980s, healthcare responsibilities have been transferred to the autonomous d/Y[a`e, which manage healthcare provision within a common framework regulated by the State.

The @: S is characterised by the high level of education among its healthcare professionals: more than half (55%) hold a university degree, compared to 33% across the Spanish labour market. This high level of training reflects the qualifications of healthcare professionals in Spain and their key role in quality of care and clinical research.

As a result, health outcomes for the Spanish population are better than the European average. Indicators such as life expectancy, avoidable and treatable mortality rates, and the coverage index of the Spanish healthcare

system are evidence of this. However, healthy life expectancy at birth has recently declined compared to the European average, suggesting that there is room for improvement in the system. Measures aimed at fostering talent attraction and retention, digitalising the system, and supporting innovation could help consolidate Spain's position as an international benchmark in healthcare and science.

55% of healthcare personnel have university training, twice the average of the overall workforce.

SPAIN WITH RESPECT TO THE EU

Source: fi from Eurostat, WHO, and OECD

BETTER



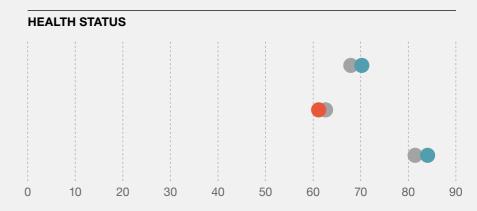




Percentage of population reporting good self-perceived health (2023)

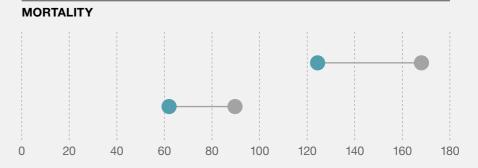
Healthy life expectancy at birth (2022)

Life expectancy at birth (2023)



Treatable mortality per 100,000 people under the age of 75 (2022)

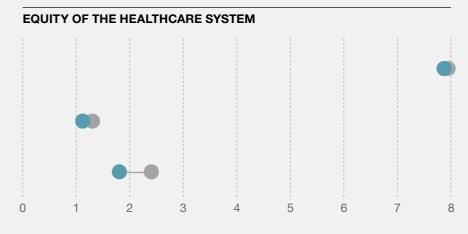
Preventable mortality per 100,000 people under the age of 75 (2022)



% of population with health expenditure exceeding 10% of household spending or income (2019)

% of population with health expenditure exceeding 25% of total household spending or income (2019)

% of population with unmet healthcare needs (2022)



Universal healthcare coverage index* (2019)



^{*} The Universal Health Coverage Index measures, on a scale from 0 to 100, the average coverage of essential healthcare services.

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LIFE EXPECTANCY AT BIRTH

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And highly efficient healthcare system

In addition to a pharmaceutical industry that contributes to both public health and the economy, Spain has one of the most efficient public healthcare systems in the world.

Our country stands at the frontier of global healthcare efficiency. This is evidenced by the combination of excellent health outcomes with moderate spending levels: Spain is among the countries with the highest life expectancy at birth globally, while incurring lower per capita healthcare expenditure than countries such as France, Germany, or Belgium.

In the pharmaceutical field, this symbiosis is particularly beneficial thanks to the public-private collaboration between laboratories and the network of hospitals, public universities, and research centres, which enables the acceleration of biomedical innovation, the development of new treatments, and their early adoption in clinical practice.



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LIFE EXPECTANCY VS. HEALTHCARE EXPENDITURE 2023

Source: Afi from Our World in Data, 2023

GLOBAL FRONTIER OF HEALTHCARE EFFICIENCY

SPAIN

BELGIUM

GERMANY

80

HEALTH EXPENDITURE PER CAPITAPPP (2015 international-\$)

The Great Opportunity: Spain as a Global Hub for Pharmaceutical Innovation and Manufacturing

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An industry committed to environmental responsibility

Within the context of global warming and climate crisis, the pharmaceutical industry serves as an example for other economic activities in terms of environmental responsibility.

Committed to reducing its carbon footprint and the use of non-renewable natural resources, the industry reinforces its role as a benchmark in the ecological transition of Spain's productive fabric, contributing to reach the Spanish and European clean-energy goals.

1 | Significant progress in energy efficiency and renewable consumption

Thanks to the adoption of more energy-efficient processes, the sector has significantly increased the share of renewables in its energy mix—from 57% in 2019 to 69% in 2022—with self-consumption playing an increasingly prominent role.

2 | An industry with low emission intensity from the outset

The pharmaceutical sector has one of the lowest greenhouse gas (GHG) emission intensities in the Spanish economy. With already low figures in 2008, emissions have fallen from 168 tonnes per million euros of gross value added (GAV) that year to just 97 in 2023. This represents a 42% reduction, greater than the average for Spanish industry, which stands at around 32%.

3 | A model for the national industrial sector

Currently, pharmaceutical companies emit only 97 tonnes of GHG per million euros of value added, compared to 701 in general industry and 186 in the national business average. This efficiency makes the sector a benchmark for the rest of the economy in the fight against climate change.

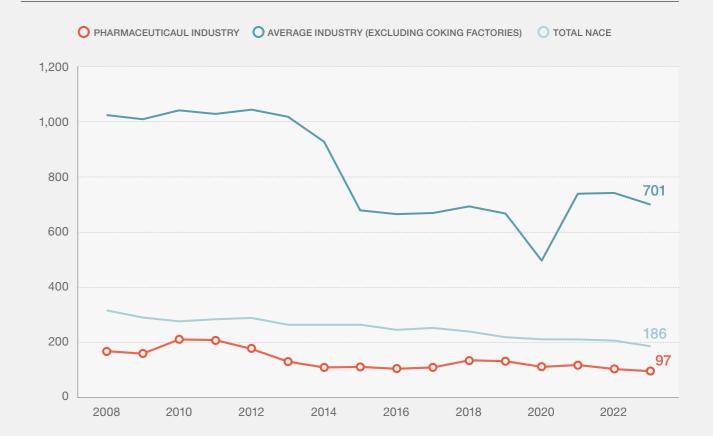
For the institutions

GHG EMISSION INTENSITY

49

Source: Afi from INF

Tonnes of GHG emitted per million euros of value added, at constant prices



The pharmaceutical industry is moving towards a greener model: reducing emissions, prioritising self-consumption and positioning itself as a benchmark in the ecological transition of the Spanish economy.

Report prepared for:

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