



EUROPEAN
COMMISSION

Brussels, 4.6.2025
SWD(2025) 209 final

COMMISSION STAFF WORKING DOCUMENT

2025 Country Report - Spain

Accompanying the document

Recommendation for a COUNCIL RECOMMENDATION

on the economic, social, employment, structural and budgetary policies of Spain

{COM(2025) 209 final}

Spain

2025 Country Report



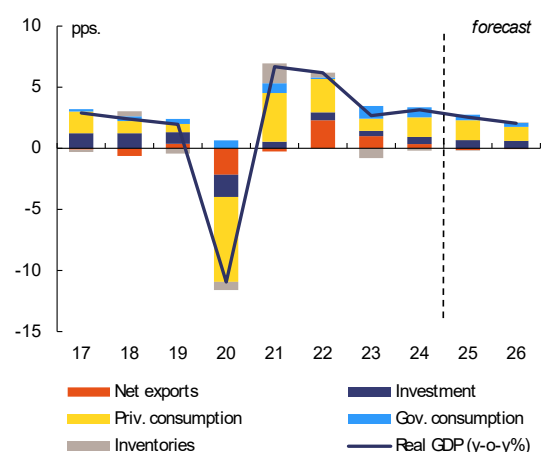
ECONOMIC DEVELOPMENTS AND KEY POLICY CHALLENGES

Spain's sustained growth proves its resilience in a shifting landscape

In 2024, economic activity maintained strong momentum, driven by both private and public consumption and tourism activity. The positive developments in consumer spending were upheld by dynamic job creation and real income gains for households. In turn, overall investment growth remained relatively subdued, particularly housing investment. The positive contribution of net exports to overall GDP expansion (see Graph 1.1) was driven by tourism activity and growth in the export of non-tourism services, together with limited growth of imports. GDP growth is expected to soften this year, but to remain on a robust growth path, reaching 2.6% and 2.0% in 2025 and 2026 respectively. Economic activity is set to be driven by domestic demand resulting from households' real income gains, strong net migration, a supportive monetary and financial environment, and an acceleration in the implementation of the recovery and resilience plan (RRP). The contribution of external demand to GDP growth is expected to be moderate, due to the normalisation of tourism inflows, the weaker economic situation of Spain's main trading partners and the pick-up in total imports. Headline inflation is set to slow down further in 2025, to 2.3%, down from 1.9% in 2024, with the downward trend of underlying components projected to continue over the coming quarters.

The robust increase in employment over recent years was sustained, thanks to the continued inflow of foreign-born workers and recent policy actions. The strong migration flows that Spain has experienced over recent years (particularly from Latin America) have helped to expand the labour force and underpinned the robust job creation, especially in certain services sectors (see Annex 10). The unemployment rate fell further in 2024, to 5.9% (see Social Scoreboard in Annex 13), on the back of the strong employment growth and the impact of the measures included in the labour market reforms of recent years, such as the streamlining of the menu of contracts. The unemployment rate is projected to drop to 10.4% in 2025 and to 9.9% in 2026, supported by additional job creation and a moderation in the total labour force. Nonetheless, it remains one of the highest in the EU, especially in terms of long-term unemployment and among the older and young populations (see Box 1). As regards wage developments, dynamic wage growth coupled with the easing of overall inflation has contributed to the increase in purchasing power, though cost-of-living pressures, particularly in housing, remain a concern.

Graph 1.1: **Real GDP growth, contributions by demand component in percentage points**



Source: European Commission's 2025 Spring forecast

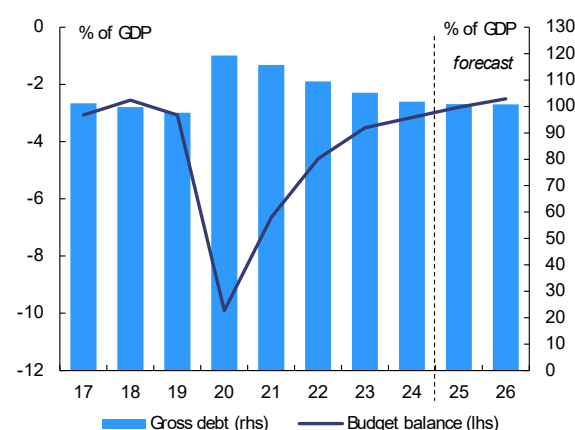
Downside risks to the outlook include overall uncertainty, and lower than expected growth in the euro area and among Spain's main trading partners. Prolonged uncertainty linked to domestic and international events could weigh on economic activity, particularly by restraining the expected pick-up in private investment and disrupting access to export markets. The direct impact on the Spanish economy of the tariffs imposed by the US government is set to be contained, due to the low exposure of Spanish exports of goods to the US. Furthermore, a greater than expected slowdown in the economic activity of Spain's main trading partners, such as Germany and France, also due to their relatively higher exposure to US markets than Spain, could create certain spill-overs that affect activity in Spain. On the other hand, a faster reduction in the (elevated) savings ratio of households, which are currently above long-term historical averages, could provide additional impetus to private consumption.

The 2024 general government deficit has decreased as a result of the phase out of energy support measures. The strong momentum of revenues from direct taxation, driven by the positive labour market developments and sustained

corporate profits, has improved public finances. Revenues from indirect taxation also showed dynamism as value added tax (VAT) and excise revenues benefited from the end of rate reductions on gas and electricity.

The measures to alleviate the consequences of recent catastrophic floods had an impact in 2024 and are expected to have a somewhat lower impact in 2025. The set of packages approved to support the recovery from the devastation caused by the floods in Valencia and other regions is projected to have a budgetary impact of approximately 0.6% of GDP (to be split between 2024 and 2025). This counteracts the deficit reduction resulting from the fiscal measures approved in the context of the medium-term plan. Overall, the deficit is expected to narrow to 2.8% in 2025 from 3.2% in 2024.

Graph 1.2: **General government budget balance and gross debt**



Source: European Commission's 2025 Spring forecast

Since 2020, the debt-to-GDP ratio has fallen by 17.5 p.p.s. (from 119.3% in 2020 to 101.8% in 2024). The government debt-to-GDP ratio is projected to continue declining in 2025 to 100.9%, thanks to strong nominal GDP growth outpacing the cost of servicing debt (see Graph 1.2). It should then remain broadly stable at

100.8%, i.e. decrease by 0.1p.p.s. in 2026 due to the less favourable interest-growth rate differential.

Spain's cumulative growth of net expenditure⁽¹⁾ in 2024-2025 remains below the recommended expenditure maximum. In 2024, net-expenditure in Spain grew by 3.5% (see Annex 1). This increase is mainly driven by social benefits other than in kind. Interest expenditure also grew dynamically but is not included in the net expenditure. In 2025, net expenditure is forecast by the Commission to grow by 4.2%, which is above the maximum growth rate recommended by the Council⁽²⁾, driven by a robust growth of gross fixed capital formation, including in defence. The cumulative growth rate of net expenditure in 2024 and 2025 taken together is projected at 7.9%, which is below the maximum rate. The reforms and investments underpinning the extension of the fiscal adjustment to 7 years that were due by the 30 April 2025 have been implemented with the exception of certain elements of Spain's RRP measure C28.R3 and the related milestone on the entry into force of tax reforms derived from the expert group recommendations or other analyses by the Ministry of Finance.

⁽¹⁾ Net expenditure is defined in Article 2(2) of Regulation (EU) 2024/1263 as government expenditure net of (i) interest expenditure, (ii) discretionary revenue measures, (iii) expenditure on programmes of the Union fully matched by revenue from Union funds, (iv) national expenditure on co-financing of programmes funded by the Union, (v) cyclical elements of unemployment benefit expenditure, and (vi) one-off and other temporary measures

⁽²⁾ Council Recommendation of 21 January 2025 endorsing the national medium-term fiscal-structural plan of Spain (OJ C, C/2025/643, 10.2.2025, ELI: <http://data.europa.eu/eli/C/2025/643/oj>).

Spain faces challenges amid strong economic momentum

The full implementation of the medium-term plan and improved quality and efficiency of public spending are needed to ensure both fiscal consolidation and competitiveness. Spain needs fiscal space to finance policies that boost productivity, address high levels of child poverty, and close the innovation gap. Fiscal sustainability risks are mostly driven by the projected increase in ageing-related costs (see Annex 1) in the context of an ageing workforce (see Annex 10) and by the unfavourable initial deficit and debt levels. Together with the commitments in the medium-term plan, the implementation of reforms and investment under the RRP will help to support fiscal sustainability. A consistent application of the 'closure clause' introduced by the 2023 pension reform should help to address the emerging fiscal sustainability gaps relating to public pension expenditure. Furthermore, while the investments and reforms under the RRP help to support the efficiency of the Spanish health system, measures may be required to further improve its efficiency and fiscal sustainability (see Annex 1). Among others, Airef's (*Autoridad Independiente de Responsabilidad Fiscal*) spending reviews have identified savings potential in the health sector, in relation to the more reasonable use and price of medicines.

There is a substantial need for investments in innovation and digitalisation, while maintaining the focus on upskilling the labour force. An uptick in R&D investments and adequate provision of skills to the labour market can have a positive ripple effect in the country's economic performance and overall competitiveness (see Annexes 3 and 12).

Productivity per hour worked is still below the EU average (see Annex 4), while substantial regional disparities remain in higher education, lifelong learning, labour market conditions and innovation (see Annex 17).

Supporting the housing supply is key to sustainable growth and social fairness.

Targeted increases in the volumes of housing development can have fundamental benefits in Spain, as they would improve the capacity to absorb labour supply in crowded metropolitan areas, while promoting internal labour mobility. The growth of tourism has contributed to an increase in tourist rental properties. This shift has subsequently reduced the availability of rental homes for primary residences, coupled with the low stock of social housing and a relatively slow pick-up in new construction or redevelopments to meet the growing demand. The scarcity of housing supply is having an impact on households' disposable income and presents a challenge for low-income families and young people. Data from the Bank of Spain show that nearly 40% of Spanish tenants now allocate 40% of their income to rent and utilities, compared to the EU average of 27%. Addressing labour shortages in the construction sector is fundamental, as over 50% of employers report significant difficulties in finding workers (see Annex 10).

Further effort is required to increase the housing supply, as the Spanish economy faces a housing deficit of approximately 600 000 units, according to estimates from the Bank of Spain⁽³⁾. The reform of the land law is pending and would facilitate new housing development by reducing processing times, promoting regulatory

stability and eliminating unnecessary administrative bottlenecks. In this context, the authorities have launched a new strategic project for economic recovery and transformation (PERTE) with a focus in the industrialisation, digitalisation, and sustainability of housing construction.

According to the Bank of Spain⁽⁴⁾, Spain's social rental housing stock represents just 1.5% the total stock, compared to the EU average of 9%. Mobilising public land, expanding the social rental housing stock and increasing financing for affordable and social housing would boost the availability of housing. The factors constraining supply need to be reversed in a timely manner, in order to enhance residential construction and expand the rental market, with a particular focus on affordable housing, especially for young people and low-income households (see Annex 11).

⁽³⁾ [Informe anual, Banco de España, 2023](#)

⁽⁴⁾ [El mercado del alquiler de vivienda residencial en España: evolución reciente, determinantes e indicadores de esfuerzo](#), Banco de España, 2024

UN Sustainable Development Goals (SDGs)

Spain is making progress in all SDGs related to competitiveness and productivity (SDGs 4, 8, 9), yet it has not closed the gap with the EU average on some of them. Sustainable economic growth and employment indicators (SDG 8) are below the EU average even after quickly catching up over recent years. The employment rate is below the EU average despite increased labour market tightness and the percentage of young people not in employment, education or training aged 15-29 remains above the EU average (see Annex 10). However, labour reforms implemented since 2021 are improving employment indicators, favouring the achievement of the SDGs. SDG 9 related to innovation, industry and resilient infrastructure is catching up with the EU average thanks to EU funds, but R&D expenditure remains lower than the EU average (see Annex 15).

Out of the 17 indicators, 10 SDGs Spain remains below the EU average in 10 out of the 17 SDGs. Besides those highlighted above, these relate to environmental stability (SDGs 6, 13, 14, 15), fairness (SDGs 1, 8 and 10) and macroeconomic stability (SDG 16).

There is potential to further enhance the business environment by reducing administrative burden and regulatory restrictions on businesses. By aligning permitting with best practices and reviewing and standardising administrative procedures across regions, Spain could improve its business environment, boost private investment and enhance its productivity (see Annexes 4 and 6). Reducing the administrative burden on firms and investors, favouring a simpler framework for businesses and reducing unjustified delays in administrative proceedings by tackling the fragmented regional system, should boost private investment (see Box 2 and Annex 17).

These steps are critical to eliminating barriers to strong growth, investment and innovation, including those posed by size-dependent regulations (as highlighted in recent OECD and IMF reports). In this context, the development of an initiative with the objective to promote regulatory standardisation (20th Regime), a commitment in the Spanish medium-term plan that the authorities say is already in progress, aims to reduce administrative burdens on businesses and promote a more coordinated regulatory approach to

enhance the efficiency of the national single market (see Annex 4).

Strengthening the institutional and regulatory framework is essential to enhancing the business environment. To achieve this, Spain faces the challenges of simplifying the complexity and volume of regulations, improving collaboration between different levels of administration, and addressing delays in the judicial system (see Annex 6).

Keep up the pace in progress on the green transition. While Spain is a leading producer of renewable energy, more effort is required to strengthen its autonomy through the availability of critical raw materials for the net zero industry and the transformation of the automotive industry (see Annexes 7 and 11). Continuous efforts are needed to drive the decarbonisation of the economy, support the electrification of industry and transport, and enhance the economy's preparedness for climate change (see Annex 9), including through the provision of green skills (see Annex 12). Moreover, Spain's manufacturing sector remains heavily reliant on imported critical raw materials for both the green and digital transitions (see Annex 7).

Box 2:**Barriers to private and public investment**

Spain is one of the largest receivers of funding under the Recovery and Resilience Facility (RRF) and **the increase in public investment, concentrated on transport and urban infrastructure, is probably related to the implementation of investments under the Recovery and Resilience Plan (RRP)**. In addition to the EUR 163 billion funding from the RRF in 2021-2026, EU cohesion policy funds are providing EUR 35.6 billion to Spain (amounting to EUR 52.1 billion with national co-financing) for 2021-2027 to boost competitiveness and growth.

The implementation of Spain's RRP faces considerable challenges. At present, Spain has fulfilled 30% of the milestones and targets in its RRP.

Bottlenecks to EU fund implementation are related to absorption capacity, especially given the concentration of investments towards the end of the implementation period. These challenges are exacerbated by the large volume of funds channelled through financial instruments. In addition, strengthening coordination among different levels of administration, along with the streamlining of procedures, would help accelerate the absorption of funds and ensure timely support reaches final beneficiaries.

It remains important to accelerate the implementation of cohesion policy programmes. The mid-term review offers opportunities to speed up progress and better address EU strategic priorities related to competitiveness, defence, housing, water resilience and the energy transition.

While Spain has leveraged STEP to reallocate some Cohesion Policy resources towards this priority, it can further support the development or manufacturing of critical technologies in the areas of digital and deep tech, clean and resource efficient technologies, and biotechnologies.

As regards private investment, various factors continue to constrain the ability of Spanish firms to invest, innovate and improve their productivity (see Section 2):

- **Capital markets in Spain are not sufficiently developed to meet all the financing needs of innovative firms** (see Annex 5).
- **Business regulation and taxation has been identified as a major obstacle to investment** by the majority of Spanish SMEs (53%) (see Annex 2).

INNOVATION, BUSINESS ENVIRONMENT AND PRODUCTIVITY

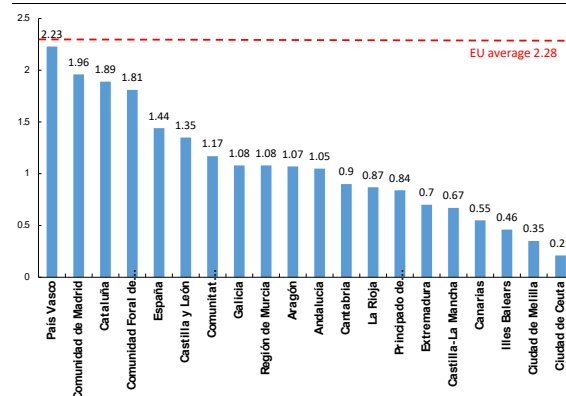
Boosting productivity and competitiveness in Spain through innovation

Spain has a strong scientific foundation, but its excellence in research has yet to translate into improved innovation performance. Spain performs well in terms of scientific excellence and has a research system that attracts both domestic and foreign talent. Nevertheless, it continues to perform below the EU average in terms of overall innovation performance (see Annex 3).

The RRP has provided a major boost in the field of research and innovation and provided the largest investment in this area (in absolute terms) of all of the recovery and resilience plans (with EUR 17.6 billion of the RRP being allocated to research and innovation measures). An additional amount of 4.5 billion is planned for R&I investments in the context of the European Regional Development Fund. However, Spain's R&D spending, especially private R&D investment, remains well below the EU average (0.84% of GDP compared to the EU average of 1.49%) and heterogeneous between regions (Annex 3, Annex 17 and Graph 2.1). In addition, private research and innovation activities are increasingly concentrated on a specific group of companies. Although Spain has recently introduced several public support schemes to support private R&D investment, their uptake is limited due to their complexity and the excessive administrative burden

they entail for potential beneficiaries. Moreover, R&D spending and innovation outcomes remain subject to regional disparities that are in large part attributable to the fragmented governance and inefficient coordination of R&D policies and to the different regional innovation ecosystems, with less-developed regions lacking incentives, experience and resources. Spain also continues to underperform with regard to science-business linkages, despite recent initiatives included both in the Spanish RRP and outside of it (see Annex 3).

Graph 2.1: R&D expenditure as a share of the total GDP, per Spanish region, 2022



Source: Eurostat

Simplifying the regulatory environment and improving institutional quality

The regulatory volume and complexity have increased in recent years. To enhance the competitiveness of businesses in Spain, it is crucial to tackle the escalating volume of regulation and complexity that

hinders companies' growth and operation, especially those that are smaller and newer. The increase in the volume of regulation affects the number of businesses, productivity and the functioning of judicial bodies (see Annex 6).

There is scope for Spain to enhance coordination between territories and government levels to address the regulatory and administrative burdens on businesses. Spain's RRP contains reforms and investments to reinforce administrative collaboration between the different levels of government. However, there remains significant potential to improve inter-administrative collaboration, particularly in regulatory and administrative procedures that have a direct impact on business operations. Regulatory differences between territories discourage companies from expanding across regions simultaneously, limiting opportunities for innovation, growth, specialisation and efficiency gains. For example, waste management regulations often change from one municipality to another, requiring companies to familiarise themselves with dozens of pages of regulations in each case.

While Spain's RRP has introduced reforms to enhance judicial efficiency, it still takes a long time to resolve civil and commercial cases. This can result in numerous economic inefficiencies, including less functional real estate markets, reduced entrepreneurship and lower credit availability (see Annex 4). Spain can further improve the efficiency of its justice system by reinforcing human and material resources and ensuring an equal level of digitalisation between territories.

Deepening the single market while addressing fragmentation in the domestic market

Spain can deepen its participation in the EU's single market. The significant difference between Spain's intra-EU trade of 15% (ratio of trade volumes to GDP) and the EU average of 43% suggests that Spanish businesses have an opportunity to increase their participation in the EU's single market and boost economic growth (see Annex 4).

A significant majority of firms in Spain see regulation as a major obstacle to investment. Spain is one of the Member States with the highest share of firms that identify regulation as a major obstacle to investment (60.4% in 2024 compared to the EU average of 24.5%)(⁵). Spain has adopted several laws to reduce financial and administrative barriers to the development of firms. The Law on Business Creation and Growth and the Law on Start-ups (both under the RRP) introduced incentives for the creation and growth of companies, including innovative ones (see Annex 4).

Spain's '20th regime' proposal has the potential to improve the business environment for companies. Spain has a competition-friendly regulatory framework that performs better than the OECD average (see Annex 4). In this context, the authorities say that a new initiative to simplify regional requirements ('20th regime'), a commitment under the Spanish medium-term plan, is in the process of being created. This proposal aims to support business activity and reduce procedures. The '20th regime' would mirror

(⁵) Commission calculation based on EIB Investment Survey 2024.

Letta's 28th regime proposal⁽⁶⁾. It includes measures to revisit and standardise administrative procedures, fostering better collaboration among administrative bodies to the benefit of companies operating nationally and across regions, including among others (i) a repository of local regulations; (ii) the implementation of digital labelling; (iii) the adoption of a standard ordinance for retail commercial activities; (iv) the reduction of barriers to the deployment of electric-vehicle charging stations; (v) a tool to simplify interaction between companies and the administration (see Annex 4).

Leveraging more private investment

The Spanish economy has shown dynamism since the aftermath of the pandemic, but the level of private investment has remained subdued. In contrast to the robust evolution in exports of services and both private and public consumption since 2021, private investment growth has remained sluggish. It stands below the EU average for the period 2019-2024 (3.5% compared to the EU average of 4.0%) (see Annex 4) and only surged above its pre-pandemic level in 2024. This is despite Spain having benefited from relatively lower energy prices compared to most EU Member States in recent years, thereby limiting cost and creating a certain buffer for investment, particularly in energy-intensive sectors.

Some factors underlying the weak evolution of private investment appear to have been cyclical. Beyond the broader uncertainty surrounding the international environment, the unfavourable monetary and financing conditions resulting from

high interest rates in very recent years has limited the appetite of non-financial corporations for capital investments, while encouraging them to strengthen their financial situation by reducing their stock of outstanding liabilities and debt. Furthermore, the relative increase in labour costs experienced throughout 2024, coupled with the simultaneous gradual drop in profit margins for non-financial corporations –despite a high degree of heterogeneity between sectors – may have further constrained the resources available for business investment. This has occurred in a context of tighter liquidity from the bank lending channel.

Taxation has contributed to a limiting of private investment. The general corporate income tax rate in Spain (25%) is above the EU-27 average (21%), although it has decreased from 35% in 1995. With R&D expenditure remaining well below the EU average, tax incentives are not currently designed to unlock the full potential of such investments. (see Annex 2). Moreover, the uptake of investment from large corporations could be discouraged by the end of the lower statutory corporate tax rate and by the resulting increased compliance burdens they could face.

Access to finance remains a challenge, especially for innovative SMEs. Spanish firms rely heavily on bank financing as opposed to listed shares or bonds. As bank lending is rebounding and Spanish firms are able to cover their investment needs through internal funding, the overall financing gap is limited. However, firms with limited capacity for internal funding, such as innovative start-ups and SMEs, are constrained by low market liquidity and relatively small capital markets (see Annex 5). To address these constraints, policy action could focus on incentives for retail and institutional investors to participate in

⁽⁶⁾ *Much more than a market*, Enrico Letta, April 2024.

capital markets, and on overall financial literacy.

DECARBONISATION, ENERGY AFFORDABILITY AND SUSTAINABILITY

Supporting strategic autonomy and technology for the green transition

Spain has a diversified net-zero manufacturing sector, which is supported by strategic projects for economic recovery and transformation (PERTEs). Spain is a leading manufacturer in Europe's the wind power supply chain⁽⁷⁾. It is a manufacturer of solar photovoltaic components (3% of EU capacity) and has at least 27 facilities producing heat pumps. Spain's regulatory framework for net-zero technologies is complemented with strategic projects for economic recovery and transformation (PERTEs). These are public-private collaborations involving public administrations, companies and research centres. There are three PERTEs focusing on clean energy and technologies: one on the electric vehicle value chain, a second one on industrial decarbonisation, and a third one on renewable energy technologies, renewable hydrogen and storage. Furthermore, the draft industry and strategic autonomy law (under the Spanish RRP) seeks to accelerate the decarbonisation and circularity of industry, increase energy security by reducing dependencies, support the digital transition, and guarantee the country's strategic autonomy. This draft ordinary law (approved by the Council of Ministers) is currently undergoing the parliamentary

(7) [Bruegel. European tracker](#)

process under an extended period for amendments (see Annex 7).

The Spanish automotive industry is exposed to risks. The Spanish automotive industry is the second largest vehicle manufacturer in Europe and production represents 10% of Spanish GDP⁽⁸⁾. Nevertheless, the sector is facing new challenges due to decreasing demand and supply chain disruptions, which could result in a loss of competitiveness (see Annex 7). To boost competitiveness, the Spanish automotive industry sector⁽⁹⁾ has identified factors such as tighter control over the value chain, increased emphasis on technology and research and innovation, better regulation and greater adaptation to the new electric vehicle model, which, in turn, would increase demand.

The Spanish manufacturing sector depends heavily on imports of critical raw materials needed for the green and digital transitions. While Spain's imports of critical raw materials are lower than the EU average, its clean tech manufacturing industry is heavily reliant on raw materials such as lithium, cobalt and rare earths, which are essential for the production of high-tech products, including electric vehicles, wind turbines and electronics. This presents significant challenges in terms of

(8) Informe ANFAC/SERNAUTO: Nuevos retos del sector de la automoción en España, 2023.

(9) Represented by ANFAC (Asociación Española de Fabricantes de Automóviles y Camiones) and SERNAUTO (Asociación Española de Proveedores de Automoción).

sustainability and resilience, such as supply chain risks, environmental degradation and social concerns. With 42% of material inputs in manufacturing production being imported in 2023 (EU average: 22%), Spain is particularly vulnerable to supply chain disruptions (see Annex 7). Actions to address this dependence include promoting import diversification and the circular economy (see below).

Boosting the decarbonisation of industry

Spain has put in place policies to support the decarbonisation of industry, but more effort is needed. A high share of Spain's manufacturing emissions relate to energy use; the sector is relatively emission-intensive. 63% of Spain's greenhouse emissions from manufacturing result from energy use, the fifth highest share in the EU, as opposed to emissions from industrial processes and product use, compared to 57% in the EU. To speed up decarbonisation efforts, Spain has put in place a PERTE on industrial decarbonisation; adopted laws to support decarbonisation efforts such as the climate change and energy transition, green bonds, tax incentives; and the smart industry strategy. These policies support the deployment of renewable energy, energy storage, carbon capture, use and storage, and promote renewable hydrogen. Furthermore, Spain is strengthening its sustainable finance framework, with measures as the creation of the Spanish Council for Sustainable Finance, a governance mechanism aimed at fostering public-private cooperation, which will play a central role in promoting and coordinating the use of sustainable financial instruments to accelerate the decarbonisation of industry and support

long-term investment in green technologies. However, given the high greenhouse emissions intensity of Spain's manufacturing industry overall, further efforts are needed to support the decarbonisation of manufacturing production, particularly in energy-intensive sectors. This includes support for the development of new low-carbon technologies (e.g. under the Innovation Fund), the scaling up of existing solutions, the promotion of sustainable supply chains, the energy renovation of its building stock and circular economy practices (see Annex 7).

The electrification of industry and transport needs continued support. In industry, electricity represents 31.3% of final energy consumption. For transport, its share remains negligible, at 1.2% (see section below). Further progress is required in electrification across sectors, to decarbonise the economy and to enable consumers to benefit from affordable renewable energy sources. The electrification of production processes below 200° C could also be expanded (e.g. transport, tourism, paper, food production). For industries, electricity prices, and electricity taxation in particular, are higher than in the case of gas (but also for consumers, where levies and taxes account for 24% of the electricity bill), disincentivising electrification (see Annex 8).

Increasing green energy production to ensure affordable transition

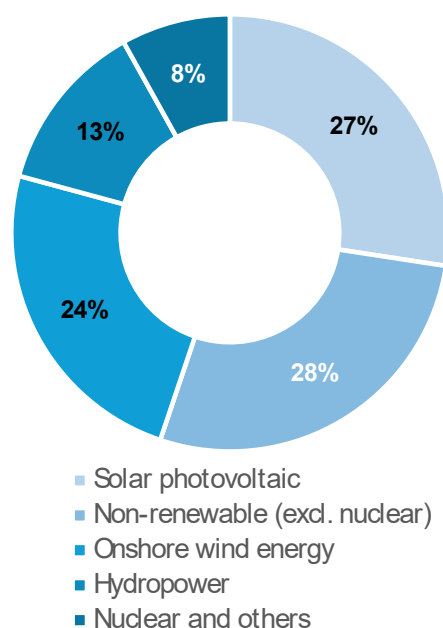
Renewable energy production represents 57% of the electricity mix, yet electricity accounted for just 24.7% of Spain's final energy consumption. This was above the EU average of 22.9% and has been increasing over the last decade (see Graph

3.1). Electricity accounts for 45.4% and 31.1% of households' and industry's final energy consumption respectively (see Annex 8). Channelling renewable energy towards household consumption could help to decarbonise the economy and enable consumers to benefit from affordable renewables. This, in turn, could help to reduce the high levels of energy poverty, which remained high in 2024⁽¹⁰⁾, with a particular impact on low-income households, despite the extraordinary measures adopted to protect consumers due to the COVID-19 pandemic and the energy price crisis derived from the Russia's war of aggression against Ukraine.

Spain is implementing permitting reforms but has not yet transposed the new provisions in the revised Renewable Energy Directive into the national legislation on permitting. Spain has taken important measures to accelerate permitting processes for renewables. These include knowledge-sharing, publishing the grid capacity of the system operator, and developing regulatory sandboxes for innovative projects. In July 2024, the central government finalised 28 GW of construction permits for renewables capacity across 280 projects. However, the new EU provisions need to be implemented quickly in order to simplify and standardise the permitting requirements.

⁽¹⁰⁾ [Statistics | Eurostat](#)

Graph 3.1: **Spain's electricity generation mix by source of energy, 2024**



Source: IRENA, Ember

A friendlier permitting environment and easier deployment of infrastructure are key to supporting the development of renewable energy. Spain is one of the countries with the highest production of renewables in Europe. This production advantage offers an opportunity to increase Spain's renewables capacity. The robust deployment of permitting reforms in the context of the transposition and implementation of RED III and investment in infrastructure are key to supporting the deployment of renewable energy. In this context, increasing the current annual investment cap, both at transport and distribution levels (0.065% and 0.13% of GDP respectively in place since 2013), will allow for the uptake of additional renewables capacity. Lastly, simplifying and standardising the requirements for permitting (which currently takes an average of 18-24 months) would improve the deployment of renewable energy infrastructure throughout Spain, thus tackling the significant disparities between regions (see Annex 17).

On 28 April 2025, Spain and Portugal faced an unprecedented power outage, which also affected parts of France.

According to EU law, ENTSO-E will lead an independent investigation into the causes of the blackout. The European Commission will inform all Member States of the progress of the investigation through the Electricity Coordination Group.

Additional expansion of Spain's cross-border electricity interconnection capacity is key to further integrating the production of renewable energy and improving the Iberian Peninsula's market integration.

Spain needs to continue improving its interconnectivity (the overall level was below 5% in 2025). The completion of the interconnection project between Spain and Portugal is expected to be commissioned by the end of 2025, with which Spain's current interconnection capacity will increase to 3.2 GW. The Bay of Biscay interconnection project between Spain and France is expected to be commissioned by 2028 and to increase exchange capacity further to 5 GW. Further interconnection projects are planned between Navarra (Spain) and Landes (France), and between Aragón (Spain) and Marsillon (France) (see Annex 8).

Promoting the circular economy

Despite the progress made in recent years, improving waste management and developing the potential of the circular economy remains a significant challenge.

In 2020, Spain approved a comprehensive national circular economy strategy entitled 'España Circular 2030', with three-year action plans. Autonomous Communities have also adopted regional strategies for the circular economy. The effects of Law 7/2022 on waste and

contaminated soils were followed by various implementing regulations, which are currently being implemented. However, there have been limited improvements in results in the waste sector. Spain is one of the countries that missed the EU target of recycling 50% of municipal waste by 2020 (the rate in Spain was 36%) and it is at great risk of missing the new EU waste targets for 2025⁽¹¹⁾. Despite the EU funding from the European Regional Development Fund and the Recovery and Resilience Facility, it is estimated that Spain needs additional investments of EUR 2.3 billion per year for the circular economy transition, including for waste management⁽¹²⁾.

Spain is implementing policies to strengthen supply chains and the uptake of circular solutions for critical raw materials, but more action is needed to achieve circularity.

In 2023, the circular use of material in Spain stood at 8.3% (EU average 11.8%). To reverse this low rate, Spain has published a roadmap for the sustainable management of mineral raw materials. It has adopted specific legislation for batteries, electrical and electronic equipment, vehicles, and construction and demolition waste, with measures to improve the circularity of those products (see Annex 7). Furthermore, under the RRP, Spain has put in place a PERTE on circular economy, with focus on key sectors as textile, fashion and footwear, plastic materials, and renewable energy equipment, including wind, solar and batteries.

⁽¹¹⁾ European Commission, [2023 Waste early warning report](#).

⁽¹²⁾ See: EMF, [Achieving growth within](#); Eunomia/COWI., [Study on waste management investment needs](#).

Strengthening climate adaptation, preparedness and water management

Spain needs to step up efforts to improve water management and water resilience. Large areas of Spain are water-stressed, meaning that water demand exceeds the water resources available under sustainable conditions due to demand from agriculture, tourism and energy. These sectors are heavily dependent on water supply, and irrigation is crucial in most rural areas. Improving water management remains a major issue in Spain, particularly in terms of water governance, water body rehabilitation and restoration and water efficiency. Furthermore, Spain has faced serious difficulties in implementing the Urban Wastewater Treatment Directive, which is an area of particular concern. Further infrastructure investment is needed to make the water system resilient (Annex 9).

Spain should enhance efforts to adapt to climate change. Climate risks directly affect Spain's economy and society, with a high number of fatalities and economic losses resulting from weather and climate-related extreme events (see Annex 9 and map A7.1). Spain uses several EU funds to improve its preparedness, including the Recovery and Resilience Facility (EUR 13.6 billion), the European Regional Development Fund (EUR 1.26 billion), and the forthcoming Social Climate Fund (up to EUR 6.8 billion). Anticipating and adapting to the adverse effects of climate change, such as floods, coastal and soil erosion, desertification, droughts, heat waves and forest fires, remains a core challenge in Spain. Reinforcing these efforts would also enhance the country's water resilience.

The state of nature and ecosystems continues to degrade in Spain, reducing the country's climate resilience. Spain is one of the most biologically diverse countries in the EU. However, only 8.9% of the country's habitats and 18.9% of species have a good status, lower than the EU averages of 14.7% and 27% respectively, showing a deteriorating trend compared to the previous reporting period (see Annex 9).

Nature degradation presents significant risks to Spain's economy and competitiveness, as it is one of the Member States with the highest dependency on ecosystem services. Spain is the Member State with the highest supply chain dependency on ecosystem services. Several sectors such as agriculture, fisheries, construction and water utilities are particularly dependent on ecosystem services, with 100% of the gross value added of those sectors directly dependent on them (Annex 9, Graph A7.1). This means that failure to maintain the capacity of ecosystems to deliver services could entail significant costs or even halt production in these sectors. Protecting and restoring key ecosystems would ensure that the long-term competitiveness of these economic sectors is preserved (Annex 9).

Spain's agricultural sector needs to adapt better to climate risks and reduce its carbon footprint. Spanish agriculture is still a notable source of greenhouse gas emissions (14% of the country's emissions) and continues to have a significant impact on air, water and soils. The emissions from the agricultural sector include 27.9 million tonnes of CO₂eq from livestock and Spain's utilised agricultural area (UAA) has grown by 5.2% in one decade, increasing the sector's carbon and environmental footprint. While Spain has started its transition towards more sustainable agriculture practices, its agri-food system

continues to have significant climate and environmental impacts, warranting additional action to support the uptake of sustainable agriculture practices (Annex 9).

SKILLS, QUALITY JOBS AND SOCIAL FAIRNESS

Strengthening the labour market inclusion of disadvantaged groups

The labour market continued to improve in 2024, driven by dynamic job creation and robust economic growth. Although it remains below the EU average, the employment rate is rising, keeping the national target of 76% by 2030 within reach. While unemployment is falling, it remains among the highest in the EU. Labour market reforms under the RRP have substantially reduced fixed-term contracts in the private sector, but they remain widespread in the public sector despite some improvement

Despite progress since 2021, young people still face barriers to employment. The weak labour market outcomes for young people are linked to persistent skills mismatches, difficult school-to-work transitions and a skills offer that falls short of labour market (and specifically SMEs') needs (see Annex 10). Further efforts to strengthen the legal framework could support better labour market integration.

Third-country nationals have contributed significantly to employment growth but struggle to access quality jobs. They are often over-represented in precarious and low productivity sectors and experience high unemployment rates (see Annex 10). The Spanish government has adopted reforms to improve migration policies and working conditions for migrants, as reflected in the Spanish medium-term fiscal-structural plan.

However, their effectiveness will need to be assessed over time. Stronger social dialogue and greater involvement by SMEs could also help address these challenges, particularly by promoting fair wages and job stability.

Demographic changes present a challenge in terms of labour market resilience. Older workers face significant obstacles to accessing employment, with relatively high overall and long-term unemployment rates, indicating that their re-entry into the workforce is limited. Despite reforms carried out in the last years, women are particularly affected, due to career breaks and care-giving responsibilities. Although younger foreign workers have eased demographic pressures, Spain's old-age dependency ratio is expected to increase significantly by 2050, with the working-age population projected to fall by 11.8%. Lower employment rates among older workers, rural depopulation and workforce ageing in the public sector and among the self-employed further undermine labour market resilience. Spain adopted measures to promote longer working lives, but improving support for older workers, especially through upskilling and reskilling, remains crucial. Public employment services (PES) can help to facilitate job transitions, including early intervention during prior notice periods in objective and collective dismissals.

Ensuring high-quality and inclusive education and training

Low basic skills and high early school leaving remain a challenge. A significant share of 15-year-olds, although below the EU average, underperform in mathematics, reading and science⁽¹³⁾, while few achieve top performance, thus jeopardising future productivity and competitiveness. Regional differences in the acquisition of basic skills persist. Although the early school leaving rate fell by almost 10 pp. over the past decade, it remains high, with persistent gender and regional disparities, although these have been reduced significantly in the last decade. This hinders skills development and employment prospects later in life. Efforts are underway, in part supported by the RRP, to improve basic skills through support to schools and teachers, updated curricula, and programmes to prevent early school leaving.

Persistent obstacles affect the transition from education to work in both VET and higher education. Despite rising VET enrolment, participation in upper-secondary and dual programmes remains limited. The low employment rates of medium-skilled VET graduates and the limited share of adults with intermediate qualifications point to underlying skills mismatches. Mismatches are also prominent among tertiary graduates, with one in three workers being over-qualified and with higher rates among young men and third-country nationals. Recent reforms supported by the RRP, such as the national catalogue of professional qualifications, are addressing these mismatches by adapting curricula to the needs of the economy,

particularly in the growing green and digital sectors in the field of VET. However, structural barriers, such as shortages of qualified teachers and limited SME participation due to administrative and capacity constraints, hinder the expansion of dual VET programmes and might also contribute to misalignments between educational outcomes and labour market needs. Skills forecasting and greater employer involvement in curriculum design could help to improve the labour market relevance of training and make the fields of science, technology, engineering and mathematics (STEM) and information and communications technology (ICT) more attractive to students. Students' engagement could be facilitated by simplified processes and individual career guidance. Public administrations could contribute by hosting VET students and attaching representatives from VET centres to groups of SMEs. This would facilitate the inclusion of VET students in smaller company structures.

Limited participation in adult learning reduces opportunities to adapt to changing labour market needs, thereby undermining productivity and competitiveness. Although participation has increased in recent years, Spain is not on track to reach the national 2030 target of 60% of adults participating in training each year. Participation declines with higher age and lower educational attainment, exacerbating inequalities, particularly for older adults, men and low-skilled individuals. Active labour market policies have limited coverage and impact, with low participation in training among low-skilled and older workers, and in key sectors such as hospitality and commerce (see Annex 12). Public employment services only help to fill a few vacancies, and credit for training remains under-used. Under the RRP, Spain has introduced reforms to modernise active labour market policies,

⁽¹³⁾ Programme for International Student Assessment (PISA), 2022.

and measures that aim to upskill and reskill adults by improving lifelong learning through universities, VET and active labour market policies. To address remaining gaps, it will be essential to strengthen the capacity of public employment services to effectively identify and support those most in need, enhance skills anticipation and support for job transitions, expand flexible training opportunities, and further promote a culture of evaluation to identify which services have the greatest impact on improving employability. Further efforts to improve outreach and implement targeted measures – such as the planned individual learning accounts – could improve outcomes.

Fostering social fairness

Poverty and social exclusion remain significant concerns. Although poverty and social exclusion decreased in 2024, the number of people at risk remains above pre-pandemic levels and the at-risk of poverty or social exclusion (AROPE) rate was among the highest in the EU, with significant differences between regions. Vulnerable groups such as single-parent and large families, persons with disabilities, young people, third-country nationals and the Roma population, are disproportionately affected. At the current pace, Spain is falling behind in its 2030 poverty reduction target of reducing the number of people at risk of poverty or social exclusion by 2.8 million. In-work poverty has decreased in recent years, however it remains high (3 pp. above the EU average, at 11.3%) despite recent minimum wage increases, particularly among temporary workers (14.3%) and third-country nationals (30.2%). Meanwhile, energy poverty is still high, and many households struggle with material deprivation. Spain has introduced energy-

cost subsidies and public transport support, providing relief for many vulnerable households, but gaps remain in ensuring adequate living standards for vulnerable households. Furthermore, under the RRP, Spain is strengthening family support schemes, enhancing minimum income provisions and modernising social services infrastructure.

Child poverty is a significant structural challenge that undermines upward social convergence and future competitiveness. More than one in three children are at risk of poverty or social exclusion (see Graph 4.1), with those from migrant and Roma backgrounds, as well as children in single-parent households, being the most affected. Low work intensity, limited access to quality services and regional disparities further contribute to persistent poverty risks. Spain adopted a national poverty strategy (2024-2030) and is implementing the European Child Guarantee with support from the ESF+, with some progress visible on inclusive education. There is potential to improve child welfare through more targeted social support and income protection measures. Moreover, the current tax deduction system does not adequately support the most vulnerable (see Annex 11). Strengthening and accelerating the implementation of the Child Guarantee, as well as ensuring access to basic services such as school meals and housing, could help reduce child poverty and prevent the intergenerational transmission of disadvantages.

The effectiveness of social protection policies remains limited, particularly in reducing poverty and income inequality. The impact of social transfers (excluding pensions) is among the lowest in the EU, especially for children (see Graph 4.1). Despite improvements, income inequality remains high and above the EU average, and the redistributive effect of taxes and

benefits is limited. Although Spain allocates a quarter of its GDP to social protection, the share directed to families, children and social inclusion remains relatively low. Spain has taken steps to address some of these gaps, including through the 2024-2030 national de-institutionalisation strategy, which expands community-based services for vulnerable groups. Strengthening targeted support for families and children, and decreasing regional differences, could help improve social outcomes.

The minimum income and child support schemes face persistent adequacy, coverage and implementation issues.

Despite ongoing efforts to ensure efficient implementation, many eligible households struggle to access the minimum income scheme (IMV) and the child support supplement (CAPI) due to administrative barriers and complex procedures. The adequacy of minimum income support is also low, with benefit levels well below the poverty threshold. Differences in the alignment of regional schemes with national benefits further exacerbate disparities (see Annex 11). Spain is addressing some of these shortcomings through targeted support and by proposing an accessibility plan to simplify processes and improve take-up. Recent reforms facilitate transition from non-contributory unemployment benefits to the IMV and enable regional management, which may improve coordination, but risks uneven implementation across the territory. Further efforts could focus on simplifying applications, increasing visibility and addressing administrative inefficiencies, such as delays and repayment requests. Better coordination between national and regional minimum income schemes could also help minimise overlaps and ensure comprehensive coverage.

Limited access to affordable housing is hampering social inclusion and mobility.

In addition to its impact on sustainable growth (see Section 1), access to affordable and social housing remains a growing social challenge, particularly for the most vulnerable and young people. 29.9% of people at risk of poverty struggle with housing costs, and only 14.8% of young people aged 16 to 34 moved into their own home in 2024, further deepening social challenges. Homelessness is also a growing challenge, with 71.3 homeless people per 100 000 inhabitants. Spain's social housing stock is among the lowest in Europe (3.3% compared to the EU average of 8%), leaving an estimated 4.5 million people in housing exclusion (see Annex 11). There are significant disparities between regions and urban and rural areas, with cities such as Madrid and Barcelona particularly affected. Further support to housing supply in stressed areas and for vulnerable people seems warranted, including by simplifying the regulatory environment.

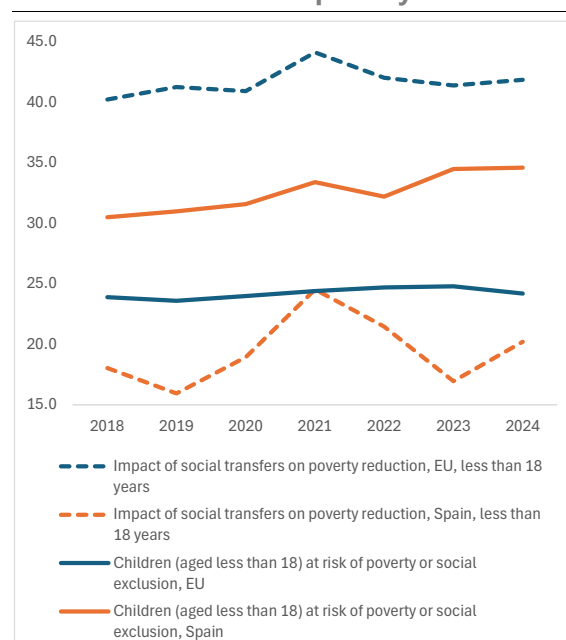
Labour shortages and inefficiencies put a strain on primary care and hinder access to medical care.

Persistent staff shortages, particularly in primary care and rural areas, restrict service availability. The number of nurses per capita remains below the EU average, and although the number of doctors is slightly above it, territorial disparities are significant (see Annex 14). Uneven distribution of healthcare resources between regions, and growing waiting times in primary care, further hinder access. Spain has taken steps to reform primary care, but plans to address regional disparities remain less detailed. Improving cost-effectiveness could free up resources to modernise primary care and reduce access gaps, while addressing staff shortages and uneven rises in pharmaceutical and medical costs across regions would foster more equitable and efficient care. The significant projected increase in healthcare costs over the coming decades, as demographic changes

place increasing pressure on public finances, (see Annex 1) may have an impact on access to medical care. Benefits from existing resources can be maximised through efficiency gains.

These findings are consistent with the second-stage analysis in line with the social convergence framework. The analysis points to challenges related to the high share of people at risk of poverty or social exclusion, particularly children, and the low impact of social transfers on poverty reduction, as well as a high share of early leavers from education and training, but does not point to overall social convergence challenges for Spain, including in light of the measures implemented or planned⁽¹⁴⁾.

Graph 4.1: **Children AROPE and the impact of social transfers on child poverty reduction**



(1) The reduction in percentage of the at-risk-of poverty rate due to social transfers is calculated by comparing the at-risk-of poverty rates before social transfers with those after transfers. Pensions are not considered as social transfers in these calculations.

Source: Eurostat, own calculations

⁽¹⁴⁾ European Commission, [SWD\(2025\)95](#). The analysis is based on all the available quantitative and qualitative evidence and the policy response undertaken and planned.

KEY FINDINGS

To boost competitiveness, sustainability and social fairness, Spain would benefit from:

accelerating the implementation of the RRP, including the REPowerEU chapter; **swiftly implementing cohesion policy**, taking advantage of the opportunities under the mid-term review; and **making optimal use of EU instruments**, including InvestEU and STEP, to improve competitiveness;

improving fiscal sustainability, by curbing the expected age-related increase in pension and healthcare costs and by enhancing the quality and efficiency of public spending through spending reviews;

strengthening the institutional and regulatory framework, by tackling the volume and complexity of regulations and further fostering collaboration among different levels of administration;

reducing administrative burden and regulatory restrictions on businesses, by aligning permitting with best practices and standardising and simplifying administrative procedures across regions;

increasing judicial efficiency, including by streamlining judicial proceedings, reinforcing human and material resources, and ensuring uniform levels of digitalisation in justice matters across all regions;

facilitating housing construction, by completing the reform of the land law, reducing processing times, eliminating administrative bottlenecks, and addressing labour shortages in the construction sector;

increasing the availability of affordable housing, by expanding the social rental housing stock and providing greater incentives for affordable housing, particularly for young people and low-income households;

increasing R&D intensity, both private and public, including by targeting public support at investments in key competitive areas and promoting stronger science-business collaboration;

keeping on track with the green transition, while fostering sustainable competitiveness, by providing continued support for the electrification of industry and transport, speeding up the energy renovation of buildings, promoting the circular economy, further expanding cross-border electricity interconnection capacity and decreasing electricity taxation compared to fossil fuels;

continuing efforts on climate adaptation and preparedness, by improving water management and resilience and improving preparedness for heatwaves, droughts, floods and wildfires;

supporting upward social convergence, reducing poverty and social exclusion, in particular for children, by improving the efficiency, coverage and adequacy of social transfers and social assistance;

improving labour market outcomes and further reducing segmentation, by tackling high youth unemployment, mitigating the underrepresentation of older workers in the labour market and further

reducing the high share of fixed-term contracts in the public sector;

addressing skills shortages and mismatches, by incentivising adult learning for the low-skilled, ensuring the full implementation of dual VET and addressing the low provision of basic skills and high early school leaving.

ANNEXES

LIST OF ANNEXES

Fiscal	26
A1. Fiscal surveillance and debt sustainability	26
A2. Taxation	35
Productivity	38
A3. Innovation to business	38
A4. Making business easier	43
A5. Capital markets, financial stability and access to finance	48
A6. Effective institutional framework	56
Sustainability	62
A7. Clean industry and climate mitigation	62
A8. Affordable energy transition	69
A9. Climate adaptation, preparedness and environment	75
Fairness	82
A10. Labour market	82
A11. Social policies	87
A12. Education and skills	92
A13. Social Scoreboard	96
A14. Health and health systems	97
Horizontal	100
A15. Sustainable development goals	100
A16. CSR progress and EU funds implementation	102
A17. Competitive regions	109

LIST OF TABLES

A1.1. General government balance and debt	31
A1.2. Net expenditure growth	32
A1.3. Net expenditure (outturn and forecast), annual and cumulated deviations vis-à-vis the recommendation	32
A1.4. Defence expenditure	32
A1.5. Macroeconomic developments and forecasts	33
A1.6. General government budgetary position	33
A1.7. Debt developments	34
A1.8. RRF – Grants	34

A1.9.	RRF - Loans	35
A1.10.	Implementation of reforms and investment underpinning the extension	37
A1.11.	Projected change in age-related expenditure in 2024-2040 and 2024-2070	38
A1.12.	Fiscal Governance Database Indicators	39
A2.1.	Taxation indicators	41
A3.1.	Key innovation indicators	49
A4.1.	Making Business Easier: indicators.	54
A5.1.	Financial indicators	63
A6.1.	Selected indicators on administrative burden reduction and simplification	65
A6.2.	Key Digital Decade targets monitored through the Digital Economy and Society Index	66
A7.1.	Key clean industry and climate mitigation indicators: Spain	76
A8.1.	Key Energy Indicators	83
A9.1.	Key indicators tracking progress on climate adaptation, preparedness and environment	90
A13.1.	Social Scoreboard for Spain	108
A14.1.	Key health indicators	110
A16.1.	Selected EU funds with adopted allocations - summary data (million EUR)	118
A16.2.	Summary table on 2019-2024 CSRs	120
A17.1.	Selection of indicators at regional level in Spain	125

LIST OF GRAPHS

A2.1.	Tax revenue shares in 2023	41
A2.2.	Tax wedge for single and second earners, % of total labour costs, 2024	42
A3.1.	Public expenditure on R&D as % of GDP	45
A3.2.	Innovation outputs	46
A4.1.	Making Business Easier: selected indicators.*	51
A5.1.	Net savings-investment balance	55
A5.2.	International investment position	56
A5.3.	Capital markets and financial intermediaries	56
A5.4.	Composition of NFC funding as a % of GDP	58
A5.5.	Composition of HH financial assets per capita and as a % of GDP	60
A6.1.	Trust in justice, regional / local authorities and in government	64
A6.2.	Indicators of Regulatory Policy and Governance (iREG)	66
A7.1.	GHG emission intensity of manu-facturing and energy-intensive sectors, 2022	73
A7.2.	Manufacturing industry production: total and selected sectors, index (2021 = 100), 2017-2023	73
A7.3.	Greenhouse gas emissions in the effort sharing sectors, 2005 and 2023	74
A8.1.	Retail energy price components for household and non-household consumers, 2024	77
A8.2.	Monthly average day-ahead wholesale electricity prices and European benchmark natural gas prices (Dutch TTF)	77
A8.3.	Spain's installed renewable capacity (left) and electricity generation mix (right)	80
A9.1.	Direct dependency (1) on ecosystem services(2) of the gross value added generated by economic sector in 2022	88
A9.2.	Investment needs and gaps in EUR million, in 2022 constant prices	88
A10.1.	Key rates: activity, unemployment, long-term unemployment, youth unemployment, NEET	93
A10.2.	Employment growth by contract type	96
A11.1.	At-risk-of-poverty or social exclusion rate and its components	97
A11.2.	Children at risk of poverty or social exclusion	98
A11.3.	Impact of social benefits on poverty reduction	99
A12.1.	Employment rate of recent graduates not in education and training by educational attainment	104
A14.1.	Life expectancy at birth, years	109
A14.2.	Treatable mortality	110
A15.1.	Progress towards the SDGs in Spain	113
A16.1.	Distribution of RRF funding in Spain by policy field	116
A16.2.	Distribution of cohesion policy funding across policy objectives in Spain	116
A17.1.	Labour productivity per hour	124

LIST OF MAPS

A9.1.	Number of flood events	84
A17.1.	GDP per head compared to the EU average (in purchasing power standard), 2023	123
A17.2.	Energy-intensive industries 2021: Country Study Spain	127
A17.3.	Human exposure to harmful climate impacts	128

This Annex contains a series of tables relevant for the assessment of the fiscal situation in Spain, including how Spain is responding to Council recommendations issued under the reformed Economic Governance Framework.

The reformed framework, which entered into force on 30 April 2024⁽¹⁵⁾, aims to strengthen debt sustainability and promote sustainable and inclusive growth through growth-enhancing reforms and priority investments. The medium-term fiscal-structural plans (hereinafter, MTPs or plans) constitute the cornerstone of the framework, setting the budgetary commitment of Member States over the medium term. The latter is defined in terms of net expenditure growth, which is the single operational indicator for fiscal surveillance.

Spain submitted its plan on 15 October 2024. The plan covers the period until 2028, and presents an extended fiscal adjustment over seven years, which is underpinned by a set of reforms and investments to which Spain committed with the aim of improving potential growth and fiscal sustainability. On 21 January 2025, the Council adopted the Recommendation endorsing Spain's plan.⁽¹⁶⁾

The assessment of the implementation of the Council Recommendation endorsing the Spain's plan is carried out on the basis of outturn data from Eurostat and the Commission's Spring 2025 Forecast and taking into account the Annual Progress Report (APR), that Spain submitted on 30 April 2025. Furthermore, in the context of the Commission Communication of 19 March 2025⁽¹⁷⁾, on accommodating defence expenditure within the Stability and Growth Pact, the annex reports the projected increase in defence expenditure based on the Commission Spring 2025 Forecast.

The Annex is organised as follows. First, developments in **government deficit and debt** are presented based on the figures reported in Table A1.1. Then, the assessment of the **implementation of the Council Recommendation endorsing the plan** follows, based on the relevant figures presented in Tables A1.2 to A1.9, including data on defence expenditure. Further on, the progress made in the **implementation of the set of reforms and investments** underpinning the extension of the fiscal adjustment period⁽¹⁸⁾ is assessed, taking into account the information presented in Table A1.10.

⁽¹⁵⁾ Regulation (EU) 2024/1263 of the European Parliament and of the Council (EU) on the effective coordination of economic policies and on multilateral budgetary surveillance, together with the amended Regulation (EC) No 1467/97 on the implementation of the excessive deficit procedure, and the amended Council Directive 2011/85/EU on the budgetary frameworks of Member States are the core elements of the reformed EU economic governance framework.

⁽¹⁶⁾ OJ C, C/2025/643, 10.2.2025, ELI: <http://data.europa.eu/eli/C/2025/643/oj>.

⁽¹⁷⁾ Communication from the Commission accommodating increased defence expenditure within the Stability and Growth Pact of 19 March 2025, C(2025) 2000 final.

⁽¹⁸⁾ According to the Regulation., the required fiscal adjustment (in particular to put or keep the government debt ratio on a plausible downward path by the end of the adjustment period or keep it at prudent levels below 60% of GDP; and to bring or maintain the deficit below 3% of GDP over the medium term) should be completed in four years but may be extended over a period to up seven years if the Member State commits to a relevant set of reforms and investments. The adjustment period of Spain has been extended to seven years based on the set of reforms and investments laid out in detail in Annex II of the Council recommendation endorsing the plan of Spain.

The Annex also provides information on the **cost of ageing** and the **national fiscal framework**. Fiscal sustainability risks are discussed in the Debt Sustainability Monitor 2024.⁽¹⁹⁾

Developments in government deficit and debt

Spain's government deficit amounted to 3.2% of GDP in 2024, affected by sizeable one-off spending (0.35% of GDP) related to the floods in Valencia. Based on the Commission's Spring 2025 Forecast, it is projected to decrease to 2.8% of GDP in 2025 and 2.5% of GDP in 2026. The government debt-to-GDP ratio amounted to 101.8% at the end of 2024 and, according to the Commission, is projected to decrease to 100.9% at end-2025.

Table A1.1: **General government balance and debt**

	Variables		2024	2025		2026	
			Outturn	APR	COM	APR	COM
1	General government balance	% GDP	-3.2	-2.8	-2.8	n.a.	-2.5
2	General government gross debt	% GDP	101.8	101.7	100.9	n.a.	100.8

Source: Commission Spring 2025 Forecast (COM), Annual Progress Report (APR).

Developments in net expenditure

The net expenditure⁽²⁰⁾ growth of Spain in 2025 is forecast by the Commission⁽²¹⁾ to be above the recommended maximum, corresponding to a deviation of 0.2% of GDP. Considering 2024 and 2025 together, the cumulative growth rate of net expenditure is projected below the recommended maximum cumulative growth rate. The 2025 net expenditure growth forecast by the Commission (4.2%) is broadly in line with the net expenditure growth forecast by Spain (4.1%). In 2024, however, the net expenditure growth estimated by the Commission (3.5%) differs from that estimated by Spain (4.1%) because the Commission uses the change (from 2023) in national co-financing of EU programmes reported by IGAE to, and validated by, Eurostat whereas Spain uses the Ministry of Finance's own estimates.

The annual deviation in 2025 is below the 0.3% threshold.

⁽¹⁹⁾ European Commission (2025) 'Debt Sustainability Monitor 2024,' *European Economy-Institutional Papers* 306.

⁽²⁰⁾ Net expenditure is defined in Article 2(2) of Regulation (EU) 2024/1263 as government expenditure net of (i) interest expenditure, (ii) discretionary revenue measures, (iii) expenditure on programmes of the Union fully matched by revenue from Union funds, (iv) national expenditure on co-financing of programmes funded by the Union, (v) cyclical elements of unemployment benefit expenditure, and (vi) one-off and other temporary measures.

⁽²¹⁾ Commission Spring 2025 Forecast, *European Economy-Institutional paper* 318, May 2025.

Table A1.2: **Net expenditure growth**

	Annual			Cumulative*		
	REC	APR	COM	REC	APR	COM
	Growth rates					
2024	n.a.	4.1%	3.5%	n.a.	n.a.	n.a.
2025	3.7%	4.1%	4.2%	9.2%	8.4%	7.9%
2026	3.5%	n.a.	3.9%	13.0%	n.a.	12.1%

* The cumulative growth rates are calculated by reference to the base year of 2023.

Source: Council Recommendation endorsing the national medium-term fiscal-structural plan of Spain (Rec), Annual Progress Report (APR) and Commission's calculation based on Commission Spring 2025 Forecast (COM).

General government defence expenditure in Spain amounted to 1.0% of GDP in 2021, 1.1% of GDP in 2022 and 0.9% of GDP in 2023⁽²²⁾. According to the Commission 2025 Spring Forecast, expenditure on defence is projected at 1.0% of GDP in 2024 and 1.3% of GDP in 2025.

Table A1.3: **Net expenditure (outturn and forecast), annual and cumulated deviations vis-à-vis the recommendation**

	Variables		2023	2024	2025	2026
			Outturn	Outturn	COM	COM
1	Total expenditure	bn NAC	681.0	722.8	761.8	793.5
2	Interest expenditure	bn NAC	35.7	39.0	42.9	45.9
3	Cyclical unemployment expenditure	bn NAC	0.1	-0.8	-2.1	-2.6
4	Expenditure funded by transfers from the EU	bn NAC	20.2	21.3	25.9	30.0
5	National co-financing of EU programmes	bn NAC	1.2	2.3	3.2	3.5
6	One-off expenditure (levels, exd. EU funded)	bn NAC	1.3	13.9	9.4	4.0
7=1-2-3-4-5-6	Net nationally financed primary expenditure (before discretionary revenue measures, DRM)	bn NAC	622.5	647.1	682.4	712.7
8	Change in net nationally financed primary expenditure (before DRM)	bn NAC		24.6	35.4	30.3
9	DRM (exd. one-off revenue, incremental impact)	bn NAC		2.7	8.1	3.5
10=8-9	Change in net nationally financed primary expenditure (after DRM)	bn NAC		21.9	27.3	26.8
11	Outturn / forecast net expenditure growth	% change		3.52%	4.2%	3.9%
12	Recommended net expenditure growth*	% change		5.3%	3.7%	3.5%
13=(11-12) x 7	Annual deviation	bn NAC		-11.1	3.4	2.9
14 (cumulated from 13)	Cumulated deviation	bn NAC		-11.1	-7.7	-4.8
15=13/17	Annual balance	% GDP		-0.7	0.2	0.2
16=14/17	Cumulated balance	% GDP		-0.7	-0.5	-0.3
17	p.m. Nominal GDP	bn NAC	1498.3	1591.6	1670.4	1739.5

* The growth rate for 2024 is not a recommendation but serves to anchor the base, as the latest year with outturn data when setting the net expenditure path is year 2023.

Source: Commission Spring 2025 Forecast and Commission's calculation.

Table A1.4: **Defence expenditure**

			2021	2022	2023	2024	2025	2026
1	Total defence expenditure	% GDP	0.9	1.1	0.9	0.9	1.3	1.4
2	of which: gross fixed capital formation	% GDP	0.2	0.4	0.2	0.2	0.4	0.5

Source: Eurostat (COFOG), Commission Spring 2025 Forecast and Commission's calculation.

⁽²²⁾ Eurostat, government expenditure by classification of functions of government (COFOG).

Table A1.5: **Macroeconomic developments and forecasts**

	Variables		2024	2025		2026	
			Outturn	APR	COM	APR	COM
1=7+8+9	Real GDP	% change	3.2	2.6	2.6	2.2	2.0
2	Private consumption	% change	2.9	3.2	2.9	2.4	2.1
3	Government consumption expenditure	% change	4.1	2.3	2.3	2.0	1.6
4	Gross fixed capital formation	% change	3.0	4.3	3.4	5.1	3.1
5	Exports of goods and services	% change	3.1	1.2	2.4	1.8	2.3
6	Imports of goods and services	% change	2.4	2.7	3.2	3.7	2.8
	Contributions to real GDP growth						
7	- Final domestic demand	pps	3.0	3.1	2.8	2.8	2.1
8	- Change in inventories	pps	-0.2	0.0	0.0	0.0	0.0
9	- Net exports	pps	0.3	-0.4	-0.2	-0.6	-0.1
10	Output gap	% pot GDP	1.5	1.3	1.7	1.2	1.6
11	Employment	% change	2.2	2.5	2.1	2.3	1.6
12	Unemployment rate	%	11.4	10.3	10.4	9.6	9.9
13	Labour productivity	% change	0.9	0.2	0.4	0.0	0.4
14	HICP	% change	2.9	na.	2.3	na.	1.9
15	GDP deflator	% change	3.0	2.6	2.3	2.3	2.0
16	Compensation of employees per head	% change	5.0	3.7	3.4	2.9	2.6
17	Net lending/borrowing vis-à-vis the rest of the world	% GDP	4.2	na.	3.9	na.	4.0

Source: Commission Spring 2025 Forecast (COM), Annual Progress Report (APR).

Table A1.6: **General government budgetary position**

	Variables (% GDP)	2024	2025		2026	
		Outturn	APR	COM	APR	COM
1=2+3+4+5	Revenue	42.3	41.8	42.8	na.	43.1
	<i>of which:</i>					
2	- Taxes on production and imports	11.1	11.3	11.2	na.	11.3
3	- Current taxes on income, wealth, etc.	12.5	12.8	12.7	na.	12.8
4	- Social contributions	13.2	13.4	13.4	na.	13.5
5	- Other (residual)	5.4	4.3	5.5	na.	5.6
8=9+16	Expenditure	45.4	44.6	45.6	na.	45.6
	<i>of which:</i>					
9	- Primary expenditure	43.0	41.9	43.0	na.	43.0
	<i>of which:</i>					
10	- Compensation of employees	10.8	10.7	10.7	na.	10.7
11	- Intermediate consumption	5.6	5.5	5.6	na.	5.6
12	- Social payments	19.6	19.5	19.5	na.	19.5
13	- Subsidies	1.2	1.1	1.1	na.	1.1
14	- Gross fixed capital formation	2.7	2.6	3.0	na.	3.0
15	- Other	3.2	2.5	3.1	na.	3.1
16	- Interest expenditure	2.4	2.7	2.6	na.	2.6
18=1-8	General government balance	-3.2	-2.8	-2.8	na.	-2.5
19=1-9	Primary balance	-0.7	-0.1	-0.2	na.	0.1
20	Cyclically adjusted balance	-4.0	na.	-3.8	na.	-3.4
21	One-offs	-0.9	-0.5	-0.6	na.	-0.2
22=20-21	Structural balance	-3.2	-2.8	-3.2	na.	-3.2
23=22+16	Structural primary balance	-0.7	-0.2	-0.7	na.	-0.6

Source: Commission Spring 2025 Forecast (COM), Annual Progress Report (APR).

Table A1.7: **Debt developments**

	Variables	2024	2025		2026	
		Outturn	APR	COM	APR	COM
1	Gross debt ratio* (% of GDP)	101.8	101.7	100.9	na.	100.8
2=3+4+8	Change in the ratio (pps. of GDP)	-3.3	-0.1	-0.9	na.	-0.1
3	Contributions**					
	Primary balance	0.7	0.1	0.2	na.	-0.1
4=5+6+7	'Snow-ball' effect	-3.7	-2.4	-2.2	na.	-1.4
	of which:					
5	- Interest expenditure	2.4	2.7	2.6	na.	2.6
6	- Real growth effect	-3.1	-2.6	-2.5	na.	-2.0
7	- Inflation effect	-3.0	-2.5	-2.3	na.	-2.0
8	'Stock-flow' adjustment	-0.3	2.2	1.1	na.	1.4

* End of period..

** The 'snow-ball' effect captures the impact of interest expenditure on accumulated general government debt, as well as the impact of real GDP growth and inflation on the general government debt-to-GDP ratio (through the denominator). The stock-flow adjustment includes differences in cash and accrual accounting (including leads and lags in Recovery and Resilience Facility grant disbursements), accumulation of financial assets, and valuation and other residual effects..

Source: Commission Spring 2025 Forecast and Commission's calculation (COM), Annual Progress Report (APR).

Table A1.8: **RRF – Grants**

Revenue from RRF grants (% of GDP)		2020	2021	2022	2023	2024	2025	2026
1	RRF grants as included in the revenue projections	na.	1.7	1.9	1.3	0.1	0.0	na.
2	Cash disbursements of RRF grants from EU	na.	1.5	1.3	1.1	0.5	0.2	na.

Expenditure financed by RRF grants (% of GDP)		2020	2021	2022	2023	2024	2025	2026
3	Total current expenditure	na.	0.3	0.2	0.2	0.0	0.0	na.
4	Gross fixed capital formation	na.	0.1	0.1	0.1	0.0	0.0	na.
5	Capital transfers	na.	1.3	1.5	1.0	0.1	0.0	na.
6=4+5	Total capital expenditure	na.	1.5	1.6	1.1	0.1	0.0	na.

Other costs financed by RRF grants (% of GDP)		2020	2021	2022	2023	2024	2025	2026
7	Reduction in tax revenue	na.	na.	na.	na.	na.	na.	na.
8	Other costs with impact on revenue	na.	na.	na.	na.	na.	na.	na.
9	Financial transactions	na.	na.	na.	na.	na.	na.	na.

Source: Annual Progress Report

Table A1.9: **RRF - Loans**

Cash flow from RRF loans projected in the Plan (% of GDP)								
		2020	2021	2022	2023	2024	2025	2026
1	Disbursements of RRF loans from EU	na.	na.	na.	na.	0.0	1.0	na.
2	Repayments of RRF loans to EU	na.	na.	na.	na.	na.	na.	na.
Expenditure financed by RRF loans (% of GDP)								
		2020	2021	2022	2023	2024	2025	2026
3	Total current expenditure	na.	na.	na.	na.	na.	na.	na.
4	Gross fixed capital formation	na.	na.	na.	na.	na.	na.	na.
5	Capital transfers	na.	na.	na.	na.	na.	na.	na.
6=4+5	Total capital expenditure	na.	na.	na.	na.	na.	na.	na.
Other costs financed by RRF loans (% of GDP)								
		2020	2021	2022	2023	2024	2025	2026
7	Reduction in tax revenue	na.	na.	na.	na.	na.	na.	na.
8	Other costs with impact on revenue	na.	na.	na.	na.	na.	na.	na.
9	Financial transactions	na.	na.	na.	na.	na.	na.	na.

Source: Annual Progress Report

Implementation of the set of reforms and investments underpinning the extension of the adjustment period

Table A1.10 includes information on progress towards implementation of the set of reforms and investments underpinning the extension of the adjustment period that Spain committed to deliver in its medium-term fiscal-structural plan as endorsed by the Council.

Taking into account the information provided by Spain in its Annual Progress Report, the Commission finds that the reforms and investments underpinning an extension that were due by the 30 April 2025 have been implemented with the exception of certain elements of Spain's Recovery and Resilience Plan's measure C28.R3 and the related milestone on the entry into force of tax reforms derived from the expert group recommendations or other analyses by the Ministry of Finance (for details, see Table A1.10).

The reforms and investments underpinning an extension of the adjustment period include reforms in the area of taxation, which in turn included tax reform measures and tax benefits reform measures. They also include and reforms in the area of public expenditure (measures establishing a permanent public spending review and evaluation process and increasing the efficiency of public spending).

Additionally, the plan contains reforms in the areas of digital transformation, green transition, human capital, physical capital and productivity and fight against tax fraud.

Reforms in the area of taxation have progressed well but two requirements out of 6 of the first key step corresponding to milestone 388 of Spain's RRP, whose assessment is ongoing, had not been completed by 30 April 2025. The first key step of the reform in the area of public expenditure has been completed whereas the remaining steps along with most reforms in the areas of digital transformation, human capital and physical capital and productivity will be assessed by the Commission in the future. Finally, reforms in the area of green transition and to fight against tax fraud have been completed.

Table A1.10: Implementation of reforms and investment underpinning the extension

Measure	Key steps	Recommended implementation date	Status (COM's assessment)
Tax Reform	Delivery of milestones 388 of Spain's RRF, permanently increasing government revenues by 0.3 % of GDP.	Q3 2023	Not Completed **
	Delivery of an additional permanent increase of 0.1% of GDP of revenues by Q4 2028, totalling a cumulative 0.4% of GDP by Q4 2028.	Q4 2025	
	Delivery of a report showing the permanent increase in revenues between 2024 and 2028.	Q4 2028	
Tax Benefits Reform	Delivery of milestone 386, permanently increasing government revenues by at least 0.1 % of GDP.	Q4 2025	
Spending Reviews	Approval by the Council of Ministers of the new cycle of spending reviews (2022- 2026) to be commissioned to AIfeF.	Q4 2021	Completed *
	Adoption of a new cycle by the Ministry of Finance which envisages an intervention for each spending area over the time frame of the Plan.	Q4 2026	
	Adoption of reforms resulting from completed and ongoing spending reviews and reducing yearly expenditure by 2028 by at least 0.1% of GDP on a permanent basis, contributing to the sustainability of public finance.	Q2 2027	
	Publication of the annual monitoring report by the Ministry of Finance on the implementation of public expenditure reviews will include the assessment of actual yearly expenditure savings since 2025 from the implementation of adopted measures following spending reviews. It shall show the achievement by 2028 of permanent yearly savings of at least 0.1% of GDP against unchanged policies.	Q1 2028	
Law against Tax Evasion and Fraud	Entry into force of a law against tax evasion and fraud ('Ley de medidas de prevención y lucha contra el fraude fiscal' which: - Enlarges the perimeter of transactions where e-payments are compulsory (firms & professionals) and set legal thresholds for cash payments - Updates the list of tax havens according to transparency, no taxation and harmful tax regimes criteria. - Implements changes to the rules for listing people with tax arrears. - Implements a ban on "double-use software". - Introduces a reference value for the tax base in property taxation.	Q2 2022	Completed *
Better regulation and business climate	Entry into force of the reform of the 'Insolvency Law'.	Q2 2022	Completed *
	Entry into force of the new 'Law on Business Creation and Growth' to simplify procedures for setting up a business and to promote a diversified sources of finance for business growth.	Q4 2022	Completed *
Regulatory Framework for the promotion of renewable generation	• Entry into force of Royal Decree Law 23/2020 (energy measures) • Entry into force of Royal Decree 960/2020 (economic regime for renewable energy) • Entry into force of Royal Decree 1183/2020 (connection of renewables to the electricity grid)	Q4 2020	Completed *
	Entry into force of Law on Climate Change and Energy Transition.	Q2 2021	Completed *
	Additional production capacity for renewable energy (at least 6000 MW) cumulative additional renewable energy capacity installed in Spain (at least 6000 MW).	Q4 2023	Completed **
Digital Transformation of Education	Approval of a programme to equip public and publicly subsidised schools with digital tools.	Q4 2021	Completed *
	Completion of actions for the digital transformation of education, including the preparation or revisions of digital strategies in at least 22 000 school and the digital training of 70 000 teachers	Q4 2025	
	Provision of connected digital devices in public and publicly subsidised schools to bridge the digital divide, and equip a minimum of 240 000 classroom	Q4 2025	
Dual Vocational Training	Complete an awareness campaign reaching at least 60% of all students that intend to start vocational training or have started in the past 6 months a non dual vocational training; and capacity building in providing vocational training to any company interested in providing dual vocational training.	Q4 2027	
	Provide a monitoring report showing that at least 80% of all vocational training students in the first half of 2028 have been enrolled in dual vocational training	Q4 2028	
Deployment of Scheme 20	Approval in (multi)sectoral conference(s) of a sectoral impact assessment (in cooperation with Autonomous Communities and City Councils), which defines priority areas needing standardization and simplification of procedures across regions and local authorities.	Q4 2025	
	Publication of a Strategic plan for the sectoral conferences approved by (multi)sectoral conference(s), specifying annual measures, responsible actors and monitoring indicators, to be fully implemented by 2027	Q2 2026	
	Publication of a report which monitors the implementation of the Strategic plan and proposes corrective measures in case of deviations. The report should also assess the impact of the measures already implemented in previous years.	Q4 2027	
Electronic Invoice	Entry into force of a royal decree establishing the technical and information requirements of the system.	Q4 2026	
	Establishment of an electronic invoice platform, managed by the Tax Agency, which will provide a basic, free service to all companies and professionals who wish to use it.	Q1 2027	
Measures to improve the management of temporary disability	Signature and entry into force of partnership agreements between the Ministries of Health of the Autonomous Communities, mutual societies and Social Security.	Q4 2025	
Simplification of the system for the homologation of diplomas	Entry into force of legislation detailing streamlined processes for the recognition of qualifications of foreign-born population.	Q4 2025	
	Assessment monitoring the implementation of the reform. The report should include key indicators as the total number of applications processed under the simplified system and average processing time for homologation requests.	Q4 2028	
Reform of the work and job search visa system	Entry into force of a royal decree regulating work and job seeking visas for migrants.	Q4 2024	Completed
Project Vienna	Launch of tenders to provide public land to private promoters for the construction of affordable housing units.	Q4 2025	
	Assessment monitoring the implementation of the reform. The report should describe the evolution and impact of the project and include key indicators as planned houses to be developed, and total units of public land transferred to private promoters.	Q2 2026	
Entry into force of the amendment of Law 14/2011 on Science, Technology and Innovation	Entry into force of the modification of the Law on Science, Technology and Innovation improving the coordination among different levels of government of science, research and innovation policies, enhancing the governance and coordination of the Spanish Science Technology and Innovation system, introducing a new scientific career and improving knowledge transfer.	Q2 2022	Completed *

The progress of each backward-looking key step (i.e., those scheduled for completion by 30 April 2025) is classified as either 'completed' or 'not completed'. The status of forward-looking key steps not yet completed remains blank, as these will be assessed by the Commission in future APRs.

* These key steps correspond to milestones and targets 400, 376, 190, 191, 102, 103, 104, 105, 289 and 254 of Spain's RRF, which have been assessed as fulfilled as part of a payment request under the RRF.

** These key steps correspond to milestones and targets 388, 106, 107 and 291 of Spain's RRF, whose assessment is still pending in the context of a payment request under the RRF and the table does not prejudge its assessment.

Source: Spain's Annual Progress Report and the Commission's assessment

Cost of ageing

Total age-related spending in Spain is projected to rise from about 24.5% of GDP in 2024 to around 27.5% in 2040 and 29% in 2070 (see Table A1.11). This increase results from the projected rise in pension spending and, to a more limited extent, healthcare and long-term care spending.

The rise in public pension spending is concentrated in the medium term, with a projected increase of 2.5 pps of GDP by 2040. After peaking around 2050 at 3.6 pps of GDP above the 2024, a limited decline in spending is expected. In 2070, Spain would be the country with the second highest gross spending on pensions in the EU.

Public healthcare⁽²³⁾ expenditure is projected at 5.9% of GDP in 2024 (below the EU average of 6.6%) and is expected to increase by 0.8 pps by 2040 and by a further 0.4 pps by 2070. This increase in expenditure contributes significantly to fiscal risk. There is however scope for improving efficiency by increasing the role of economic evaluation in funding and pharmaceutical pricing decisions as well as reducing unwarranted variations in the cost-effectiveness health care.

Public expenditure on long-term care⁽²⁴⁾ is projected at 0.8% of GDP in 2024 (below the EU average of 1.7%) and is expected to increase by 0.2 pps of GDP by 2040 and by a further 0.7 pps of GDP by 2070.

Table A1.11: **Projected change in age-related expenditure in 2024-2040 and 2024-2070**

	age-related expenditure 2024 (% GDP)	change in 2024-2040 (pps GDP) due to:					age-related expenditure 2040 (%GDP)	
		pensions	healthcare	long-term care	education	total		
ES	24.4	2.5	0.8	0.2	-0.7	2.9	27.3	ES
EU	24.3	0.5	0.3	0.4	-0.3	0.9	25.2	EU
	age-related expenditure 2024 (% GDP)	change in 2024-2070 (pps GDP) due to:					age-related expenditure 2070 (%GDP)	
		pensions	healthcare	long-term care	education	total		
ES	24.4	3.0	1.2	0.9	-0.6	4.6	29.0	ES
EU	24.3	0.2	0.6	0.8	-0.4	1.3	25.6	EU

Source: 2024 Ageing Report (EC/EPC).

National fiscal framework

The Independent Authority for Fiscal Responsibility (AIReF) is a well-established independent fiscal institution with a broad mandate but could benefit from enhanced independence safeguards. It is relatively well staffed, reflecting its resource-intensive tasks stemming partly from the decentralised structure of Spain. It has experienced some problems with access to information and would therefore benefit from having Memoranda of Understanding with the Ministry of Economy and the Ministry of Finance. The dialogue with the government could be improved and expanding access to positions to non-civil servants would broaden the institution's recruitment pool.

⁽²³⁾ Key performance characteristics, recent reforms and investments are discussed in Annex 11 'Health and health systems'.

⁽²⁴⁾ The quality and the accessibility of the long-term care system are covered in Annex 9 'Social policies'.

There are areas of improvement in the management of public investments across the full investment cycle. Strategic planning of investments takes place mostly at sectoral and sub-sectoral level. In transportation, detailed investment planning is carried out by each means of transportation (roads, railways, etc.), while an integrated planning across at least several means of transportation is more efficient. Neither standardised procedures for appraisal, nor external quality assurances are in place to ensure similar assessment and selection criteria across sectors, while pre-appraisal is in place only in selected sectors ⁽²⁵⁾. Capital budgeting is done on an annual basis and there are no longer-term capital expenditure ceilings to ensure capital availability beyond the budget year. The new Sustainable Mobility and Transport Financing Act, also milestone C.1.[R.2] in the recovery and resilience plan, aims at improving planning, appraisal, prioritisation and budgeting of public investments ⁽²⁶⁾.

Spain is quickly advancing towards deepening green budgeting practices. For the 2023 budget, Spain has for the first time published a report on alignment with climate and environmental goals. The country follows the classification into six dimensions of the EU Taxonomy and identifies both “green” and “brown” expenditures through a systematic tagging methodology. To this end, Spain has intensified the collaboration between the Ministry of Finance and the Ministry for Ecological Transition and the Demographic Challenge as joint responsible of green budgeting and has built capacity across ministries during budget preparation.

Table A1.12: **Fiscal Governance Database Indicators**

2023	Spain	EU Average
Country Fiscal Rule Strength Index (C-FRSI)	17.27	14.52
Medium-Term Budgetary Framework Index (MTBFI)	0.92	0.73

The Country Fiscal Rule Strength Index (C-FRSI) shows the strength of national fiscal rules aggregated at the country level based on i) the legal base, ii) how binding the rule is, iii) monitoring bodies, iv) correction mechanisms, and v) resilience to shocks. The Medium-Term Budgetary Framework Index (MTBFI) shows the strength of the national MTBF based on i) coverage of the targets/ceilings included in the national medium-term fiscal plans; ii) connectedness between these targets/ceilings and the annual budgets; iii) involvement of the national parliament in the preparation of the plans; iv) involvement of independent fiscal institutions in their preparation; and v) their level of detail. A higher score is associated with higher rule and MTBF strength.

Source: [Fiscal Governance Database](#)

⁽²⁵⁾ OECD (2020), Supporting Better Decision-Making in Transport Infrastructure in Spain: Infrastructure Governance Review, OECD Publishing, Paris, <https://doi.org/10.1787/310e365e-en>

⁽²⁶⁾ Many of the new features of the new law address AIReF’s recommendations in the context of their Spending Review of Transport Infrastructure of 2019/2020.

This annex provides an indicator-based overview of Spain's tax system. It includes information on: (i) the tax mix; (ii) competitiveness and fairness aspects of the tax system; and (iii) tax collection and compliance.

Spain's tax revenues are relatively low in relation to GDP, with increasing contributions from labour taxation. Table A13.1 shows that Spain's tax revenues as a percentage of GDP were below the EU average in 2023, even though the gap with the EU average has been reduced since 2017. It is now only 2.5 percentage points, as tax revenues were equivalent to 36.5% of Spain's GDP in 2023 against an EU average of 39.0%. The share of labour taxes as a proportion of Spanish GDP was slightly below the EU average in 2023, although these labour taxes represented a higher percentage of total taxation than the EU (51.7% vs 51.2%) (Graph A13.1). The average share of labour taxes in total Spanish tax revenues increased from 48.5% in the period 2014-2018 to 51.5% in the 2019-2023 period, backed by the growth in household income, rises in social-security contributions and the non-indexation of personal-income-tax brackets. The level of capital taxes in Spain was slightly greater than the EU average in 2023 (8.6% of GDP vs 8.5% in the EU), resulting in capital taxes accounting for a higher percentage of total taxation (23.6% in Spain while only 21.9% on average in the EU).

Revenues from consumption taxes remain very low in Spain. Taxation of consumption in Spain is below EU levels, both in terms of GDP (9.0% in Spain in 2023 vs 10.5% in the EU on average) and in terms of total taxation (24.7% in Spain and 26.9% in the EU on average). In response to rising inflation and increases in the cost of living, Spain temporarily reduced in 2023 the VAT rate on food and maintained reduced VAT rates on electricity and gas, which resulted in a decline in VAT revenue. Spain has one of the highest actionable VAT gaps in the EU, resulting in the lowest implicit tax rate on consumption of all the 27 Member States. Revenues from environmental taxes increased

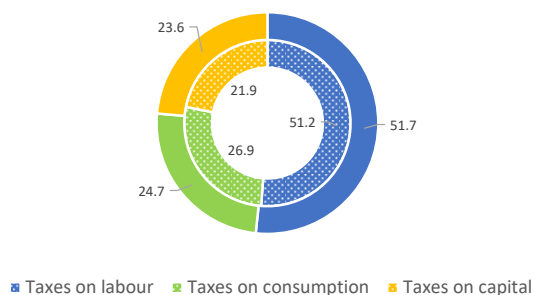
slightly in 2023 to reach 1.6% of GDP, although this is still below the EU-27 average of 2.0%. Revenues from property taxes in Spain are relatively high as a percentage of both GDP and total tax revenues, but the structure of these property taxes was not as efficient as that of the EU, where recurrent taxes on property play a greater role. The performance of Spain's tax system should be viewed in the context of a persistent public deficit and high levels of debt to GDP. To increase tax revenues, Spain could make more use of tax bases other than labour income. For example, there is room to streamline the use of tax benefits, and the 'polluter pays' principle can be applied more extensively (see also Annex 5).

The Spanish recovery and resilience plan (RRP) and the Council's 2024 country-specific recommendations to Spain draw attention to the need to ensure fiscal sustainability. In 2024, Spain adopted a number of measures to increase its tax-revenue-raising capacity: (i) it maintained the tax on large fortunes; (ii) it increased taxation on tobacco and introduced taxation on e-cigarettes; and (iii) it introduced the OECD-proposed 'global minimum tax' rate of 15% on corporations by transposing the relevant EU directive. The savings tax rate for the higher income decile in personal-income tax was also increased by 2 percentage points, from 28 to 30%. Plans to align the taxation of diesel with that of gasoline have not materialised yet. Spain expects the equivalent of more than 0.3% of GDP in permanent additional revenue from all these reforms.



Graph A2.1: **Tax revenue shares in 2023**

Tax revenue shares in 2023, Spain (outer ring) and EU (inner ring)



Source: Taxation Trends Data, DG TAXUD

Business regulation, including taxation, could be hindering investment in Spain.

According to the 2022 EIB Group Survey on Investment, most Spanish SMEs said they considered business regulation and taxation as a major obstacle for investment activities (53.0% said this, the highest percentage in the EU). Some features of Spain's corporate-tax system could be dissuading businesses from scaling up, as larger businesses can no longer benefit from the lower statutory corporate-tax rate) and be hit with increased compliance burdens. The general corporate-income-tax rate is 25%, above the EU-27 average (21%) although this has decreased from 35% in 1995. In addition, Spain had the second highest forward-looking effective average corporate-tax rate in the EU in 2023 at 25.7%, considerably above the EU-27 average of around 18.9%. R&D spending in Spain (1.4% of GDP in 2023) remains well below the EU average (2.2%), with related tax incentives not deployed in a way that would maximise their potential.

Income inequality in Spain remains high, and the tax-benefit system shows limited redistributive capacity.

Spain's Gini coefficient was 31.5% in 2023 (0,3 p.p. lower than in 2024), worse than the EU-27 average of 29.6%. The tax-and-benefit system reduced the Gini coefficient by 6.9 points in 2023, a reduction similar to the EU average of 7.7 points. At the same time, Spain has the 16th-lowest Gini in

the EU for market incomes before taxes and social transfers, but only the 20th-lowest when it comes to total disposable income., showing that the redistribution of income in Spain via the tax-benefit system is not as efficient as in other Member States of the EU. Spain's top income-tax-rate threshold has fallen since 2013 from 11.7 times average income to 10.8 times average income in 2022. This threshold is still one of the highest in the EU, indicating that the top rate in Spain only applies to relatively high incomes. On the overall distribution of the direct tax burden, Spain's direct tax system is progressive in the sense that households in higher income quintiles contribute a larger share of their gross income. Nevertheless, Spain's direct tax system is less progressive than the one of other Member States, where higher income quintiles contribute a larger share of their income via direct taxation than in Spain. The overall burden of direct taxation – at 11.7% of households' gross income – is comparatively low in Spain.⁽²⁷⁾

⁽²⁷⁾ See: Eurostat – ["Distribution of direct taxes paid by households as a percentage of their gross income by income quintile - experimental statistics"](#) for 2020

Table A2.1: Taxation indicators

		Spain					EU-27				
		2010	2021	2022	2023	2024	2010	2021	2022	2023	2024
Tax structure	Total taxes (including compulsory actual social contributions) (% of GDP)	31.2	37.5	36.9	36.5		37.8	40.2	39.7	39.0	
By tax base	Taxes on labour (% of GDP)	16.6	19.1	18.7	18.9		19.8	20.5	20.1	20.0	
	of which, social security contributions (SSC, % of GDP)	11.8	13.3	12.5	12.6		12.9	13.0	12.7	12.7	
	Taxes on consumption (% of GDP)	8.1	9.6	9.5	9.0		10.9	11.2	10.9	10.5	
	of which, value added taxes (VAT, % of GDP)	5.1	6.8	6.9	6.4		6.8	7.3	7.4	7.1	
	Taxes on capital (% of GDP)	6.6	8.9	8.7	8.6		7.1	8.5	8.7	8.5	
Some tax types	Personal income taxes (PIT, % of GDP)	6.9	8.6	9.0	9.0		8.6	9.6	9.4	9.3	
	Corporate income taxes (CIT, % of GDP)	1.8	2.6	2.7	2.9		2.2	2.9	3.2	3.2	
	Total property taxes (% of GDP)	2.1	2.9	2.7	2.5		1.9	2.2	2.1	1.9	
	Recurrent taxes on immovable property (% of GDP)	1.0	1.2	1.1	1.0		1.1	1.1	1.0	0.9	
	Environmental taxes (% of GDP)	1.6	1.7	1.5	1.6		2.5	2.4	2.1	2.0	
	Effective carbon rate in EUR per tonne of CO ₂ equivalents	NA	69.1	NA	71.1		NA	86.0	NA	84.8	
Progressivity & fairness	Tax wedge at 50% of average wage (single person) (*)	30.5	27.9	28.8	28.5	28.3	33.9	31.8	31.5	31.5	31.8
	Tax wedge at 100% of average wage (single person) (*)	39.7	39.5	39.6	40.2	40.6	40.9	39.9	39.9	40.2	40.3
	Corporate income tax - effective average tax rates (1) (*)	29.0	25.7	25.7	25.7		21.3	19.3	19.1	18.9	
	Difference in Gini coefficient before and after taxes and cash social transfers (pensions excluded from social transfers) (2) (*)	7.3	8.5	7.6	6.8		8.6	8.2	7.9	7.7	
Tax administration & compliance	Outstanding tax arrears: total year-end tax debt (including debt considered not collectable) / total revenue (in %) (*)		8.7	7.5				35.5	32.6		
	VAT gap (% of VAT total tax liability, VTTL) (**)		4.1	4.6				6.6	7.0		

(1) Forward-looking effective tax rate (KPMG).

(2) A higher value indicates a stronger redistributive impact of taxation.

(*) EU-27 simple average.

(**) For more details on the VAT gap, see European Commission, Directorate-General for Taxation and Customs Union, VAT gap in the EU - 2024 report, <https://data.europa.eu/doi/10.2778/2476549>

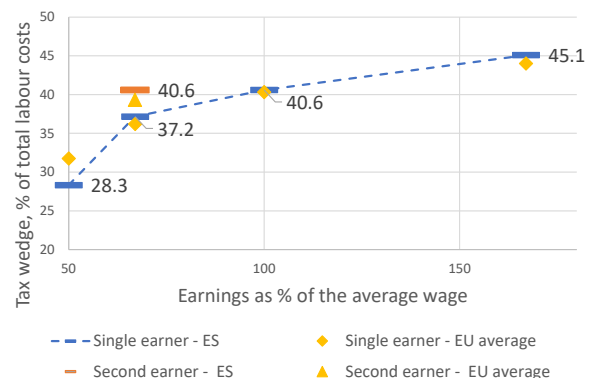
For more data on tax revenues as well as the methodology applied, see the Data on Taxation webpage, https://ec.europa.eu/taxation_customs/taxation-1/economic-analysis-taxation/data-taxation_en.

Source: European Commission, OECD

Spain's labour tax burden is relatively more progressive than the EU average. Graph A2.2 shows that the labour-tax wedge⁽²⁸⁾ for Spain in 2024 was lower than the EU average for single people at 50% of the average wage and close to the EU average at higher wage levels. Second earners, at a wage level of 67% of the average wage and whose spouses earn the average wage, face a higher tax wedge in Spain than single earners at the same wage level. At the same time, the tax wedge of second earners is close to the EU average of the second earner tax wedge. Also, the difference between the second earner tax wedge and the tax wedge of single persons at 67% of the average wage in Spain is comparable to the EU average of the same difference. Spain's RRP

includes a reform to make the tax system more progressive. Spain has already adopted several measures in this regard, such as the increases in the top personal income tax rates, both for the general and savings tax bases, approved as of 2021.

Graph A2.2: Tax wedge for single and second earners, % of total labour costs, 2024



⁽²⁸⁾ The tax wedge is defined as the sum of personal income taxes and employee and employer social-security contributions net of family allowances, expressed as a percentage of total labour costs (the sum of the gross wage and social-security contributions paid by the employer).

The tax wedge for second earners assumes a first earner at 100% of the average wage and no children. For the full methodology, see OECD, 2016, Taxing Wages 2014-2015.

Source: European Commission

Recently, some reforms have tried to increase the distributional capacity of the Spanish tax system. It is estimated that a 'solidarity' charge on large fortunes (over EUR 3 million) introduced in 2023 will produce EUR 622 million (0.04% of GDP) per year, and the increase in the tax rate for the top income decile from 28% to 30% introduced for 2025 in the savings schedule of the personal-income tax is expected to produce EUR 222 million. In addition, the non-indexation of personal income tax brackets at national level, along with the increase of the labour-income-tax allowance for low income in the personal-income tax, is estimated to have led to a net aggregate budgetary gain of EUR 2.9 bn (0.2% of GDP) in 2022 and EUR 2.2 bn in 2023, and prompted a marginal reduction in the Gini index ⁽²⁹⁾.

Spain's VAT compliance gap remains comparatively low. At 4.6% of VAT total tax liability, the VAT compliance gap in Spain in 2022 was below the EU-27 average (7.0%). However, this gap increased slightly compared with 2021 (4.1% in 2021 in Spain), a trend replicated at EU level (an EU average of 6.6% in 2021). This slight increase between 2021 and 2022 is probably related to the rapid recovery of the tourism sector (42.5% growth between 2021 and 2022) after the pandemic and the increase in bankruptcy declarations (these increased by 36.2% in Spain between 2021 and 2022) amid large increases in household final consumption (these rose by 4.7% in 2022 in Spain compared with 2021) and investment (government and household investment in Spain increased by 11.0% and 12.0% respectively in 2022 compared with 2021).

Spain requires taxpayers to provide extensive amounts of information to the tax administration, and this facilitates the smooth management of taxes. Spain has put in place a powerful IT system to make the most of its tax information, including through the

use of artificial intelligence. According to the most recently available data, the percentage of tax arrears that is considered collectable at the end of the year is one of the highest in the EU (equivalent to 84.7% of GDP in 2022).

⁽²⁹⁾ JRC simulations using EUROMOD

Spain has a good science base, but its scientific excellence has not yet succeeded in boosting its innovation performance.

Spain performs well in scientific production, and public R&D investment is making gradual progress. However, according to the 2024 European Innovation Scoreboard ⁽³⁰⁾ its innovation performance reached 89.9% of the EU average, with significant regional disparities ⁽³¹⁾. The innovation potential is hindered by stagnating business R&D investments and inefficiencies in public support for business innovation. As a result, Spain is still classified as a 'moderate innovator' in the scoreboard, highlighting the need for targeted improvement to boost its productivity and competitiveness.

Science and innovative ecosystems

The Spanish science system performs well and public R&D has been increasing, but further efforts are needed to reach national targets. Over the past decade, R&D intensity ⁽³²⁾ has steadily increased, reaching 1.49% of GDP in 2023. However, this remains well below the EU average (2.24%) and its national target of 2.12% ⁽³³⁾. Public R&D expenditure also slowly improved to 0.65% of GDP in 2023, but lags behind the EU average (0.72%) and is far from its national target of 1.25% ⁽³⁴⁾, requiring significant additional efforts (see Graph A3.1). Moreover, regional disparities persist, affecting Spain's overall innovation performance.

Regions like Madrid, Catalonia, Navarra and Basque Country are classified as 'strong innovators' ⁽³⁵⁾ with higher levels of investment in R&D than the Spanish average. Other regions continue to exhibit low R&D investment, highlighting an innovation divide ⁽³⁶⁾. Despite relatively low public R&D investment, Spain has a good science base, with scientific publications within the top 10% most cited scientific publications worldwide stable at 9% in recent years and close to the EU average. Moreover, the scientific system is attractive for researchers and exhibits good rates of international collaboration, with co-publications reaching 51% of total publications, nearing the EU average of 55.9% (see Table A3.1). Moreover, Spanish participation in EU-funded research and innovation (R&I) projects has shown very good performance ⁽³⁷⁾. The recovery and resilience plan (RRP) has provided a major boost for R&I, with Spain's RRP investing the most in terms of absolute investment among all Member States, with EUR 17.6 billion allocated to R&I measures. Similarly, the European Regional Development Fund invests EUR 4.7 billion in improving R&I capacities and the uptake of advanced technologies across regions. Despite these efforts, Spain still needs a long-term strategy that mobilises, coordinates and steers increased public investment for R&D, especially as RRP funding will end in mid-2026.

⁽³⁰⁾ 2024 European Innovation Scoreboard, country profile: [Spain](#). The scoreboard provides a comparative analysis of innovation performance in EU countries, including the relative strengths and weaknesses of their national innovation systems.

⁽³¹⁾ [Regional Innovation Scoreboard 2023](#).

⁽³²⁾ [Eurostat](#). R&D intensity is defined as gross domestic expenditure on R&D as a percentage of GDP.

⁽³³⁾ Spanish science, technology and innovation strategy ([EECTI 2021-27](#)) sets target for 2027.

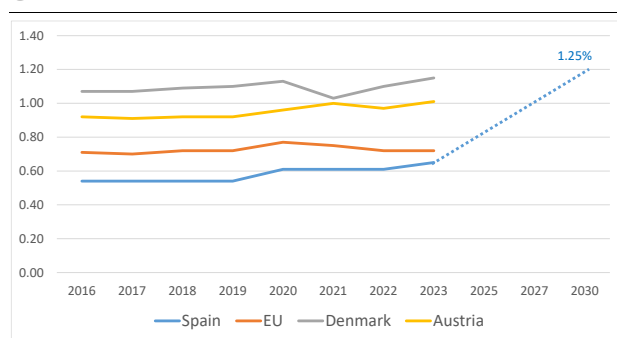
⁽³⁴⁾ Spain sets a target for R&D public expenditure to reach 1.25% of GDP in 2030 (Law Science, Technology and Innovation ([Reform Act 17/2022 sept 2022](#))).

⁽³⁵⁾ See [Regional Innovation Scoreboard 2023](#), which has regional profiles of innovation performance for Spain.

⁽³⁶⁾ Regional Innovation Scoreboard 2023 and Cotec 2024 analysis evolution I+D.

⁽³⁷⁾ Spain ranks third among Members States, just behind Germany and France, obtaining 11% of Horizon Europe funds. Spain ranked first in terms of leadership with the highest percentage as coordinators in collaborative R&I projects (16% Horizon Europe dashboard, report by the Centre for Development, Technology and Innovation (CDTI) on analysis of participation).

Graph A3.1: **Public expenditure on R&D as % of GDP**



Source: Eurostat

The governance of R&I policies continues to be fragmented and requires better coordination.

The Spanish R&I system has historically been characterised by a dual governance structure, with shared responsibility between central government and regional authorities. Unfortunately, coordination in R&I policy design and implementation has not improved over time, while monitoring and evaluation of R&I policies, as well as measuring the efficiency and effectiveness of public policies, remains insufficient⁽³⁸⁾. The fragmentation and overlap of R&I initiatives has persisted over time, resulting in a heavy information and administrative burden for R&I stakeholders⁽³⁹⁾, especially innovative firms seeking public support for R&I⁽⁴⁰⁾. While the RRP reform of the Science, Technology and Innovation Act established the Council for Science, Technology and Innovation Policy to address coordination between the General State Administration and the regions, these measures largely continue previous frameworks that have not fully tackled

⁽³⁸⁾ Europeanisation of Public Policies in Spain (2022) and [Informe Fundación CYD](#) (2021/2022 and 2024).

⁽³⁹⁾ OECD STI Policy Papers. [Improving knowledge transfer and collaboration between science and business in Spain](#) (December 2021) as part of the project *Roadmap to foster cooperation between universities, research, and business in Spain* co-funded by the EU via the Structural Reform Support Programme (REFORM/IM2020/004).

⁽⁴⁰⁾ FEI and IND+I (April 2023). [Propuestas para políticas de innovación en España 2023-2027](#). Madrid. Foro de Empresas Innovadoras (FEI) and Industria e Innovación (IND+I).

the ongoing fragmentation. Moreover, Spain would benefit from a targeted innovation strategy that acts as a 'country strategy'. This would permeate all public innovation administrations⁽⁴¹⁾ through a 'whole of government' approach involving all relevant ministries, including science and innovation, industry, digital, transport, environment, health, agriculture or the economy.

Business innovation

Business innovation remains weak and is characterised by low private investment in R&D, which is relatively concentrated in a small number of businesses in traditional sectors.

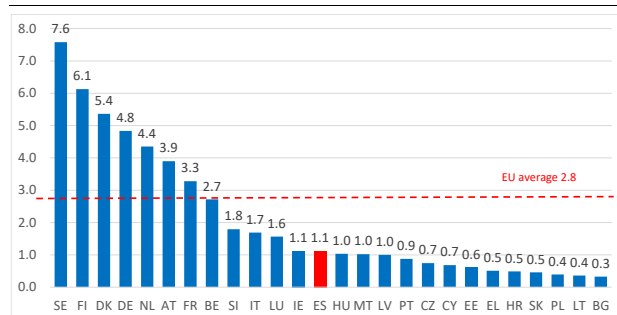
Private R&D investment, although making progress, remains well below the EU average of 1.49% of GDP, reaching a modest level of 0.84%. The number of firms carrying out R&D activities has been decreasing in recent years, pointing to a stronger concentration of R&I activities in fewer companies. In 2023, the business sector invested 57% more in R&D than before the financial crisis of 2008. However, this increase involved 21% fewer firms in 2023, which means fewer firms are innovating compared to before⁽⁴²⁾. Innovation outputs are weak in Spain, with patent applications filed under the Patent Cooperation Treaty per billion of GDP (in purchasing power standards/PPS €) at 1.1% well below the EU average of 2.8% (see Graph A3.2). Moreover, Spain would benefit from participating in the unitary patent system as it offers key advantages in promoting innovation and boosting competitiveness⁽⁴³⁾.

⁽⁴¹⁾ Such as the Centre for Development, Technology and Innovation (CDTI) under the Ministry of Science, Innovation and Universities or ENISA (*Empresa Nacional de Innovación*) under the Ministry of Industry and Tourism.

⁽⁴²⁾ Cotec 2024. [Informe Cotec](#).

⁽⁴³⁾ It is still expected that Spain will sign the Unified Patent Court Agreement or, as a first step, enter the enhanced cooperation framework.

Graph A3.2: Innovation outputs



Source: Patent applications filed under PCT per billion GDP (in PPS€). EPO PATSTAT data and Eurostat GDP data

Spain's business structure is highly fragmented, consisting mainly of small and medium-sized enterprises (SMEs) in low technology sectors such as services (tourism, retail, financial) and agri-food. The country has experienced low productivity growth for several decades⁽⁴⁴⁾. According to the 2024 EU Industrial R&D Scoreboard⁽⁴⁵⁾, there are only 11 Spanish companies in the world ranking (2 000 companies). Their total R&D investment amounted to EUR 5.67 billion, which represents 0.45% of the total R&D of all the companies in the scoreboard. In the EU-800 ranking, there are 22 Spanish companies investing EUR 5.9 billion altogether, which is 2.4% of the total EU-800. The largest investors carry out their activities in banking (EUR 2.2 billion), software (EUR 1.1 billion) and telecommunications (EUR 785 million), which shows that Spain is more geared towards services. To address the low private R&D investment, Spain has put in place public initiatives through direct and indirect support mechanisms that have witnessed some growth since 2017 (See Table A3.1). However, studies show a lack of use due to difficulties caused by heavy bureaucracy for firms⁽⁴⁶⁾. These issues should therefore be assessed to ensure simplification and better take-up of these schemes.

⁽⁴⁴⁾ OECD 2024. [Reviving Broadly Shared Productivity Growth in Spain](#).

⁽⁴⁵⁾ European Commission: Joint Research Centre, [The 2024 EU Industrial R&D Investment Scoreboard](#).

⁽⁴⁶⁾ FEI and IND+I (April 2023) and [Informe Cotec](#), October 2024.

Spain has made significant progress in the adoption of digital technologies by SMEs and the uptake of advanced technologies by firms contributing to its Digital Decade targets. However, further efforts are still needed to ensure a stronger digital uptake⁽⁴⁷⁾. The adoption of digital technologies by firms in Spain is progressing steadily, with the country performing slightly above the EU average in basic digital intensity for SMEs (74.2% vs 73.9%). The size of the ICT sector was 3.4% in gross value added and its R&D business expenditure amounted to 16.81% of the total R&D expenditure in 2021⁽⁴⁸⁾. On the uptake of advanced digital technologies by all firms, the country is also progressing, although it performs below the EU average in artificial intelligence (11.3% vs 13.5%). According to data from 2023, cloud uptake in Spain was 27.5% (vs 38.9% in the EU), while data analytics was 38% (vs 33.2% in the EU). To support the further adoption and development of digital technologies, Spain has developed reforms and investments under its RRP, including the Digital Spain Agenda. Furthermore, the European Regional Development Fund accounts for EUR 1.9 billion worth of added-value investments in reaping the benefits of digitalisation for companies, research organisations and public authorities. However, Spain should continue its efforts to support the digitalisation of firms, in particular to encourage the adoption of advanced technologies in order to further boost innovation.

Science-business linkages are weak despite some recent progress. Public and private scientific joint publications as a percentage of the total number of publications – a measure of public-private collaboration in science – is only

⁽⁴⁷⁾ The Digital Decade policy programme sets out a pathway for the EU's digital transformation, including concrete commitments from Member States to commonly achieve objectives (e.g. competitiveness, resilience, sovereignty) and digital targets by 2030.

⁽⁴⁸⁾ [ICT sector size](#) (2018 latest data); Eurostat and [R&D in ICT sector](#) (data from 2021).

6.8% of the total number of publications (below the EU average of 7.7%). An in-depth study by the OECD⁽⁴⁹⁾ provided a clear diagnosis of the main persistent challenges, indicating structural, regulatory and framework weaknesses that are unfavourable for stimulating business-academic collaboration. Some of the main recommendations included (i) improving the governance of public research organisations to make them more performance-based; (ii) increasing the level of professionalisation of knowledge intermediation services; and (iii) introducing measures to better support private R&D investment, also backed by later studies⁽⁵⁰⁾. The Spanish RRP, through the strategic projects for economic recovery and transformation, addresses some of these challenges in areas of health, space, automotive, energy, agriculture or chips⁽⁵¹⁾. These projects are public-private collaboration instruments that bring together public administrations, companies and science & technology centres to promote large projects in strategic areas, with the capability to boost economic growth, innovation, industrial development, employment and competitiveness. In addition, the 2022 Start-Up Law, which is part of the RRP, aims to improve the conditions for innovative entrepreneurship with a special focus on business and science cooperation⁽⁵²⁾. One of the primary goals is to ensure legal certainty and transparency for all stakeholders involved, thereby creating a conducive environment for research-based start-ups. In addition, the Spanish government has announced that it will update its

knowledge transfer and collaboration plan⁽⁵³⁾. Despite these promising measures, Spain still needs to develop a more comprehensive set of measures to be more effective in boosting science-business collaboration that improve technology transfer and knowledge valorisation.

Financing innovation

The administrative burden for accessing financial support for innovation, in particular for SMEs, coupled with the overall complexity due to fragmentation, continues to hamper innovation in Spain. Venture capital as a percentage of GDP reached 0.075 in 2023 (very close to the EU average of 0.078). However, recent studies show that excessive administrative barriers⁽⁵⁴⁾ hamper better access to R&I finance for SMEs. There are schemes for access to venture capital as well as direct and indirect support for business R&D through grants and tax incentives, but their complexity makes it difficult for SMEs to access them (see Annex 5). However, the current support measures need to improve and include other actions such as training in tools and methodology together with advice and management of R&D projects to help develop R&D capabilities beyond the execution of R&D projects⁽⁵⁵⁾. In addition, firms demand better coordination of the European, national and regional support frameworks in order to increase the effectiveness of public-private collaboration⁽⁵⁶⁾. In 2023, a significant percentage of Spanish firms also continued to highlight business regulations as a major

(49) OECD STI Policy Papers. [Improving knowledge Transfer and collaboration between science and business in Spain](#). (December 2021) as part of the project *Roadmap to foster cooperation between universities, research and business in Spain* co-funded by the European Union via the Structural Reform Support Programme (REFORM/IM2020/004).

(50) [Informe Fundación CYD 2024](#). Chapter 3.

(51) Strategic projects for economic recovery and transformation, [PERTE](#).

(52) Spanish Start-Up Law. ([Law 28/2022](#)).

(53) The [knowledge transfer and collaboration plan](#) was approved December 2022 and [Minister Morant announced](#) in 2024 that this plan will be updated.

(54) Cotec (October 2024). [Plan de Recuperación, Transformación y Resiliencia: Balance y propuestas de mejora](#).

(55) FEI and IND+I (April 2023). and Cotec (September 2024).

(56) [EY Insights. 2024](#).

obstacle to investment compared to the EU average (48% vs 22.2%) ⁽⁵⁷⁾.

Innovative talent

A suitable talent pool and skills for innovation remain a challenge for Spain.

New graduates in science and engineering reached 16.3% (per thousand of the population) in 2022, below the EU average of 17.5%. However, graduates in the field of computing are at 5.3%, (per thousand of the population), which is above the EU average of 3.6% (See Table A3.1) Overall, the number of university graduates in STEM disciplines has decreased by more than six percentage points (pps) in the last decade (2013-2022). By contrast, in the EU it has increased by 1.2 pps ⁽⁵⁸⁾. In addition, the number of researchers employed by the business sector remains low at 2.7% (per thousand of the active population), less than half of the EU average of 5.6% (see Table A3.1). This points to clear deficits in innovative talent. In response, through the RRP Spain has adopted measures to tackle skills shortages, especially digital and ICT (see Annex 12). The success of these measures will need to be assessed over time.

Entrepreneurship education is well integrated into the Spanish education system across all education levels.

Entrepreneurship competences are embedded into the school curricula in a comprehensive way, from primary school to upper secondary education (to both general and VET tracks). Entrepreneurship education is also offered in higher education, for instance through courses and training or mentorship programs. Nevertheless, to further strengthen entrepreneurship education, it could have more focus on green and equitable growth.

⁽⁵⁷⁾ According to the European Investment Bank Group Survey on Investment and Investment Finance.

⁽⁵⁸⁾ Informe CYD 2024 (Chapter 2).

Table A3.1: **Key innovation indicators**

Spain	2012	2017	2020	2021	2022	2023	2024	EU average (1)	USA
Headline indicator									
R&D intensity (gross domestic expenditure on R&D as % of GDP)	1.29	1.20	1.40	1.40	1.41	1.49	:	2.24	3.45
Science and innovative ecosystems									
Public expenditure on R&D as % of GDP	0.61	0.54	0.61	0.61	0.61	0.65	:	0.72	0.64
Scientific publications of the country within the top 10% most cited publications worldwide as % of total publications of the country	9.4	8.7	9.0	8.8	:	:	:	9.6	12.3
Researchers (FTE) employed by public sector (Gov+HEI) per thousand active population	3.5	3.7	4.0	4.1	4.1	4.3	:	4.2	:
International co-publications as % of total number of publications	41.8	48.9	49.4	49.2	49.6	51.0	:	55.9	39.3
R&D investment & researchers employed in businesses									
Business enterprise expenditure on R&D (BERD) as % of GDP	0.68	0.66	0.78	0.78	0.79	0.84	:	1.49	2.70
Business enterprise expenditure on R&D (BERD) performed by SMEs as % of GDP	0.32	0.30	0.36	0.35	0.33	:	:	0.40	0.30
Researchers employed by business per thousand active population	2.0	2.2	2.5	2.6	2.7	3.0	:	5.7	:
Innovation outputs									
Patent applications filed under the Patent Cooperation Treaty per billion of GDP (in PPS €)	1.6	1.3	1.6	1.4	1.1	:	:	2.8	:
Employment share of high-growth enterprises measured in employment (%)	10.05	22.26	15.42	:	:	:	:	12.51	:
Digitalisation of businesses									
SMEs with at least a basic level of digital intensity % SMEs (EU Digital Decade target by 2030: 90%)	:	:	:	:	67.52	:	74.15	72.91	:
Data analytics adoption % enterprises (EU Digital Decade target by 2030: 75%)	:	:	:	:	:	38.01	40.94	33.17	:
Cloud adoption % enterprises (EU Digital Decade target by 2030: 75%)	:	:	:	27.02	:	27.25	33.1	38.86	:
Artificial intelligence adoption % enterprises (EU Digital Decade target by 2030: 75%)	:	:	:	7.67	:	9.18	11.31	13.48	:
Academia-business collaboration									
Public-private scientific co-publications as % of total number of publications	5.5	6.3	6.3	6.6	6.9	6.8	:	7.7	8.9
Public expenditure on R&D financed by business enterprises (national) as % of GDP	0.039	0.030	0.039	0.039	0.039	:	:	0.050	0.020
Public support for business innovation									
Total public sector support for BERD as % of GDP	:	0.183	0.231	0.244	0.249	:	:	0.204	0.251
R&D tax incentives: foregone revenues as % of GDP		0.101	0.128	0.145	0.139	0.138	:	0.102	0.141
BERD financed by the public sector (national and abroad) as % of GDP	0.110	0.083	0.102	0.100	0.110	:	:	0.100	0.110
Financing innovation									
Venture capital (market statistics) as % of GDP, total (calculated as a 3-year moving average)	0.024	0.042	0.050	0.075	0.082	0.075	:	0.078	:
Seed capital (market statistics) as % of GDP	7.4	3.5	6.9	5.3	5.4	4.0	:	7.3	:
Start-up stage funding share (% of total venture capital)	47.4	51.8	54.3	38.9	39.7	41.2	:	44.0	:
Later stage funding share (% of total venture capital)	45.2	44.6	38.8	55.8	55.0	54.8	:	48.7	:
Innovative talent									
New graduates in science and engineering per thousand population aged 25-34	12.6	15.7	15.5	16.8	16.3	:	:	17.5	:
Graduates in the field of computing per thousand population aged 25-34	1.9	3.2	3.6	4.8	5.3	:	:	3.6	:

(1) EU average for the last available year or the year with the highest number of country data.

Source: Eurostat, DG JRC, OECD, Science-Metrix (Scopus database), Invest Europe, European Innovation Scoreboard

The Spanish economy continued to grow in 2024 and the outlook is favourable for the business environment, despite a context of global uncertainty⁽⁵⁹⁾. Productivity per hour

worked in Spain nevertheless remains below the EU average. The main challenges⁽⁶⁰⁾ in order to increase productivity and improve business environment are: reducing

⁽⁵⁹⁾ [Challenges Spanish economy. Banco de España.](#)

⁽⁶⁰⁾ [OECD Investment Survey Spain 2023.](#)

administrative burden; making it easier for firms to scale up; reinforcing innovation; fostering market unity (including standardisation at regional level); increasing integration with the rest of the single market; access to non-bank financing; reducing regulatory restrictions in professional services and retail; making skilled staff available; adopting adequate information and communication technologies (ICT); and making the institutional framework more efficient. Spain established the Spanish Productivity Council on 30 July 2024 to analyse productivity and competitiveness developments in Spain.

The Spanish economy was very dynamic in 2024, but more private and public investment is needed in order to sustain growth. Growth was mainly driven by the strong performance of tourism and services exports, and by an increase in public consumption⁽⁶¹⁾. Spain's public investment⁽⁶²⁾ (supported by the Recovery and Resilience Fund (RRF)) has significantly increased over the last five years (2020: 0.0% to 2024: 0.74%) but is still below the EU average (1.3%). Private investment⁽⁶³⁾ has also been lower than the EU average over the last five years (3.5% vs the EU average of 4.0%). This downward trend in private investment has negative implications for the business climate. To increase investment, Spain needs more coordination and to simplify the regulatory environment.

Uncertainty, non-availability of skilled staff and business regulations remain firms' main investment obstacles⁽⁶⁴⁾. According to the EIB Investment Survey 2024, there is uncertainty about the future (82% vs the EU average of 79%), availability of skilled staff (78% vs the EU average of 77%) and business regulations (78% vs the EU average of 66%). According to ECFIN BCS, the share of businesses facing labour shortages⁽⁶⁵⁾ is increasing (7.8% in 2024 vs

6.6% in 2023) but remains much lower than the EU average 20.2% (see the Annex on Labour Market)). The share of Spanish businesses facing material supply constraints is decreasing (8.1% in 2024 compared with 13.6% in 2023) and is lower than EU average (10%).

Fewer firms in Spain than in the rest of the EU think that energy prices, and transport and digital infrastructures are obstacles to investment. According to the EIB Investment Survey⁽⁶⁶⁾, 68% of Spanish firms think that energy prices are an obstacle (vs the EU average of 77%). 50% of Spanish businesses think that transport infrastructure is an obstacle to investment (vs the EU average of 45%). 39% of Spanish businesses think that digital infrastructure is an obstacle to investment (vs the EU average of 41%). Spain has made considerable efforts to make progress on digital and transport infrastructure and Spain's recovery and resilience plan (RRP) has relevant investments in these areas.

Spain's active deployment of connectivity infrastructures allowed it to nearly meet the EU targets for VHCN, FTTP and 5G coverage in 2024. In 2023, Spain's VHCN, FTTP and 5G coverages were 96.3%, 95.2% and 92.3% respectively (all three were higher than the EU averages of 78.8%, 64.0% and 89.3%).

Cybersecurity awareness in Spanish enterprises is rising. ICT security incidents were 3.6% in 2022 and remain the same in 2024, standing above the EU average of 3.4%. 89.9% of enterprises implemented security measures, but only 57.1% of enterprises made their employees aware of their obligations on ICT security (slightly below the EU average of 59.9%)⁽⁶⁷⁾.

The share of Spanish SMEs affected by late payments remains a concern. The percentage of Spanish SMEs experiencing late payments was lower in 2023 than the EU average.

⁽⁶¹⁾ [IMF 2024 Article IV Consultation. Spain.](#)

⁽⁶²⁾ [AMECO.](#)

⁽⁶³⁾ [AMECO.](#)

⁽⁶⁴⁾ [EIB Investment Survey 2024.](#)

⁽⁶⁵⁾ [Business Consumer Survey 2024. ECFIN.](#)

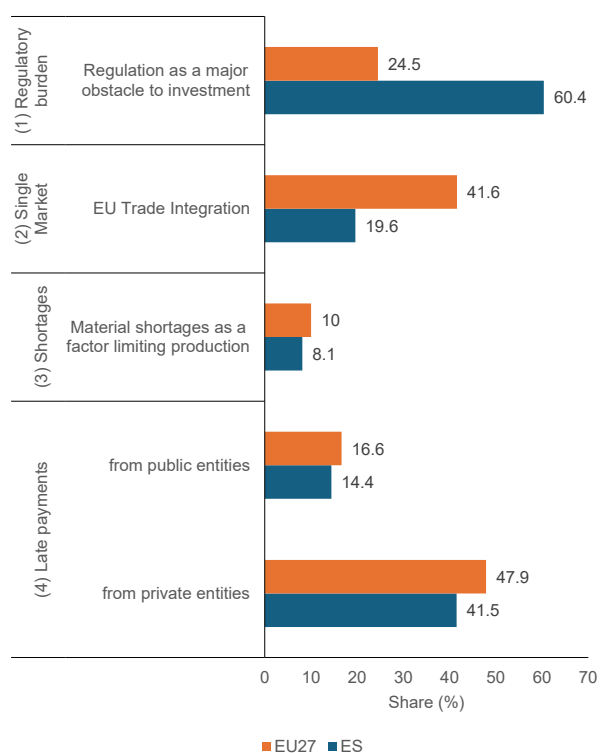
⁽⁶⁶⁾ [EIB Investment Survey 2024.](#)

⁽⁶⁷⁾ [ICT security in enterprises - Statistics Explained](#)

Specifically, 41.2% of Spanish SMEs experienced late payments versus the EU average of 48.6%. This was nevertheless a slight increase on 2022, when 36.5% of Spanish SMEs experienced late payments.

The business-to-business payment gap in 2024 increased slightly in 2023. It is now 17.6 days (above the EU average of 15.5 days)⁽⁶⁸⁾. The average payment term in the private sector in 2023 was 70 days (3 days longer than the estimate made for 2022 and far from the 60 days permitted by Law 15/2010). Large companies are more likely to be the slowest in paying (59%) and only 26% of them pay within the legal deadline of 60 days⁽⁶⁹⁾.

Graph A4.1: **Making Business Easier: selected indicators.***



Share of (1) enterprises, (2) average intra-EU exports and imports in GDP, (3) firms, (4) SMEs.

* Q4 data on trade integration is not yet available.

Sources: (1) EIB IS, (2) Eurostat, (3) ECFIN BCS, (4) SAFE survey.

⁽⁶⁸⁾ [Intrum Payment Report](#).

⁽⁶⁹⁾ [Plataforma Multisectorial de la Morosidad](#).

The public sector's payment gap has slightly decreased but remains above the EU average (15.7 days vs. 15.2 days). On 30 April 2024, the Council of Ministers approved Royal Decree 439/2024 (in accordance with the 'Create and Grow' Law that is part of the recovery and resilience plan (RRP)). This royal decree created a new State Observatory of Private Late Payments⁽⁷⁰⁾. It is estimated that this will benefit a significant number of companies, particularly SMEs⁽⁷¹⁾.

The Spanish labour market has a high level of skills polarisation, with persistent skills mismatches. Spain has one of the highest overqualification rates in the EU, which indicates a mismatch between labour market needs and educational supply. The high share of students underachieving in mathematics, although below the EU average, and the low share of top performers in the 2022 PISA survey⁽⁷²⁾ may jeopardise future productivity and competitiveness. Tertiary educational attainment (TEA) is steadily increasing⁽⁷³⁾.

Regulatory and administrative barriers

A significant majority of firms in Spain believe that regulation has been a major obstacle to investment⁽⁷⁴⁾. Spain is one of the Member States with the highest share of firms identifying regulation as a major obstacle to investment (60.4 % in 2024 vs the EU average of 24.5%⁽⁷⁵⁾). Spain has adopted several laws⁽⁷⁶⁾ to reduce financial and administrative barriers to the development of firms. The 'Create and Grow' Law⁽⁷⁷⁾ and the Law on

⁽⁷⁰⁾ [Observatorio Estatal de la Morosidad Privada](#).

⁽⁷¹⁾ [Ministerio de Industria y Turismo – El Gobierno crea el Observatorio Estatal de Morosidad Privada](#).

⁽⁷²⁾ [PISA 2022 Results - The State of Learning and Equity in Education en.pdf](#), page 28.

⁽⁷³⁾ [ETM 2024 - key findings from the country reports.docx](#)

⁽⁷⁴⁾ [EIB Investment Survey 2024](#).

⁽⁷⁵⁾ [Commission calculation based on EIB Investment Survey 2024](#).

⁽⁷⁶⁾ [Spain OECD Economic Survey 2023 5b50cc51-en.pdf](#)

⁽⁷⁷⁾ [BOE Law Create and Grow](#).

Start-ups (under the RRP) introduced incentives for the creation and growth of companies, including innovative ones (see the Annex on Innovation to Business) ⁽⁷⁸⁾.

Spain's business registration rate declined slightly in 2022, rebounded in 2023 and outperformed in 2024. When compared with 2021 (with a base index of 100), the registration rate dropped to 98.7 in 2022. However, it increased to 107.4 in 2023 and further increased to 117.6 in 2024. This growth significantly outpaced the EU average, which stood at 103 in 2024 ⁽⁷⁹⁾.

Spain has a relatively efficient insolvency framework. The 2022 Insolvency Law ⁽⁸⁰⁾ reformed the framework for insolvency procedures and restructuring plans to favour out-of-court settlements and swift reaction to financial distress situations ⁽⁸¹⁾. According to ASPAC ⁽⁸²⁾, the reform, which brought key changes in the restructuring of firms and the administration of microenterprises, has achieved significant progress, although important challenges persist. (see the Annex on Capital markets, financial stability and access to finance).

The single market

EU integration offers Spanish businesses (particularly SMEs) opportunities for growth by enabling them to better exploit the single market. Spanish firms benefit from lower barriers to entry and expansion trade than the OECD average, facilitating international trade and economic exchange ⁽⁸³⁾.

Spain can deepen its participation in the EU's single market. The significant difference

between Spain's intra-EU trade ⁽⁸⁴⁾ of 15% (ratio of trade volumes to GDP) and the EU average of 43% indicates an opportunity for Spanish businesses to increase their participation in the EU's single market and boost economic growth, competitiveness and prosperity. Several factors can explain this low integration rate: low productivity growth; the small size of companies; education skills; the minor role of innovation and technological capital; trust in institutions; and the large size of the Spanish market ⁽⁸⁵⁾.

Spanish exports have boomed since 2008 ⁽⁸⁶⁾. Between 2008 and 2023, Spanish exports grew as a share of GDP from 26% to 39%. In 2023, goods exports made up 68% of total sales abroad and accounted for 26.4% of GDP. Services exports grew even more sharply. Between 2008 and 2023, they increased by 66% and their ratio to GDP rose from 8.2% to 12.5%. This surge was driven by strong growth in the export of both travel and non-travel services. In 2024, the total number of international tourists reached a record level of almost 93.8 million ⁽⁸⁷⁾, generating around 126 billion euros expenditure, confirming Spain as a leading tourist destination.

Spain can do better in transposing single market rules into national legislation ⁽⁸⁸⁾. Spain's transposition of single market directives into national legislation is well below the EU average. The percentage of all directives not transposed in 2024 in Spain was 1.8% (vs 0.8% in the EU) and the average delay in transposing those directives in Spain was 18.7 months (vs 11.9 months in the EU) ⁽⁸⁹⁾. The conformity deficit (the percentage of wrongly transposed directives) is also high in Spain at 1.2% (the EU average is 0.9%). Both the number and

⁽⁷⁸⁾ [BOE Law on Start Ups](#).

⁽⁷⁹⁾ [Eurostat Business Registration](#).

⁽⁸⁰⁾ [Disposición 14580 del BOE núm. 214 de 2022](#).

⁽⁸¹⁾ [Spain OECD Economic Survey 2023 5b50cc51-en.pdf](#).

⁽⁸²⁾ [ASPAC. Ley concursal. Retos pendientes](#).

⁽⁸³⁾ [Spain PMR country note.pdf](#).

⁽⁸⁴⁾ [Eurostat](#).

⁽⁸⁵⁾ [Bank of Spain](#).

⁽⁸⁶⁾ [Bank of Spain](#).

⁽⁸⁷⁾ [Instituto Nacional Estadística España. INE](#).

⁽⁸⁸⁾ [Country data: Spain | The Single Market and Competitiveness Scoreboard](#).

⁽⁸⁹⁾ [Country data: Spain | Single Market and Competitiveness Scoreboard](#).

duration of pending single market infringement proceedings in Spain were much higher than the EU average in 2024. Spain ranks 27th out of the 27 Member States for both indicators.

Spain's SOLVIT⁽⁹⁰⁾ centre is a well-functioning active centre within the SOLVIT network. In 2024, SOLVIT Spain resolved 86.4% of the problems that EU nationals faced in Spain (vs the EU average of 85%).

Spain has a rather competition-friendly regulatory framework that performs better than the OECD average⁽⁹¹⁾. However, the notarial profession could benefit from reduced barriers to competition, because it ranks 25 out of the 43 countries permitting in the OECD survey. According to the European Commission's restrictiveness indicator⁽⁹²⁾, civil engineers and tourist guides have to overcome higher barriers than the EU average. Barriers for civil engineers concern requirements to obtain authorisation from the professional association for certain projects. Barriers for tourist guides result from differences in regional regulations.

Spain has one of the most restrictive retail regulatory frameworks in the EU. In 2022, its RRI score⁽⁹³⁾ of 2.92 exceeded the EU median of 1.70. This restrictive environment was particularly pronounced in the operational pillar, where Spain scored 2.60 (significantly higher than the EU median of 1.20), partially due to limited flexibility in shops' opening hours and the existence of retail-specific taxes. This is confirmed by the OECD's Product Market Regulation indicator (PMR)⁽⁹⁴⁾ which highlights Spain's retail market as highly restrictive; Spain's regulatory barriers to competition could be reduced in retail

distribution and retail sales in the medicines sector in order to increase competition and benefit consumers. The national government, regions and local authorities have approved a 2025 action plan (in the framework of 'Regime 20') for the elimination of bureaucratic barriers for businesses. The plan includes measures to reduce barriers in areas such as authorisation to establish retail outlets.

Public procurement

Spain has taken steps to promote sustainable procurement, but further efforts are required in order to fully integrate green procurement practices. MITECO (the Spanish Ministry for Ecological Transition and the Demographic Challenge) has issued a manual to promote the inclusion of sustainability criteria in public procurement⁽⁹⁵⁾. Sustainable public procurement is crucial to transforming public purchasing in Spain. Implementing sustainable public procurement will enable the Spanish government to reduce its environmental impact, and to foster innovation and competitiveness.

⁽⁹⁰⁾ [Country data: Spain | Single Market and Competitiveness Scoreboard](#).

⁽⁹¹⁾ [Spain PMR country note.pdf](#).

⁽⁹²⁾ [COM\(2021\) 385 final, Communication on reform recommendations for regulation in professional services of 2017](#).

⁽⁹³⁾ Spain RRI 2022 [Microsoft Power BI](#).

⁽⁹⁴⁾ [Spain PMR country note.pdf](#).

⁽⁹⁵⁾ [MITECO manual to promote the inclusion of sustainability criteria in public procurement..](#)

Table A4.1: **Making Business Easier: indicators.**

Spain							
POLICY AREA	INDICATOR NAME	2020	2021	2022	2023	2024	EU-27 average
Investment climate							
Shortages	Material shortage, firms facing constraints, % ¹	7.1	17.2	26.4	13.6	8.1	10.0
	Labour shortage, firms facing constraints, % ¹	4.4	4.5	7.7	6.6	7.8	20.2
	Vacancy rate, vacant posts as a % of all available ones (vacant + occupied) ²	0.4	0.6	0.7	0.7	0.7	2.3
Infrastructure	Transport infrastructure as an obstacle to investment, % of firms reporting it as a major obstacle ³	35.1	41.8	32.6	23.5	27.5	13.4
	VHCN coverage, % ⁴	-	93.8	93.3	96.3	-	78.8
	FTTP coverage, % ⁴	-	88.9	91.0	95.2	-	64.0
	5G coverage, % ⁴	-	58.9	82.3	92.3	-	89.3
Reduction of regulatory and administrative barriers							
Regulatory environment	Impact of regulation on long-term investment, % firms reporting business regulation as a major obstacle ³	63.6	64.1	53.0	47.8	60.4	24.5
Late payments	Payment gap - corporates B2B, difference in days between offered and actual payment ⁵	21.3	12.5	16.3	15.2	17.6	15.6
	Payment gap - public sector, difference in days between offered and actual payment ⁵	23.9	11.2	22.0	16.9	15.7	15.1
	from public or private entities in the last 6 months	40.6	33.9	36.4	41.2	-	-
	Share of SMEs experiencing late payments, % ⁶	-	-	-	-	41.5	47.9
	from private entities in the previous or current quarter	-	-	-	-	14.4	16.6
	from public entities in the previous or current quarter	-	-	-	-	14.4	16.6
Single Market							
Integration	EU trade integration, % (Average intra-EU imports + average intra EU exports)/GDP ²	16.8	18.8	21.2	20.2	19.6	41.6
	EEA Services Trade Restrictiveness Index ⁷	0.036	0.036	0.036	0.036	0.042	0.050
Compliance	Transposition deficit, % of all directives not transposed ⁸	1.9	2.2	2.5	1.3	1.8	0.8
	Conformity deficit, % of all directives transposed incorrectly ⁸	1.3	1.0	1.3	1.3	1.2	0.9
	SOLVIT, % resolution rate per country ⁸	87.1	79.5	85.4	88.0	86.4	84.9
	Number of pending infringement proceedings ⁸	58.0	49.0	46.0	44.0	42.0	24.4
Public procurement							
Competition and transparency in public procurement	Single bids, % of total contractors ^{**8}	28	27	28	33	33	-
	Direct awards, % ^{**8}	15	12	10	9	8	7.0

*Change in methodology in 2024: reporting late payments from public and private entities separately.

**Data on single bids for 2024 is provisional and subject to revision. Please note that approximately 18% of the total data is currently missing, which may impact the accuracy and completeness of the information. Due to missing data, the EU average of direct awards data is calculated without Romania.

Sources: (1) ECFIN BCS, (2) Eurostat, (3) EIB IS, (4) Digital Decade Country reports, (5) Intrum Payment Report, (6) SAFE survey, (7) OECD, (8) up to 2023: Single Market and Competitiveness Scoreboard, 2024: Public procurement data space (PPDS).

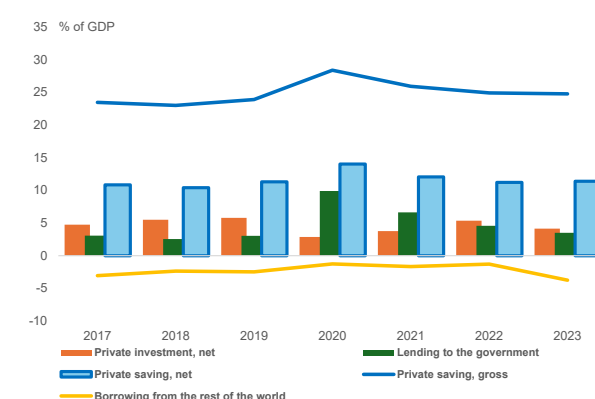
Amidst sustained and elevated domestic savings, the Spanish economy benefits from a good potential for capital market development, as well as well-developed and stable banking and non-banking financial sectors. Spain's economy is heavily bank-dependent, with limited development of capital markets, particularly compared with other EU countries. Most Spanish companies rely on bank financing rather than capital markets. Household savings are also lower than the EU average and are held mainly in deposits and real estate. The capital markets remain comparatively small in terms of capitalisation and volumes traded. Spanish households' savings are invested conservatively, as financial instruments form only a small part of their wealth. The investment portfolio of domestic institutional investors is focused on debt securities and investment-fund shares. In recent years, private equity and venture capital have been more active, with many new entities setting up in Spain. However, the local venture and growth capital markets are not yet sufficiently developed to meet all the financing needs of innovative firms. Spain's recovery and resilience plan (RRP) includes measures to support the financing of start-ups and the development of capital markets.

Availability and use of domestic savings

The Spanish economy invests the bulk of its net savings domestically. From 2014 until 2023, the private savings ratio, net of fixed capital consumption, stood on average at 11.6% of GDP, reaching a maximum of 14% in 2020 (see Graph A3.1). The net private investment ratio, which denotes the net contribution of the private sector to capital accumulation in the economy, recorded an average of 4.3% of GDP during the reference ten-year period and reached 5.8% in 2019. At the same time, during the same period the government has been running recurrent and sizable budgetary deficits, which during 2014-

2023 on average amounted to a budgetary deficit of 4.9%. Regardless of these general government budgetary deficits, the sustained and positive difference between net domestic savings and net investment, resulted in structural net lending by Spain to foreign economies that averaged 2.4% of GDP during 2014-2023, with a peak of 3.7% in 2023. Thus, most of the net savings in Spain have been invested domestically (to finance private investment or borrowing by the government), while a comparatively smaller share was used to finance projects abroad.

Graph A5.1: **Net savings-investment balance**

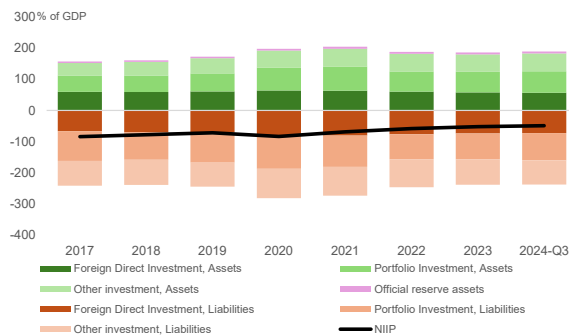


Source: AMECO.

While the Spanish economy has accumulated significant foreign assets, the even more sizable investments from abroad have resulted in a negative net international investment position. As of Q3 2024, total assets on foreigners reached 189% of GDP, while liabilities to foreigners stood at almost 238% of GDP, resulting in a net international investment position (NIIP) equivalent to -48.4% of GDP (see Graph A5.2). The stock of official foreign reserve assets, which amounted to 6.2% of GDP, was the only factor that contributed positively to the NIIP. All investment categories contributed to a similar extent to the negative NIIP. The net portfolio investments, which are directly affected by the price volatility of equity valuations, stood at -18% of GDP as of Q3 2024, while net foreign direct investment was at 16%. The net stock of other investments amounted to almost -21% of GDP at the same

time. While the Spanish economy seems well integrated in international capital flows as a source of foreign capital, it remains a net capital importer across all investment categories.

Graph A5.2: International investment position

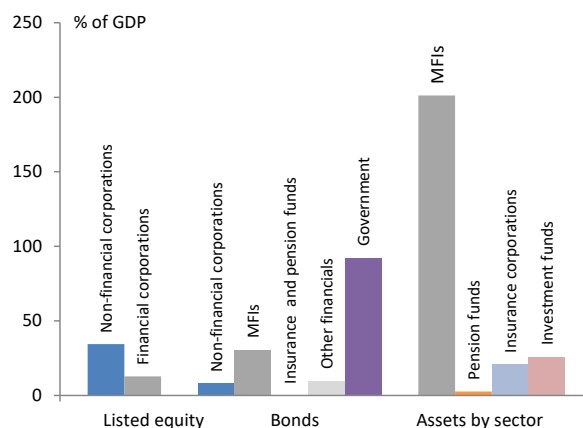


Source: ECB.

Structure of the capital markets and size of the financial sector

The Spanish economy stands out with one of the domestic capital markets with potential for further growth in the EU. The market capitalisation of listed equity reached 47% of GDP at the end of 2023 (see Graph A5.3), which is well below the EU average of 67% of GDP. At the same time, non-financial corporations accounted for 73% of that capitalisation, which implies that the stock market in Spain is to a large extent geared towards funding the non-financial segment of the real economy. The outstanding volume of debt securities reached almost 141% of GDP at end-2023, which is in line with the EU average. Bonds issued by the government and monetary financial institutions (MFIs) accounted for almost 66% and 22% of the total, respectively.

Graph A5.3: Capital markets and financial intermediaries



Source: ECB, EIOPA, AMECO.

While the financial sector in Spain remains dominated by banks, non-bank financial intermediaries also play an important role.

Starting from 256% of GDP in 2020, the size of the banking sector steadily declined to 201% of GDP in 2023, which remains below the EU average of 257%. Several large Spanish banking groups (in particular Santander and Banco Bilbao Vizcaya Argentaria) have substantial international operations, notably in Latin America, United Kingdom and Türkiye. The Spanish banking sector is predominantly domestically owned (almost 95% in 2023), with the top five lenders owning almost 70% of total banking sector assets.

The insurance and pension funds sectors, with total assets of almost 21% of GDP and 11% of GDP at end-2023, play a lesser role in the non-bank intermediation. Investment funds also play a role, even though their total assets dropped by around 4 percentage points to almost 26% of GDP between 2021 and 2023 (see section on institutional investors).

Resilience of the banking sector

The Spanish banking sector is well-capitalised and exhibits good resilience to risks. Banking sector capitalisation only slightly improved in 2024, despite very strong profits.

On the back of favourable profitability developments, banks in Spain opted for dividend pay-outs and share buy-backs. The system-wide capital ratio stood at 17.4% in Q3 2024, below the EU average (at 20.1%). In the same period, the Spanish banking sector reported a consolidated common equity tier 1 (CET1) ratio of 13.3%, the lowest in the EU. Less significant credit institutions in Spain continued to have higher capital ratios than significant credit institutions. Overall, the capitalisation of Spanish banks is aligned with their business model and stands above the capital requirements and supervisory guidance. According to the 2023 EBA stress test ⁽⁹⁶⁾, the participating Spanish institutions fared better than the EU aggregate, as they experienced a comparatively smaller negative impact under the adverse scenario and showed a greater capacity to generate capital revenue under the baseline scenario. Banking groups in Spain have issued securities eligible for the Minimum Requirement for own funds and Eligible Liabilities (MREL). Against an average MREL binding target (including the combined buffer requirements CBR) as of 1 January 2024 of 27.4% TREA, all the banks in Spain meet their final MREL targets ⁽⁹⁷⁾.

Despite some deterioration, banks' balance sheets show robust asset quality. Supported by the decrease in the share of impaired assets in the loan book, due to the regular sales of NPLs by banks and the rebound in new lending, the aggregate non-performing loan (NPL) ratio declined to 2.6% in Q3 2024 (slightly above the EU average of 1.9%). Despite the overall increase in bankruptcies over the past three years, the corporate NPL ratio has been on a downward path and reached 3.6% in Q3 2024, broadly in line with the EU average. The share of loans that have deteriorated significantly in credit quality (Stage 2) under the International Financial Reporting Standard

(IFRS) 9 has remained broadly stable and was the second lowest in the EU at the end of 2024. At the same time, banks' aggregate coverage ratio of NPLs by existing provisions has gradually increased to 43.8% in Q3 2024, above the EU average (at 42.1%).

Spanish banks maintain very strong liquidity positions, with sustained issuances of debt securities. Banks are exposed to a very low liquidity funding risk and show an excellent term adequacy between assets and liabilities. All credit institutions in Spain have liquidity coverage ratios well above the regulatory minima. Banks have benefitted from the increase in term deposits, and from the issuance of debt securities, while the monetary tightening by the ECB led to falling cash balances at central banks.

Resilience of the non-bank financial intermediaries

The Spanish insurance sector has remained resilient and profitable. Gross earned premiums saw significant annual growth in 2023, driven by Spain's dynamic economy and a more normalised interest rate environment. The strong recent performance of the life insurance sector has been driven by the official interest rate policies that have particularly benefited savings-linked life insurance business. The Spanish life market is dominated by annuities and traditional savings products with investment guarantees, which are more attractive to customers when interest rates are high. Spanish insurance companies maintain an overall adequate level of capitalisation, with average solvency capital requirement (SCR) of almost 242%, somewhat below the EU average, with relatively lower ratios in the life segment. However, downside risks remain, given the high uncertainty in the macro-financial environment. On a positive note, Spain is among the EU

⁽⁹⁶⁾ See [2023 EU-wide stress test](#), July 2023.

⁽⁹⁷⁾ For additional information, see the European Banking Authority's [MREL Dashboard - Q4 2023](#).

Member States with relatively limited insurance protection gaps for natural hazards ⁽⁹⁸⁾.

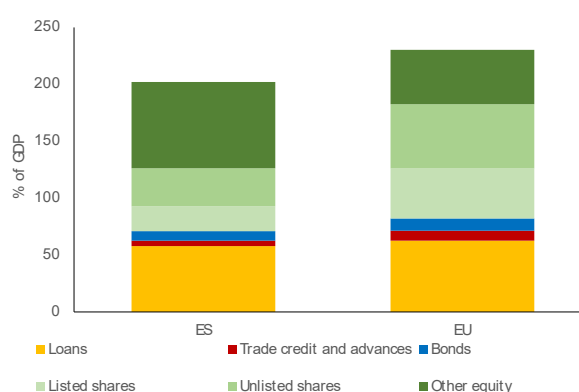
Sources of business funding and the role of banks

Overall, firms in Spain rely more heavily on funding by banks and less on the capital markets than their European peers. This is in part due to the predominant structure of small and medium-sized enterprises (SMEs) in Spain, many of which are organised as limited liability companies. According to the Spanish National Statistics Institute (INE), 99% of all firms in the country are classified as SMEs, employing more than two thirds of the Spanish workforce and generating nearly three fifths of total value added in the economy. However, the productivity levels of these SME firms are comparatively low, and a significant share face financing constraints that hold them back from making the investments they need to grow ⁽⁹⁹⁾. More specifically, at the end of 2023 bank finance through loans constituted 28.6% of all funding sources for non-financial corporations (NFCs) in Spain, while listed shares and bonds accounted for only 15% of funding sources. This compares with EU averages of 27.2% from bank finance through loans and 23.8% for listed shares and bonds. The overall level of NFC funding was 202% of GDP in Spain and 230.3% of GDP on average in the EU (see Graph A5.4).

External funding plays a relatively significant role and Spanish firms overall can meet their investment needs. According to the 2024 EIB Investment Survey ⁽¹⁰⁰⁾, 62% of Spanish firms' investments needs are covered by internal funding, below the EU average of

66%. At the same time, only 13% of firms that responded to this survey said they believed that their investment activities over the last three years were less than needed. This is slightly better than the average perceived underinvestment in the EU (14%), suggesting that there is only a limited financing gap relative to investment demand in Spain. However, this may not be the case for firms with limited capacity for internal funding, such as innovative start-ups.

Graph A5.4: **Composition of NFC funding as a % of GDP**



The sum of NFC liabilities only reflects the total for the NFC liabilities considered. Reference period 2023.

Source: Eurostat.

The banking sector plays a major role in financing Spain's economy. The banking sector in Spain is mainly domestically owned, and is characterised by significant concentration. Several large Spanish banking groups have substantial international operations, notably in Latin America, the United Kingdom and Türkiye. The sector remains resilient, with good liquidity and solid profitability, close to EU average levels (see Table A5.1). Overall, Spanish NFCs are not likely to face serious challenges in accessing bank loans in the near term. The capitalisation of Spanish banks is aligned with their business model and stands above existing capital requirements and supervisory guidance but remains much lower than the EU average. In the event of an adverse shock that puts a strain on the debt-repayment capacity of some borrowers, the capitalisation of Spanish banks

⁽⁹⁸⁾ See EIOPA's Dashboard on the insurance-protection gap for natural catastrophes.

⁽⁹⁹⁾ [OECD Capital Market Review of Spain 2024 | OECD](#).

⁽¹⁰⁰⁾ See [EIB Investment Survey 2024: European Union overview](#).

and their potential for organic capital generation might warrant close oversight.

Supported by the gradual decline in interest rates, bank lending in Spain has started to rebound. For households, annual growth in bank credit for adjusted loans has started to recover, from -2.6% at the end of 2023 to +0.9% at the end of 2024. The rebound is due to improvements in affordability driven by rising real incomes and slightly falling financing costs. For NFCs, annual credit growth reached 0.8% at the end of 2024, up from -3.7% in 2023. Estimated insolvency liabilities increased in the course of 2024, although business registrations have also been on the rise. Moreover, the Bank Lending Survey ⁽¹⁰¹⁾ showed that the upward trend in demand for corporate loans continued in Q3 2024, driven by: (i) increased financing needs for fixed-asset investment, inventories and working capital; and (ii) reduced use of internal funds. Overall, the terms and conditions on new loans were reported to have eased across all segments, and the rejection rate in corporate lending has remained stable.

Retail investors in capital markets

The Spanish capital markets remain relatively small, compared with the size of Spain's economy. The Madrid Stock Exchange ranks fourth in the EU by size, with the IBEX 35 index featuring a number of large multinational companies. Nevertheless, the Madrid Stock Exchange has lower market liquidity, especially for small and mid-cap stocks, and this hampers SMEs' access to capital. The Spanish equity market is comparatively small in terms of capitalisation (equivalent to 47.1% of GDP vs an EU average of almost 68% as of end-2023) and volumes traded. In particular, market liquidity is lower for small and mid-cap stocks, and the use of the Alternative Stock Market (set up to

target smaller companies that wish to go public) has been limited. The capital markets in Spain were also affected by the EU-wide shift in equity trading from primary exchanges to alternative trading venues in recent years, a significant cause of reduced revenues from securities trading. As has been the case in other European stock markets, the share of order-book trading taking place on the Madrid Stock Exchange has been on a downward trend in the past years, reaching around 60% today. In parallel, 'dark' trading of shares of Spanish listed companies ⁽¹⁰²⁾ has become more common. The use of equity by Spanish SMEs is very low, as only 3% of SMEs indicated in the 2023 SAFE survey that equity is relevant for them, compared with an EU average of 10.1% ⁽¹⁰³⁾. No new companies joined the regular market, nor were there any initial public offerings (IPOs) in 2023. However, in Q1-2024 the largest IPO in Spain since 2015 was launched, when Spanish beauty-products group Puig went public.

Spanish households' savings are invested conservatively, as financial instruments form only a small part of their wealth. Main-residence ownership is the most significant asset for most Spanish homeowners. On average, Spanish households have financial portfolio profiles with very low risk. According to the latest Spanish Survey of Household Finances (EFF) conducted in 2022 ⁽¹⁰⁴⁾, the portfolio composition of Spanish households tends to be similar across all levels of income and net wealth, except for households in the top decile of income and of net wealth, which hold around 17.7% of their financial assets in unlisted shares and other equity, while all other households hold less than 2.1% in these products. The pattern is similar for holdings of

⁽¹⁰¹⁾Bank of Spain, [Bank Lending Survey](#), October 2024.

⁽¹⁰²⁾ 'Dark' trading refers to trades executed outside national securities exchanges and associations.

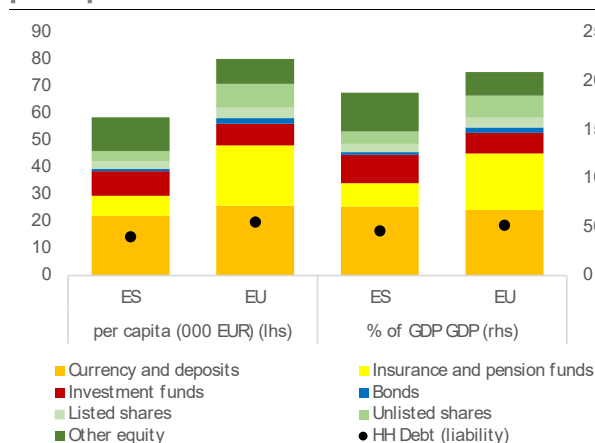
⁽¹⁰³⁾See Data and surveys - SAFE - European Commission, 2023, Results by country.

⁽¹⁰⁴⁾ [Spanish Survey of Household Finances \(EFF\)](#), 2022 edition.

investment funds and listed shares. The proportion of assets in pension schemes and fixed-income securities also grows as income and wealth increase although the differences with the top decile of the distribution are less significant.

The degree of direct retail investment in the Spanish capital markets is low. Since 2015, the share of cash and deposits in households' assets has been on an upward path and has remained elevated. In 2023, it stood at 37.9%, above the EU average of 32.3%. Household financial assets continued to increase in the last quarters, driven both by net acquisitions and by their revaluation, especially of shares and mutual funds. Assets held in investment funds gradually increased to 15.6% of households' financial assets in 2023. The share of total Spanish household financial assets held in pension and investment funds or directly in financial-investment instruments has slightly increased, rising from 33.7% in 2015 to 34.3% in 2023, but still stands well below the EU average of 45.4%. At the same time, recent policy developments to promote Spain's capital markets include efforts to facilitate employers' use of occupational pensions.

Graph A5.5: **Composition of HH financial assets per capita and as a % of GDP**



The sum of HH assets only reflects the total for the HH assets considered. Reference period 2023.

Source: Eurostat.

The comparatively low savings rate and high cash holdings of Spanish households may warrant policy action to promote retail

investments. Encouraging the build-up of universal funded supplementary pension schemes would positively contribute to (i) the sustainability and adequacy of pension benefits; (ii) investment in equity; (iii) access to finance; (iv) growth; and (v) innovation. Moreover, an in-depth assessment of the incentives in place to promote retail participation in financial markets could also be considered, as well as possible steps to increase the availability of low-cost, well-diversified investment products suited for retail investors.

The role of domestic institutional investors

The growing fund-management industry in Spain tends to invest more in bonds and less in equity than its European peers.

Investment-fund-industry assets grew by around 13% in the first nine months of 2024. In Q3 2024, out of the assets invested in domestic and foreign investment funds offered in Spain, 47.1% was allocated to debt securities, 22.7% to investment-fund units and 20.6% to shares and other equity ⁽¹⁰⁵⁾. In 2024, Spanish asset managers allocated almost 68% of assets to equity and bond holdings, which is in line with the euro area average. However, the bond holdings of Spanish asset managers (at 47%) were well above the euro area average (at just below 30%), while shares had a comparatively smaller weight.

The investment portfolio of other domestic institutional investors is focused on debt securities and, to a lesser extent, on investment-fund shares. The insurance sector in Spain, which is comparatively small by EU standards (20.2% of assets-to-GDP compared with an EU average of 53.4%), mainly invests in debt securities, at 63.7% of total assets as of

⁽¹⁰⁵⁾ See [Assets and liabilities of investment funds | ECB Data Portal](#).

Q3-2024 (compared with 34.6% of total insurance-sector assets held in debt for the euro area as a whole) ⁽¹⁰⁶⁾, with another 10.7% held in investment-fund shares and only 7.2% in equity. The domestic pension-fund industry, the assets of which were equivalent to almost 11% of GDP at end-2023 (below the EU average of 22%) invests predominantly in collective investment undertakings (notably equity and debt funds), which account for around 57% of pension funds' total assets. Government bonds are the second largest investment asset of pension funds, at 23%, while corporate bonds play lesser role in pension funds' asset structure ⁽¹⁰⁷⁾.

The depth of available venture and growth capital

The local venture-capital and growth-capital markets are not yet sufficiently developed to meet all the financing needs of innovative Spanish firms. In recent years, Spain's private-equity and venture-capital industry has continued to grow, with many new vehicles being launched. However, private equity overall in Spain remains slightly underused as a source of finance compared with other Member States. The average value of annual private-equity investment relative to nominal GDP remained broadly unchanged at 0.56% in the period 2021-2023, as compared with 0.54% in 2017-2020, but this is still in line with the equivalent EU average for 2021-2023 (0.6%). For venture-capital, investments in Spain increased to 0.08% of GDP in 2021-2023, slightly above the average for EU peers ⁽¹⁰⁸⁾.

Venture-capital financing could be further boosted by the greater participation of institutional investors, including pension funds. New public sector decisions have channelled venture capital funding to innovative enterprises. For example, in 2024, the new strategy of the public entity CDTI deployed EUR 1.5 billion to venture-capital firms and vehicles, a substantial increase from 2023. A 2024 paper showed that pension funds in Spain accounted on average for only 7% of private-equity and venture-capital funds raised annually over the period 2007-2023, substantially below: (i) the EU average (of 15%); (ii) the 19% seen in the Baltic states; or (iii) the shares above 20% in Sweden, Finland and Denmark ⁽¹⁰⁹⁾. Making the investment limits of pension funds more flexible (e.g. by relaxing the requirement for pension-fund resources to be invested in securities and financial instruments that can be easily traded) would give pension-fund managers more scope to select other investment options and diversify their asset allocation.

Spain's RRP also includes measures to support the financing of start-ups. Reform measures in the plan included improving access to finance for SMEs by providing support in the form of financial, commercial and technical guarantees. The Spanish authorities have designed three new dedicated lines of funding allowing access to long-term financing and working capital for actions under this investment in the areas of digitalisation, sustainability, growth and recovery. Any 'reflows' (i.e. interest on the loan, return on equity, or principal repaid, minus associated costs) linked to the financial instrument would need to be reinvested for the same policy objectives, including beyond 2026. The Spanish RRP also includes sizeable financial instruments to improve access to finance and develop

⁽¹⁰⁶⁾ Source: [Assets and liabilities of insurances | ECB Data Portal](#).

⁽¹⁰⁷⁾ Source: [Occupational pension statistics - EIOPA](#).

⁽¹⁰⁸⁾ [Commission staff working document: Monitoring progress towards a capital markets union: a toolkit of indicators - 2024](#).

⁽¹⁰⁹⁾ Source: [Closing the gaping hole in the capital market for EU start-ups – the role of pension funds – CEPS](#).

capital markets, including support to equity, quasi-equity, loan and guarantee instruments.

Financing the green transition

Spanish companies make significant use of sustainable financing instruments, in particular green loans. Since 2016, Spain has maintained a high aggregate amount of green-loan borrowing compared with its EU peers. This tendency reflects the strong preference of Spanish corporations for bank financing over bond funding. Green bond issuance is broadly in line with other European economies. In Spain, between 2013 and 2023 the amount raised through sustainable bonds accounted for around 10% of total corporate bond issuance. However, like in the broader corporate bond market, the financial sector dominates sustainable bond issuance in Spain, accounting for 69% of total proceeds. By contrast, the use of sustainability-linked bonds remains limited in Spain ⁽¹¹⁰⁾. In Spain, the assets under management of sustainable funds have grown much faster than the broader fund universe, particularly during the last decade.

Spain has made significant progress in its environmental, social and governance (ESG) benchmarks in recent years. At the end of 2023, the Madrid Stock Exchange launched the IBEX® ESG, a new benchmark that includes 47 Spanish listed companies meeting specific ESG criteria. This new index complements the already existing FTSE 4Good IBEX® and IBEX® Gender Equality indices, both of which also promote sustainability and responsible investing.

Despite substantial progress in this area in recent years, companies in Spain still face

difficulties in using sustainable financing instruments. Survey data show that the two most significant factors hindering the take-up of such instruments are the lack of available information and the high associated costs. Moreover, existing contractual limitations may also limit the effectiveness of these instruments and reduce investor demand. In some cases, sustainable bond prospectuses may even: (i) make it possible to use proceeds to simply refinance existing projects; and (ii) lack penalties for misuse of proceeds. Thus, attention to contract design could help increase investor confidence.

Financial literacy

The need for improved financial education – especially for young people – is a widespread concern in Spain. Improving financial education in Spain, could, among other benefits, increase household savings and promote alternatives to bank financing. Recent surveys ⁽¹¹¹⁾ show that only 19% of respondents in Spain have a high level of financial literacy, 54% a medium level, and the remaining 27% a low level, compared with the EU averages of 26% for high literacy, 50% for medium literacy, and 24% for low literacy. In particular, the results for Spain are below the EU average for the use of digital financial services and trust in investment advice received. In addition, a recent OECD PISA report ⁽¹¹²⁾ (see Annex 10) assessed the financial knowledge of 15-year-olds across 20 jurisdictions in 2022. The results indicate that financial literacy levels among young people in Spain are somewhat below the OECD average. Over 17% of Spanish students performed poorly in the tests conducted for the report, indicating a very limited understanding of financial concepts, negatively

⁽¹¹⁰⁾ Sustainability-linked bonds are bonds in which the proceeds from the issuance are not ring-fenced to green or sustainable purposes (unlike 'use of proceeds' green bonds or sustainable bonds) and may be used for general corporate purposes or other purposes.

⁽¹¹¹⁾ [Monitoring the level of financial literacy in the EU - July 2023 - - Eurobarometer survey.](#)

⁽¹¹²⁾ [PISA 2022 Results \(Volume IV\) - Factsheets: Spain, 2024.](#)

Table A5.1: Financial indicators

	2017	2018	2019	2020	2021	2022	2023	2024-Q3	EU
Monetary									
Total assets of MFIs (% of GDP)	232.7	218.2	213.5	256.2	243.1	216.5	201.2	193.3	248.4
Common Equity Tier 1 ratio	12.6	12.2	12.5	13.2	13.3	13.0	13.2	13.3	16.6
Total capital adequacy ratio	15.4	15.4	15.7	16.8	17.3	16.5	17.0	17.4	20.1
Overall NPL ratio (% of all loans)	4.4	3.7	3.1	2.8	2.9	2.7	2.7	2.6	1.9
NPL (% loans to NFC-Non financial corporations)	7.9	5.9	4.7	4.6	4.8	4.0	3.8	3.6	3.5
NPL (% loans to HH-Households)	4.4	4.0	3.6	3.4	3.8	3.4	3.7	3.7	2.2
NPL-Non performing loans coverage ratio	42.7	43.7	43.7	45.6	41.7	43.3	43.5	43.8	42.1
Return on Equity ¹	7.0	8.2	6.7	-3.5	10.2	9.9	11.8	14.0	10.0
Loans to NFCs (% of GDP)	43.8	40.0	37.8	44.9	41.0	34.3	30.0	28.2	30.0
Loans to HHs (% of GDP)	60.3	58.2	56.2	61.7	56.6	50.7	45.3	42.8	44.5
NFC credit annual % growth	-0.3	-2.0	-0.8	8.4	0.8	0.3	-3.7	0.1	0.8
HH credit annual % growth	-0.5	0.3	0.2	-0.6	0.7	0.5	-2.0	0.4	0.7
Capital									
Stock market capitalisation (% of GDP)	61.0	50.3	55.0	54.5	54.9	45.5	47.0	51.1	69.3
Initial public offerings (% of GDP)	0.22	0.04	0.06	0.07	0.12	0.13	0.00	-	0.05
Market funding ratio	41.1	41.8	43.6	42.5	43.5	42.5	41.4	-	49.6
Private equity (% of GDP)	0.42	0.51	0.68	0.55	0.60	0.63	0.44	-	0.41
Venture capital (% of GDP)	0.05	0.04	0.04	0.07	0.12	0.07	0.05	-	0.05
Financial literacy (composite)	-	-	-	-	-	-	39.5	-	45.5
Bonds (as % of HH financial assets)	0.8	0.7	0.5	0.6	0.5	0.6	1.4	-	2.7
Listed shares (as % of HH financial assets)	5.9	4.7	4.7	4.1	4.3	4.0	4.5	-	4.8
Investment funds (as % of HH financial assets)	13.8	13.9	14.4	14.3	15.9	14.7	15.6	-	10.0
Insurance/pension funds (as % of HH financial assets)	15.6	15.9	15.9	15.5	14.7	12.8	12.8	-	27.8
Total assets of all insurers (% of GDP)	26.0	25.4	27.0	30.9	27.6	21.6	21.1	20.6	54.8
Pension funds assets (% of GDP)	-	-	11.9	13.4	13.2	10.9	10.8	10.7	23.4
01-Mar 04-Oct Nov-17 18-24 25-27 Colours indicate performance ranking among 27 EU Member States.									

(1) Annualised data.

Credit growth and pension funds EU data refers to the EA average.

Source: ECB, ESTAT, EIOPA, [DG FISMA CMU Dashboard](#), AMECO.

affecting their financial behaviours and attitudes.

Spain has taken action to improve financial literacy, but further efforts may be needed.

In 2008, the Spanish government launched a financial education plan to improve the financial knowledge of individuals ⁽¹¹³⁾. This was followed by subsequent plans, with the current financial education plan covering measures from 2022 to 2025. The programme is supported by a strong network of public and private entities that collaborate on initiatives such as guides, videos, workshops, conferences and seminars across Spain. For instance, financial topics have been integrated into various subjects at both the primary and secondary levels.

⁽¹¹³⁾ See [Financial Education Plan](#).

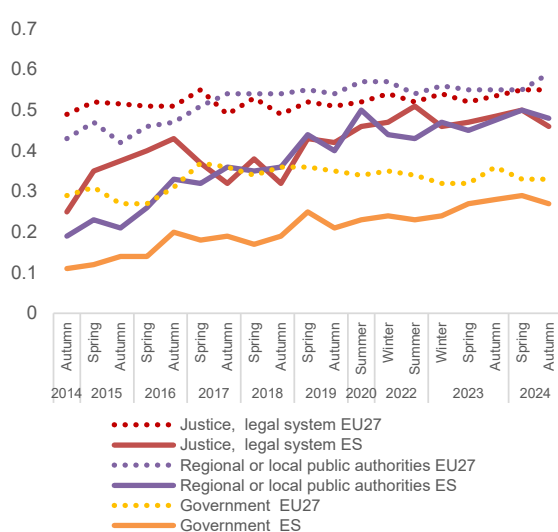
Spain's institutional framework influences its competitiveness. Despite advances in service accessibility and government openness, trust in Spain's public institutions remains below the EU average. Spain is faced with challenges in volume and complexity of regulations, administrative burdens and corruption risks. Efforts have been made to digitalise public services, with progress made in service provision. There are risks to the stability and productivity of the Spanish civil service due to its ageing workforce and slow recruitment. The efficiency of the justice system also faces challenges, in particular regarding the uneven levels of digitalisation across regions and the duration of judicial proceedings.

interaction between citizens and administration (EU 28%) ⁽¹¹⁴⁾. The perceived quality of government has deteriorated in most regions and remains below the EU average ⁽¹¹⁵⁾. Against this backdrop, Spain's recovery and resilience plan aims to improve intergovernmental cooperation through the creation of a digital platform and through improvements to the governance and working methods of such bodies. It also prioritises the digitalisation of the justice administration, public administration reform, and measures to reduce temporary public sector employment and to increase the attractiveness of public sector jobs.

Quality of legislation and regulatory simplification

Public perceptions

Graph A6.1: Trust in justice, regional / local authorities and in government



(1) EU27 from 2019; EU28 before

Source: Standard Eurobarometer surveys

Trust in public institutions is below the EU average. The widest gap in trust across Spain's national institutions is in trust in central government (Graph 4.1). When asked about improvements that can increase trust in Spain's public administration, 57% of citizens pointed to more transparency about decisions and the use of public money (EU: 44%), 55% to less bureaucracy (EU: 52%) and 35% to streamlined

Performance in developing and evaluating legislation is close to the EU average. It is stronger for stakeholder engagement and ex ante impact assessments than for ex post evaluation of legislation, which despite progress, lags behind the EU average on account of weaker requirements governing its methodology, systematic adoption, oversight and quality controls (Graph A6.2).

Spain has worked to strengthen policy assessment by enhancing its institutional framework and defining a competency framework for public policy assessment under its recovery and resilience plan. However, the anticipated Agency for Public Policy Evaluation is not yet operating. The government has taken steps to strengthen use of evidence, forecasting ⁽¹¹⁶⁾ and scientific knowledge ⁽¹¹⁷⁾ in

⁽¹¹⁴⁾ [Understanding Europeans' views on reform needs - April 2023 - - Eurobarometer survey](#). Country fact sheet.

⁽¹¹⁵⁾ [Inforegio - European Quality of Government Index](#)

⁽¹¹⁶⁾ Oficina Nacional de Prospectiva y Estrategia, Brújula del país: <https://futuros.gob.es/nuestro-trabajo/br%C3%BAjula-del-pa%C3%ADs/desde-los-a%C3%B1os-80>

⁽¹¹⁷⁾ CSIC <https://digital.csic.es/simple-search?query=%22Ciencia+para+las+Pol%C3%ADticas+P>

Table A6.1: **Selected indicators on administrative burden reduction and simplification**

Ex ante impact assessment of legislation		Ex post evaluation of legislation					
When developing new legislation, regulators are required to ...	Identify and assess the impacts of the baseline or 'do nothing' option.	<div></div>	Is required to consider the consistency of regulations and address areas of duplication.	<div></div>			
	Identify and assess the impacts of alternative non-regulatory options.	<div></div>	Is required to contain an assessment of administrative burdens.	<div></div>			
	Quantify administrative burdens of new regulations.	<div></div>	Is required to contain an assessment of substantive compliance costs.	<div></div>			
	Quantify substantial costs of compliance of new regulations.	<div></div>	Compares the impact of the existing regulation to alternative options.	<div></div>			
	Assess macroeconomic costs of new regulations.	<div></div>	Periodic ex post evaluation of existing regulations is mandatory.	<div></div>			
	Assess the level of compliance.	<div></div>	Government uses stock-flow linkage rules when introducing new regulations (e.g., one-in one-out).	<div></div>			
	Identify and assess potential enforcement mechanisms.	<div></div>	A standing body has published an in-depth review of specific regulatory areas in the last 3 years.	<div></div>			
		In the last 5 years, public stocktakes have invited businesses and citizens to assess the effectiveness, efficiency, and burdens of legislation.	<div></div>				
<div></div> Yes / For all primary laws		<div></div> For major primary laws		<div></div> For some primary laws		<div></div> No / Never	

(1) This table presents a subset of iREG indicators focusing on regulatory costs. The indicators refer to primary legislation. **Source:** OECD (2025), Regulatory Policy Outlook 2025 [<https://doi.org/10.1787/56b60e39-en>] and Better Regulation across the European Union 2025 (forthcoming).

policymaking. A specialised degree was launched by the State Public Employment Service, regional public employment services and the University of Barcelona, dedicated to designing and analysing public policies at national, regional and local level ⁽¹¹⁸⁾.

There is scope to simplify regulation and reduce administrative burdens on businesses. The volume of regulations in Spain has increased in recent years, with an extraordinary rise observed due to the impact of COVID-19. In 2022 only, the Spanish administration adopted 11,775 new norms ⁽¹¹⁹⁾. This negatively impacts the businesses. A

recent study suggests that a 1% increase in the volume of regulation could lead to an average decrease of 0.05% in the number of businesses in Spain. The study also indicates that the readability and relational complexity of regional laws have worsened over time. Regulations with lower readability (i.e., greater linguistic complexity) and a higher number of references (i.e., greater relational complexity) negatively impact productivity growth. Moreover, poor-quality regulations may lead to increased litigation, leading to greater congestion in the justice system and less legal certainty. This results in numerous economic inefficiencies, such as less functional real estate markets, reduced entrepreneurship, and lower credit availability, among others ⁽¹²⁰⁾.

Spain's licensing system could be further aligned with best practices. According to the OECD product market regulation indicators,

[%C3%BAAblicas%22&location=publications&sort_by=bi_so
rt_1_sort&order=ASC](#)

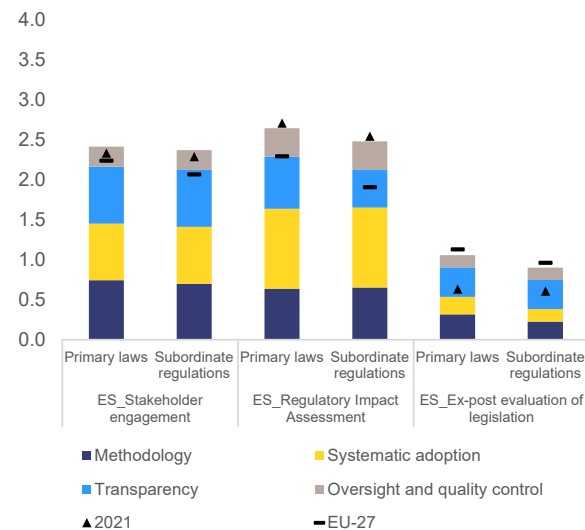
⁽¹¹⁸⁾ <https://aeuropeocompetencias2023.sepe.es/Home-Anio-Europeo/detalleNoticia.html?folder=/SEPE/2024/Julio/&etail=segunda-edicion-titulo-universitario-para-evaluar-politicas-publicas-de-empleo>

⁽¹¹⁹⁾ Mora-Sanguinetti, J.S., Quintana, J., Soler, I. *et al.* The heterogenous effects of a higher volume of regulation: evidence from more than 200k Spanish norms. *J Regul Econ* 65, 137–153 (2024). <https://doi.org/10.1007/s11149-023-09466-x>

⁽¹²⁰⁾ Mora-Sanguinetti, Juan. (2022). Las cuatrocientas mil normas de la democracia española. Cuantificación e impacto de la complejidad normativa de España. *Revista de las Cortes Generales*. 231-253. 10.33426/rcg/2022/114/1722.

although the government keeps an up-to-date online inventory of all permits and licences required/issued to businesses by public bodies, there is no requirement for it to regularly assess whether such licences and permits are still required or should be withdrawn. In addition, the PMR indicators also point to higher administrative requirements for limited liability companies and personally owned enterprises (see also Annex 4). Furthermore, legal requirements affecting businesses in Spain often vary across regions. Stronger coordination between regions and underused tools like in-depth reviews and public stocktakes (TableA6.1) would be useful to simplify legislation.

Graph A6.2: **Indicators of Regulatory Policy and Governance (iREG)**



Source: OECD (2025), Regulatory Policy Outlook 2025 and Better Regulation across the European Union 2025 (forthcoming).

Social dialogue

The system of tripartite social dialogue is well established, although challenges remain in ensuring representativeness and effective consultation. In recent years, social partners were consulted and contributed to the design and implementation of significant labour market and social policy reforms at both

national and regional levels. However, participation in tripartite dialogue is limited to the most representative trade unions and employers' organisations. The absence of a formal register measuring employers' representativeness has led to a system of mutual recognition, limiting the possibility for other associations — particularly those representing SMEs — to be involved in tripartite social dialogue.⁽¹²¹⁾

Gaps in SME representation may negatively affect the effectiveness of policies, including the need to align skills supply with real labour market needs (see Annex 10). In line with EU trends, affiliation to social partner organisations remains low. In 2022, only 23.3% of companies were associated with a business organisation, with higher rates among larger companies ⁽¹²²⁾. Trade union membership is also limited, with only 12.4% of employees affiliated in 2019, one of the lowest rates in the EU ⁽¹²³⁾. Meanwhile, social partners report that consultation is not always systematic or timely, and their proposals are not always given due consideration ⁽¹²⁴⁾, which may hinder the effective implementation of new legislative initiatives.

Digital public services

Spain is on track with the Digital Decade targets (Table A6.2). In 2024, use of digital public services by citizens scored 84 while use

⁽¹²¹⁾For an analysis of the involvement of Spain's social partners at national level in the European Semester and the Recovery and Resilience Facility, see Eurofound (2025), [National-level social governance of the European Semester and the Recovery and Resilience Facility](#).

⁽¹²²⁾ Ministerio de Trabajo y Economía Social, Encuesta Anual Laboral 2022.

⁽¹²³⁾ILOSTAT trade union density rate.

⁽¹²⁴⁾ See, e.g., Consejo Económico y Social, Dictamen sobre el anteproyecto de ley para la reducción de la duración máxima de la jornada ordinaria de trabajo, el registro de jornada y el derecho a la desconexión.

Table A6.2: **Key Digital Decade targets monitored through the Digital Economy and Society Index**

		Spain			EU-27	Digital Decade target by 2030
		2022	2023	2024	2024	EU-27
Digitalisation of public services						
1	Digital public services for citizens Score (0 to 100)	87 2021	86 2022	84 2023	79 2023	100 2030
2	Digital public services for businesses Score (0 to 100)	94 2021	91 2022	91 2023	85 2023	100 2030
3	Access to e-health records Score (0 to 100)	na 2021	83 2022	85 2023	79 2023	100 2030

Source: State of the Digital Decade report 2024

by businesses scored 91, surpassing the EU average of 79 and 85 respectively. In terms of the rate of e-government use, Spain reached 83.03%, above the EU average of 75%. As for user support, Spain scored 87, slightly above the EU average of 86.4. Transparency of service delivery, design, and personal data in Spain scored 71.4, compared to the EU average of 70. However, in the area of mobile friendliness, Spain scored 94.8, just below the EU average of 95.3. In terms of citizens' online access to e-health records, Spain achieved a score of 84.6 in 2024, significantly higher than the EU average of 79.1.

Spain operates an eID scheme based on national ID cards (DNIE). 54.4% of Spaniards declared they had used it for private purposes in the last 12 months, while 50.3% had used it for accessing public services. In both cases this was above the EU average of 41.1% and 35.7%, respectively⁽¹²⁵⁾. However, Spain has not yet set up and notified eID schemes for legal persons under the eIDAS Regulation⁽¹²⁶⁾. This means that Spanish businesses cannot authenticate themselves to access public services provided by other Member States, including those enabled by the Once-Only Technical

System⁽¹²⁷⁾, part of the EU Single Digital Gateway.

Spain is making good progress towards seamless, automated exchange of authentic documents and data across the EU. It has already successfully tested its first transactions through the Once-Only Technical System. Spain is in the process of connecting up the first authorities⁽¹²⁸⁾.

Civil service

Ageing, slow recruitment, and low motivation pose important risk on the stability and productivity of the Spanish civil service⁽¹²⁹⁾. With about half of civil servants over 49 years of age⁽¹³⁰⁾, the Spanish administration will lose a significant proportion of its employees to retirement in the coming years (see Annex 10). National data also shows that statutory civil servants are, on average,

⁽¹²⁵⁾European Commission. [Digital Decade 2024: Country reports](#)

⁽¹²⁶⁾ European Commission, [eIDAS Dashboard](#).

⁽¹²⁷⁾European Commission, [The Once Only Principle System: A breakthrough for the EU's Digital Single Market](#)

⁽¹²⁸⁾ European Commission, [Once-Only Technical System Acceleratorometer](#)

⁽¹²⁹⁾ [Ministerio para la Transformación Digital y de la Función Pública, Comparecencia del Ministro sobre las Líneas Generales en la Comisión de Función Pública, 21 de marzo 2024:](#)

⁽¹³⁰⁾Eurostat, 2025, [European Union Labour Force Survey](#).

older than staff on temporary contracts ⁽¹³¹⁾. In the last two years, Spain has started to offset retirements through recruitment. It is estimated that positions made available through the annual public employment offer are filled two years after they are published and that, on average, only 90% of these positions will be filled. This recruitment rate indicates that the administration is at risk of being unable to meet its human resource needs ⁽¹³²⁾.

To mitigate the risks, Spain is taking different measures to speed up and enhance civil service recruitment. In 2024, it launched its biggest recruitment in the last ten years, recruiting 31,465 new civil servants in the central government ⁽¹³³⁾. It has been taking steps to reduce the high share of temporary employment in the public sector. A new system will match the needs with multiannual budgetary scenarios. Two plans will aim to attract junior and senior talent. A 'competency passport' will build a competency framework into recruitment and professional development. The government has outlined an initiative for a 'top public managers statute' to incorporate merit-based recruitment into the senior civil service ⁽¹³⁴⁾. This initiative is in line with the objectives of the new competency framework and with plans to create a school of senior civil servants. In Spain, the share of civil servants engaging in adult learning is among the highest in the EU.

⁽¹³¹⁾ Boletín Estadístico del Personal al Servicio de las Administraciones Públicas (BEPSAP)

⁽¹³²⁾ [Ministerio para la Transformación Digital y de la Función Pública \(2024\) Estudio sobre el envejecimiento de las plantillas en la Administración General del Estado 2024 y proyección futura a 2034](#)

⁽¹³³⁾ [Public Employment Offer for 2024](#)

⁽¹³⁴⁾ [Order TDF/379/2024](#)

Integrity

A far higher percentage of companies than the EU average consider corruption to be widespread and a problem when doing business. In Spain, 91% of companies consider that corruption is widespread (EU average 64%), while 51% consider that corruption is a problem when doing business (EU average 36%) ⁽¹³⁵⁾. Moreover, only 15% of companies believe that people and businesses caught for bribing a senior official are appropriately punished (EU average 31%) ⁽¹³⁶⁾. The investigation and prosecution of corruption cases is hampered by the current low number of judges and prosecutors and an overall absence of specialised judges and tribunals working on anticorruption matters ⁽¹³⁷⁾. In October 2024, two new Prosecutorial Chambers were established, thereby increasing the staff of the Public Prosecutor's Office to adapt it to existing needs. Furthermore, a new law on justice efficiency has been adopted, aiming to speed up judicial procedures and increase the number of staff in the Anti-corruption Prosecutor's Office.

Public procurement is reported as an area at high risk for corruption in Spain. 21% of companies (EU average 27%) think that corruption has prevented them from winning a public tender or a public procurement contract in practice in the last three years ⁽¹³⁸⁾. Since January 2024, information on the degree of participation of small and medium-sized companies in public procurement procedures has been published every six months on a transparency portal with the aim of increasing transparency in public procurement and

⁽¹³⁵⁾ Flash Eurobarometer 543 on businesses' attitudes towards corruption in the EU (2024).

⁽¹³⁶⁾ Ibid.

⁽¹³⁷⁾ See the 2024 country-specific chapter for Spain of the Rule of Law Report, p. 15.

⁽¹³⁸⁾ Flash Eurobarometer 543 on businesses' attitudes towards corruption in the EU (2024).

minimising corruption risks. Major infrastructures also appear to be a sector at high risk for corruption. ⁽¹³⁹⁾

Following in the steps of other Member States, Spain is making progress in implementing a public register for lobbyists.

A draft law on lobbying has been tabled in parliament on 30th January 2025 and is pending of approval ⁽¹⁴⁰⁾. This initiative is part of component 11 of the recovery and resilience plan and was included in the 2024 annual regulatory plan. It is expected to be a key tool to reinforce transparency in corporate lobbying.

Justice

Whilst Spain has taken important steps to improve efficiency in the justice system, challenges in this area persist. According to the 2025 EU Justice Scoreboard, the disposition time for civil and commercial cases at the Supreme Court remains very high (691 days both in 2022 and 2023). The disposition time for administrative cases at first instance increased in 2023 (414 days). Judicial bodies in Spain face a structural deficit in terms of human resources, as reflected in the Council for the Judiciary's Strategic Plan 2024-2033.⁽¹⁴¹⁾ Organic Law 1/2025 is expected to contribute to enhance efficiency, namely by the creation of new first instance courts and by anticipating the tabling of a specific draft law addressing longstanding concerns regarding

the deficit of human resources, by reinforcing the number of judges and prosecutors in the system, and stabilising the situation of substitute judges. Organic Law 1/2025 also regulates the resort to alternative dispute resolution mechanisms with the objective of alleviating the burden of courts and provides for a series of procedural steps to be conducted electronically.

The quality of the justice system is considered to be good overall and the level of digitalisation is very advanced. There are procedural rules in place enabling digital tools in courts, and the courts and prosecution services are equipped with digital technology. However, there is further room for improvement in this area, notably since the digitalisation levels differ widely across regions. As regards judicial independence, no systemic deficiencies have been reported ⁽¹⁴²⁾. Moreover, following the renewal of the Council for the Judiciary in summer 2024, it was possible to proceed with pending appointments of top judicial positions.

⁽¹³⁹⁾ See the 2024 country-specific chapter for Spain of the Rule of Law Report, p. 22.

⁽¹⁴⁰⁾ https://www.congreso.es/es/busqueda-de-iniciativas?p_p_id=iniciativas&p_p_lifecycle=o&p_p_state=normal&p_p_mode=view&iniciativas_mode=mostrarDetalle&iniciativas_legislatura=XV&iniciativas_id=121/000046

⁽¹⁴¹⁾ <https://www.poderjudicial.es/cgpj/es/Poder-Judicial/Consejo-General-del-Poder-Judicial/Actividad-del-CGPJ/Estudios/Plan-Estrategico-para-el-decenio-2024-2033-de-recursos-humanos-en-la-Carrera-Judicial-Acuerdo-CP-CGPJ-11-07-2024->

⁽¹⁴²⁾ For more detailed analysis of the performance of the justice system in Spain, see the upcoming 2025 EU Justice Scoreboard and the 2024 Rule of Law Report.

Spain faces significant challenges regarding its clean industry transition and climate mitigation: its fragmented net zero manufacturing ecosystem requires better coordination between stakeholders to decarbonise industry, bolster innovation and investment. Despite its geological resources, there is a heavy reliance on imports of critical raw materials, which poses resilience risks. While measures have been implemented for industry decarbonisation, more efforts are needed to address high greenhouse gas emissions from manufacturing production, and insufficient progress has been made in transitioning to a circular economy, with recycling rates below the EU average. This annex reviews the areas in need of urgent attention in Spain's clean industry transition and climate mitigation, looking at different dimensions.

Strategic autonomy and technology for the green transition

Net zero industry

Spain has a diversified portfolio of net zero manufacturing and is a leading manufacturer in the wind power supply chain. Spain has a strong manufacturing presence in wind technology in Europe⁽¹⁴³⁾, with 38 firms active in this sector. Wind power manufacturing capacity amounts to approximately 5–5.25 GW for nacelles, around 15.5–18.5 GW for towers, and 8–8.25 GW for blades. For electrolyzers, Spain's manufacturing capacity amounts to between 500 and 600 MW/y (9–11% of EU capacity). The country is also a manufacturer of solar photovoltaic components, with a capacity of between 500 and 650 MW/y (3% of EU capacity) for solar photovoltaics and over 30GW inverter capacity.

⁽¹⁴³⁾ [Bruegel. European clean tech tracker.](#)

Additionally, Spain has at least 27 facilities producing heat pumps.

Spain's regulatory framework for net zero technologies is shaped by the Spanish recovery, transformation and resilience plan.

Within this framework, strategic projects for economic recovery and transformation (PERTE) have been established. These are public-private collaborations involving public administrations, companies and research centres. Three PERTE on clean energy technologies and related industrial capacities: one focuses on electric vehicle batteries, a second one on industrial decarbonisation and the third one on various renewable energy technologies, renewable hydrogen and storage. With an additional PERTE on circular economy contributing to Spanish strategic autonomy. In addition, Spain's just transition strategy aims to ensure a fair and socially beneficial shift to a low-carbon economy, emphasising clean technologies. Its hydrogen roadmap seeks to drive renewable hydrogen development, supporting industrial value chains, technological innovation and sustainable employment.

Spain's clean tech sector will be underpinned by the new Law on Industry and Strategic Autonomy⁽¹⁴⁴⁾. This law seeks to accelerate the decarbonisation of industry; increase energy security by reducing dependencies; support the digital transition; and guarantee the country's strategic autonomy.

Spain's net zero manufacturing ecosystem is fragmented and lacks collaboration⁽¹⁴⁵⁾.

Weak knowledge transfer from academia to the private sector hinders innovation. A more coordinated approach is needed to integrate stakeholders, including startups, research

⁽¹⁴⁴⁾ [Law on Industry and Strategic Autonomy](#)

⁽¹⁴⁵⁾ [The net-zero manufacturing industry landscape across the Member States](#)



institutions and government; boost the clean tech value chain; and facilitate innovation and investment.

Transforming the car industry

The Spanish automotive industry ranks among the largest in the world, Spain being the second largest vehicle manufacturer in Europe and the ninth in the world⁽¹⁴⁶⁾. The automotive industry represents 10% of Spanish GDP and is responsible for 18% of total exports. The automotive sector is the third largest industrial sector in Spain and the largest investor in research and development. Between 2017 and 2021, the automotive component manufacturers invested EUR 6 776 million in R&D.

Nevertheless, the Spanish automotive industry is threatened by decreasing demand and supply chain disruption problems, which could lead to a loss of competitiveness.

The automotive industry is facing new challenges. Spain's automotive sector associations, ANFAC⁽¹⁴⁷⁾ and SERNAUTO⁽¹⁴⁸⁾, have identified five factors that would strengthen the competitiveness of the sector: (1) control over the value chain: (2) emphasis on technology and research and innovation (3) better regulation: (4) adaptation to the new electric vehicle model: and (5) establishment of a favourable economic and political ecosystem.

Critical raw materials

Spain's geological diversity offers a varied and high-volume mining production ⁽¹⁴⁹⁾.

⁽¹⁴⁶⁾ [Informe-ANFAC-SERNAUTO.-Los-nuevos-retos-del-sector-de-la-automocion-en-Espana.pdf](#)

⁽¹⁴⁷⁾ ANFAC Asociación Española de Fabricantes de Automóviles y Camiones

⁽¹⁴⁸⁾ SERNAUTO: Asociación Española de Proveedores de Automoción

⁽¹⁴⁹⁾ [Estadística Minera Anual 2021.pdf](#)

Within the EU, Spain is the sole producer of sepiolite and celestine. It is the largest producer of fluorine spar and gypsum. It ranks second and producer of copper ore and sixth producer of bentonite.

Spain relies on imports of critical raw materials, but its import dependence is lower than the EU average ⁽¹⁵⁰⁾. Spain uses a limited number of sources for most of its imports. Nevertheless, Spain's five-year average import concentration score is 0.16⁽¹⁵¹⁾ in comparison with the EU average of 0.18.

On circular solutions, more can be done.

Over the last decade, the circular material use rate has been below the EU average, with the gap widening after 2020⁽¹⁵²⁾. In 2023, the circular material use in Spain was 8.3% (EU average 11.8%). The Spanish recovery and resilience plan (under Component 12, Investment 5) includes a strategic project on the circular economy focusing on three key Spanish sectors: plastics, textile, and components of renewable energy technologies. Its aim is to invest in R&D for eco-design and reusability, and to increase the recovery and circularity of materials and their recyclability.

The roadmap for the sustainable management of mineral raw materials ⁽¹⁵³⁾ aims to establish the bases for the transformation of the critical raw materials industry. This strategy aims to ensure a more sustainable and efficient supply of critical raw materials in Spain, thus contributing to the transformation of the industry and to Spanish industrial sovereignty.

⁽¹⁵⁰⁾ [Strategic dependencies on raw materials.xlsx](#)

⁽¹⁵¹⁾ A score above 0.25 indicates a high degree of import concentration, a score between 0.15 and 0.25 indicates a moderate degree of import concentration, and a score below 0.15 indicates a low degree of import concentration.

⁽¹⁵²⁾ [RMIS - Country Profiles](#)

⁽¹⁵³⁾ [Road Map for the Sustainable Management of Mineral Raw Materials roadmapforthesustainablemanagementofmineralrawmaterials_tcm30-561498.pdf](#)

Spanish manufacturing depends heavily on imports of critical raw materials needed for the green and digital transitions. Spain's manufacturing industry is heavily reliant on raw materials such as lithium, cobalt and rare earths which are essential for the production of high-tech products, including electric vehicles, wind turbines and electronics. This presents significant challenges for sustainability and resilience, such as supply chain risks, environmental degradation and social concerns. With 42% of material inputs in manufacturing production stemming from imports in 2023 (EU average: 22 %), Spain is particularly vulnerable to supply chain disruptions.

Spain is implementing policies to strengthen supply chains and the uptake of circular solutions for critical raw materials. Spain published in 2022 a roadmap for the sustainable management of mineral raw materials. In this sense, Spain has launched in March 2025, the Mineral Raw Materials Action Plan 2025-2029, which has been submitted to public consultation and is currently under elaboration. Spain has also adopted specific legislation for batteries; electrical and electronic equipment; vehicles; and construction and demolition waste, with measures to improve the circularity of these products. Although there is no specific end-of-life regulation for ashes and slag, Spain is working on end-of-waste criteria for different types of slag. The recycling rate for e-waste, a key source of critical raw materials, was at 70% in 2023, which is below the EU average of 81%. The reuse and recycling rate for end-of-life vehicles is slightly below the EU average (86 % vs 89% in 2022). This points to the need to avoid the leakage of critical raw materials, especially as the car industry shifts to battery-electric vehicles.

Climate mitigation

Industry decarbonisation

A high share of Spain's manufacturing emissions relates to energy use; the sector is relatively greenhouse gas intensive. In 2023, 22 % of Spain's total greenhouse gas emissions came from industry, comparable to the EU average ⁽¹⁵⁴⁾. In 2022, manufacturing production in Spain emitted 390 g CO₂eq of greenhouse gases per euro of gross value added (GVA), 44 % more than the EU average. Since 2017, the emissions intensity of Spain's industry has declined by 19%, comparable to the EU overall where it declined by 20 %. 63% of Spain's greenhouse emissions from manufacturing come from energy use, the fifth highest share in the EU, as opposed to emissions from industrial processes and product use. In the EU as a whole, 57 % of the greenhouse emissions in manufacturing are related to energy.

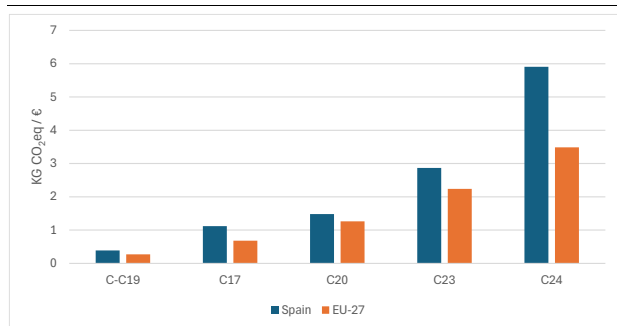
Greenhouse gas emissions intensity improvements in Spain's manufacturing show similar trends for energy and non-energy-related emissions; the former seem to be driven by energy efficiency ⁽¹⁵⁵⁾. Between 2017 and 2022, Spain reduced the emissions intensity of manufacturing production for both energy-related and

⁽¹⁵⁴⁾In 2023. Manufacturing includes all divisions of the "C" section of the NACE Rev. 2 statistical classification of economic activities. In the remainder of this section, unless indicated otherwise, data on manufacturing refer to the divisions of the NACE section C excluding division C19 (manufacture of coke and refined petroleum products), and the year 2022. The source of all data in this section is Eurostat; data following the UNFCCC Common Reporting Framework (CRF) are from the European Environment Agency (EEA), republished by Eurostat.

⁽¹⁵⁵⁾For the GHG emissions intensity of GVA related to energy use and industrial processes and product use respectively, GHG emissions are from inventory data in line with the UNFCCC Common Reporting Format (CRF), notably referring to the source sectors CRF1.A.2 – fuel combustion in manufacturing industries and construction and CRF2 – industrial processes and product use. The CRF1.A.2 data broadly correspond to the NACE C and E sectors, excluding C-19. GVA data (in the denominator for both intensities) are aligned with this sectoral coverage. Therefore, they are not fully consistent with the data referred to in other part of this section.

industry process and product use-related emissions by 19%. In the EU overall, energy-related greenhouse emissions intensity decreased by less, 16 %, but those from industry processes decreased by 23 %. In that period, in Spain the share of electricity and renewables in the final energy consumption of manufacturing improved by 1.5 percentage points only, to 44.7% in 2022. In contrast, the energy intensity of manufacturing improved by 14%, from 1.6 GWh by euro of GVA produced to 1.4 GWh/€, still higher than the EU average of 1.1 GWh/€.

Graph A7.1: **GHG emission intensity of manufacturing and energy-intensive sectors, 2022**



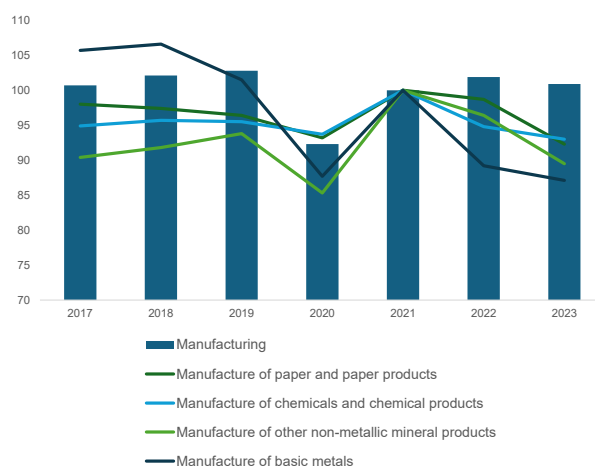
Source: Eurostat.

Spain's energy-intensive industries have contracted lately, despite moderate energy prices. Energy-intensive industries ⁽¹⁵⁶⁾ accounted for 14 % of Spain's total manufacturing GVA in 2022. Among these sectors, the manufacture of metals recorded a high emission intensity of production, with 5.9 kg CO₂eq/€ of GVA, well above the EU average of 3.5 kg. Likewise, with 1.1 kg/€, the emissions intensity of the manufacture of paper and paper products was much higher than the

⁽¹⁵⁶⁾Notably, the manufacture of paper and paper products (NACE division C17), of chemicals and chemical products (C20), "other" non-metallic mineral products (C23; this division includes manufacturing activities related to a single substance of mineral origin, such as glass, ceramic products, tiles, and cement and plaster), and basic metals (C24). To date, these industries are energy-intensive – i.e. consuming much energy both on site and/or in the form of purchased electricity – and greenhouse gas emissions intensive, in various combinations.

EU average, 0.68 kg/€. Energy prices in Spain remained below the EU average from 2023 on due to several factors such as a large rollout of renewables ⁽¹⁵⁷⁾; alternatives to Russian gas; and the implementation of the Iberian exception ⁽¹⁵⁸⁾. Nevertheless, in Spain, production in the energy-intensive industries has declined by up to 12 % since 2021 ⁽¹⁵⁹⁾.

Graph A7.2: **Manufacturing industry production: total and selected sectors, index (2021 = 100), 2017-2023**



Source: Eurostat.

Spain has put in place policies to support the decarbonisation of industry, but more is needed. These include the PERTE strategic project for industrial decarbonisation; the Industrial Decarbonisation Law; green bonds; tax incentives; and the smart industry strategy. These policies support the deployment of renewable energy; energy storage; carbon capture, utilisation and storage; and promotion

⁽¹⁵⁷⁾In 2023, wind power overtook gas as the largest electricity source in Spain and Spain's last coal power plant for electricity generation is expected to close in 2025.

⁽¹⁵⁸⁾The Iberian exception, implemented in 2022, was a temporary mechanism allowing Spain and Portugal to cap natural gas prices used for electricity generation, thereby reducing electricity costs for consumers while addressing the energy market disruptions caused by Russia's war of aggression against Ukraine.

⁽¹⁵⁹⁾For a detailed analysis of energy prices, see Annex 8 on the affordable energy transition.

of renewable hydrogen. However, because of the high greenhouse emissions intensity of Spain's manufacturing industry and the role of energy-intensive sectors, continued implementation of existing measures as well as further efforts are needed to support decarbonisation in manufacturing, particularly in energy-intensive sectors. This includes support for new low-carbon technologies (e.g., under the Innovation Fund), the scaling up of existing solutions, and the promotion of sustainable supply chains and circular economy practices.

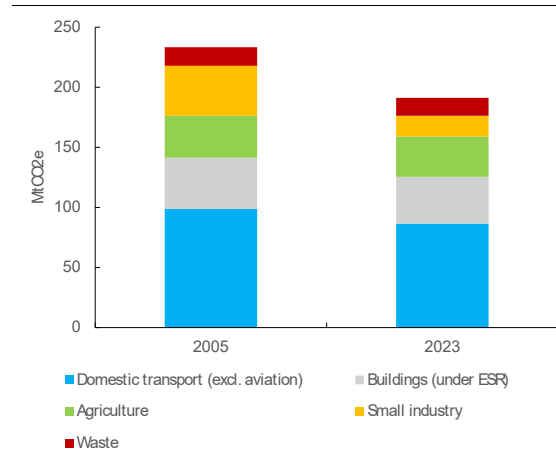
Reduction of emissions in the effort sharing sectors

Spain is projected to reach its 2030 target for the effort sharing sectors if it adopts and implements the planned additional climate mitigation measures⁽¹⁶⁰⁾. GHG emissions from Spain's effort sharing sectors in 2023 are expected to have been 20.9 % below those of 2005. By 2030, current policies are projected to reduce them by 29 % relative to 2005 levels; additional policies under Spain's final updated national energy and climate plan are projected to achieve further reductions of 15.6 percentage points. Hence, Spain is projected to overachieve its effort sharing target of a 37.7 % reduction, by 6.9 percentage points⁽¹⁶¹⁾, if it adopts and implements those measures.

⁽¹⁶⁰⁾ The national greenhouse gas emission reduction target is set out in Regulation (EU) 2023/857 (the Effort Sharing Regulation). It applies jointly to buildings (heating and cooling); road transport, agriculture; waste; and small industry (known as the effort sharing sectors).

⁽¹⁶¹⁾ The emissions reduction from effort sharing sectors for 2023 are based on approximated inventory data. The final data will be established in 2027 after a comprehensive review. Projections on the impact of current policies ('with existing measures', WEM) and additional policies ('with additional measures, WAM) as per Spain's final updated national energy and climate plan.

Graph A7.3: **Greenhouse gas emissions in the effort sharing sectors, 2005 and 2023**



Source: European Environment Agency

Sustainable industry

Circular economy transition

Despite the progress made in recent years, improving waste management and developing the potential of the circular economy remains a significant challenge. Spain approved in 2020 a comprehensive national Circular Economy Strategy titled 'España Circular 2030', which sets the long-term vision for the country's circularity transition. The Spanish strategy's objectives will be achieved with the approval of three-year action plans. A first Circular Economy Action Plan 2021-2023 has already been implemented, and a second Circular Economy Action Plan 2024-2026 is expected to be published shortly. Moreover, many Autonomous Communities have also adopted regional strategies on the circular economy. A new Law 7/2022 on waste and contaminated soils for a circular economy was adopted in 2022, followed by various implementing regulations. The national waste management plan (PEMAR) and the national prevention programme for 2016-2022 are still to be revised in line with the new EU requirements in the waste sector. The regional waste management plans for the 17 Autonomous Communities and the 2

Autonomous Cities need also to be updated, with part of them still pending.

The improvement of results in the waste sector is still limited. Spain's municipal waste generation shows a small decrease over the last 10 years. In 2023, Spain generated 465 kg/cap of municipal waste, which is slightly below the estimated EU average of 511 kg/cap. Spain is one of the countries that missed the EU target of recycling 50% of municipal waste by 2020 (the rate in Spain was 36%) and it is at high risk of missing the new EU waste targets for 2025⁽¹⁶²⁾. Therefore, it is essential to implement the new legislation and the new plans and adopt the pending measures, including additional efforts and further investments, several of which are included in the Spanish recovery and resilience plan, for instance under Component 12, Investment 3.

Current investments in the circularity transition have been insufficient, despite the support provided by EU funding, for example from the European Regional Development Fund and the Recovery and Resilience Facility. Spain is estimated to need total additional investment of EUR 2.3 billion a year for the circular economy transition, including for waste management, which represents 0.17% of Spain's GDP ⁽¹⁶³⁾.

Zero pollution industry

Spain has made considerable progress in reducing air pollution, which is now decoupled from GDP growth. However, on air pollution, Spain presents a mixed picture. While emissions of several air pollutants have fallen in recent decades, air quality in Spain continues to give cause for concern, mainly as regards nitrogen dioxide. In particular, private transport exacerbates seasonal air quality problems and

traffic congestion in the major metropolitan areas, namely Madrid and Barcelona, leading to health and economic costs.

Spain's industry continues to release large amounts of air and water pollutants. In Spain, around 7 000 industrial installations are required to have a permit based on the Industrial Emissions Directive, most of which fall in the intensive rearing of poultry and pig sector (56%), followed by the food and drink sector. Spain has a relatively high rate of damage to health and the environment (the fifth highest damage in the EU) and it is above the EU average of 27.5 EUR/thousand EUR GVA in emissions intensity (11th highest in the EU). The main emitters are the energy sector (including refineries, gasification, etc.), the mineral sector (7%) and the metal sector (7%).

The costs of pollution remain far higher than investment in pollution prevention and control. The latest available annual estimates (for 2022) by the European Environment Agency ⁽¹⁶⁴⁾ for Spain attribute 18 500 deaths each year (or 184 200 years of life lost (YLL)) to fine particulate matter (PM_{2.5}); 5 500 deaths each year (or 54 500 YLL) to nitrogen dioxide (NO₂); and 6 100 deaths each year (or 61 300 YLL) to ozone. To meet its environmental objectives on pollution prevention and control (towards zero pollution), Spain needs to provide an additional EUR 1.7 billion a year (0.13% of GDP), mostly for measures on clean air and noise ⁽¹⁶⁵⁾. The implementation of the national climate and energy plan, which provides for investments for sustainable energy and transport, would largely deliver this.

⁽¹⁶²⁾ European Commission, [2023 Waste early warning report](#).

⁽¹⁶³⁾ European Commission, DG Environment, *Environmental investment needs & gaps assessment programme*, 2025 update. Expressed in 2022 prices.

⁽¹⁶⁴⁾ [European Environment Agency, 2024, Harm to human health from air pollution in Europe: burden of disease 2024](#).

⁽¹⁶⁵⁾ European Commission, DG Environment, *Environmental investment needs & gaps assessment programme*, 2025 update. Expressed in 2022 prices.

Table A7.1: Key clean industry and climate mitigation indicators: Spain

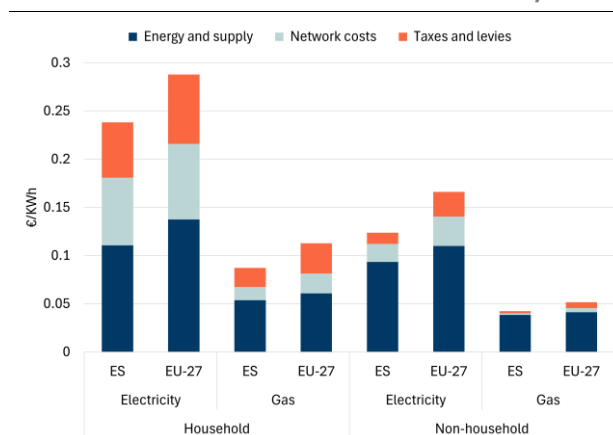
Strategic autonomy and technology for the green transition				Spain				EU-27			
Net zero industry											
Operational manufacturing capacity 2023											
- Solar PV (c: cell, w: wafer, m: module), MW	500-650 (m)			- Electrolyzer, MW				500-600			
- Wind (b: blade, t: turbine, n: nacelle), MW	8000-8250 (b), 5000-5250 (n), 15500-181			- battery, MWh				-			
Automotive industry transformation	2017	2018	2019	2020	2021	2022	2023		2018	2021	
Motorisation rate (passenger cars per 1000 inhabitants), %	529	539	546	549	554	553	551	↘	539	561	
New zero-emission vehicles, electricity motor, %	0.30	0.43	0.76	1.96	2.66	3.73	5.63	↗	1.03	8.96	
Critical raw materials	2017	2018	2019	2020	2021	2022	2023		2018	2021	
Material import dependency, %		42.8	41.8	37.9	39.4	42.3	42.0	↘	24.2	22.6	
Climate mitigation				Spain				Trend		EU-27	
Industry decarbonisation	2017	2018	2019	2020	2021	2022	2023		2017	2022	
GHG emissions intensity of manufacturing production, kg/€	0.49	0.5	0.48	0.5	0.48	0.39		↘	0.34	0.27	
Share of energy-related emissions in industrial GHG emissions	40.1	37.3	36.4	35.0	35.4	34.6	37.3	↘	44.8	42.5	
Energy-related GHG emissions intensity of manufacturing and construction, kg/€	215.7	220.6	215.6	224.2	224.8	174.3	-	↘	158.4	132.9	
Share of electricity and renewables in final energy consumption in manufacturing, %	43.1	42.2	41.5	41.3	42.0	44.7	45.6	↗	43.3	44.2	
Energy intensity of manufacturing, GWh/€	1.61	1.62	1.60	1.72	1.61	1.39	1.31	↘	1.29	1.09	
Share of energy-intensive industries in manufacturing production						13.9				7.3	
GHG emissions intensity of production in sector [...], kg/€											
- paper and paper products (NACE C17)	1.25	1.23	1.32	1.11	1.22	1.12	-	-	0.73	0.68	
- chemicals and chemical products (NACE C20)	1.49	1.66	1.49	1.36	1.43	1.48	-	-	1.25	1.26	
- other non-metallic mineral products (NACE C23)	4.12	3.96	3.40	3.52	3.16	2.87	-	-	2.53	2.24	
- basic metals (NACE C24)	2.64	2.77	2.70	2.52	5.10	5.91	-	-	2.79	3.49	
Reduction of effort sharing emissions		2018	2019	2020	2021	2022	2023		2018	2023	
GHG emission reductions relative to base year, %					-19.6	-19.5	-20.9				
- domestic road transport		-11.7	-10.7	-26.8	-15.7	-11.6	-12.4	↘	1.4	5.2	
- buildings		-5.7	-10.2	-11.0	-9.2	-14.5	-8.5	↘	21.4	32.9	
	2005				2021	2022	2023	Target	WEM	WAM	
Effort sharing: GHG emissions, Mt; target, gap, %	242.0				194.7	194.8	191.3	-37.7	-8.7	6.9	
Sustainable industry				Spain				Trend		EU-27	
Circular economy transition		2018	2019	2020	2021	2022	2023		2018	2021	
Material footprint, tonnes per person		11.0	10.2	10.0	10.3	9.7	8.2	↘	14.7	15.0	
Circular material use rate, %		8.9	9.0	9.3	8.8	9.4	8.5	↗	11.6	11.1	
Resource productivity, €/kg		2.7	2.9	2.6	2.8	3.2	3.7	↗	2.1	2.3	
Zero pollution industry											
Years of life lost due to PM2.5, per 100,000 inhabitants		340	340	338	313	578	-	↗	702	571	
Air pollution damage cost intensity, per thousand € of GVA					32.5					27.5	
Water pollution intensity, kg weighted by human factors per bn € GVA						1.0				0.9	

Source: Net zero industry: European Commission: [The net-zero manufacturing industry landscape across Member States: final report](#), 2025. **Automotive industry transformation:** Eurostat. **Critical raw materials:** Eurostat. **Climate mitigation:** See footnotes in the "climate mitigation" section; reduction of effort sharing emissions: [EEA greenhouse gases data viewer](#); European Commission, [Climate Action Progress Report](#), 2024. **Sustainable industry:** Years of life lost due to PM2.5: Eurostat and EEA, [Harm to human health from air pollution in Europe: burden of disease status](#), 2024. Air pollution damage: EEA, [EU large industry air pollution damage costs intensity](#), 2024. Emissions covered: As, benzene, Cd, Cr, Hg, NH3, Ni, NMVOC, NOX, Pb, dioxins, PM10, PAH, SOX. Water pollution intensity: EEA, [EU large industry water pollution intensity](#), 2024. Releases into water covered from cadmium, lead, mercury, nickel. Other indicators: Eurostat.

This annex outlines the progress made and the ongoing challenges faced in enhancing energy competitiveness and affordability, while advancing the transition to net zero. It examines measures and targets proposed in the final update to the national energy and climate plan (NECP) for 2030.

Energy prices and costs

Graph A8.1: Retail energy price components for household and non-household consumers, 2024



(i) For household consumers, consumption band is DC for electricity and D2 for gas. Taxes and levies are shown including VAT.

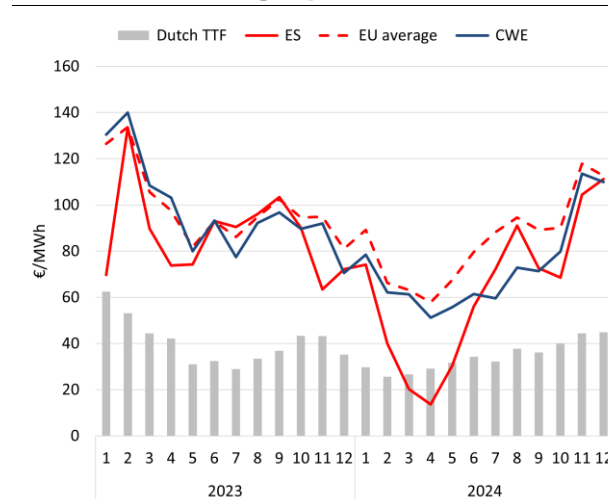
(ii) For non-household consumers, consumption band is ID for electricity and I4 for gas. Taxes and levies are shown excluding VAT and recoverable charges, as these are typically recovered by businesses.

Source: Eurostat

Spain's electricity and gas retail prices decreased further in 2024, both for non-household and household consumers. Below EU average energy prices are largely driven by a reduced burden of taxes and levies compared to the EU average. The later, for non-household consumer, is skewed toward electricity and accounts for 9,4% of the final price for electricity and 5,4% for gas (against an EU average of 15,5% and 11,6 respectively). Limited network costs also contribute to reduce retail prices, with the notable exception of electricity retail price for household consumer. Despite a year-on-year decrease, network costs account for a higher share of the final price than the EU average.

Thanks to a large share of renewables (57.2%) in its electricity mix, wholesale electricity prices in Spain averaged 63.3 EUR/MWh in 2024⁽¹⁶⁶⁾, the EU's fourth-lowest wholesale electricity prices (EU average of 84.7 EUR/MWh). The Iberian Peninsula (PT&ES) experienced stronger fluctuation in prices than the EU average. Prices in Spain decreased to as low as 13.7 EUR/MWh in April due to strong output of renewables (+21% in ES in Feb-May 2024 compared to same period in 2023). Prices picked up in the second half of the year amid rising natural gas costs and limited non-fossil flexibility. In November, prices spiked further in the Iberian Peninsula due to the Dunkelflaute in the Central Western European (CWE) region which negatively impacted day-ahead prices in CWE and neighbouring markets.⁽¹⁶⁷⁾

Graph A8.2: Monthly average day-ahead wholesale electricity prices and European benchmark natural gas prices (Dutch TTF)



(i) the Title Transfer Facility (TTF) is a virtual trading point for natural gas in the Netherlands. It serves as the primary benchmark for European natural gas prices.

(ii) CWE gives average prices in the central-western European market (Belgium, France, Germany, Luxembourg, the Netherlands and Austria).

Source: S&P Platts and ENTSO-E

⁽¹⁶⁶⁾ Fraunhofer (ENTSO-E data)

⁽¹⁶⁷⁾ Yearly electricity data, Ember (consumption and generation data throughout the paragraph)

Flexibility and electricity grids

Spain is part of the South-West Europe capacity calculation region (CCR) ⁽¹⁶⁸⁾, where cross-border trade capacities are relatively high. The Spanish electricity system is interconnected with Portugal (in the 'Iberian electricity system') and France. Due to its geographic location, trade flows within this CCR are relatively high compared with other regions and trade levels have slightly increased since 2022. Limitations are observed on the Spanish-Portuguese border. To address these, Spain and Portugal started implementing a new interconnection in May 2024. Overall, Spain takes a relatively high volume of costly remedial measures in cross-border electricity trades, due to its need to manage congestion.

Further expansion of Spain's cross-border electricity interconnection capacity is key to further integrating renewable energy sources (RES) production and improving the Iberian Peninsula's market integration. Spain needs to continue to improve its interconnectivity (the overall level in 2025 was below 5%) in line with the operational timeline of current projects. The interconnection project between Spain and Portugal is expected to be completed by April 2025, to increase current interconnection capacity to 3.2 GW. The Biscay Bay interconnection project between Spain and France is expected to be commissioned by 2028 and to increase exchange capacity to 5 GW. Further interconnection projects are planned between Pamplona (Spain) and Cantegrit (France), and between Aragón (Spain) and Marsillon (France).

The Spanish government is in the process of setting the target level of investments for electricity infrastructure and distribution. A public consultation on limits to annual investment in transport and distribution

(0.065% and 0.13% of GDP respectively) ⁽¹⁶⁹⁾ was closed in June. Infrastructure deployment is key to supporting the deployment of renewable energy.

Spain needs to continue promoting hydrogen infrastructure. Under the REPowerEU plan, the Commission has identified the Iberian hydrogen flow to Germany as one of the EU's key renewable hydrogen corridors. To support this aim, the South-Western corridor (Portugal-Spain-France-Germany) is a flagship corridor on the PCI/PMI list, with individual components granted PCI status in 2023. This initiative includes an interconnection between Spain and Portugal with 0.75 million tonnes (Mt) per year capacity; and a maritime pipeline connecting Barcelona (Spain) to Marseille (France), BarMar, with 2 Mt/year.

Accelerating permitting procedures is key to swiftly implementing infrastructure projects in all Spanish regions. Permitting procedures for energy infrastructure take an average of 18-24 months, which is comparable with other Member States. Stakeholders identify public participation processes and environmental impact assessments as the main factor influencing length. Timelines are included in legislation but their duration is not set out for all steps.

Spain did not experience negative prices in 2023 but curtailed the second highest amount of RES in the EU in 2023. Spain generated the second highest amount of RES in the EU in 2023 (105.3 TWh; Germany generated 236.8 TWh). Investment is combined with the deployment of solutions to make the grid more flexible, given the limited number of days when Spain experienced negative electricity prices in 2024. Further improving storage solutions and demand flexibility can help bring down the level of RES curtailment expressed as a ratio (Spain comes after Germany and Croatia).

⁽¹⁶⁸⁾ The South-West Europe CCR covers Spain, France and Portugal. A CCR is a group of countries that calculate cross-border electricity flows together.

⁽¹⁶⁹⁾ RD 1047/2013 and RD 1048/2013 respectively.

Spain has taken further steps to support non-fossil flexibility. Operational electricity storage capacity is above 7 GW. With the final updated NECP, Spain has increased its target for 2030 from 20 GW (the 2020 forecast) to 22.5 GW. Implementation of the energy storage strategy is underway and there are dedicated recovery and resilience plan (RRP) funds to finance storage and flexibility technologies. Projects (mainly hydropower and batteries) are underway and are envisaged to be operational within three to five years. Those with PCI status are expected to add 2 GW of new installed capacity. Spain's regulatory framework still has barriers to flexibility regarding market access of demand-side response aggregators and effective participation of demand-side response and storage in balancing services. To address these shortcomings, Spain has made a commitment to take measures to enable the full market participation of aggregators and allow the participation of demand response and storage in ancillary and congestion management services.

Legislation to carve out the energy regulator (CNE) from the current joint regulatory and competition body (CNMC) is pending. The proposed law provides for a 'limitative' budget that requires ministerial approval of investment decisions and human resources. This contrasts with the 'estimative' budget of the energy regulator when it was previously free-standing.

Spain is making progress with measures to empower consumers in demand response, energy communities, dynamic pricing and smart grids. Dynamic price contracts are available for household and non-household customers. 99% of all final household consumers already have a smart meter installed. Fewer than 5% of Spanish household consumers can be considered 'prosumers' ⁽¹⁷⁰⁾. The number of energy communities is steadily increasing and over 110 of them are reportedly

active across Spain ⁽¹⁷¹⁾. The RRP is supporting them and self-consumption via the strategic national project for renewable energy, green hydrogen and storage (PERTE ERHA) programme, which is financed by the Spanish recovery and resilience fund.

In 2023, electricity accounted for 24.7% of Spain's final energy consumption (FEC) (slightly above the EU average of 22.9%) and this share has remained largely stagnant in the last decade ⁽¹⁷²⁾, partly due to an unfavourable electricity-to-gas price ratio that disincentivizes electrification and cost-effective decarbonization. This was above the EU average of 22.9% and has been increasing in the last decade. Electricity accounts for 45.4% and 31.1% of households' and industry's FEC respectively (see the Annex 7). The transport sector's FEC share remains negligible (1.2%). Further progress is required in order to decarbonise the economy and benefit from affordable RES for consumers. In 2024's second semester, Spain had a fiscal burden skewed towards electricity. Before taxes and levies, the electricity-to-gas price ratio was 2.7 for both households and energy-intensive industries. After taxes and levies, this ratio rose to 2.8 for the industry segment. For households, taxes and levies made up around 24% of the final electricity price, compared to 22.5 for gas. For energy-intensive industries, non-recoverable taxes and levies accounted for about 9% of electricity prices, while gas stood at approximately 5%.⁽¹⁷³⁾

⁽¹⁷¹⁾ ESPON TANDEM project.

⁽¹⁷²⁾ The CAGR (compound annual growth rate) was -0.5% between 2013 and 2023. Source: Final energy balances, Eurostat.

⁽¹⁷³⁾ Analysis based on Eurostat data for the first semester of 2024. For household consumers, consumption band is DC for electricity and D2 for gas, which refer to medium-sized consumers and provide an insight into affordability. For non-household consumers, consumption band is I4 for electricity and I4 for gas, referring to large-sized consumers, providing an insight into international competitiveness (price used for the calculation excludes VAT and other recoverable taxes/levies/fees as non-household consumers are usually able to recover VAT and some other taxes).

⁽¹⁷⁰⁾ [ACER-CEER 2024 MMR Retail.pdf](#).

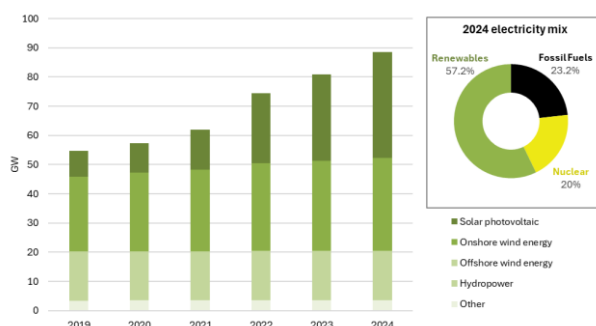
Deployment of flexibility solutions through energy storage and demand response is also key for the efficient integration of the renewable energy production and the reduction of curtailment. Funds from the Recovery and Resilience Fund have been allocated to storage and flexibility projects and the regulatory framework is under revision to enable its rapid and full development.

Renewables and long-term contracts

2024 was a record year for RES generation.

The 57% RES share in the electricity mix ⁽¹⁷⁴⁾ (vs the EU's overall RES share of 47%) was a new record (after 50% in 2023). In the overall electricity mix, wind remained the first source (22%), followed by nuclear (20%) and solar (18%). Fossil fuels represented less than a quarter of generation.

Graph A8.3: **Spain's installed renewable capacity (left) and electricity generation mix (right)**



"Other" includes renewable municipal waste, solid biofuels, liquid biofuels, and biogas.

Source: IRENA, Ember

Installed renewable energy capacity in Spain grew by 9,4% in 2024 to reach 88 498 MW

(see graph above). Solar energy continued to lead growth, with an additional 6 667 MW installed to reach 38 587 MW, representing a 20.9% jump. Total installed capacity for wind

increased by 943 MW to reach 31 811 MW, a 3.1% increase⁽¹⁷⁵⁾.

Spain is implementing permitting reforms but needs to speed up the transposition of new provisions in the revised Renewable Energy Directive into national law.

Spain has taken important measures to accelerate permitting processes for RES. These include knowledge-sharing, publishing the grid capacity of the system operator and developing regulatory sandboxes for innovative projects. In July 2024, the government finalised 28 GW of permitting for RES capacity across 280 projects. However, further implementation of new EU provisions is required.

The Spanish NECP has a RES energy share target of 48% by 2030, which is above its expected contribution to the EU target.

Spain aims to have 160 GW of RES capacity by 2030 (including 76 GW of solar PV and 62 GW of wind). However, no new schedule on the expected allocation of support for RES was released in 2024 in the Union Renewables Development Plans platform.

Spain remains the EU's largest and most dynamic market for power purchase agreements (PPAs) ⁽¹⁷⁶⁾.

Around 11 GW of RES capacity is contracted through private contracts. Solar PV dominates. In 2020, Spain created a fund to provide guarantees for electro-intensive units that signed RES PPAs to source their electricity needs.

Energy efficiency

The residential and industrial sectors led the fall in energy consumption in 2023.

Primary energy consumption (PEC) decreased by 3.1% on 2022 (to 110.1 Mtoe). Final energy consumption (FEC) decreased by 0.6% to 80.6 Mtoe. However, FEC increased in transport

⁽¹⁷⁴⁾ Yearly electricity data, Ember.

⁽¹⁷⁵⁾ [Renewable energy capacity statistics 2025, IRENA](#)

⁽¹⁷⁶⁾ [European PPA Market Outlook 2024, Pexapark.](#)

(0.9%) and services (0.6%), while it decreased in the industrial and residential sectors by 1.7% and 2.6% respectively. The recast Energy Efficiency Directive (EED) requires Spain to reach 82.2 Mtoe in PEC and 66.3 Mtoe in FEC by 2030.

Spain needs to significantly step up its efforts to reduce energy consumption in buildings in order to achieve its targets.

Spain aims to reduce energy consumption in the residential sector by 14% by 2030, but almost no progress was made between 2020 and 2022. Performance improved in 2023, but this was still insufficient to get back on track to achieve the 2030 targets.

The decarbonisation of the heating sector is making progress. Spain has not notified a comprehensive heating and cooling assessment that identifies the potential to apply high-efficiency cogeneration and efficient district heating and cooling ⁽¹⁷⁷⁾. The ratio of electricity to gas prices has substantially decreased (by almost 40% between 2020 and 2024). It is still very high, however, and is a major barrier to further electrification. Heat pumps sales markedly increased in 2024 (by 13%), but Spain needs to assess whether further measures are required in order to achieve its objectives.

Spain has a supportive national financing framework that mobilises energy efficiency investment. However, deployment of financial instruments and blended schemes is limited and grants predominate. There is therefore potential to further deploy non-grant-based schemes to achieve energy efficiency targets.

Substantial funding has been committed to improving energy efficiency in buildings and industry. This includes more than EUR 25.5 billion in resources from the RRF. However, absorption is lagging behind and it is unclear if it will be possible to spend the allocated funds. The situation is particularly

delicate for cohesion policy, where the level of payments is very low. Analysis of and stocktaking for this measure should make it possible to put measures in place to efficiently and effectively disburse the funds that have been allocated to the objectives.

Security of supply and diversification

Spain aims to reduce its energy import dependency from 73% to 50% by 2030. The government aims for RES domestic production to increase, fossil fuel imports to decrease and primary energy consumption to fall. Over 25 measures have been taken to strengthen energy supply since 2021. 73 additional measures were introduced in 2022 ⁽¹⁷⁸⁾, focusing on energy savings, efficiency and RES. Past investments in infrastructure have made the gas sector relatively resilient. The government is promoting renewable gases and minimum safety stocks. Natural gas traders and direct consumers are required to hold 27.5 days' worth of firm sales or consumption in safety stocks. Russian LNG imports (6.9 bcm) remained an important share of total imports in 2024 (21%).

Despite progress in renewables, Spain's overall energy mix remained very reliant on fossil fuels in 2023. Oil and natural gas accounted for 44.1% and 21.5% of gross inland consumption respectively. Spain no longer relies on coal ⁽¹⁷⁹⁾. Renewables (and biofuels) contributed 19.1% ⁽¹⁸⁰⁾. This continuing reliance on fossil fuels underscores the importance of Spain's ongoing efforts to diversify its energy sources and strengthen energy security.

On 28 April 2025, Spain and Portugal faced an unprecedented power outage, which also affected parts of France. According to EU law,

⁽¹⁷⁷⁾ Article 25(1).

⁽¹⁷⁸⁾ Plan + Seguridad Energética.

⁽¹⁷⁹⁾ Electricity and heat are excluded to avoid double-counting, focusing on primary energy sources.

⁽¹⁸⁰⁾ Gross inland consumption ([Eurostat](#)).

ENTSO-E will lead an independent investigation into the causes of the blackout. The European Commission will inform all Member States of the progress of the investigation through the Electricity Coordination Group.

Fossil fuel subsidies

In 2023, environmentally harmful ⁽¹⁸¹⁾ fossil fuel subsidies without a planned phase-out before 2030 represented 0.22%⁽¹⁸²⁾ of Spain's GDP⁽¹⁸³⁾, below the EU weighted average of 0.49%. Tax measures accounted for 79% of this volume, while income/price support represented the remaining 21%. However, Spain's 2023 Effective Carbon Rate⁽¹⁸⁴⁾ averaged EUR 71.10 per tonne of CO₂, below the EU weighted mean of EUR 84.80⁽¹⁸⁵⁾.

⁽¹⁸¹⁾ Direct fossil fuel subsidies that incentivise maintaining or increasing in the availability of fossil fuels and/or use of fossil fuels.

⁽¹⁸²⁾ Numerator is based on volumes cross-checked with the Spanish authorities. For all Member States, it includes public R&D expenditures for fossil fuels as reported by the IEA (Energy Technology RD&D Budgets) and excludes, for methodological consistency, excise tax exemption on kerosene consumed in intra-EU27 air traffic.

⁽¹⁸³⁾ 2023 Gross Domestic Product at market prices, Eurostat.

⁽¹⁸⁴⁾ The Effective Carbon Rates is the sum of carbon taxes, ETS permit prices and fuel excise taxes, representing the aggregate effective carbon rate paid on emissions.

⁽¹⁸⁵⁾ OECD (2024), Pricing Greenhouse Gas Emissions 2024

Table A8.1: Key Energy Indicators

	Spain				EU			
	2021	2022	2023	2024	2021	2022	2023	2024
Household consumer - Electricity retail price (EUR/KWh)	0.2823	0.3082	0.2386	0.2383	0.2314	0.2649	0.2877	0.2879
Energy & supply [%]	46.2%	56.4%	54.3%	46.5%	36.6%	54.3%	55.6%	47.8%
Network costs	24.0%	24.6%	33.7%	29.4%	26.7%	25.3%	24.8%	27.2%
Taxes and levies including VAT	29.8%	19.0%	12.0%	24.1%	36.7%	20.3%	19.6%	25.0%
VAT	10.6%	6.7%	5.3%	11.5%	14.5%	13.4%	13.8%	14.6%
Household consumer - Gas retail price	0.0787	0.1032	0.1062	0.0872	0.0684	0.0948	0.1121	0.1128
Energy & supply	38.8%	56.7%	74.7%	61.7%	43.7%	61.0%	64.5%	53.9%
Network costs	38.1%	13.6%	16.6%	15.8%	22.5%	17.3%	17.1%	18.3%
Taxes and levies including VAT	23.1%	29.7%	8.8%	22.5%	33.8%	21.7%	18.4%	27.8%
VAT	17.4%	17.3%	4.8%	17.3%	15.5%	11.6%	10.2%	13.6%
Non-household consumer - Electricity retail price	0.1166	0.2000	0.1403	0.1239	0.1242	0.1895	0.1971	0.1661
Energy & supply	49.9%	68.7%	66.8%	62.9%	43.0%	66.5%	63.0%	55.8%
Network costs	11.3%	9.1%	13.2%	12.6%	15.8%	10.7%	11.9%	15.5%
Taxes and levies excluding VAT	28.6%	6.9%	4.1%	9.4%	30.4%	9.9%	11.2%	15.4%
Non-household consumer - Gas retail price	0.0293	0.0887	0.0583	0.0425	0.0328	0.0722	0.0672	0.0517
Energy & supply	62.3%	77.6%	89.5%	75.1%	66.2%	77.3%	77.3%	68.7%
Network costs	16.1%	2.5%	2.6%	3.1%	7.7%	3.8%	5.3%	7.1%
Taxes and levies excluding VAT	5.1%	3.0%	3.3%	5.4%	12.5%	6.1%	7.3%	11.6%
Wholesale electricity price (EUR/MWh)	111.4	167.7	87.4	63.1	111.0	233.2	99.1	84.7
Dutch TTF (EUR/MWh)	n/a	n/a	n/a	n/a	46.9	123.1	40.5	34.4
	2017	2018	2019	2020	2021	2022	2023	2024
Gross Electricity Production (GWh)	275,726	274,452	273,257	263,373	274,312	292,454	285,881	-
Combustible Fuels	133,002	118,149	117,125	93,778	95,443	112,950	84,756	-
Nuclear	58,039	55,766	58,349	58,299	56,564	58,590	56,873	-
Hydro	21,070	36,803	26,874	33,998	32,847	22,102	31,105	-
Wind	49,127	50,896	55,647	56,444	62,061	62,784	64,275	-
Solar	14,397	12,744	15,103	20,667	27,098	35,723	48,586	-
Geothermal	-	-	-	-	-	-	-	-
Other Sources	91	94	159	187	299	305	286	-
Gross Electricity Production [%]								
Combustible Fuels	48.2%	43.0%	42.9%	35.6%	34.8%	38.6%	29.6%	-
Nuclear	21.0%	20.3%	21.4%	22.1%	20.6%	20.0%	19.9%	-
Hydro	7.6%	13.4%	9.8%	12.9%	12.0%	7.6%	10.9%	-
Wind	17.8%	18.5%	20.4%	21.4%	22.6%	21.5%	22.5%	-
Solar	5.2%	4.6%	5.5%	7.8%	9.9%	12.2%	17.0%	-
Geothermal	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-
Other Sources	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	-
Net Imports of Electricity (GWh)	9,169	11,102	6,862	3,280	852	-19,802	-13,957	-
As a % of electricity available for final consumption	3.7%	4.5%	2.8%	1.4%	0.4%	-8.5%	-6.1%	-
Electricity Interconnection [%]	5.8%	6.7%	6.5%	6.5%	5.0%	5.4%	4.4%	4.2%
Share of renewable energy consumption - by sector [%]								
Electricity	36.5%	35.2%	37.1%	42.9%	46.0%	50.9%	56.9%	-
Heating and cooling	16.2%	16.1%	17.2%	18.0%	17.0%	19.5%	21.4%	-
Transport	5.8%	6.9%	7.6%	9.5%	9.2%	9.7%	12.0%	-
Overall	17.1%	17.0%	17.9%	21.2%	20.6%	21.9%	24.9%	-
	2020	2021	2022	2023	2020	2021	2022	2023
Import Dependency [%]	67.9%	69.4%	74.4%	68.4%	57.5%	55.5%	62.5%	58.3%
of Solid fossil fuels	54.8%	102.0%	144.3%	71.8%	35.8%	37.2%	45.9%	40.8%
of Oil and petroleum products	99.4%	95.6%	101.0%	99.1%	96.8%	91.7%	97.8%	94.5%
of Natural Gas	97.5%	100.1%	103.2%	98.5%	83.6%	83.6%	97.6%	90.0%
Dependency from Russian Fossil Fuels [%]								
of Natural Gas	10.4%	8.7%	12.6%	18.3%	41.0%	40.9%	20.7%	9.3%
of Crude Oil	1.8%	4.6%	1.1%	0.0%	25.7%	25.2%	18.4%	3.0%
of Hard Coal	55.0%	29.6%	16.1%	0.0%	49.1%	47.4%	21.5%	1.0%
	2017	2018	2019	2020	2021	2022	2023	
Gas Consumption (in bcm)	31.1	31.0	35.4	31.9	33.8	32.6	29.0	
Gas Consumption year-on-year change [%]	8.2%	-0.6%	14.4%	-9.9%	5.8%	-3.4%	-11.2%	
Gas Imports - by type (in bcm)	34.6	34.8	37.2	32.5	37.0	39.7	35.3	
Gas imports - pipeline	18.3	20.0	15.8	12.1	16.8	11.3	10.6	
Gas imports - LNG	16.4	14.9	21.4	20.4	20.2	28.4	24.6	
Gas Imports - by main source supplier [%]								
Algeria	48.3%	51.3%	33.1%	29.1%	42.8%	23.6%	29.3%	
United States	2.2%	0.9%	11.0%	15.6%	14.6%	28.9%	20.9%	
Russia	0.0%	2.5%	8.5%	10.4%	8.7%	12.6%	18.3%	
Nigeria	12.7%	11.7%	11.5%	12.1%	11.5%	14.3%	13.6%	

Source: Eurostat, ENTSO-E, S&P Platts

Spain is a frontrunner in terms of the maturity of adaptation governance and climate risk assessment work, but additional action is required to clarify responsibilities externally, increase its preparedness and water resilience, and decrease its economy's impact on nature. Spain is among the Member States that are most exposed to climate risks. It is taking action to build resilience, but some sectoral policies lag behind, in particular agriculture. Sustainable water management also remains a major environmental issue, notably in terms of water governance, water body rehabilitation and restoration, and water efficiency. The state of nature and ecosystems continues to degrade, presenting significant economic and competitiveness risks. Spain has started its transition towards more sustainable agriculture practices, but its agri-food system continues to have significant climate and environmental impacts, warranting additional action to support the uptake of sustainable agriculture practices.

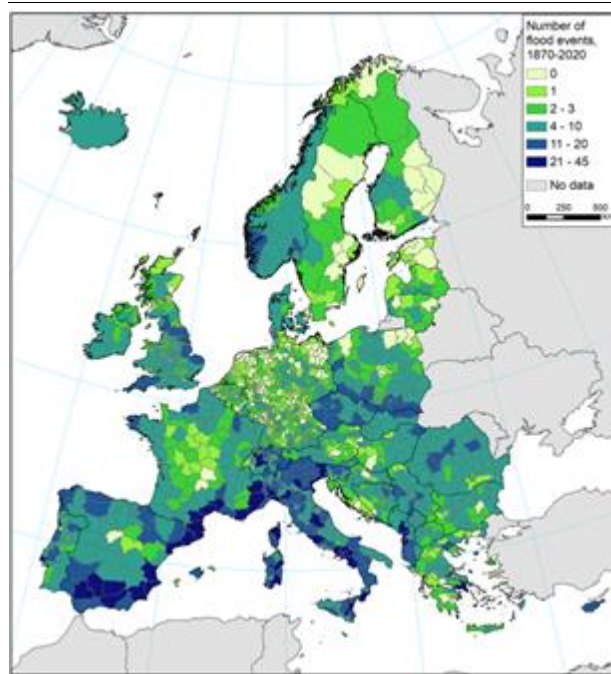
Climate adaptation and preparedness

Spain is particularly exposed to heatwaves, droughts, floods and wildfires. Climate risks directly affect Spain's economy and society. Between 1980 and 2023, Spain recorded EUR 95.9 billion in economic losses caused by weather and climate-related extreme events. However, only 5% of the economic damages over the same period were insured, compared to 62% in Denmark ⁽¹⁸⁶⁾. These impacts will particularly affect vulnerable groups and regions in Spain with lower capacity to adapt, including populations of lower socioeconomic

status. Climate change also aggravates pre-existing vulnerabilities ⁽¹⁸⁷⁾⁽¹⁸⁸⁾.

The health impacts of extreme heat exacerbated by climate change are significant. Spain recorded 32 053 fatalities due to extreme events between 1980 and 2023, while EU-level estimates show that if no adaptation and mitigation measures are taken, Spain could see a 40-fold increase in mortality from heatwaves ⁽¹⁸⁹⁾. Rising temperatures due to climate change also increase the spread of infectious diseases like malaria, dengue fever or West Nile fever ⁽¹⁹⁰⁾.

Map A9.1: **Number of flood events**



Source: D. Paprotny et al., 2024, *Hanze v2.1: an improved database of flood impacts in Europe from 1870 to 2020*, [Link](#).

Floods are the extreme events causing the largest damages in Spain. Between 1870 and 2020, Spain had the second highest number of

⁽¹⁸⁷⁾ EEA, 2024, *European Climate Risk Assessment*, p. 345.

⁽¹⁸⁸⁾ Navas-Martín et. al., 2022, *Effects of local factors on adaptation to heat in Spain (1983–2018)*.

⁽¹⁸⁹⁾ EEA, 2024, *European Climate Risk Assessment*, pp. 215 and 343.

⁽¹⁹⁰⁾ [EEA, 2022, Heatwaves, spread of infectious diseases due to climate change growing health threats to Europeans.](#)

⁽¹⁸⁶⁾ [EEA, 2024, Economic losses from weather- and climate-related extremes in Europe.](#)

floods in the EU (304 floods), and the highest number of reported fatalities (4 395 people) ⁽¹⁹¹⁾. In Spain, flood events are primarily concentrated along the coast (see Map A9.1), exemplified by the October 2024 floods in the Valencia region which led to the death of at least 220 people and caused over EUR 10 billion of damages ⁽¹⁹²⁾. As part of its work under the EU Flood Directive, Spain has adopted the second cycle of flood risk management plans for 2021-2027. Spain further adopted three Royal Decree laws containing aids and measures amounting to EUR 16 billion to tackle the damages caused by the 2024 floods in the Valencia region.

National policy measures related to adaptation and preparedness have further strengthened over recent years, but additional efforts are still required. Spain has a national governance structure for adaptation in place, including a climate law, climate adaptation strategy, a climate risk assessment and national climate change adaptation plan. The plan includes nature-based solutions and adaptation strategies, such as switching to crop varieties that can better withstand changing conditions ⁽¹⁹³⁾. However, substantial challenges still exist including desertification, heatwaves and water resilience. Issues related to water management and adaptation to climate change were also raised in CSR-3 of the 2024 European Semester (see next section), and incidents like the ecological crisis in Mar Menor and the depletion of water resources in Doñana National Park highlight the need for further action to address these challenges ⁽¹⁹⁴⁾⁽¹⁹⁵⁾. Spain is no exception to the

need across the EU to better clarify risk ownership, i.e. the responsibility and the means to act at the different administrative levels and by the private sector ⁽¹⁹⁶⁾.

Spain uses several EU funds to improve its preparedness. These include the European Regional Development Fund, the Social Climate Fund and the Recovery and Resilience Facility. Spain's recovery and resilience plan includes adaptation measures such as adaptation of buildings, local action plans, sustainable irrigation, green infrastructure, water reuse, restoration of riverbanks, protection against flood risks and the purchase of firefighting assets.

Climate adaptation is also addressed at sub-national level. Spanish regions and local authorities are among the most active in the EU in developing local climate action plans. Some 3 005 Spanish municipalities are signatories to the EU Covenant of Mayors, covering 88% of the Spanish population. 32% of the signatories have developed sustainability energy and climate action plans that cover both local mitigation and adaptation planning ⁽¹⁹⁷⁾. Nine regions mandate the development of such local action plans in their regional climate laws. Of the 294 EU regions and local authorities participating in the EU Mission on Adaptation to improve their work on climate adaptation, 24 are in Spain. In addition to broader climate adaptation efforts, Spain tackles climate-related risks through the Spanish Agricultural Insurance System (Agroseguro) and the Insurance Compensation Consortium (Consortio de Compensación de Seguros). The Spanish Agricultural Insurance System supports farmers in managing climate-related losses such as droughts, floods, and hail through public-private insurance schemes co-financed by the government. Meanwhile, the Insurance

⁽¹⁹¹⁾ [D. Paprotny et al., 2024, Hanze v2.1: an improved database of flood impacts in Europe from 1870 to 2020.](#)

⁽¹⁹²⁾ [McElroy and Hayes, 2024, Valencia floods highlight climate vulnerabilities of Spanish banks.](#)

⁽¹⁹³⁾ Institute for European Environmental Policy, 2023, *Environment and climate assessment of Spain's CAP Strategic Plan.*

⁽¹⁹⁴⁾ [Elorza Saralegui and Rodrigues, 2023, Mar Menor: cleaning Europe's largest saltwater lagoon.](#)

⁽¹⁹⁵⁾ [Euronews, 2023, Drought and heatwaves: Spain's Donana wetland is shrinking putting wildlife and crops at risk.](#)

⁽¹⁹⁶⁾ EEA, 2024, European Climate Risk Assessment.

⁽¹⁹⁷⁾ Data as of 5 December 2024.

Compensation Consortium is a public entity providing compensation for damages caused by extraordinary risks which are typically excluded from standard insurance policies.

Water resilience

Large areas of Spain are subject to water stress, in particular due to demand from agriculture, tourism and energy. These sectors are heavily dependent on water supply, and irrigation is crucial in many rural areas. Spain's water productivity is considerably lower than that of other Member States at EUR 38 per m³ of abstracted water in 2022, on a downward trend over the past five years⁽¹⁹⁸⁾. The water exploitation index plus (WEI+), a measure of how much water is being used compared with the total renewable freshwater resources available for a given territory and period, shows that, especially in summer months, the country's total water consumption exceeds its renewable freshwater resources. The highest WEI+ value (46) was reached in the third quarter of 2019 and the second highest value (37) in 2021. The main consumer of water is agriculture. Between 2016 and 2020, water abstraction in the agricultural sector declined by 7% but the sector still accounts for most water consumption at 13 035 million m³, i.e. 77% of total consumption in 2022, putting a significant strain on the country's water resources. The Spanish government has implemented measures to reduce the agricultural sector's water consumption, such as improving irrigation efficiency, the use of non-conventional water resources, and promoting the use of drought-resistant crops. The challenges remain significant, particularly in regions with high water stress.

Water quality in Spain has only marginally improved, and concerns remain for surface

and groundwater bodies. Spain's third cycle of river basin management plans (2022-2027) under the Water Framework Directive shows that the ecological status and potential of surface water bodies has only slightly improved since the second cycle (2016-2021). Only 58% of surface water bodies are classified as having 'good ecological status/potential'. Their chemical status remains stable, as 93% of surface water bodies have a good chemical status. Regarding groundwater bodies, the quantitative status has slightly deteriorated since the second cycle, with 71% reported as having good quantitative status. Their chemical status has slightly improved, with at least 67% now reported as having good chemical status. However, 43% are at risk of failing to achieve good chemical status by 2027.

Spain's wastewater treatment is a particular cause for concern. Despite the improvement in compliance over the years, for which the use of EU funding has been fundamental, Spain has experienced significant difficulties in properly implementing the Urban Wastewater Treatment Directive (UWWTD). This partial implementation has forced the European Commission to take legal actions that have led to rulings of the Court of Justice of the EU. Overall, Spain's compliance rate was 86% in 2020 and around 450 agglomerations did not comply with all the requirements of the Directive. Therefore, it is essential that Spain takes the adequate measures and implement the necessary projects without delay to fully comply with the requirements of the UWWTD, taking advantage of the available EU funding, i.e., the European Regional Development Fund (ERDF) and the Recovery and Resilience Facility (RRF).

The investment needs for water protection and water management are substantial, as shown in Graph A9.2, with a financing gap of EUR 1.8 billion per year by 2027. Roughly 70% of the gap can be attributed to unmet financing for wastewater management. Increasing investment will be even more important as the UWWTD was revised and

⁽¹⁹⁸⁾ Measured as GDP in 2010 chain linked volumes over total fresh surface water abstracted in cubic metres.

strengthened in 2024⁽¹⁹⁹⁾. EUR 2 billion from the 2021-2027 multiannual financial framework and EUR 9 billion from the Recovery and Resilience Facility already contribute to meeting Spain's investment needs for water protection and management. Further infrastructure development would help improve water management, e.g. wastewater collection and treatment, water reuse, reducing leaks in the networks and the general water supply. Additional investments are needed to improve monitoring (quality and quantity) and support nature-based solutions, flood prevention and river restoration.

Biodiversity and ecosystems

The state of nature and ecosystems continues to degrade in Spain, reducing the country's climate resilience. Spain is one of the most biologically diverse countries in the EU, home to 117 habitat types and 426 species covered by the Habitats Directive⁽²⁰⁰⁾. However, according to the last available data, only 8.9% of the country's habitats have a good status, lower than the EU average of 14.7%. Similarly, the conservation status of species is concerning, with 18.9% reported as having a good status, lower than the EU average of 27%. Data show a deteriorating trend compared to the previous reporting period. This situation has severe implications for Spain's climate resilience, as the loss of biodiversity impairs ecosystems' ability to provide services that help mitigate the effects of climate change, such as regulating water cycles, maintaining soil health and sequestering carbon.

Spain contributes the largest terrestrial surface to the EU Natura 2000 network, covering 27.3 % of its territory (although it is

the fifth Member State in percentage, the EU average is 18.6 %). Some designations are still needed in the marine part. The main challenge is the adoption of site-specific conservation objectives and measures, together with allocating sufficient resources to manage the Natura 2000 network. Spain could also further capitalise on its very valuable natural capital to promote green growth and job creation. Considering both Natura 2000 and other nationally designated protected areas, Spain legally protects 28.1 % of its terrestrial areas (EU-27 coverage: 26.1 %) and 12.4 % of its marine areas (EU-27 coverage: 12.3%). Thus, Spain is on track to achieve its political commitment under the EU Biodiversity Strategy for 2030 to protect 30% of land and sea in 2030, as outlined in its Strategic Plan for the Natural Heritage and Biodiversity for 2030⁽²⁰¹⁾ and the Master Plan for the Spanish Marine Protected Areas Network, approved in December 2022.

Nature degradation presents significant economic and competitiveness risks as Spain is one of the Member States with the highest degree of dependency on ecosystem services. Spain has the highest degree of supply chain dependency on ecosystem services in the EU, with 32% of its gross value added highly dependent, against the EU-27 average of 22%. It is also above the EU average in terms of overall dependency on ecosystem services, ranking fourth among Member States. Several sectors such as agriculture, fisheries, construction and water utilities (see Graph A9.1) are particularly dependent on ecosystem services. 100% of the gross value added generated by these sectors is directly dependent on ecosystem services. This means that failure to maintain the capacity of ecosystems to deliver services could entail significant costs or even stop production in these sectors. Protecting and restoring key

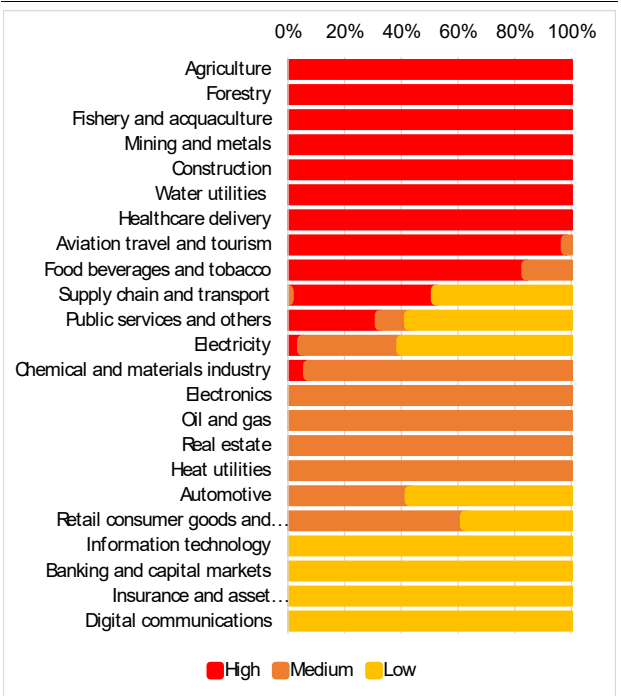
⁽¹⁹⁹⁾ Directive 2024/3019, of 27 November 2024. The deadline for transposition is 31 July 2027.

⁽²⁰⁰⁾ [EEA, 2019, Number of habitats and species per Member State.](#)

⁽²⁰¹⁾ Adopted by [Royal Decree 1057/2022](#) of 22 December 2022.

ecosystems would help maintain the long-term competitiveness of these sectors.

Graph A9.1: **Direct dependency (1) on ecosystem services(2) of the gross value added generated by economic sector in 2022**



(1) Dependency based on the sector’s own operations, excluding value chain operations within countries and across international value chains. A high dependency indicates a high potential exposure to nature-related shocks or deteriorating trends, which means that the disruption of an ecosystem service could cause production failure and severe financial loss.

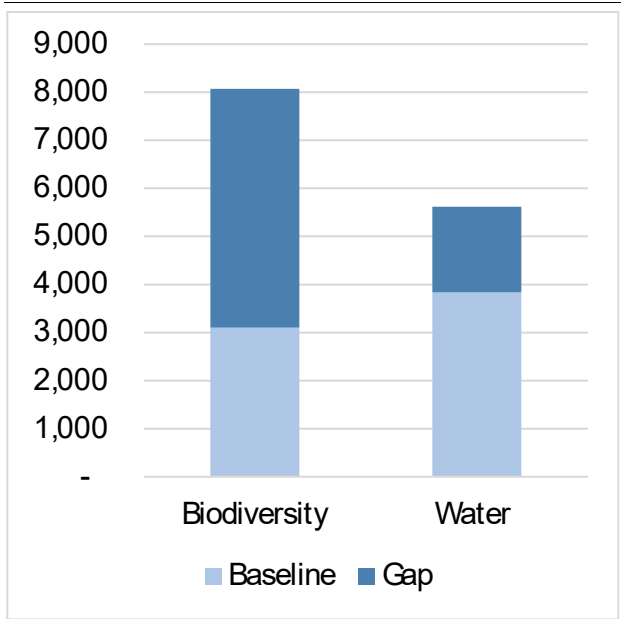
(2) Ecosystem services are the contributions of ecosystems to the benefits that are used in economic and other human activity, including provisioning services (e.g. biomass provisioning or water supply), regulating and maintenance services (e.g. soil quality regulation or pollination), and cultural services (e.g. recreational activities).

Source: [Hirschbuehl et al., 2025, The EU economy's dependency on nature.](#)

Targeted action on nature protection and restoration is necessary to meet Spain’s nature restoration targets. It should be noted that, between 2006 and 2012, the extent of soil areas providing flood control ecosystem services decreased by 18% due to soil

sealing ⁽²⁰²⁾. Spain also needs to restore up to 113 410 km² of habitats listed in Annex I to the Habitats Directive, corresponding to up to 22.4% of its land ⁽²⁰³⁾. Spain requires EUR 8.1 billion of investment per year to effectively protect and restore its natural capital, mitigate the impacts of climate change and preserve the country’s rich biodiversity (see Graph A9.2). The current level of financing for biodiversity and ecosystem conservation in Spain is around EUR 3.1 billion per year. Therefore, the investment gap is estimated to be around EUR 5 billion per year, corresponding to 0.37 % of its GDP. This shortfall undermines the country’s commitment to global biodiversity agreements and its long-term economic and social development.

Graph A9.2: **Investment needs and gaps in EUR million, in 2022 constant prices**



Source: European Commission, DG Environment, Environmental investment needs & gaps assessment programme, 2025 update.

⁽²⁰²⁾ European Commission, European Environment Agency, 2021, *Accounting for ecosystems and their services in the European Union*.

⁽²⁰³⁾ European Commission, 2022, *Impact assessment accompanying the proposal for a Regulation on nature restoration*.

Sustainable agriculture and land use

Spain's carbon removals fall short of the level of ambition needed to meet its 2030 target for land use, land-use change and forestry (LULUCF). Spain's land-use sector has provided constant net carbon removals in recent years, with forests playing a major role. To meet its 2030 LULUCF target, additional carbon removals of -5.3 million tonnes of CO₂ equivalent (CO₂eq) are needed ⁽²⁰⁴⁾. The latest available projections show a gap to target of 6.1 million tonnes of CO₂eq for 2030 ⁽²⁰⁵⁾. Therefore, additional measures need to be applied to reach the 2030 target ⁽²⁰⁶⁾.

Spanish agriculture is still a notable source of greenhouse gas emissions and continues to have a significant impact on air, water and soils. In 2022, agriculture generated 34.9 million tonnes of CO₂eq, accounting for around 14% of the country's total emissions. This includes 27.9 million tonnes of CO₂eq from livestock. The utilised agricultural area (UAA) in Spain increased by 5.2% from 23.5 million hectares in 2012 to 24.7 million hectares in 2022. This increase translated in an increase in nutrient losses from agriculture, mainly from mineral fertilisers and manure. This poses a significant environmental concern and a threat to human health. This is reflected in the country's nitrogen balance of 41 kg of nitrogen per hectare of UAA. Furthermore, according to data from the Nitrates Directive, 23% of groundwater monitoring stations in Spain recorded average nitrate concentrations above 50 mg/l between 2016 and 2019, exceeding the healthy threshold for human consumption. Although the livestock density index was 0.7 in 2020, slightly below the EU average of 0.75,

ammonia emissions have been on a downward trend, falling by 5% between 2018 and 2022. Between 2017-2022, pesticides were detected in 26% of surface water bodies at levels exceeding the set thresholds.

Spain is transitioning to a sustainable food system by implementing policies to reduce the environmental impact of agriculture. In 2022, 5.3% of its agricultural land had landscape features such as woods and non-productive grasslands, below the EU average of 5.6%. Organic farming, which reduces the use of synthetic fertilisers and pesticides, made up 10.8% of Spain's agricultural land, a 39% increase since 2012. Spain aims to reach 20% of UAA under organic farming by 2030 which it will be able to achieve, if the current growth trend in organic farming surface is maintained in the coming years. To mitigate the environmental impact of agriculture, the Spanish government has implemented measures to promote water resilience under the common agricultural policy strategic plan, including verifying the permit to use irrigation water issued by the competent water authority as a prerequisite for access to certain aid ⁽²⁰⁷⁾. The plan also supports the increase in the share of organic farming and the use of soil cover, promotes crop rotation and diversification, and helps to reduce nutrient losses, along with support for other sustainable agriculture practices. These measures are crucial for the long-term competitiveness of Spain's agri-food system and its bioeconomy, which have a significant economic role. The bioeconomy, encompassing the production and processing of biological products, contributed EUR 74.6 billion of added value to the country's gross domestic product in 2021. Agriculture generated EUR 31.1 billion, while the food industry contributed EUR 21.9 billion ⁽²⁰⁸⁾.

⁽²⁰⁴⁾ National LULUCF targets of the Member States in line with Regulation (EU) 2023/839.

⁽²⁰⁵⁾ Climate Action Progress Report 2024 COM/2024/498.

⁽²⁰⁶⁾ Projections submitted in Spain's draft updated national energy and climate plan, 2023.

⁽²⁰⁷⁾ [Annex](#) to Spain's CAP strategic plan "Contribución del PEPAC 23-27 a la mejora de la gestión del agua en la agricultura".

⁽²⁰⁸⁾ [European Commission, 2023, EU Bioeconomy Monitoring System dashboards.](#)

Table A9.1: Key indicators tracking progress on climate adaptation, preparedness and environment

Climate adaptation and preparedness:							EU-27	
	2018	2019	2020	2021	2022	2023	2018	2021
Drought impact on ecosystems [area impacted by drought as % of total]	0.36	5.93	0.03	0.74	11.33	6.84	6.77	2.76
Forest-fire burnt area ⁽¹⁾ [ha, annual average 2006-2023]	81 623	81 623	81 623	81 623	81 623	81 623		
Economic losses from extreme events [EUR million at constant 2022 prices]	2 178	4 942	2 421	2 910	11 204	7 132	24 142	62 981
Insurance protection gap ⁽²⁾ [composite score between 0 and 4]	-	-	-	-	1.88	1.88		
Heat-related mortality ⁽³⁾ [number of deaths per 100 000 inhabitants in 2013-2022]	116	116	116	116	116			
Sub-national climate adaptation action [% of population covered by the EU Covenant of Mayors for Climate & Energy]	67	73	75	76	72	78	41	44

Water resilience:							EU-27	
	2018	2019	2020	2021	2022	2023	2018	2021
Water Exploitation Index Plus, WEI+ ⁽⁴⁾ [total water consumption as % of renewable freshwater resources]	6.0	7.8	6.4	6.7	8.8	-	4.5	4.5
Water consumption [million m ³]	16 341	16 048	16 022	15 980	16 824	-		
Ecological/quantitative status of water bodies ⁽⁵⁾ [% of water bodies failing to achieve good status]								
Surface water bodies	-	-	-	41%	-	-	-	59%
Groundwater bodies	-	-	-	25%	-	-	-	93%

Biodiversity and ecosystems:							EU-27	
	2018	2019	2020	2021	2022	2023	2018	2021
Conservation status of habitats ⁽⁶⁾ [% of habitats having a good conservation status]	8.9	-	-	-	-	-	14.7	-
Common farmland bird index 2000=100	-	-	-	-	-	-	72.2	74.4
Protected areas [% of protected land areas]	-	-	-	28	28	-	-	26

Sustainable agriculture and land use:							EU-27	
	2018	2019	2020	2021	2022	2023	2018	2021
Bioeconomy's added value ⁽⁷⁾ [EUR million]	67 719	66 982	66 938	73 765			634 378	716 124
Landscape features [% of agricultural land covered with landscape features]	-	-	-	-	5	-		
Food waste [kg per capita]	-	-	90	-	-	-		
Area under organic farming [% of total UAA]	9.3	9.7	10.0	10.8	10.8		7.99	-
Nitrogen balance [kg of nitrogen per ha of UAA]	40.4	46.2	38.9	41.0	-	-		
Nitrates in groundwater ⁽⁸⁾ [mgNO ₃ /l]	51.7	48.2	43.4	40.7	-	-		
Net greenhouse gas removals from LULUCF ⁽⁹⁾ [kt CO ₂ -eq]	- 47 957	- 46 988	- 46 475	- 47 516	- 47 417	-	- 256 077	- 240 984

(1) The data show the average for the timespan 2006-2023 based on EFFIS - European Forest Fire Information System.

(2) Scale: 0 (no protection gap) – 4 (very high gap). EIOPA, 2024, Dashboard on insurance protection gap for natural catastrophes.

(3) van Daalen, K. R. et al., 2024, The 2024 Europe report of the Lancet Countdown on health and climate change: unprecedented warming demands unprecedented action, The Lancet Public Health.

(4) This indicator measures total water consumption as a percentage of the renewable freshwater resources available for a given territory and period. Values above 20% are generally considered to be a sign of water scarcity, while values equal or greater than 40% indicate situations of severe water scarcity.

(5) European Commission, 2024, 7th Implementation Report from the Commission to the Council and the European Parliament on the implementation of the Water Framework Directive (2000/60/EC) and the Floods Directive (2007/60/EC) (Third River Basin Management Plans and Second Flood Risk Management Plans).

(6) For this indicator, the EU average includes figures for the UK under the previous configuration, EU-28.

(7) European Commission, 2023, EU Bioeconomy Monitoring System dashboards.

(8) Nitrates can persist in groundwater for a long time and accumulate at a high level through inputs from anthropogenic sources (mainly agriculture). The EU drinking water standard sets a limit of 50 mg NO₃/L to avoid threats to human health.

(9) Net removals are expressed in negative figures, net emissions in positive figures. Reported data are from the 2024 greenhouse gas inventory submission. 2030 value of net greenhouse gas removals as in Regulation (EU) 2023/839 – Annex IIa.

Source: Eurostat, EEA.

Spain's labour market has shown resilience and improvement, with robust job creation contributing to historic employment highs.

However, substantial structural challenges persist, including high unemployment, skills mismatches, and an ageing workforce that may hinder productivity. Third-country nationals have played a large role in employment growth but often face precarious working conditions. Young and older workers remain underrepresented in the labour market. Nevertheless, Spain is currently on track to reaching its 2030 employment target of 76%. Continuing to improve job quality, fostering lifelong learning and the silver economy, aligning skills with market needs, and supporting vulnerable groups through more effective active labour market policies remain crucial to ensuring a competitive and inclusive labour market.

Spain's labour market continued to make progress in 2024, but key structural challenges remain.

The employment rate (for people aged 20-64) reached the historic high of 71.4% in 2024, supported by strong GDP growth, the expansion of services and professional activities, and public sector job creation (see Annex 2). Employment grew by 3.0% in 2023, with a significant contribution from third-country nationals. However, the employment rate remains below the EU average (75.8%), highlighting persistent barriers to the labour market integration of young people, medium-skilled workers (Annex 12) and older women. In addition, Spain set a target for employing persons with disabilities of 51% by 2030 (a relative increase of 91% over 10 years). The activity rate (for people aged 15-64) was close to the EU average in 2024 (74.6% vs 75.4%), showing that Spain's employment gap is driven by high unemployment rather than low participation. Unemployment decreased in 2024 and is projected to decline further, reaching 11% by 2025 and 10.7% by

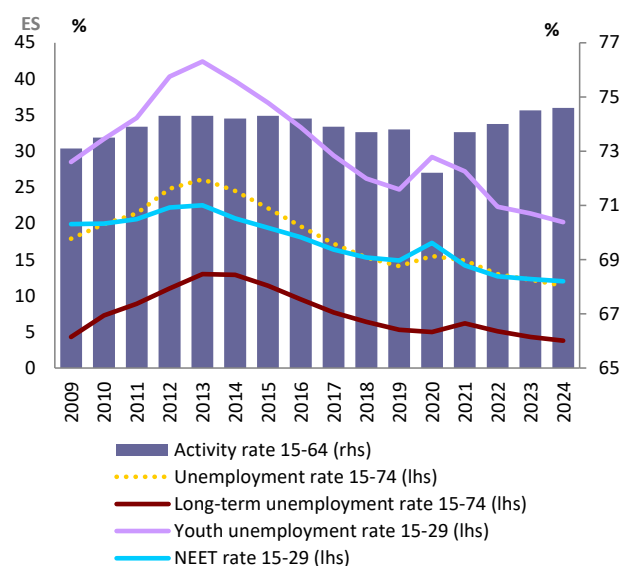
2026 ⁽²⁰⁹⁾. Despite improvements, it is the highest in the EU in 2024, at 11.4%, with long-term unemployment at 3.8%, both double the EU average. However, Spain's share of long-term unemployment within total unemployment aligns with the EU average, indicating no disproportionate concentration compared to other Member States. Unemployment disproportionately affects young people, older workers, and third-country nationals. Although decreasing, labour market slack ⁽²¹⁰⁾ remained among the highest in the EU in 2024 (19.3% vs the EU average of 11.7%), underscoring Spain's high unmet needs for employment and potentially sustaining job precariousness, particularly among vulnerable groups. Regional disparities persist in 2024, although are narrowing, with a gap of 12.7 pps in employment rates between Andalucía (64.1%) and Madrid (76.8%) (aged 20-64) and a gap of 8.9 pps in unemployment rates between Andalucía (16.5%) and Comunidad Foral de Navarra (7.6%) (aged 15-74). Reaching the employment rate target of 76% by 2030 would require an average annual employment growth of 1.1% between 2023 and 2030, far below the 2.3% annual growth recorded between 2013 and 2019.

⁽²⁰⁹⁾ [European Commission Autumn Forecast 2024.](#)

⁽²¹⁰⁾ The labour market slack is the underutilisation of labour resources, including unemployment, underemployment, and those available for work but not actively seeking it.



Graph A10.1: **Key rates: activity, unemployment, long-term unemployment, youth unemployment, NEET**



Source: Eurostat, Labour Force Survey [lfsi_emp_a, une_rt_a, edat_lfse_20, une_ltu_a]

Young people still face considerable challenges in the labour market, but since 2021 Spain has been among the Member States with the strongest relative improvement in most youth employment indicators. In 2024, the youth employment rate (for people aged 15-29) was 38.4%, well below the EU average of 46.8%, reflecting both a lower activity rate (50.5% vs 55.9% in the EU) and higher unemployment. Youth unemployment (15-29) stood at 20.2% in 2024, almost twice the EU average. Regional disparities in youth unemployment are large, ranging from 28.7% in Andalucía to 15.5% in Cataluña. These challenges are caused by structural issues, such as skills mismatches or limited transitions from education to stable, high-quality jobs (Annex 12), which hinder Spain's competitiveness. The share of young people (15-29) neither in employment nor in education and training decreased over the last decade but remained above the EU average (12.3% vs 11.2% in 2024). Within this group, 6.2% are unemployed and 5.8% are inactive, suggesting difficulties in labour market integration. Public employment services have an important role to play in this context. Efforts to address these issues in line with the recovery

and resilience plan (RRP) include the Statute of Trainees, whose pre-draft law aims to regulate compensation, limit the number of trainees per workplace, and enforce compliance through imposing fines. The European Social Fund Plus supports youth employment with more than EUR 1.8 billion in funding, having reached more than 21 000 unemployed people between 2021 and 2024.

Third-country nationals, who play an important role in employment growth, are often exposed to job precariousness. They contributed almost half of the employment growth between Q1-2022 and Q3-2024, primarily in service and sales occupations ⁽²¹¹⁾. However, in 2024, the unemployment rate among third-country nationals (18.4%) was significantly higher than that of native workers (10.3%) and the EU average for that group (12.5%), while female third-country nationals faced even greater disadvantages, with an unemployment rate gap of 9 pps compared to native women. These challenges are linked to third-country nationals being heavily concentrated in more precarious sectors such as domestic work and care services, where non-Spanish nationals represent 68.5% and 50.2% of workers, respectively ⁽²¹²⁾. Specifically, many women migrate from Latin America to Spain responding to the growing demand for workers in the country's care service sector ⁽²¹³⁾ amid comparatively lower public support for families (Annex 11). Similarly, 49.3% of agricultural workers are third-country nationals highlighting their critical contribution to Spain's agrifood industry. However, an estimated 12 000 third-country nationals in this sector, particularly in southern Spain, live in informal settlements without basic services or social protection, enduring harsh working

⁽²¹¹⁾ Funcas, El dato de año 2024.

⁽²¹²⁾ Fedea, Observatorio Trimestral del Mercado Laboral, 2024-T2.

⁽²¹³⁾ Banco de España, Una caracterización de los flujos migratorios hacia España y otros países de la Unión Europea.

conditions ⁽²¹⁴⁾. Labour market discrimination further exacerbates these barriers, limiting access to quality employment and carrying an estimated economic impact of EUR 12 billion annually – around 1% of Spain's GDP in 2022 ⁽²¹⁵⁾. These challenges translate into third-country nationals being more likely to hold fixed-term (23.3%) or part-time (19.3%) contracts than native workers (15.3% and 12.6%, respectively). Looking ahead, demographic forecasts from INE (*Instituto Nacional de Estadística*), AIReF (*Autoridad Independiente de Responsabilidad Fiscal*) and Eurostat project that immigration will remain a significant driver of labour market dynamism in 2025. In response to these trends, the Spanish government has enacted migration reforms outlined in the medium-term fiscal-structural plan to simplify residence and work permits, expand job opportunities, and address labour shortages.

Older workers also encounter significant employment barriers. In 2024, their unemployment rate stood at 10.5%, way above EU average of 4.4%, while long-term unemployment affected over half of these individuals, complicating their re-entry into the workforce due to upskilling and reskilling challenges (Annex 12). Women in this age group face even greater disadvantages, with an employment rate that is 13.5 pps lower than that for men. For example, older women make up most beneficiaries of the unemployment benefit for individuals over 52 ⁽²¹⁶⁾, reflecting differences in access to and incentives for workforce participation. Population ageing has also contributed to reduced employment flows,

including job-to-job transitions ⁽²¹⁷⁾ which are critical for the occupational and sectoral reallocation needed to support Spain's digital and green transitions (Annex 12). To address these challenges, the European Social Fund Plus supported almost 20 000 older workers with training and employment initiatives up to 2024. Under the RRP, the action plan for developing micro-credentials aims to transform universities into lifelong learning institutions, ensure equity of access, and create personalised and flexible training pathways. These actions have the potential to help upskill and reskill older workers.

Demographic trends are reshaping the labour market, creating competitiveness challenges as the workforce ages and the younger population declines. Over the past two decades, the average age of employees has risen significantly, from 37.5 to 43.5 years for employees and from 44 to 48 years for self-employed individuals. Non-Spanish nationals, who are on average 3.4 years younger than Spanish nationals, have helped mitigate some of these demographic pressures ⁽²¹⁸⁾. However, the overall trend reflects broader shifts, including a sharp rise in the old-age dependency ratio, which is projected to grow by 28.2 pps from 30.8% in 2023 to 59% in 2050 (53% according to INE). This increase far exceeds the projected EU average growth of 17.1 pps, underscoring the unique challenges faced by Spain. Given these demographic trends, the lower employment rates among older workers compared to middle-aged workers could pose risks to Spain's competitiveness. Regions such as Castilla y León and Asturias are particularly affected, with nearly 1 in 4 workers over the age of 55 ⁽²¹⁹⁾, illustrating stark regional disparities and challenges as regards rural depopulation (Annex 17). The public sector is among the

⁽²¹⁴⁾ Asociación Pro Derechos Humanos de Andalucía, Las fronteras internas en Andalucía: las vulneraciones de derechos en los asentamientos de Huelva y Almería.

⁽²¹⁵⁾ Ministerio de Inclusión, Seguridad Social y Migraciones, Análisis del impacto económico de la discriminación y la desigualdad entre la población autóctona y la extranjera residente en España.

⁽²¹⁶⁾ SEPE, Prestaciones por desempleo: Resumen de datos.

⁽²¹⁷⁾ Banco de España, The impact of population ageing on Spanish labour market flows.

⁽²¹⁸⁾ Banco de España, Informe Anual 2023, Capítulo 3.

⁽²¹⁹⁾ INE.

sectors most affected, with nearly 30% of employees aged 55 or older ⁽²²⁰⁾. Similarly, self-employment is experiencing a significant demographic shift, with one third of self-employed individuals aged 46-55 and increasing numbers in the 56+ age group ⁽²²¹⁾, raising concerns about the long-term sustainability of private-sector entrepreneurship. To address these challenges, the Just Transition Fund will support some of the regions most affected by aging and depopulation by, among other initiatives, reskilling workers from carbon-intensive industries, creating sustainable jobs. Additional policies are being deployed by the Spanish Government's Just Transition Institute.

Despite some progress, a persistent low level of productivity growth remains a barrier to sustainable wage increases.

Nominal wages are projected to grow by 5.1% in 2024 and 3.1% in 2025 ⁽²²²⁾. Real wages, which fell by 2.5% in 2022 and recovered by 2.1% in 2023, are forecast to grow modestly by 2% in 2024 and by 0.5% in 2025 ⁽²²³⁾. For 2024 and 2025, however, these rates would be among the lowest rates of growth for real wages in the EU. Nonetheless, this recovery in real wages, driven by lower inflation, will fully offset 2022's purchasing power losses. Over the past 15 years, the moderate growth in wages and unit labour costs (ULCs) has supported cost competitiveness, particularly within the euro area, and has likely contributed to rising export market shares and reduced imbalances. ULCs rose by 6.2% in 2023, less than in most EU Member States, but are expected to grow slower in both 2024 (4.0%) and 2025 (2.9%).

⁽²²⁰⁾ INE.

⁽²²¹⁾ Ministerio de Trabajo y Economía Social, Estadística de autónomos.

⁽²²²⁾ For nominal wage growth, pay per employee is considered. For real gross wages, the deflator used is the Harmonised Index of Consumer Prices the Harmonised Index of Consumer Prices (HICP). Data for 2024 and 2025 are based on the European Commission Autumn 2024 economic forecast.

⁽²²³⁾ [European Commission Autumn Forecast 2024.](#)

Structurally low productivity growth continues to constrain wages. Despite some recent increases, Spain's labour productivity growth has lagged behind the EU average since 2017, hindered by skills mismatches, a reliance on low-productivity sectors like hospitality, and high self-employment rates (16.8% in 2023 vs 10.8% in the EU). Most self-employed workers operate without employees, often in trade or lower-skilled roles, limiting their potential contribution to productivity and competitiveness.

Spain has made progress in addressing labour market precariousness through recent reforms, but significant challenges remain.

Under the RRP, the 2021 labour market reform helped reduce the share of fixed-term contracts in the private sector from 21% in 2021 to 12.8% in 2023 ⁽²²⁴⁾. This reform has particularly benefited young people and migrants and has helped reduce job rotation. However, fixed-term employment remains disproportionately high in the public sector, where it is twice as prevalent as in the private sector, particularly in health and education. This has kept Spain's overall share of temporary contracts 3.3 pps above the EU average. High levels of involuntary part-time work (47.4% vs the 18.8% in the EU for 20-64) and a larger share of workers with less than one year of job tenure (16.8% vs 12.4% in the EU) further exacerbate precariousness. Transition rates from temporary to permanent contracts also remain below the EU average (31.0% vs 36.3% in 2023) and decreased a lot in 2024 to 23.8%, highlighting persistent segmentation in the labour market. Social dialogue, with a 91.8% collective bargaining coverage ⁽²²⁵⁾, offers a strong framework for addressing these challenges. However, gaps in small to medium-sized enterprise representation – partly due to the lack of a formal register for employers' organisations and low membership among

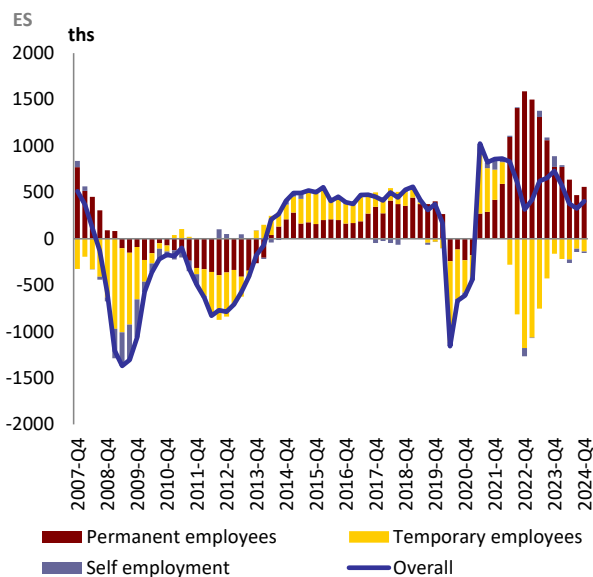
⁽²²⁴⁾ INE.

⁽²²⁵⁾ Ministerio de Trabajo y Economía Social, Estadística de convenios colectivos de trabajo.

smaller businesses – may limit the effectiveness of social dialogue in aligning skills supply with the needs of the labour market.

Spain’s workforce is adapting to the green transition but faces challenges regarding the digital transition. In 2024, energy-intensive industries accounted for 2.6% of total employment (3.5% in the EU), while jobs in environmental goods and services expanded by 46.7% between 2016 and 2022, reaching 2.7% of total employment (3.3% in the EU). Emission intensity per worker fell from 14.7 tonnes in 2015 to 10.4 tonnes in 2023, outperforming the EU average of 12.3 tonnes. This reflects the progress Spain has made in sustainability efforts. However, the digital transformation faces obstacles. ICT specialists made up 4.7% of employment in 2024 (5.0% in the EU) despite a higher share of ICT graduates (5.2% vs 4.5% in 2022), underscoring difficulties in transitioning from training to employment due to skills mismatches (Annex 12).

Graph A10.2: **Employment growth by contract type**



(1) Employment (thousand), total, ages 20-64, year-on-year change based on non-seasonally adjusted data. Self employment is defined as the total of self-employed persons and contributing family workers..

Source: Eurostat, LFS [lfsq_egaps, lfsq_etgaed]

Labour shortages remain low overall but concentrated in key sectors, posing risks to competitiveness. Labour shortages are partly

driven by skills mismatches, particularly in medium-skilled roles, as well as demographic changes and increasing job quality expectations among workers. Over 50% of employers in tourism, agriculture, and construction report significant difficulties in finding workers ⁽²²⁶⁾, even for lower-skilled roles such as waiters, cooks and bricklayers. The agricultural sector faces challenges in recruiting mixed crop and livestock farm labourers, while the industry has difficulties hiring specialised workers such as chemical product plant and machine operators ⁽²²⁷⁾. In addition, the rising demand for healthcare and long-term care services has made it increasingly difficult to fill roles in this sector, e.g. nurses, family and specialist doctors, and occupational therapists (see Annex 14). Although the overall vacancy rate in industry, construction, and services has remained stable at 0.9% since 2022 (2.4% in the EU in 2024), shortages exist in specific sectors, such as public administration (3.4%). In 2022, green and ICT jobs had 52% and 212% more vacancies per worker than average, respectively ⁽²²⁸⁾, highlighting persistent skills shortages and mismatches (Annex 12) that could slow the twin green and digital transitions. Despite high unemployment, labour shortages hinder economic performance, contributing to an estimated GDP loss of 1.3% (2% in the EU) ⁽²²⁹⁾. Regional disparities also exacerbate these challenges, with 3 out of 5 vacancies concentrated in Comunidad de Madrid, Cataluña, Andalucía, and Comunitat Valenciana ⁽²³⁰⁾.

⁽²²⁶⁾ Banco de España, Encuesta a las empresas españolas sobre la evolución de su actividad: cuarto trimestre de 2024.

⁽²²⁷⁾ European Labour Authority, 2025 EURES Report on labour shortages and surpluses.

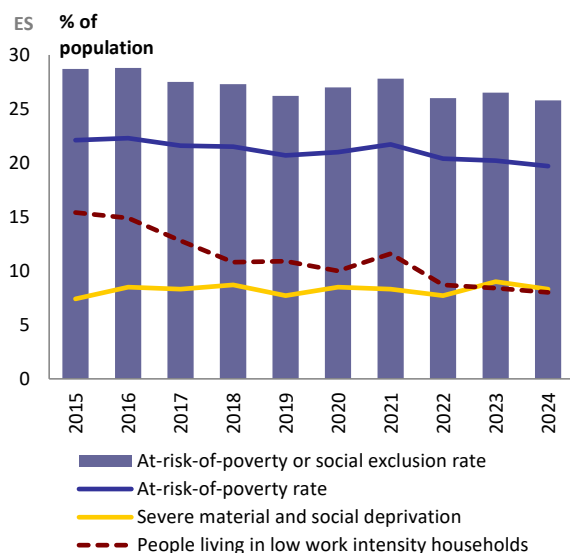
⁽²²⁸⁾ OECD Job Creation and Local Economic Development 2024 – Country Notes: Spain.

⁽²²⁹⁾ PWC, European Private Business Survey.

⁽²³⁰⁾ INE.

Risk of poverty and social exclusion, as well as income inequality, remain critical issues in Spain, with child poverty standing out as one of the most pressing challenges in view of its wider economic and social implications. Despite an economic recovery and strong employment performance, the most vulnerable groups have barely benefited, highlighting social disparities and deepening intergenerational inequality. Vulnerable groups, including children in single-parent households, children with migrant or Roma backgrounds, families with low work intensity and families with more than two children, face heightened risks of poverty and social exclusion. The persistently low effectiveness of social protection, housing affordability issues, energy poverty and restricted access to services exacerbate these challenges. Spain is currently falling behind its 2030 national poverty reduction targets, including for child poverty, highlighting persistent social disparities. Addressing these challenges will contribute to inclusive growth and competitiveness.

Graph A11.1: At-risk-of-poverty or social exclusion rate and its components



Source: Eurostat, EU-SILC [ilc_peps01n, ilc_li02, ilc_mdsc11, ilc_lvh11n]

Poverty remains the most pressing social challenge, disproportionately affecting vulnerable groups. In 2024, the share of the population at risk of poverty or social exclusion (AROE) fell to 25.8% but remained well above

the EU average of 21.0%. Severe material and social deprivation remains high at 8.3%. Certain groups face higher poverty risks, often linked to job market integration challenges. The AROPE rate is more than double the national average for some groups: single parents (50.3% in 2024), parents of more than two children (49.1% in 2024), non-EU nationals (53.4% in 2024). Roma also present high risk-of-poverty rates (AROP) (98% in 2021) ⁽²³¹⁾. The AROPE gap between non-EU-born and those born in Spain was among the widest in the EU in 2024 (27.0 pps vs an average of 20.2 pps for the EU), as was their in-work poverty gap (16.9 pps vs 11.3 pps). Persons with disabilities and young people (15-29) have a high risk of poverty and social exclusion (32.9% and 26.7%), while 13.1% of persons with disabilities are severely materially and socially deprived, compared with 10.4% in the EU. Spain faces significant challenges in meeting its 2030 poverty reduction target of reducing the number of people at risk of poverty or social exclusion by 2.8 million, including 0.7 million children. In 2023, 12.6 million people were at risk of poverty or social exclusion, including 2.8 million children. These figures exceed 2019 levels by 383 000 overall and 197 000 for children, highlighting that more needs to be done to tackle this issue. To address these challenges, the European Social Fund Plus (ESF+) will help mobilise EUR 3.7 billion to promote social inclusion, reaching more than 0.6 million vulnerable people. In December 2024, Spain approved the new National strategy for preventing and fighting poverty and social exclusion 2024-2030., focusing on a minimum basic income, affordable housing and access to early childhood education.

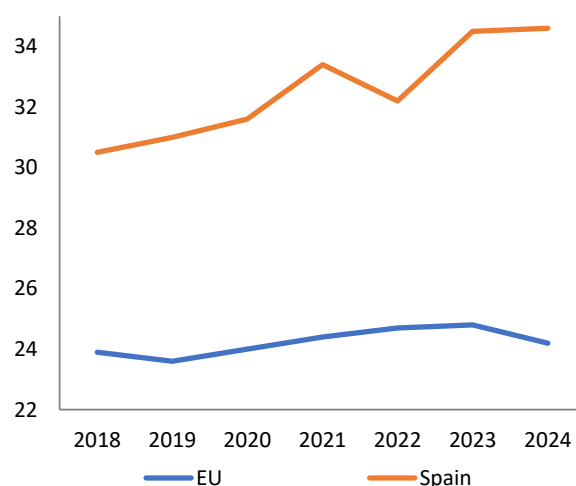
Child poverty continues to worsen, with over one in three children affected and certain groups being more impacted. Following an increase between 2018 and 2021,

⁽²³¹⁾ EU Agency for Fundamental Rights (2021), Roma in 10 European countries. For Roma, this indicator refers to people at risk of poverty (AROP).



the AROPE rate for children decreased by 0.8 pps in 2022 before rising again to 34.6% in 2024. Severe material and social deprivation, while improving, is also still high at 11.2% in 2024. A driver of this is also the severe material and social deprivation rate among children, at 11.2% (vs 7.9% in the EU). The rate of children at risk of poverty (AROP) rose to 29.2%, compared to 19.3% in the EU. Children from parents with migrant backgrounds and Roma children are among the most affected, alongside children in single-parent households and children whose parents have a low or medium level of education. Work intensity plays a significant role: in 2024, 84.1% of children in very low work intensity households were at risk of poverty, compared to 9.9% in those with very high work intensity. Other main factors relate to the low efficiency of social benefits and to significant regional disparities, driven by uneven social protection coverage, disparities in access to essential services, coordination gaps between national and regional benefits, and urban-rural differences in service availability, with child AROP rates ranging from 16.8% in Cantabria to 49.3% in Melilla⁽²³²⁾. To mitigate the impact of child poverty, Spain is implementing the European Child Guarantee as part of its 2022 action plan, supported by the ESF+. The 2024 implementation report shows progress, e.g. with actions taken in inclusive education. Yet gaps remain to be filled, in particular as regards school meals and housing, to ensure children in poverty can benefit from equal opportunities and stop the costly intergenerational transmission of disadvantages, which hinders skills acquisition and job market integration.

Graph A11.2: Children at risk of poverty or social exclusion



Source: Eurostat, EU-SILC [ilc_pecs01]

Further efforts are needed to reduce income inequality. In 2024, the income quintile share ratio (S80/S20) decreased to 5.39 (4.66 in the EU), indicating that the top 20% of earners received 5.39 times the income of the bottom 20%. While this represents a slight improvement, it remains among the highest in the EU. The impact of taxes and social benefits on income inequalities is limited (see Annex 2), reducing Spain's S80/S20 ratio by 39%, compared to 48% in the EU⁽²³³⁾.

Increases in the minimum wage have improved social outcomes, but in-work poverty remains high. In 2023, real gross disposable household income surpassed pre-financial crisis levels (2008) for the first time, although growth has been among the slowest in the EU, widening the income gap with the EU average (see Annex 10). Between January 2022 and January 2025, the statutory minimum wage grew by 22.6% in nominal terms (8.8% in real terms), likely reaching the reference values set by the Minimum Wage Directive (50% of the gross average wage and 60% of the gross median wage). Simulations suggest these increases contributed to reducing poverty and income inequality, benefiting low-income households, young people, women and those

⁽²³²⁾ Evidence based on a study by the European Commission Joint Research Centre, using the EUROMOD model.

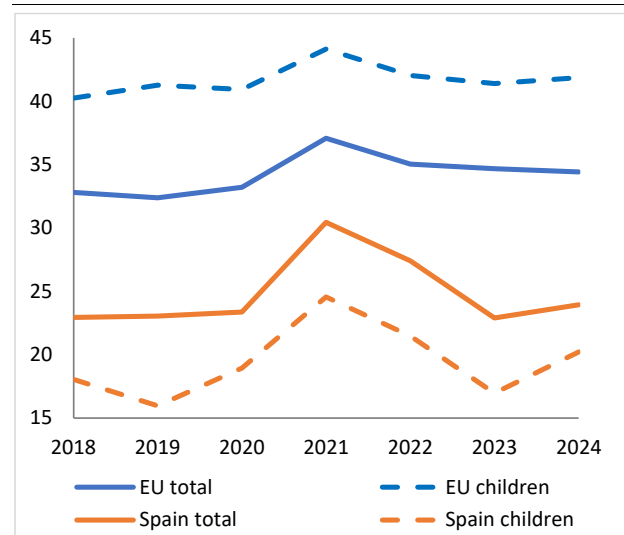
⁽²³³⁾ European Commission, *Economic inequalities in EU, 2024*.

in lower-paying jobs⁽²³⁴⁾. The percentage of workers earning the minimum wage jumped from 5.1% in 2018 to 11.5% in 2023, with projections of 12.7% for 2024⁽²³⁵⁾, reflecting increased wage compression. Nevertheless, the in-work poverty rate remains 3 pps above the EU average at 11.2%, disproportionately affecting temporary workers (13.2%) and non-EU nationals (29.7%), who are overrepresented in low-paid roles.

Despite ongoing efforts, gaps in social protection remain for some types of workers and the unemployed. Material and social deprivation rates were notably higher among part-time workers (24.5% vs 12.1% in the EU) and temporary employees (20.4% vs 15.5% in the EU), reflecting job market segmentation and the prevalence of precarious work conditions. Self-employed workers also face high AROPE rates, a significant challenge given Spain's high self-employment rate (Annex 10). To address this, the recovery and resilience plan includes a gradual transition to a new social security contribution system for the self-employed, based on real income. This reform aims to align their treatment with that of employees and improve social security coverage, although its impact will require close monitoring. Unemployment protection has also been strengthened, reflecting efforts to improve its scope and impact. However, many individuals in precarious or informal employment remain ineligible, leaving them without support. The adequacy of benefits also remains a concern. Under the recovery and resilience plan, Spain reformed the non-contributory unemployment benefit system to simplify its structure, improve adequacy and extend coverage. A key new feature is allowing benefits to be compatible with work, facilitating job market reintegration. Other improvements include restoring the 60% calculation rate for

contributory unemployment benefits and expanding access to domestic workers, artists and workers with a fixed discontinuous contract.

Graph A11.3: **Impact of social benefits on poverty reduction**



Source: Eurostat, EU-SILC [ilc_li10, ilc_li02]

The effectiveness of social protection policies is limited, particularly in poverty reduction, and coverage remains low. In 2024, the impact of social benefits (excluding pensions) on poverty reduction was one of the lowest in the EU (23.9% vs a 34.4% EU average). The gap was even wider for children, where the impact was 20.2%, less than half the EU average of 41.9%. Spain allocated a quarter of its GDP to social protection in 2023, slightly below the EU average of 26.8%. However, spending is heavily skewed toward old-age benefits (41.2%) and sickness/healthcare benefits (29.4%), while areas like family and child support (5.5%), social inclusion (2.0%), and housing (0.5%) receive minimal funding, raising concerns about adequacy in addressing critical needs. Spain's social benefit expenditure per inhabitant (EUR 7 732 in 2023) was also below the EU average (EUR 10 222 in 2023). The disparity is particularly pronounced in spending on family and child benefits, where Spain's per capita investment was only half the EU average (EUR 428 vs EUR 878), underscoring significant gaps in support for children and families. Coverage remains low, with only

⁽²³⁴⁾ Evidence based on a study by the European Commission Joint Research Centre, using the EUROMOD model.

⁽²³⁵⁾ Banco de España, Informe Anual 2023, Capítulo 3.

68.9% of eligible individuals receiving benefits in 2023, compared to 83.5% in the EU, the fifth lowest in the EU. To address these gaps, Spain's 2024-2030 national deinstitutionalisation strategy aims to improve care services and empower vulnerable groups and persons with disabilities. By prioritising person-centred care, expanding community-based services and improving working conditions for care staff, it seeks to strengthen social protection and improve the accessibility and quality of support for those most in need.

The implementation of the minimum income scheme is advancing but still faces significant challenges, notably low take-up rates. Since its launch in June 2020, the national minimum income scheme (*ingreso mínimo vital*) has supported 943 620 households and 2 805 670 individuals⁽²³⁶⁾. By December 2024, 472 604 households had benefited from the child support supplement (*complemento de ayuda a la infancia*), with an average monthly amount of EUR 69.72 per child and EUR 129.75 per household with children. Despite substantial progress, the 2024 minimum income report of the Independent Authority for Fiscal Responsibility (AIReF) highlighted substantial bureaucratic barriers that hinder accessibility, particularly for vulnerable groups like homeless individuals⁽²³⁷⁾. As of December 2023, 56% of eligible households had not applied, leaving only 36% of potential beneficiaries covered. 5% of non-take-up stems from households already receiving regional minimum income benefits, as most regions have not aligned their schemes with the minimum income scheme. Administrative inefficiencies remain a critical issue, as 65% of households under the minimum income scheme in 2023 had their benefit amounts reviewed, with some required to repay a part of it due to updated income information and the need to recalculate income amounts. The child support supplement faces

similar challenges, with only 19% of eligible households receiving it by December 2023. 73% of potentially eligible households had not applied, underscoring significant non-take-up across both schemes. The minimum income scheme guarantees income levels of only 30%-40% of the median income, well below the EU poverty threshold of 60%, underscoring its insufficient adequacy⁽²³⁸⁾.

Spain is addressing minimum income challenges through targeted support, system reforms and regional management.

To address non-take-up of the minimum income, the government is implementing the integral accessibility plan, focused on streamlining processes, improving clarity and proximity, and ensuring transparency. Recent reforms allow for a fast transition from non-contributory unemployment benefits to the IMV,. Moreover, amendments in the IMV law allow regions to manage the national minimum income benefit to increase take-up and improve coordination with other social benefits. País Vasco and Navarra now handle the national minimum income recognition, modification and compliance, while the central government retains financial oversight to ensure consistency nationwide. Catalonia will assume the management as well in 2026. This could improve complementarity between national and regional schemes but also risks widening regional disparities due to varying administrative capacities (see Annex 6). To support vulnerable populations affected by the floods in eastern Spain, the government introduced targeted measures linked to the minimum income, including a 15% supplement for beneficiaries in affected areas and a 30% increase to the child support supplement. Minimum income applications for sudden

⁽²³⁶⁾ [La Moncloa](#), December 2024.

⁽²³⁷⁾ [AIReF, 3rd opinion - Ingreso mínimo vital](#). July 2024.

⁽²³⁸⁾ [AIReF, 2nd opinion - Ingreso mínimo vital](#). June 2023; and Noguera, J. A., Prada, À. G. de la, & Álvarez, E. (2024), [La garantía de ingresos como derecho de ciudadanía. El impacto del ingreso mínimo vital y su articulación con las rentas mínimas autonómicas: Una estimación](#). Future Policy Lab - Oxfam Intermon.

poverty were expedited and the minimum income scheme helpline was reinforced.

House prices have increased significantly over the last decade, rising almost 50% in nominal terms since 2015. House price growth was more moderate in 2023 (+4.0% after 7.4% in 2022) in the context of higher interest rates and reduced mortgage lending, with the number of house transactions falling by 12.5% in 2023. House prices picked up somewhat in 2024 (+8.3% year-on-year in Q3-2024) and were estimated to be overvalued by 10%. The number of building permits continued to increase in 2023 and 2024, signalling that supply is rising and could contribute to some moderation in the growth of house prices going forward.

Overall housing affordability has deteriorated over the last decade amid low new housing supply. Since 2015, house prices have grown more rapidly than household incomes and the standardised house price-to-income ratio has increased by 11%. At the same time, it stands slightly below its long-term average. While the borrowing capacity of households improved over the last decade, the foreclosures and evictions remained more pressing issue than in other EU countries. While the rental market is rather small, the ratio of new rents to incomes increased over the last decade in city centres and, to an even greater degree, outside city centres. The availability of social rental housing is rather low. The ratio of dwellings per capita has decreased by 4% since 2015, reflecting a broadly stagnant number of dwellings amid growing population. Despite a mild increase over the past years, the number of house completions per capita remains among the lowest in the EU. Residential building permits have increased over the past years and returned to pre-pandemic levels. The government Housing Plan (2022-2025) provides public funding for affordable and social housing production.

The lack of affordable housing is a growing challenge, aggravating social issues such as

homelessness, young people being unable to move out of the family home and evictions. In 2024, the national housing cost overburden rate stood at 7.8%, slightly below the EU average of 8.2%, but with notable disparities: 4.9% in rural areas and 8.4% in cities. The burden is specially severe for those at risk of poverty, with 29.9% struggling with housing costs, compared to just 2.4% of those not at risk of poverty, further deepening social challenges. An estimated 28 552 individuals are homeless, equivalent to 71.3 people per 100 000 inhabitants⁽²³⁹⁾, of which 77% are men and 23% are women. 21.1% are under 29 years of age⁽²⁴⁰⁾. Immigrants make up a disproportionate number of the homeless population⁽²⁴¹⁾. Spain's social housing stock is among the lowest in Europe (3.3% vs 8% EU average), leaving an estimated 4.5 million people in housing exclusion⁽²⁴²⁾. The 2023-2030 national strategy to combat homelessness (*Estrategia Nacional de Personas Sin Hogar 2023-2030*) is the country's strategic framework to prevent and tackle homelessness, prioritising those who are sleeping rough. The growing housing affordability issues are also highlighted in the low number of young people leaving the family home, with only 14.8% of young people (aged 16-34) moving into their own place in 2024⁽²⁴³⁾. In response to these challenges, the government introduced safeguards against evictions for tenants and a

⁽²³⁹⁾ [INE](#), 2022.

⁽²⁴⁰⁾ <https://www.feantsa.org/public/user/epoch/National-Strategies/Homelessness-Strategy-Spain-Original2024.pdf>.

⁽²⁴¹⁾ <https://www.feantsa.org/public/user/epoch/National-Strategies/Homelessness-Strategy-Spain-Original2024.pdf>.

⁽²⁴²⁾ Provivienda, "Observatorio de Vivienda," available at <https://provivienda.org/observatorio/>, and "Causes of the Problem: Housing Stock," available at <https://provivienda.org/observatorio/causas-del-problema/parque-de-vivienda/>.

⁽²⁴³⁾ Consejo de la Juventud de España & Gobierno de España. (2024). [Observatorio de Emancipación: 1.er semestre 2024](#). Resumen ejecutivo.

State-backed rental guarantee scheme for landlords.

Energy poverty is an issue, with significant disparities between vulnerable and non-vulnerable households. In 2024, 17.5% of households were unable to keep their homes adequately warm, nearly double the EU average (9.2%), marking a sharp rise from 7.5% in 2019. The challenge is particularly acute for those at risk of poverty, with 31.4% unable to afford adequate heating compared to 14.2% of non-AROP households. To address these challenges, the Spanish government has extended protections, including energy-cost subsidies, for vulnerable consumers. Additionally, public transport support measures remain in place, indirectly easing energy consumption costs for vulnerable groups.

Spain's competitiveness is hampered by challenges in people transitioning from education to work, which are linked to low basic skills, skills mismatches and limited adult learning. The country's education and training system faces difficulties in adapting to the rapid changes brought by the green and digital transitions. Schools often fail to adequately equip young people with the basic skills that lay the foundations for skills development. Leaving school earlier and low educational attainment impede upskilling opportunities later in life and employment prospects. Higher education and vocational education and training (VET) often fail to align with labour market needs, particularly in the growing green and digital sectors. Adult participation in learning has seen modest improvements but remains low. Structural barriers further hinder Spain's competitiveness, including the limited impact of active labour market policies and the difficulty of small and medium-sized enterprises (SMEs) in identifying learning needs and providing training.

Participation in early childhood education and care continues to expand. In 2023, 97.7% of children aged three and over attended early childhood education and care (ECEC), well above the EU average of 94.6% and above the EU target of 96%. Participation in formal ECEC of children under three in 2023 (55.8%) was also far above both the EU average (37.5%) and the national Barcelona target for 2030 (50.9%). However, significant differences in ECEC participation exist between children at risk of poverty or social exclusion (AROPE) and the others (44% of children below three AROPE vs 61.5% of children not AROPE in ECEC in 2023), although these differences have declined significantly compared to 2016. There are also major differences in participation at regional level, although it has narrowed significantly in the last 5 years. The Recovery and Resilience Facility (RRF) has made EUR 671 million in funding available for the creation of 60 000 affordable public ECEC places by the end of 2025 (with priority for children aged 1-2 years in areas with higher poverty or social exclusion

risks and in rural areas). Funding of the programme will continue through the European Social Fund Plus (ESF+) to ensure free participation in ECEC for children from disadvantaged backgrounds.

High student underachievement in mathematics and a low share of top performers may pose a risk to future productivity and competitiveness. According to the 2022 OECD Programme for International Student Assessment (PISA) ⁽²⁴⁴⁾, the share of underachieving 15-year-old students in Spain in all three domains (mathematics: 27.3%; reading: 24.4%; and science: 21.3%) was below the EU averages (29.5%, 26.2% and 24.2% respectively) and still far from the EU-level target (<15%). At the same time, the share of top-performing students has not improved since 2012 and has continued to lag behind the EU average, raising concerns about the country's ability to foster high-skilled talent, especially for innovation.

Regional differences in achieving basic skills are significant. In the PISA 2022 test only one region (Cantabria) has shown a moderate increase in scores for all three fields in the last decade. By contrast, some of the best performing regions in mathematics (Basque Country, Catalonia and Navarre) showed a significant decrease (over 20 points) compared to PISA 2012⁽²⁴⁵⁾. Evidence shows the importance of targeted policies to mitigate territorial inequalities in education quality and effective equal opportunities throughout the country⁽²⁴⁶⁾. The gap in student performance based on socio-economic and/or migrant background, although still significant, remains below the EU average.

Early school leaving remains a challenge, with persistent regional and gender disparities. While the rate of early leavers from education and training has declined

⁽²⁴⁴⁾ OECD, 2023; MEFPD, 2023.

⁽²⁴⁵⁾ INEE, 2023.

⁽²⁴⁶⁾ López Rupérez & García García, 2023.

significantly in the past decade, at 13% in 2024, it remains well above the EU average of 9.3%. with a significant gender gap at 5.8 pps in favour of women. Regional disparities in early school leaving rates have also diminished but persist, with only 2 out of 19 regions below or close to the EU average: 7 regions are close or below the national average, and the remaining 9 regions score between around 15% to 26%.

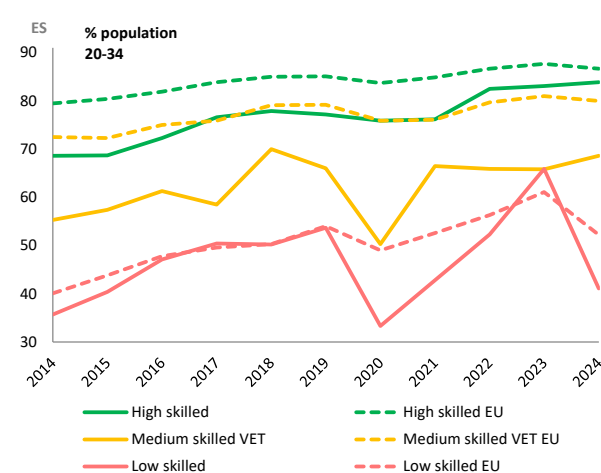
Several measures are being implemented to improve educational outcomes. Supported by the RRF, Spain adopted an education law emphasising a more competence-based approach to learning. This was reflected in the curricula reform for primary and secondary education, which was fully implemented in 2024. The RRF also supports the programme for orientation, progress and educational enrichment (PROA+) and the creation of vulnerable student support, guidance and psychoeducational service units. Both initiatives aim to reduce the number of early school leavers and improve educational outcomes. Strengthening guidance and orientation of students to align learning paths with individual preferences, learning capabilities and future working prospects is essential, not only for students' future well-being, but also for Spain's competitiveness.

An ageing teacher workforce and a lack of job stability are challenges for the teaching profession. In 2022, the proportion of teachers (ISCED 1-3) aged 55 and over was below the EU average (20.6% vs 24.8%). However, national data show that the share of older teachers is higher in secondary education and VET than in primary education and even higher in higher education. In addition, a significant number of teachers have temporary contracts (21.1% of all teachers, ranging from 5.5% to 41.1% at regional level in 2024-2025⁽²⁴⁷⁾) (see Annex 10). The government aims to reduce the share of interim teachers to 8% by the end of 2025. Meanwhile, entry requirements to the teaching

profession, unchanged for more than 40 years, are being reviewed to strengthen recruitment and retention.

Spain's VET system continues to face challenges in aligning with labour market needs despite recent reforms. VET enrolments grew by 33.1% over the five years leading up to 2022/2023. However, upper-secondary VET enrolment remained lower than the EU average (39.1% vs 49.1%), and participation in dual VET was just 4.9%⁽²⁴⁸⁾. While 90.8% of recent VET graduates participated in work-based learning in 2024, employment rates remained low compared to the EU average (see below). To improve labour market relevance, all intermediate and advanced VET programmes transitioned to a dual model by September 2024. Getting SMEs involved and addressing the shortage of qualified teachers remain key challenges. VET enrolment is concentrated in healthcare, ICT and administration, while critical sectors for the green and digital transitions (e.g. energy, electronics) need to be reinforced (see Annex 10).

Graph A12.1: Employment rate of recent graduates not in education and training by educational attainment



Source: Eurostat

⁽²⁴⁷⁾ [Informe-curso-2024-2025-1726135620.pdf](#)

⁽²⁴⁸⁾ Ministry of Education, Vocational Training and Sports, Educabase.

Recent medium-skilled VET graduates face the greatest challenges in securing employment.

Misalignments between labour market needs and educational outcomes may help explain why the Spanish employment rate for recent graduates (aged 20-34) not in education and training was only 79.0% in 2024, 3.4 pps below the EU average. Recent medium-skilled graduates face particularly poor employment rates, at just 68.6%, well below the EU average of 80%. Closing these gaps and making the Spanish economy more competitive requires closer alignment between VET curricula and labour market needs as well as the networking of small and medium-sized enterprises and entities for the rotation of trainees during in-company periods to complement learning outcomes and facilitate the transfer of knowledge and new practices between small and medium-sized enterprises. To support these efforts, the ESF+ will invest over EUR 300 million to expand VET places, foster collaboration with SMEs and strengthen outreach to students and companies. In addition, VET reforms set out in the country's recovery and resilience plan (RRP), such as training in sustainable and energy-related skills or creating new centres of excellence, are expected to improve the quality of courses and teaching, strengthen links with labour market needs and expand the number of VET places.

Spain has already met the EU objective of 45% of the population having a university degree.

Tertiary educational attainment is steadily increasing. In 2024, the rate among people aged 25-34 grew further, reaching 52.6% (0.6 pps more than in 2023), much higher than the EU average (44.2%) and the EU target (45%). Nevertheless, significant regional disparities remain in tertiary educational attainment rates (ranging from 41.6% to 67.8%). Differences are also significant by birthplace and by level of urbanisation. Compared with 2016, the share of students enrolled in higher education in science, technology, engineering and mathematics (STEM) fields remained stable in 2022 at around 24.5% and below the EU average of

27.1%, while the share of ICT students (6.3%) was higher than the EU average (5.2%). Pupils enrolled in medium-level VET in STEM fields was 28.3% for Spain in 2023 (36.2% EU wide). The rate of STEM graduates among those aged 20-29 was the same as the EU average in 2022 (23 graduates per 1 000 inhabitants), and the share of ICT graduates among all graduates was above the EU average (5.2% vs 4.5% in 2022). Spain is broadening the scope of scholarships to allow more students from middle-class families and students with special educational needs access tertiary studies. Under the RRP, the reform of the university system includes, among other measures, performance-based funding schemes that consider the job insertion rates of their graduates. This will incentivise universities to offer degrees more relevant to the labour market and societal needs.

Skills mismatches and polarisation hinder Spain's labour market efficiency.

Skills mismatches decreased by 0.3 pps in 2024 but remain high (22.6%) and above the EU average (19.2%)⁽²⁴⁹⁾. This reflects significant skills polarisation in the country, with 42.0% of adults (25-64) holding tertiary qualifications (vs 36.1% in the EU), 35.1% having low qualifications (vs 19.6% in the EU), and just 22.9% having intermediate qualifications – the lowest in the EU (44.3%). By contrast, 80% of Spanish SMEs have difficulties in finding workers with the right skills⁽²⁵⁰⁾, particularly with vocational training⁽²⁵¹⁾. Overqualification affects 35.0% of workers, one of the highest rates in the EU (21.4%), particularly among young men⁽²⁵²⁾. Workers born outside the EU face even greater challenges, with over half of them being overqualified compared to one third of natives. Overqualification is most prevalent in hospitality (83.2%) and agriculture (73.9%) but

⁽²⁴⁹⁾ The macroeconomic skills mismatch indicator measures the dispersion of employment rates across skill groups (proxied by qualification levels, ISCED 0-2 low; 3-4 medium and 5-7 high).

⁽²⁵⁰⁾ Eurobarometer 529.

⁽²⁵¹⁾ Eurobarometer 537.

⁽²⁵²⁾ OECD, Survey of Adults Skills 2023: Spain.

much lower in education (6.2%) and ICT (7.3%). Given the growing number of tertiary graduates, overqualification risks may grow if labour market alignment does not improve. Providing better information to families and guidance in secondary schools could help reduce overqualification ⁽²⁵³⁾.

Tackling the skills gaps is critical for Spain's green and digital transitions. In 2024, only 13.5 of employees in energy-intensive industries participated in education or training in the preceding four weeks, even though 59% of Spanish people feel unprepared to support the green transition due to inadequate skills ⁽²⁵⁴⁾. Low-skilled workers in emission-intensive roles, who are often older and with longer tenures, face significant challenges transitioning to greener jobs due to difficulties in reskilling ⁽²⁵⁵⁾. Skills gaps also remain significant in the digital sector despite Spain's high digital competencies. In 2023, 75.3% of the working-age population (25-64) and 66.2% of the overall adult population had at least a basic level of digital skills, while 38.7% had an above-basic level of skills – well above EU averages. The share is higher among young people (16-19) at 81.2%, also well above the EU average (66.5%), suggesting a strong foundation for future ICT graduates. However, these strengths have not fully led to professional expertise as evidenced by the low number of ICT specialists (Annex 10) and the low share of businesses providing ICT training (21.2% vs 22.3% in the EU in 2024). The RRP is expected to play a crucial role in closing these gaps through investments in skills development, including in the green and digital transitions. The ESF+ also contributes EUR 67 million under the Strategic Technologies for Europe Platform (STEP), including investments in VET specialisation courses focused on green and digital skills.

Participation in adult learning has improved modestly but still suffers from structural barriers, undermining the country's competitiveness. In 2022, 34.1% of adults (25-64) participated in learning activities, up 3.7 pps from 2016 but still short of the EU average (39.5%) and far from Spain's 2030 target of 60%. The Programme for the International Assessment of Adult Competencies (PIAAC) from 2023 reveals persistently low literacy and numeracy levels among adults, with one third of adults showing low proficiency. Men, older individuals and low-skilled adults participate less in learning, with participation decreasing by age and skills level, deepening disparities in opportunities. Systemic challenges, including the prevalence of SMEs in the country (see Annex 3), limit training access and opportunities. The coverage of active labour market policies remains low relative to the unemployment rate, both in programme participation and expenditure ⁽²⁵⁶⁾, limiting their impact. Spain is working to improve the evaluation of public employment services (PES) policies, but findings indicate that PES training is insufficiently targeted at low-skilled individuals and more effective when combined with other services. In 2022, 60% of unemployed workers only received initial assessments ⁽²⁵⁷⁾. Half of company training credits went unused in 2022 ⁽²⁵⁸⁾, with most training focusing on safety and administrative tasks rather than digital and green skills ⁽²⁵⁹⁾. Smaller firms reported fewer training needs and provided less training, often citing reliance on skilled hires or heavy workloads. Policy initiatives, such as the planned individual learning account (ILA) scheme, aim to make training more flexible and accessible. ESF+ funding will mobilise over EUR 115 million to support lifelong learning,

⁽²⁵³⁾ Ballestar de las Heras and Sainz González (2023).

⁽²⁵⁴⁾ Special Eurobarometer 527.

⁽²⁵⁵⁾ OECD, Employment Outlook 2024 - Country Notes: Spain.

⁽²⁵⁶⁾ Banco de España, Informe Anual 2023, Capítulo 3.

⁽²⁵⁷⁾ SEPE, Evaluación *ex post* PAPE 2022.

⁽²⁵⁸⁾ Fundae, Formación para el empleo, Balance de situación 2023.

⁽²⁵⁹⁾ Fundae, Evaluación del papel de las entidades externas en la calidad de la formación programada por las empresas.

helping to close skills gaps and boost competitiveness and productivity growth.

ANNEX 13: SOCIAL SCOREBOARD

Table A13.1: Social Scoreboard for Spain

Social Scoreboard for Spain						
Equal opportunities and access to the labour market	Adult participation in learning (during the last 12 months, excl. guided on the job training, % of the population aged 25-64, 2022)					34,1
	Early leavers from education and training (% of the population aged 18-24, 2024)					13,0
	Share of individuals who have basic or above basic overall digital skills (% of the population aged 16-74, 2023)					66,2
	Young people not in employment, education or training (% of the population aged 15-29, 2024)					12,0
	Gender employment gap (percentage points, population aged 20-64, 2024)					9,8
	Income quintile ratio (S80/S20, 2024)					5,39
Dynamic labour markets and fair working conditions	Employment rate (% of the population aged 20-64, 2024)					71,4
	Unemployment rate (% of the active population aged 15-74, 2024)					11,4
	Long term unemployment (% of the active population aged 15-74, 2024)					3,8
	Gross disposable household income (GDHI) per capita growth (index, 2008=100, 2023)					101,1
Social protection and inclusion	At risk of poverty or social exclusion (AROPE) rate (% of the total population, 2024)					25,8
	At risk of poverty or social exclusion (AROPE) rate for children (% of the population aged 0-17, 2024)					34,6
	Impact of social transfers (other than pensions) on poverty reduction (% reduction of AROP, 2024)					23,9
	Disability employment gap (percentage points, population aged 20-64, 2024)					23,4
	Housing cost overburden (% of the total population, 2024)					7,8
	Children aged less than 3 years in formal childcare (% of the under 3-years-old population, 2024)					55,0
	Self-reported unmet need for medical care (% of the population aged 16+, 2024)					1,8
Critical situation	To watch	Weak but improving	Good but to monitor	On average	Better than average	Best performers

(1) Update of 5 May 2025. Members States are categorised based on the Social Scoreboard according to a methodology agreed with the EMCO and SPC Committees. Please consult the Annex of the Joint Employment Report 2025 for details on the methodology (<https://employment-social-affairs.ec.europa.eu/joint-employment-report-2025-0>).

Source: Eurostat

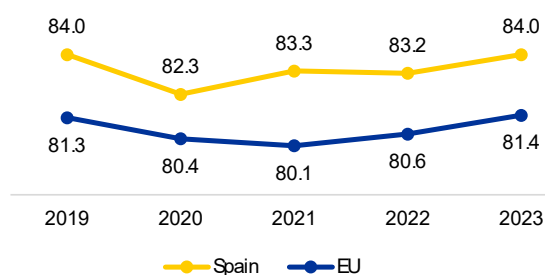


ANNEX 14: HEALTH AND HEALTH SYSTEMS

Spain's health system performs comparatively well. However, it faces challenges that need be addressed to further improve the health of its population and social fairness, while boosting the competitiveness of its economy. Territorial disparities in the allocation of budgetary resources for health, and the availability of healthcare workers - especially for primary care, remain key challenges. Efficiency gains may increase budgetary space and contribute to closing the existing gaps in access to healthcare and improve the long-term resilience of the health system.

Spain achieves relatively good health outcomes. Life expectancy at birth rebounded to its pre-COVID-19 level and was among the highest in the EU in 2023. While women can expect to live 5.5 years longer than men, they live 1.1 year less in good health than men. Treatable mortality, constantly improving in the last decade, is one of the lowest in the EU, suggesting that the health system is effective.

Graph A14.1: Life expectancy at birth, years



Source: Eurostat (demo_mlexpec)

Despite a low level of spending, health outcomes in Spain are good, yet there are gaps in access to healthcare, with room for efficiency gains. The share of total public spending on healthcare and health spending per capita, were below the EU average in 2022. An uneven distribution of healthcare resources between regions and growing waiting times in primary care present challenges to access to healthcare. The implementation of the reform of primary care included under the Spanish recovery and resilience plan (RRP) would

benefit from further investment. Investment in primary care under the RRP is limited to EUR 230 million, for digitalisation. The number of hospital beds per capita is among the lowest in the EU, with substantial regional disparities. Investments under the Spanish RRP of EUR 2.4 billion (1.5% of the RRP's total value) contribute to capital formation, with a sizeable allocation to renew and expand hospital equipment, which should in turn reduce disparities in access to services. Complementary investments worth more than EUR 1.6 billion under the cohesion policy funds for 2021-2027 focus mainly on health infrastructure, equipment and e-health. The coverage of mental healthcare, rehabilitation services, and dental and eye care requires further improvement, which will be partially addressed by the reform to expand health coverage included in the RRP.

Healthcare costs are projected to increase significantly over the next decades as demographic changes place increasing pressure on public finances (see Annex 1). Benefits from existing resources can be maximised through efficiency gains. This will require stronger governance mechanisms, such as increasing the role of economic evaluation in funding and pricing decisions and setting objectives for the rational use of medicines, especially in the hospital sector. Addressing uneven rises in spending on pharmaceuticals across regions and unwarranted variations between regions in the cost of medical procedures and prescriptions, also provides scope for efficiency gains. It remains to be seen to what extent the reform to improve the rational use of medicines in the RRP will contribute to addressing these challenges.

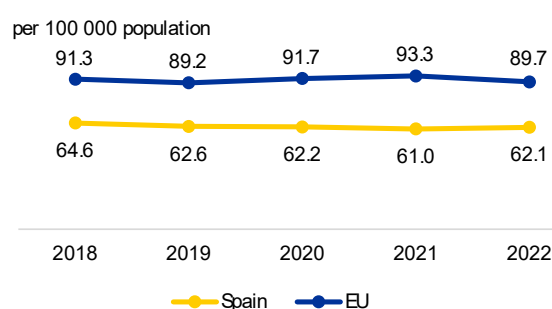
Table A14.1: Key health indicators

	2019	2020	2021	2022	2023	EU average* (latest year)
Cancer mortality per 100 000 population	218.3	214.5	213.3	212.9	n.a.	234.7 (2022)
Mortality due to circulatory diseases per 100 000 population	214.5	217.8	213.0	213.9	n.a.	336.4 (2022)
Current expenditure on health, purchasing power standards, per capita	2 504	2 561	2 724	2 814	n.a.	3 684.6 (2022)
Public share of health expenditure, % of current health expenditure	70.5	73.2	73.7	74.0	n.a.	81.3 (2022)
Spending on prevention, % of current health expenditure	2.1	3.0	3.6	3.8	n.a.	5.5 (2022)
Available hospital beds per 100 000 population**	259	261	260	258	n.a.	444 (2022)
Doctors per 1 000 population*	4.4	4.6	4.5	4.3	n.a.	4.2 (2022)*
Nurses per 1 000 population*	5.9	6.1	6.3	6.1	n.a.	7.6 (2022)*
Mortality at working age (20-64 years), % of total mortality	13.5	12.6	13.5	13.0	13.2	14.3 (2023)
Number of patents (pharma / biotech / medical technology)	159	146	123	86	147	29 (2023)***
Total consumption of antibacterials for systemic use, daily defined dose per 1 000 inhabitants****	24.9	19.7	20.0	23.2	24.1	20.0 (2023)

*The EU average is weighted for all indicators except for doctors and nurses per 1 000 population, for which the EU simple average is used based on 2022 (or latest 2021) data except for Luxembourg (2017). Doctors' density data refer to practising doctors in all countries except Greece, Portugal (licensed to practise) and Slovakia (professionally active). Density of nurses: data refer to practising nurses (EU recognised qualification) in most countries except France and Slovakia (professionally active) and Greece (hospital only). **Available hospital beds' covers somatic care, not psychiatric care. ***The EU median is used for patents.

Source: Eurostat database; European Patent Office; ****European Centre for Disease Prevention and Control (ECDC) for 2023.

Graph A14.2: Treatable mortality



Age-standardised death rate (mortality that could be avoided through optimal quality healthcare)

Source: Eurostat (hlth_cd_apr)

Stepping up disease prevention efforts can also benefit efficiency. In 2022, the share of spending on prevention in Spain accounted for 3.8% of total spending on health, much lower than the EU average of 5.5%. Mortality from cardiovascular diseases and cancer is relatively low. Nevertheless, addressing lifestyle risk factors, especially high alcohol consumption among people aged 15 and over, high smoking/vaping rates, low levels of physical activity and growing rates of overweight, require more effort ⁽²⁶⁰⁾. The public health strategy, adopted under the Spanish RRP,

entrusted a national network of public health surveillance bodies with developing evidence-based cross-sectoral policies to reduce the prevalence of both communicable and non-communicable diseases, and to address occupational and environmental health issues. Other strategic efforts include the 2024-2027 plan for smoking prevention and control and the 2022-2026 national strategy for mental health, which emphasises staff shortages as a main bottleneck in access to mental healthcare. Another public health measure is to rationalise the use of antimicrobials. In 2023, the consumption of antibiotics in Spain was well above the EU average, despite the national target ⁽²⁶¹⁾ to reduce total consumption by 27% between 2019 and 2030. Spain participates in the EU4Health-funded joint action on antimicrobial resistance.

Shortages of health staff limit the availability of care, especially in primary care. For several years, the density of nurses in Spain (6.2 per 1 000 population in 2021) has been below the EU average of 7.6 per 1 000. The density of doctors is only slightly above the EU average. The health workforce is unequally

⁽²⁶⁰⁾ OECD/European Commission (2024), [Health at a Glance: Europe 2024 - State of Health in the EU Cycle](#), Chapter 4.

⁽²⁶¹⁾ National target set by the Council Recommendation on stepping up EU actions to combat antimicrobial resistance in a 'one health' approach, [2023/C 220/01](#).

distributed across the country and there are problems in filling vacancies in rural areas, particularly for primary care physicians. In 2020, the number of primary care physicians ranged from 0.6 to 1.1 per 1 000 population while the number of primary care nurses ranged from 0.5 to 0.9 depending on the region. The number of specialist doctors varied from 1.5 to 2.6 per 1 000 population, and the number of specialist nurses ranged from 3.0 to 6.9.

Despite the ageing workforce, with in particular 60% of general practitioners aged 50 and over, the number of doctor and nursing graduates per 100 000 population is among the lowest in the EU. The latest projection⁽²⁶²⁾ ordered by the government shows that long-term needs for physicians are set to increase by 9% by 2035, with the specialisations with the biggest potential shortfalls being family medicine, anaesthesiology, geriatrics, psychiatry and radiology.

Working conditions remain far from ideal, with a high use of temporary contracts (41.9% of all health workers in 2020, up from 28.5% in 2012) (see Annex 10). The reform included in the RRP aims for a fairer distribution of professionals across regions, and improved career prospects and working conditions. The impact of Royal Decree-Law 12/2022, part of this reform, which included measures to reduce the use of temporary contracts, has yet to be assessed.

The Spanish health system has the potential to drive innovation and foster industrial development in the EU medical sector. Spain reports among the highest levels of public spending on health research and development in the EU. In 2023, 147 European patents were granted to patentees with Spanish residency in the combined areas of pharmaceuticals, biotechnologies and medical devices (vs an EU-level median of 39) ⁽²⁶³⁾. Spain is among the EU countries with the highest number of clinical

trials reported ⁽²⁶⁴⁾. The Spanish RRP includes investments to support innovations and research and development in the health sector, complemented by investments under several cohesion policy regional programmes.

Spain is among the EU countries with the highest uptake of e-health and overall health system digitalisation, including data storage and sharing. For instance, in 2022, the share of people accessing their personal health records online was above the EU average (40% vs 27.7%). The digital health strategy, adopted in 2021, created a framework for the digitalisation of healthcare, including related investments under the RRP and the cohesion policy. These investments focus on: (i) increasing the digital capacity of health institutions at all levels; (ii) improving the interoperability of systems; (iii) data management; and (iv) accelerating telemedicine. The introduction of the 'Insurance ID card' in Spain led to the implementation of the 'patient summary' and the electronic e-prescription programmes, allowing the exchange of clinical and pharmaceutical information across regions and national borders. Spain participates in the EU4Health joint action on the European Health Data Space and benefits from a grant supporting secondary use of data in healthcare.

⁽²⁶²⁾ source: Ministry of Health

⁽²⁶³⁾ European Patent Office, [Data to download | epo.org](https://data.epo.org).

⁽²⁶⁴⁾ EMA (2024), [Monitoring the European clinical trials environment](#), p. 9.

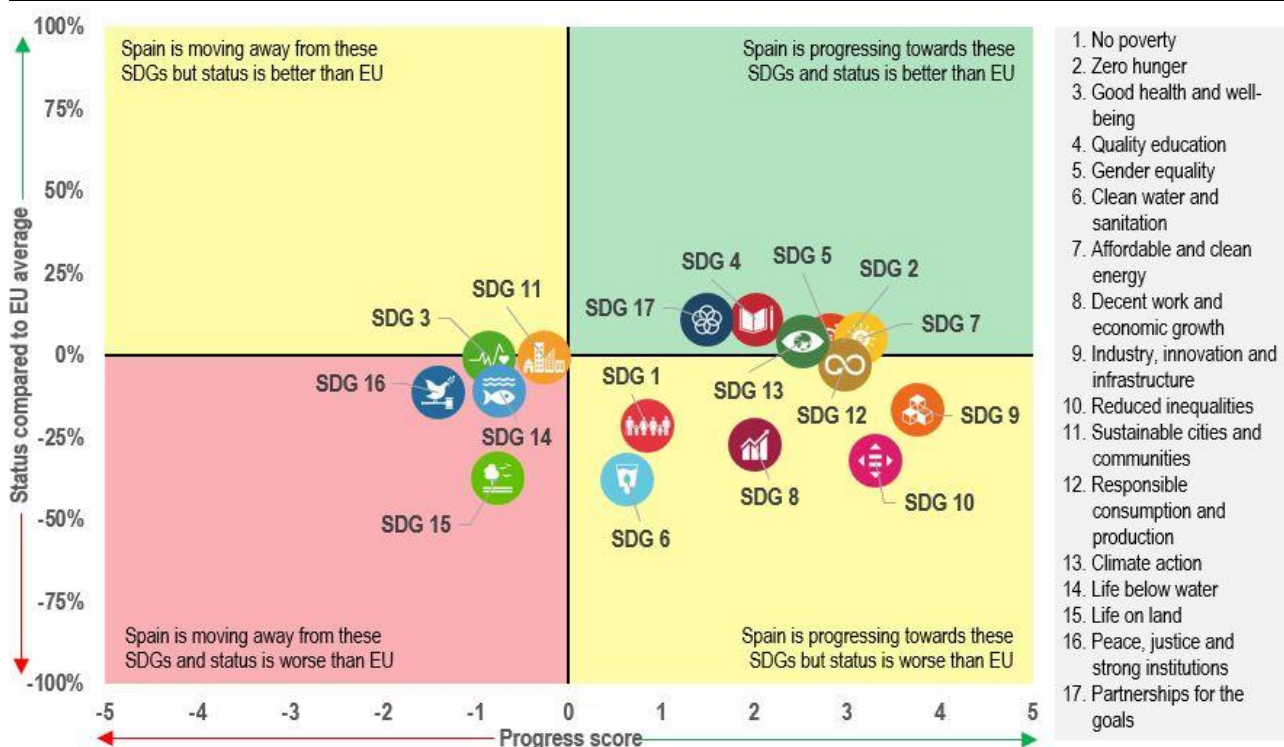


This Annex assesses Spain's progress on the Sustainable Development Goals (SDGs) along the dimensions of competitiveness, sustainability, social fairness and macroeconomic stability. The 17 SDGs and their related indicators provide a policy framework under the UN's 2030 Agenda for Sustainable Development. The aim is to end all forms of poverty, fight inequalities and tackle climate change and the environmental crisis, while ensuring that no one is left behind. The EU and its Member States are committed to this historic global framework agreement and to playing an active role in maximising progress on the SDGs. The graph below is based on the EU SDG indicator set developed to monitor progress on the SDGs in the EU.

competitiveness (SDGs 4, 8, 9) but still needs to catch up with the EU average in some of them (SDGs 8 and 9). It has a high share of households with a high-speed internet connection (SDG 9; 96.3% of households in 2023; EU average: 78.8%). In addition, the percentage of adults with at least basic digital skills (SDG 4; 66.2% in 2023) is above the EU average of 55.6%. Despite some improvements in the productivity indicators, Spain ranks below the EU average on most of them. On SDG 8 (Decent work and economic growth), the percentage of young people not in employment, education or training aged 15-29 remains high (12% in 2024) and is above the EU average (11% in 2023). In addition, the Spanish research and innovation system suffers from underinvestment, as shown by gross domestic expenditure on R&D (SDG 9; 1.49% of GDP in

Spain is improving on all SDGs on

Graph A15.1: Progress towards the SDGs in Spain



For detailed datasets on the various SDGs, see the annual Eurostat report '[Sustainable development in the European Union](#)'; for details on extensive country-specific data on the short-term progress of Member States: [Key findings – Sustainable development indicators – Eurostat \(europa.eu\)](#). A high status does not mean that a country is close to reaching a specific SDG, but signals that it is doing better than the EU on average. The progress score is an absolute measure based on the indicator trends over the past five years. The calculation does not take into account any target values, as most EU policy targets are only valid for the aggregate EU level. Depending on data availability for each goal, not all 17 SDGs are shown for each country.

Source: Eurostat, latest update of 28 April 2025. Data refer mainly to the period 2018-2023 or 2019-2024. Data on SDGs may vary across the report and its annexes due to different cut-off dates.

2023 against an EU average of 2.24%) and R&D personnel (1.19% of the active population in 2023; EU average: 1.56%, see Annexes 8 and 11). The Spanish recovery and resilience plan (RRP) includes significant reforms and investments to boost innovation and digital skills; these are complemented by Cohesion Fund investments (see Annex 10).

Spain is making progress in most indicators related to sustainability (SDGs 2, 7, 9, 12, 13, 14) but is also moving away from its targets on some of them (SDGs 6, 11, 15). Spain needs to catch up with the EU average on many of these (SDGs 2, 6, 9, 11, 13, 14, 15). Spain has made some progress on energy indicators, including the share of renewable energy in gross final energy consumption (SDG 7; from 17% in 2018 to 24.9% in 2023, slightly above the EU average of 24.6%). On SDG 6 (Clean water and sanitation), Spain is moving away from the goal. It would be beneficial for Spain to catch up with the EU average, for which the water exploitation index is half of Spain's. Water stress and scarcity also contribute to a deteriorating SDG 15 (Life on land) where Spain is moving away from the targets too. The drought impact on ecosystems increased by 1 600% between 2018 and 2023 and the share of the area at risk of severe soil erosion by water is 40% larger than the EU average. Spain's RRP includes measures to address some of the water-related challenges, such as hydrological planning, complemented by Cohesion Funds improving water supply.

While Spain is improving on most SDGs related to social fairness (SDGs 1, 4, 5, 7, 8, 10), is also moving away from the targets in one of them (SDG 3), and it still below the EU average on some of them (SDGs 1, 8, 10). Spain has improved on several fairness-related indicators such as people at risk of poverty or social exclusion (SDG 1; 26.5% in 2023 vs 27.3% in 2018), the in-work at-risk-of-poverty rate (SDG 1; 11.3% in 2023 vs 12.9% in 2018), the long-term unemployment rate (SDG 8; 3.8% in 2024 vs 5.3% in 2019), and early leavers from education and training (SDG 4; 13 % in 2024, vs

17.3 % in 2019). However, it is still performing worse than the EU average on all these indicators, and challenges persist on poverty reduction, social exclusion, long-term unemployment and early school leaving (see Annexes 8, 9 and 10). The Spanish RRP and Cohesion Funds include measures to address challenges in all these areas. On the negative side, the share of the Spanish population unable to keep their homes adequately warm increased from 9.1% in 2018 to 20.8% in 2023 and is nearly twice as high as the EU average of 10.6% (SDG 7). The severe housing deprivation rate (SDG 1) increased, from 1.5% in 2015 to 2.9% in 2023, which indicates poorer living conditions. This adds to more acute housing affordability challenges for the most vulnerable, including young people, low-income households and families with children. The Spanish RRP contains investments and reforms to increase social and affordable energy-efficient housing; these are complemented by Cohesion Fund investments.

Spain is improving on SDG indicators 8 (Decent work and economic growth) and 17 (Partnerships for the goals) related to macroeconomic stability. However, it is still below the EU average and is moving away from its targets on SDG 16 (Peace, justice and strong institutions). Spain's real GDP per capita has been recovering after the pandemic (SDG 8; EUR 27 740 in 2024 vs EUR 26 930 in 2019) but remains below the EU average of EUR 29 280. Spain has a lower investment share of GDP (SDG 8) than the EU average (19.7% of GDP vs 22.4% for the EU in 2023). Spain faces challenges in particular on the sustainability of public finances. The Spanish RRP includes several measures on taxation and the effectiveness of public spending. These are expected to improve the sustainability of public finances and support substantial additional investments, which will increase the investment share of GDP. On SDG 16, in 2024, 37% of the Spanish population perceived the independence of the justice system as 'very good' and 'fairly good', compared to an EU average of 52% in 2024.

As the SDGs form an overarching framework, any links to relevant SDGs are either explained or depicted with icons in the other annexes.



Spain faces structural challenges in a wide range of policy areas, as identified in the country-specific recommendations (CSRs) addressed to the country as part of the European Semester. They refer, among other things, to improving the business environment, increasing judicial efficiency, accelerating the deployment of renewable energy and energy-efficient solutions, investing in energy storage, electricity transmission and distribution, energy-efficiency, enhancing water and waste management and addressing the lack of affordable housing and skills shortages and mismatches.

The Commission has assessed the 2019-2024 CSRs considering the policy action taken by Spain to date and the commitments in its recovery and resilience plan (RRP). At this stage, Spain has made at least 'some progress' on 84% of the CSRs ⁽²⁶⁵⁾, and 'limited progress' on 13% (Table A16.2).

EU funding instruments provide considerable resources to Spain by supporting investments and structural reforms to increase competitiveness, environmental sustainability and social fairness, while helping to address challenges identified in the CSRs. In addition to the EUR 163 billion funding from the Recovery and Resilience Facility (RRF) in 2021-2026, EU cohesion policy funds ⁽²⁶⁶⁾ are providing EUR 35.6 billion to Spain (amounting to EUR 51.6 billion with national co-financing) for 2021-2027 ⁽²⁶⁷⁾ to boost regional competitiveness and growth. Support from these instruments combined represents around

13.25% of 2024 GDP ⁽²⁶⁸⁾. The contribution of these instruments to different policy objectives is outlined in Graphs A16.1 and A16.2. This substantial support comes on top of financing provided to Spain under the 2014-2020 multiannual financial framework, which financed projects until 2023 and has had significant benefits for the Spanish economy and society. Project selection under the 2021-2027 cohesion policy programmes has accelerated, while significant volumes of investment are yet to be mobilised.

The Spanish RRP contains 397 investments and 197 reforms to stimulate sustainable growth and help the transition towards a low-carbon, digital and more resilient and inclusive economy. A year before the end of the RRF timespan, implementation is well on its way with 30% of the funds disbursed. Spain has fulfilled 30 % of the milestones and targets in its RRP ⁽²⁶⁹⁾. Increased efforts are needed to ensure completion of all RRP measures by 31 August 2026. Strengthen coordination among different levels of administration, along with streamlining procedures, can help to accelerate fund absorption and implementation pace.

Spain also receives funding from several other EU instruments, including those listed in table A16.1. Most notably, the common agricultural policy (CAP) provides Spain with an EU contribution of EUR 31.5 billion ⁽²⁷⁰⁾ under the CAP strategic plan for 2023-2027. A further EUR 1 billion is available under the Asylum, Migration and Integration Fund (AMIF), together with the border management and visa instrument (BMVI) and internal security funds. Furthermore, operations amounting to EUR 4.3

⁽²⁶⁵⁾ 3% of the 2019-2024 CSRs have been fully implemented, 16% substantially implemented, and some progress has been made on 65%.

⁽²⁶⁶⁾ In 2021-2027, cohesion policy funds include the European Regional Development Fund, the European Social Fund Plus and the Just Transition Fund. The information on cohesion policy included in this annex is based on adopted programmes with the cut-off date of 5 May 2025.

⁽²⁶⁷⁾ European territorial cooperation (ETC) programmes are excluded from the figure.

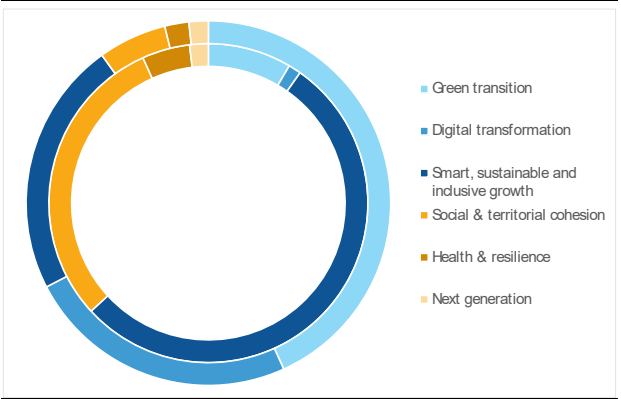
⁽²⁶⁸⁾ RRF funding includes both grants and loans, where applicable. GDP figures are based on Eurostat data for 2024.

⁽²⁶⁹⁾ As of mid-May 2025, Spain has submitted 5 payment requests, the last one being under assessment.

⁽²⁷⁰⁾ An overview of Spain's formally approved strategy to implement the EU's common agricultural policy nationally can be found at: https://agriculture.ec.europa.eu/cap-my-country/cap-strategic-plans/spain_en

billion ⁽²⁷¹⁾ have been signed under the InvestEU instrument backed by the EU guarantee, improving access to financing for riskier operations in Spain.

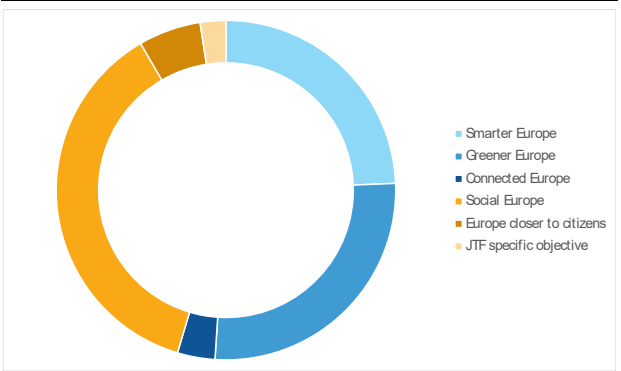
Graph A16.1: **Distribution of RRF funding in Spain by policy field**



(1) Each RRP measure helps achieve the aims of two of the six policy pillars of the RRF. The primary contribution is shown in the outer circle, while the secondary contribution is shown in the inner circle. Each circle represents 100% of the RRF funds. Therefore, the total contribution to all pillars displayed on this chart amounts to 200% of the RRF funds allocated.

Source: European Commission

Graph A16.2: **Distribution of cohesion policy funding across policy objectives in Spain**



Source: European Commission

Cohesion policy funds aim to increase the productivity and competitiveness of Spain’s firms and improve the business environment. In 2021-2027, the European Regional Development Fund (ERDF) is boosting the digitalisation of the economy, improving the business environment, with a focus on

public administration, by supporting ICT solutions and e-services introducing innovative tools. The ERDF and the Just Transition Fund (JTF) will support business development and innovation, providing support to over 100 000 businesses and improving R&D infrastructure for over 43 000 researchers. Spain is also making significant use of the Strategic Technologies for Europe Platform (STEP) to strengthen the competitiveness of its regions. Spain has thus far allocated over EUR 500 million of cohesion policy funding to STEP priorities covering digital technologies and deep tech, clean and resource efficient technologies and biotechnologies. The JTF supports the diversification of the economy in regions most affected by the closure of coal mines and coal-fired powerplants, mitigating the effect on the regional economy and labour market. The European Social Fund+ (ESF+) also supports the twin transitions, increasing Spain’s competitiveness and productivity. In particular, it allocates over EUR 650 million to promoting digital skills and jobs and EUR 700 million to green skills and jobs. It supports action to align labour skills with market needs, such as digital training, skills accreditation and lifelong learning programmes, reaching nearly 280 000 people, mostly with lower education levels. More than 125 000 participants have benefited from improvements to education and training systems, including the expansion of dual vocational and education and training and enhanced teacher training programmes.

Other funds are contributing to competitiveness in Spain, for instance through open calls. The Connecting Europe Facility has financed strategic investments for instance in rail infrastructure, in the deployment of alternative fuel infrastructure for a greener road transport and the modernisation of both Spain’s maritime and inland waterways transport networks; energy market integration, decarbonisation of the energy system and security of energy supply, and in particular electricity interconnectivity; as well as the deployment of submarine cables to enhance the connectivity between the Canary

⁽²⁷¹⁾Data reflect the situation on 31.12.2024.

Islands, and advanced the deployment of 5G in smart communities. Horizon Europe has supported research and innovation, from scientific breakthroughs to scaling up innovations with Climate, Energy and Mobility and Digital, Industry and Space as top priorities in Spain. The Technical Support Instrument (TSI) supported Spain with the application of Artificial Intelligence solutions for the advanced management of the road network, the development of gender mainstreaming and distributional impact assessment methodologies, and the evaluation and monitoring of the impact of the new Startup Law.

Spain's RRP also contains ambitious measures to improve the business environment and competitiveness. As part of the measures covered by payment requests submitted over the past year, Spain committed to providing a favourable business environment through reforms benefiting small and medium-sized enterprises and innovative firms. This involved the adoption of (i) the Law on Business Creation and Growth and (ii) the Start-Ups Law. In the field of research, development and innovation, Spain has invested in improving the research, development and innovation system by strengthening research infrastructure, knowledge generation, knowledge transfer and public-private partnerships.

EU funds are playing a significant role in promoting environmental sustainability and green transition in Spain during the current seven-year EU budget (multiannual financial framework). The ERDF will invest over EUR 250 million in new or improved systems to enhance monitoring, warning, preparedness and response in relation to natural disasters. This includes reinforcing the firefighting fleet to prevent and contain forest fires. Around 6 million people will benefit from new or upgraded capacity for waste-water treatment and ERDF support is promoting nature-based water management solutions, such as the

restoration of river areas. The ERDF supports renewable energy generation in Spain, particularly in high-potential regions such as Canarias and the JTF supports the regions previously engaged in coal-mining or coal-based power production in the green transformation. The CAP strategic plan allocates 49% of its rural development budget (EUR 2 674 million) to environmental and climate objectives, and 23% of its direct payments budget (EUR 5 552 million) to eco-schemes. These funds focus on carbon sequestration, biodiversity support and measures to combat soil erosion, with measures such as rotation, organic farming, sustainable management of pastures, protection of birds by limiting the use of fertilisers and pesticides, use of cover crops, creation of landscape features, minimum tillage and direct showing. Spain also uses nearly EUR 819 million of its rural development funding to promote afforestation, agroforestry, fire prevention and restoration and adaptation of forests.

Spain's RRP, including the REPowerEU chapter, has a comprehensive set of reforms and investments for the green transition. Measures covered by the payment requests submitted over the last year include improving energy efficiency in buildings through renovation and reforms to funding for smooth building renovation. In terms of energy transition for a sustainable economy, Spain has delivered on significant reforms focusing on green budgeting, waste management, forestry and investment in restoring coastline. Approval has been given for strategic projects focusing on electric and connected vehicles, the agrifood sector, naval industry, the semiconductors/chip sector and the decarbonisation of industry, while EUR 1.2 billion has been allocated to projects transforming industry.

Promoting fairness, social cohesion and improving access to basic services are among the key priorities of EU funding in Spain. For example, the ERDF and JTF will fund

new and modernised education facilities with classroom capacity for over 260 000 pupils. Planned ERDF investments in healthcare facilities are expected to benefit 15 million people a year. This figure includes 243 000 people a year in the outermost region of Canarias, which faces specific healthcare access challenges due to its remoteness and where the ERDF is being used to modernise and increase the capacity of 17 healthcare facilities, as part of a concerted effort to improve access to different basic services. Spain dedicates 32% of the ESF+ allocation (EUR 3.6 billion) to social inclusion and almost 11% (EUR 1.2 billion) to combating child poverty, promoting social fairness. More than 504 000 people have already benefited from social inclusion measures, including integrated employment pathways, training programmes, and initiatives targeting vulnerable groups. More than 800 000 children are expected to receive ESF+ support through measures like educational support, free early childhood education, and socio-educational programmes for vulnerable children, contributing to the 2030 child poverty reduction target. In addition, the AMIF supports asylum measures, from reception to legal assistance, as well as integration measures, including language training, civic orientation courses, exchanges with host society, information and other support services. Special asylum actions were adopted for children and people with special needs, as well as special integration measures for vulnerable people.

Spain's RRP contains several reforms and investments related to fairness and social policies. Measures covered by the payment requests submitted over the last year include a legislative reform to simplify and make hiring incentives more effective. In this context, Spain has adopted legislation to simplify and improve non-contributory unemployment assistance by addressing the previous system fragmentation, enhancing coverage, improving design and including previously excluded

groups. The TSI has further supported Spain with the assessment of innovative formulas for the compatibility of unemployment benefits with work-based learning and income. Spain is also tackling issues related to housing through the adoption of legislative measures, such as the Housing Law. In the area of health, Spanish authorities have benefitted from the TSI to ensure the adequate and successful implementation of the EU Health Technology Assessment Regulation. Finally, on the child protection front, Spain received support to strengthen child-friendly justice among Barnahus-type services in Spanish regions.

Table A16.1: **Selected EU funds with adopted allocations - summary data (million EUR)**

Instrument/policy	Allocation 2021-2026		Disbursed since 2021 (1)
RRF grants (including the RepowerEU allocation)	79 854.2		47 962.5
RRF loans	83 160		340.0
Instrument/policy	Allocation 2014-2020 (2)	Allocation 2021-2027	Disbursed since 2021 (3) (covering total payments to the Member State on commitments originating from both 2014-2020 and 2021-2027 programming periods)
Cohesion policy (total)	42 074.4	35 561.9	31 900.9
European Regional Development Fund (ERDF)	29 099.3	23 397.4	20 767.0
European Social Fund (ESF, ESF+) and the Youth Employment Initiative (YEI)	15 759.6	11 295.7	10 864.5
Just Transition Fund (JTF)		868.7	269.3
Fisheries			
European Maritime, Fisheries and Aquaculture Fund (EMFAF) and the European Maritime and Fisheries Fund (EMFF)	1 057.1	1 120.4	684.9
Migration and home affairs			
Migration, border management and internal security - AMIF, BVM and ISF (4)	759.4	1 021.0	443.9
The common agricultural policy under the CAP strategic plan (5)	Allocation 2023-2027		Disbursements under the CAP Strategic Plan (6)
Total under the CAP strategic plan	31 509.4		9 685.9
European Agricultural Guarantee Fund (EAGF)	26 106.3		9 081.7
European Fund for Agricultural Development (EAFRD)	5 403.1		604.2

(1) The cut-off date for data on disbursements under the RRF is 31 May 2025.

(2) Cohesion policy 2014-2020 allocations include REACT-EU appropriations committed in 2021-2022.

(3) These amounts relate only to disbursements made from 2021 onwards and do not include payments made to the Member State before 2021. Hence the figures do not comprise the totality of payments corresponding to the 2014-2020 allocation. The cut-off date for data on disbursements under EMFAF and EMFF is 29 April 2025. The cut-off date for data on disbursements under cohesion policy funds, AMIF, BMVI and ISF is 5 May 2025.

(4) AMIF - Asylum, Migration and Integration Fund; BMVI - Border Management and Visa Instrument; ISF - Internal Security Fund.

(5) Expenditure outside the CAP strategic plan is not included.

(6) The cut-off date for data on EAFRD disbursements is 5 May 2025. The information on EAGF disbursements is based on the Member State declarations until March 2025. Disbursements for the Direct Payments (EAGF) started in 2024.

Source: European Commission

Table A16.2: Summary table on 2019-2024 CSRs

Spain	Assessment in May 2025	Relevant SDGs
2019 CSR 1	Some progress	
Ensure that the nominal growth rate of net primary government expenditure does not exceed 0.9 % in 2020, corresponding to an annual structural adjustment of 0.65 % of GDP.	No longer relevant	SDG 8, 16
Take measures to strengthen the fiscal [framework]	Some progress	SDG 8, 16
and public procurement frameworks at all levels of government.	Some progress	SDG 9
Preserve the sustainability of the pension system.	Substantial progress	SDG 8
Use windfall gains to accelerate the reduction of the general government debt ratio.	No longer relevant	SDG 8, 16
2019 CSR 2	Some progress	
Ensure that employment services have the capacity to provide effective support	Some progress	SDG 8
and ensure that social services have the capacity to provide effective support.	Some progress	SDG 1, 2, 10
Foster transitions towards open-ended contracts,	Substantial progress	SDG 8
including by simplifying the system of hiring incentives.	Some progress	SDG 8
Improve support for families,	Some progress	SDG 1, 2, 10
reduce fragmentation of national unemployment assistance	Substantial progress	SDG 1, 2, 10
and address coverage gaps in regional minimum income schemes.	Substantial progress	SDG 1, 2, 10
Reduce early school leaving	Some progress	SDG 4
and improve educational outcomes, taking into account regional disparities.	Some progress	SDG 4, 10, 11
Increase cooperation between education and businesses with a view to improving the provision of labour market relevant skills and qualifications,	Some progress	SDG 4, 8, 9
in particular for information and communication technologies.	Some progress	SDG 4, 9
2019 CSR 3	Some progress	
Focus investment-related economic policy on fostering innovation,	Some progress	SDG 9, 10, 11
resource efficiency	Some progress	SDG 6, 10, 11, 12, 15
and energy efficiency,	Some progress	SDG 7, 10, 11
upgrading rail freight infrastructure	Some progress	SDG 10, 11
and extending electricity interconnections with the rest of the Union, taking into account regional disparities.	Limited progress	SDG 7, 9, 10, 11, 13
Enhance the effectiveness of policies supporting research and innovation.	Some progress	SDG 9
2019 CSR 4	Some progress	
Further the implementation of the Law on Market Unity by ensuring that, at all levels of government, rules governing access to and exercise of economic activities, in particular for services, are in line with the principles of that Law	Some progress	SDG 9
and by improving cooperation between administrations.	Some progress	SDG 9
2020 CSR 1	Some progress	
Take all necessary measures, in line with the general escape clause of the Stability and Growth Pact, to effectively address the COVID-19 pandemic, sustain the economy and support the ensuing recovery. When economic conditions allow, pursue fiscal policies aimed at achieving prudent medium-term fiscal positions and ensuring debt sustainability, while enhancing investment.	No longer relevant	SDG 8, 16
Strengthen the health system's resilience and capacity, as regards health workers, critical medical products and infrastructure.	Some progress	SDG 3
2020 CSR 2	Some progress	
Support employment through arrangements to preserve jobs,	Substantial progress	SDG 8
effective hiring incentives and	Some progress	SDG 8
skills development.	Some progress	SDG 4
Reinforce unemployment protection, in particular for atypical workers.	Substantial progress	SDG 1, 2, 10
Improve coverage and adequacy of minimum income schemes and	Some progress	SDG 1, 2, 10
family support, as well as	Some progress	SDG 1, 2, 10
access to digital learning.	Some progress	SDG 4
2020 CSR 3	Some progress	
Ensure the effective implementation of measures to provide liquidity to SMEs and the self-employed, including by avoiding late payments.	Substantial progress	SDG 8, 9
Front-load mature public investment projects and	Some progress	SDG 8, 16
promote private investment to foster the economic recovery.	Some progress	SDG 8, 9
Focus investment on the green and digital transition, in particular on fostering research and innovation,	Some progress	SDG 9
clean and efficient production and use of energy, energy infrastructure,	Some progress	SDG 7, 9, 13
water and waste management and	Some progress	SDG 6, 12, 15
sustainable transport.	Some progress	SDG 11

(Continued on the next page)

Table (continued)

2020 CSR 4	Some progress	
Improve coordination between different levels of government and	Limited progress	SDG 16
strengthen the public procurement framework to support recovery in an efficient manner.	Some progress	SDG 9
2021 CSR 1	No longer relevant	
In 2022, use the Recovery and Resilience Facility to finance additional investment in support of the recovery while pursuing a prudent fiscal policy. Preserve nationally financed investment.	No longer relevant	SDG 8, 16
When economic conditions allow, pursue a fiscal policy aimed at achieving prudent medium-term fiscal positions and ensuring fiscal sustainability in the medium term.	No longer relevant	SDG 8, 16
At the same time, enhance investment to boost growth potential. Pay particular attention to the composition of public finances, on both the revenue and expenditure sides of the budget, and to the quality of budgetary measures in order to ensure a sustainable and inclusive recovery. Prioritise sustainable and growth-enhancing investment, in particular investment supporting the green and digital transition.	No longer relevant	SDG 8, 16
Give priority to fiscal structural reforms that will help provide financing for public policy priorities and contribute to the long-term sustainability of public finances, including, where relevant, by strengthening the coverage, adequacy and sustainability of health and social protection systems for all.	No longer relevant	SDG 8, 16
2022 CSR 1	No longer relevant	
In 2023, ensure prudent fiscal policy, in particular by limiting the growth of nationally financed primary current expenditure below medium-term potential output growth, taking into account continued temporary and targeted support to households and firms most vulnerable to energy price hikes and to people fleeing Ukraine. Stand ready to adjust current spending to the evolving situation.	No longer relevant	SDG 8, 16
Expand public investment for the green and digital transitions, and for energy security taking into account the REPowerEU initiative, including by making use of the Recovery and Resilience Facility and other Union funds.	No longer relevant	SDG 8, 16
For the period beyond 2023, pursue a fiscal policy aimed at achieving prudent medium-term fiscal positions and ensuring credible and gradual debt reduction and fiscal sustainability in the medium term through gradual consolidation, investment and reforms.	No longer relevant	SDG 8, 16
2022 CSR 2		
Proceed with the implementation of its recovery and resilience plan, in line with the milestones and targets included in the Council Implementing Decision of 13 July 2021.	RRP implementation is monitored by assessing RRP payment requests and analysing reports published twice a year on the achievement of the milestones and targets. These are to be reflected in the country reports.	
Submit the 2021-2027 cohesion policy programming documents with a view to finalising the negotiations with the Commission and subsequently starting their implementation.	Progress on the cohesion policy programming documents is monitored under the EU cohesion policy.	
2022 CSR 3	Some progress	
Increase recycling rates to meet Union targets and promote the circular economy by enhancing coordination among all levels of government and undertaking further investment to meet separate collection of waste and recycling obligations, as well as to enhance water reuse.	Some progress	SDG 6, 10, 11, 12, 15
2022 CSR 4	Some progress	
Reduce overall reliance on fossil fuels.	Some progress	SDG 7, 9, 13
Accelerate the deployment of renewable energy, with a focus on decentralised installations and self-consumption, including by further streamlining permitting procedures and improving access to the grid.	Substantial progress	SDG 7, 8, 9, 13
Support complementary investment in storage, network infrastructure, electrification of buildings	Some progress	SDG 7, 9, 13
and transport.	Limited progress	SDG 7
and renewable hydrogen.	Some progress	SDG 11
Expand energy interconnection capacity.	Substantial progress	SDG 7, 9, 13
Increase the availability of energy-efficient social and affordable housing, including through renovation.	Limited progress	SDG 7, 9, 13
	Some progress	SDG 1, 2, 7, 10

(Continued on the next page)

Table (continued)

2023 CSR 1	Some progress	
Wind down the emergency energy support measures in force, using the related savings to reduce the government deficit, as soon as possible in 2023 and 2024. Should renewed energy price increases necessitate new or continued support measures, ensure that such support measures are targeted at protecting vulnerable households and firms, are fiscally affordable and preserve incentives for energy savings.	Substantial progress	SDG 8, 16
Ensure prudent fiscal policy, in particular by limiting the nominal increase in nationally financed net primary expenditure in 2024 to not more than 2,6 %.	No progress	SDG 8, 16
Preserve nationally financed public investment and ensure the effective absorption of grants under the Facility and of other Union funds, in particular to foster the green and digital transitions.	No progress	SDG 8, 16
For the period beyond 2024, continue to pursue a medium-term fiscal strategy of gradual and sustainable consolidation, combined with investments and reforms conducive to higher sustainable growth, in order to achieve a prudent medium-term fiscal position.	Full implementation	SDG 8, 16
2023 CSR 2		
Maintain the momentum in the steady implementation of its recovery and resilience plan and, following the recent submission of the addendum, including the REPowerEU chapter and the additional loan request, rapidly start the implementation of the related measures. Ensure continued sufficient administrative capacity in view of the planned increase in the size of the recovery and resilience plan. Proceed with the speedy implementation of cohesion policy programmes, in close complementarity and synergy with the recovery and resilience plan.	RRP implementation is monitored through the assessment of RRP payment requests and analysis of the bi-annual reporting on the achievement of the milestones and targets, to be reflected in the country reports. Progress with the cohesion policy is monitored in the context of the Cohesion Policy of the European Union.	
2023 CSR 3	Some progress	
Reduce reliance on fossil fuels.	Some progress	SDG 7, 9, 13
Accelerate the deployment of renewable energy, with a focus on decentralised installations and self-consumption, including by further streamlining permitting procedures and improving access to the grid.	Substantial progress	SDG 7, 8, 9, 13
Investing in energy storage, electricity transmission and distribution, and cross-border electricity interconnections.	Some progress	SDG 7, 9, 13
	Limited progress	SDG 7, 9, 13
Increase the availability of social and affordable energy-efficient housing, including through renovation,	Some progress	SDG 1, 2, 7, 10
accelerate the electrification of buildings and	Limited progress	SDG 7
the penetration of electromobility.	Some progress	SDG 11
Step up policy efforts aimed at the provision and acquisition of the skills needed for the green transition.	Some progress	SDG 4
2024 CSR 1	Some progress	
Submit the medium-term fiscal-structural plan in a timely manner.	Full implementation	SDG 8, 16
In line with the requirements of the reformed Stability and Growth Pact, limit the growth in net expenditure ²⁸ in 2025 to a rate consistent with, inter alia, putting the general government debt on a plausibly downward trajectory over the medium term and reducing the general government deficit below the 3% of GDP Treaty reference value.	Some progress	SDG 8, 16
Ensure fiscal sustainability including by: (i) reviewing and simplifying the tax system to support economic growth and employment, cohesion and the green transition;	Limited progress	SDG 8, 10, 12
and (ii) improving the quality, efficiency and equity of public spending.	Some progress	SDG 8, 16
2024 CSR 2		
Strengthen administrative capacity to manage EU funds, accelerate investments and maintain momentum in the implementation of reforms. Address relevant challenges to allow for a continued, swift and effective implementation of the recovery and resilience plan, including the REPowerEU chapter, ensuring completion of reforms and investments by August 2026. Accelerate the implementation of cohesion policy programmes. In the context of their mid-term review, continue focusing on the agreed priorities, while considering the opportunities provided by the Strategic Technologies for Europe Platform initiative to improve competitiveness.	RRP implementation is monitored through the assessment of RRP payment requests and analysis of the bi-annual reporting on the achievement of the milestones and targets. Progress with the cohesion policy programming is monitored in the context of the Cohesion Policy of the European Union.	
2024 CSR 3	Limited progress	
Improve water management to better address the adaptation to present and future effects of climate change and ensure long-term economic, social and environmental resilience, by improving coordination among all levels of government and administration	Limited progress	SDG 6, 12, 15
and scaling up existing solutions for drought risk reduction and sustainable water management in agriculture, water efficiency and infrastructure investments,	Limited progress	SDG 6, 12, 15
and by supporting the development of nature-based solutions.	Some progress	SDG 6, 12, 15

Source: European Commission

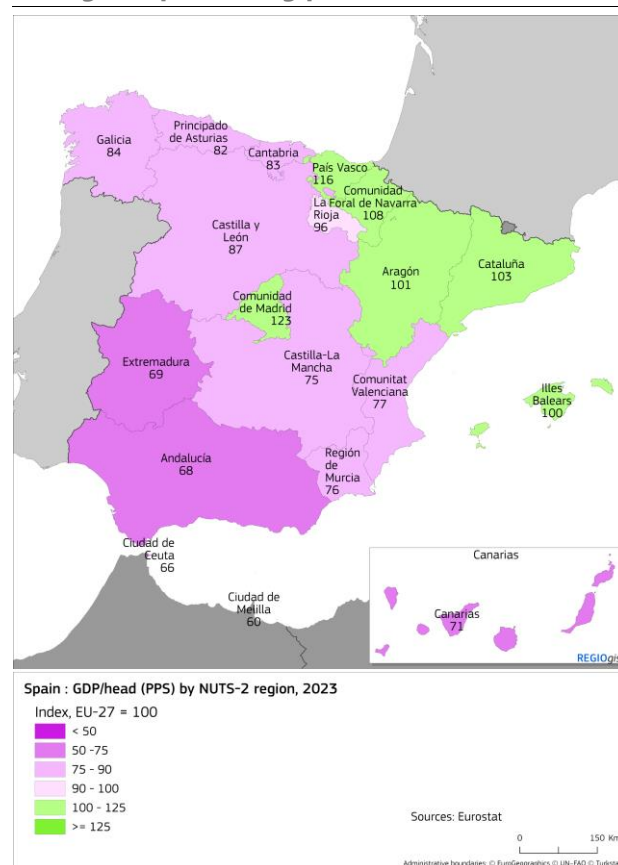
While Spain continues facing significant disparities between regions, the current growth momentum offers an opportunity to trigger structural change. Investing in new innovative sectors, protecting and attracting talent, upgrading risk prevention and water management, and improving policy and administrative coordination, would contribute to strengthening competitiveness, the resilience and attractiveness of the regional economies.

Regional disparities in Spain remain high, with most regions diverging from the EU average, but the country's sustained growth and convergence since the COVID-19 pandemic offers an opportunity to bridge the gap. Spain has improved its relative position as regards the EU average, with GDP per head in purchasing power standard (PPS) increasing from a three-decade minimum of 83% in 2020 to 91% in 2023. In 2023 there were six Spanish regions which had reached or exceeded the EU average (Map A.17.1). Three of these (Aragon, Cataluña and Iles Balears) were still below or well below EU average in the preceding year (2022) demonstrating the continuation of post-pandemic recovery in these regions. However, between 2014 and 2023, 12 Spanish regions grew slower than the national average of 1.6%. In addition, Madrid's GDP per head (123% of EU average) in 2023 remained nearly double the GDP per head of the five least affluent regions, Melilla (60%), Ceuta (66%), Andalucía (68%) Extremadura (69%) and Canarias (71%).

Regional disparities in growth are mirrored in the labour market conditions. In 2024, the national employment rate of people aged 20-64 (71.4%) was below the EU average (75.8%). Employment rates in Madrid, Aragón, Comunidad Foral de Navarra, Cataluña (all above 75%) yield rates close to or above the EU average, while Extremadura, Andalucía, Ceuta and Melilla score significantly lower below 65%. There are also disparities in relation to the gender employment gap, where most regions score better than the EU average (EU=10.0

percentage points (pps) employment gap between men and women), but Castilla-la Mancha and Ceuta lag behind with a gap of 17 and 21 pps or more. Moreover, regions that struggled to increase their employment rate tend to also have difficulties in integrating young people into the labour market (see Annex 10). Youth unemployment remains particularly high in Ceuta (66.5%), Melilla (62.6%), as well as above 30% in Andalucía Extremadura, Principado de Asturias and Canarias. Policies directed at these target groups (women and young people), which seek to protect, strengthen and attract talent, are key for tackling the disparities in the regional labour markets.

Map A17.1: **GDP per head compared to the EU average (in purchasing power standard), 2023**



Source: Eurostat

Such policies would also help address depopulation. Although the Spanish population grew by 4.4% overall over 10 years to 2023, driven primarily by immigration, 5 of the 19 regions recorded a population decline, with severe depopulation rates in Asturias (-



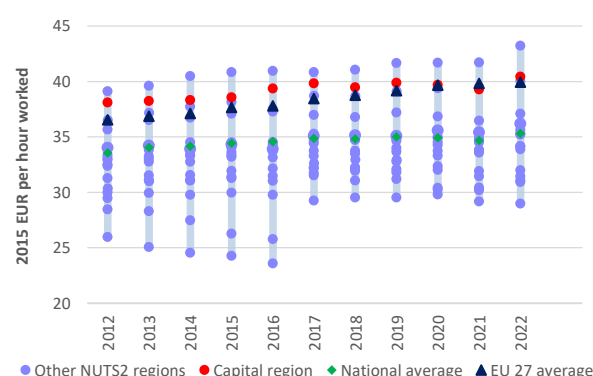
4.7%), Castilla y León (-4.2%) and Extremadura (-4.2%).

Competitiveness

Disparities in GDP per head in Spain go hand in hand with disparities in labour productivity. In 2022, labour productivity, measured as GDP per hour worked, was at its highest – at or above both the national and EU averages – in País Vasco, in the capital region of Madrid and in Navarra. At the opposite end, Murcia and Extremadura recorded the lowest levels of labour productivity (Table A17.1) Gaps in labour productivity across Spanish regions increased steadily from the economic crisis of 2008 until 2017, then decreased mainly due to the least productive regions catching up. While the data from 2022 show an increase in internal disparities compared to 2017-2021, mainly due to the high productivity growth in País Vasco, the least productive regions have also been catching up, albeit slowly.

Competitiveness of most Spanish regions ranks below the EU average. As shown in the Regional Competitiveness Index 2.0, regional disparities in the competitiveness of Spanish regions are mainly driven by disparities in higher education, lifelong learning, efficiency of the labour market and in innovation, where more developed regions continue leading the country's record, especially País Vasco. Addressing disparities in higher education and improving the alignment of skills with regional and national market needs would prepare the ground to strengthen knowledge and innovation across regions.

Graph A17.1: Labour productivity per hour



Unit: Real GDP per hour worked (EUR, 2015 prices)

Source: ARDECO (JRC)

In this vein, there is significant scope to strengthen R&D, especially by firms. In 2022, expenditure in R&D scored low in Spain (1.4% of GDP, against an EU average of 2.3%), and was concentrated in the richest regions of the country. País Vasco was the only region to reach the EU average (2.3%). R&D expenditure was lowest in many of the least developed and transition regions, especially in Extremadura (0.7%), Canarias (0.6%), Baleares (0.5%), Melilla (0.4%) and Ceuta (0.2%). R&D private expenditure only represents 0.81% of GDP and has followed a similar regional distribution over the last 20 years.

In Spain, sectors with low productivity and R&D intensity, like retail, agrifood or tourism, have greater weight in GDP than in other EU countries, and this has increased in recent years ⁽²⁷²⁾. There is an increasing dependence of the economies of Canarias and Baleares on tourism, or of Valencia and Murcia on the retail sector. Taken together, retail, agrifood and tourism represent more than 30% of the regional gross value added in Murcia, Andalucía, Baleares and Canarias, and more than 40% of regional employment in Murcia, Extremadura, Andalucía, Baleares and Canarias. These regions would benefit from their specialisation patterns being modified and diversified as well as from a move towards

⁽²⁷²⁾: [El gran reto de la economía española: mejorar la productividad.](#)

sectors with higher productivity levels, like renewables – where Spain has a substantial untapped potential – electronics or the digital sector ⁽²⁷³⁾.

Regional smart specialisation strategies suggest encouraging patterns of regional specialisation in high added value sectors.

However, further diversifying regional economic specialisation, especially in less developed regions, would better cushion potential shocks linked to climate change and water shortages and achieve a more competitive, resilient, cohesive and sustainable economic fabric. This is the case, for instance, for the aeronautics sector, mainly located in Andalucía, Castilla-la Mancha, Madrid and Pais Vasco, and for which R&D investments are key for these regions to keep their competitive advantage ⁽²⁷⁴⁾. Castilla y León, Cataluña, Comunidad Valenciana, Aragón, Galicia and Navarra have also a competitive edge in the automotive sector, with very efficient production plants and a highly qualified labour force ⁽²⁷⁵⁾. Agri-food is a key sector in 13 out of the 17 regional specialisation strategies. The sector is particularly vital in terms of share of employment and gross value added in Extremadura, La Rioja, Castilla-la Mancha, Castilla y Leon and Murcia ⁽²⁷⁶⁾. Nevertheless, productivity levels have decreased by 23% compared to 2017 ⁽²⁷⁷⁾. Given the challenge posed by climate change and water availability in all Spanish regions, investments in digitalisation and sustainability of production are necessary to secure the future competitiveness of this sector.

Improving Spanish's quality of governance is a precondition for bridging the gap with the EU's most advanced Member States and regions. Large disparities across Spanish regions exist in terms of quality of government. Castilla y León, Andalucía and Extremadura show the country's lowest values for the European Quality of Government Index ⁽²⁷⁸⁾. Moreover, this index has been decreasing since 2010. In particular, insufficient cooperation and coordination between the national and regional levels ⁽²⁷⁹⁾ hamper the regions' capacity to attract investments and talent. Improving both the country's and regions' quality of governance is an important part of strengthening the competitiveness of Spanish regions.

⁽²⁷³⁾: [TEDv Industrial dashboard](#).

⁽²⁷⁴⁾: [Agenda sectorial industria aeronáutica](#) and Smart Specialisation Strategies of the regions mentioned.

⁽²⁷⁵⁾ [Plan estratégico automoción 2019-2025](#) and Smart Specialisation Strategies of the regions mentioned.

⁽²⁷⁶⁾ [El Sector Agrario y la Industria Alimentaria en España: Principales rasgos y análisis regional en 2023](#).

⁽²⁷⁷⁾ [Informe economico FIAB 2022](#).

⁽²⁷⁸⁾ [European Quality of Government Index 2024 | University of Gothenburg](#)

⁽²⁷⁹⁾ Tribunal de Cuentas de Espana, Informe de Fiscalización de las Actuaciones para las Relaciones de Cooperación Multilateral entre la Administración General del Estado y las Comunidades Autónomas Desarrolladas en el Marco de la Gestión de la Pandemia COVID-19 (N.º 1.495).

Table A17.1: Selection of indicators at regional level in Spain

	GDP per head (PPS)	Real GDP per head growth	Productivity - GDP per person employed (PPS)	Real productivity growth (per person employed)	Productivity - GDP per hour worked (PPS)	Real productivity growth (per hour worked)	R&D expenditure	Employment rate 20-64	Youth unemployment rate	European Quality of Government Index	Population with high educational attainment	Early leavers from education and training	Participation in lifelong learning	Housing cost overburden	Access to alternative fuel infrastructure	Greenhouse gas emissions
	Index EU-27 = 100	Average annual % change	Index EU-27 = 100	Average annual % change	Index EU-27 = 100	Average annual % change	% of GDP	% of population aged 20-64	% of labour force aged 15-24	EU-27=0	% of population aged 25-64	% of population aged 18-24	% of population aged 25-64	% of total population	Number of electric vehicles charging points within 10 km	tCO2eq. per person
	2023	2014-2023	2023	2014-2023	2022	2013-2022	2022	2024	2024	2024	2024	2024	2024	2024	2022	2023
European Union (27 MS)	100	1.6	100	0.6	100	0.9	2.28	75.8	14.9		36.1	9.3	13.3	8.2	287	7.1
Spain	91	1.6	97	0.1	93	0.5	1.44	71.4	26.5		42.0	13.0	16.0	7.8	240	5.7
Galicia	84	2.0	94	0.7	90	1.2	1.08	71.1	25.7	-0.39	42.2	10.8	15.6	3.8	33	6.3
Principado de Asturias	82	1.6	97	0.1	92	0.5	0.84	69.4	32.9	0.06	44.3	10.5	16.3	4.9	59	10.3
Cantabria	83	1.6	97	0.6	93	0.7	0.90	73.6	21.7	0.62	48.8	5.5	16.1	6.8	48	6.4
País Vasco	116	1.6	114	0.6	112	1.0	2.23	74.2	23.2	0.05	56.2	5.0	18.4	6.2	113	6.0
Comunidad Foral de Navarra	108	1.3	108	0.3	105	0.9	1.81	75.8	22.9	0.05	50.1	9.9	18.2	7.3	153	8.6
La Rioja	96	1.4	100	0.1	94	0.6	0.87	74.4	31.7	0.21	41.6	17.0	14.5	4.0	35	6.8
Aragón	101	1.3	102	0.1	95	0.6	1.07	75.9	23.4	0.04	41.3	11.9	15.3	4.0	92	10.6
Comunidad de Madrid	123	1.7	106	0.3	103	0.6	1.96	76.8	20.4	0.34	50.9	10.5	16.1	11.2	679	2.1
Castilla y León	87	1.8	95	0.1	90	0.5	1.35	73.1	27.7	-1.24	42.0	10.8	15.9	5.7	61	11.4
Castilla-La Mancha	75	1.4	96	0.0	85	0.5	0.67	68.9	29.0	0.03	33.6	14.6	14.3	7.2	16	10.9
Extremadura	69	1.5	84	-0.5	81	-0.2	0.70	65.4	35.4	-0.76	35.1	13.0	14.8	4.6	18	7.7
Cataluña	103	1.3	102	0.1	97	0.4	1.89	75.7	22.1	-0.23	45.9	13.7	16.0	8.4	521	4.7
Comunitat Valenciana	77	1.4	89	-0.1	86	0.3	1.17	70.3	25.6	-0.18	38.2	12.9	19.3	8.8	182	4.2
Illes Balears	100	1.5	106	0.4	95	0.7	0.46	74.4	23.5	-0.26	34.6	20.1	15.4	11.0	147	5.0
Andalucía	68	1.4	85	-0.2	82	0.3	1.05	64.1	36.9	-0.76	36.2	15.5	14.6	7.2	69	5.5
Región de Murcia	76	1.6	84	0.3	78	0.6	1.08	68.7	27.2	0.09	33.0	18.2	16.1	6.3	70	7.6
Ciudad de Ceuta	66	1.0	84	0.1	85	1.2	0.21	56.5	66.5		35.9	14.6	20.8	6.3	7	2.2
Ciudad de Melilla	60	1.0	76	-0.4	82	1.8	0.35	55.3	62.6		31.8	26.0	15.6	12.1	12	1.4
Canarias	71	1.2	82	-0.4	81	-0.1	0.55	67.3	28.5	-0.14	35.4	13.1	14.0	9.3	22	4.6

Source: Eurostat and JRC

Social fairness

Spain has the potential to provide both sufficient quality housing for a growing population and competitive accommodation for tourists, although further efforts are needed in the short run. The housing-cost overburden ⁽²⁸⁰⁾ for households in Spain is highest in urbanised areas and is particularly significant in regions with high tourism intensity. In 2024, this affected 8.4% of the population in cities, 7.8% in towns and suburbs, and 4.9% in rural areas (percentages similar to EU level and lower in rural areas). However, regions with high tourism intensity largely surpassed the national average of 8%, especially Madrid and Balears, and Canarias (9%). In such regions, tourism can be a double-edged sword: a major factor for economic

growth but also a hindrance for welfare and attractiveness due to its pressure on housing.

On access to healthcare and primary schools, there is a striking rural-urban divide. While in rural areas only 18% of the population live in places within a 10-minute drive from the nearest hospital (scoring well below the EU average in rural areas - 29%), in urbanised areas this rate increases to 73% – a nearly fivefold disparity (see Annex 14). Likewise, access to primary schools is significantly lower in rural areas, as only 38% of rural residents have a primary school within a 15-minute walk ⁽²⁸¹⁾, compared to an average of 64% in urbanised areas. This is nevertheless above the EU average for rural areas (31%).

At the same time, extensive broadband coverage and modern transport infrastructure across Spanish regions provide opportunities to increase access to services of general interest. Broadband access shows very slight differences between cities (97%), towns (96%), suburbs and rural areas (93%), while transport infrastructure rates above the EU average (77%) in all Spanish

⁽²⁸⁰⁾ The housing cost overburden rate is the percentage of the population living in households where the total housing costs ('net' of housing allowances) represent more than 40% of disposable income ('net' of housing allowances).

⁽²⁸¹⁾ Commission calculations based on Eurostat data.

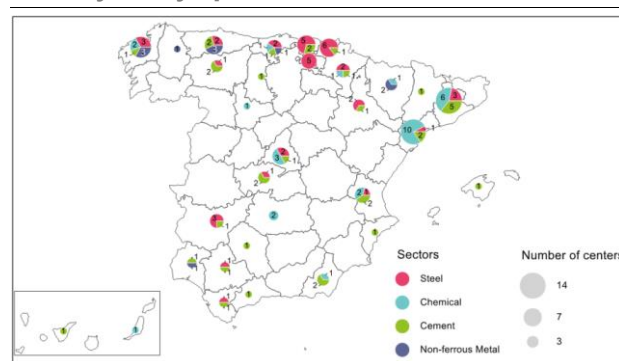
regions, except Galicia, Ceuta and Extremadura. These infrastructures, in particular digital infrastructure, provide an excellent setting for e-services in the educational and medical fields, improving access to basic services outside major urban settlements. Simultaneously, people on the smaller islands of Canarias, still suffer from double insularity ⁽²⁸²⁾, therefore being highly dependent on transport infrastructure to access certain basic services, making this an investment priority for the next years.

Sustainability

In 2023, Spain's average greenhouse gas (GHG) emissions per head were below the EU average and have shown a higher decrease in the last five years compared to other EU countries, although the country's transition to climate neutrality still faces challenges. Several Spanish regions recorded emissions above the EU average (7.1 CO₂ tonnes per head), namely Aragón (10.6), Castilla-La Mancha (10.9) and Castilla y León (11.4). The primary contributors to GHG emissions across regions in Spain are the industry and transport sectors. The most energy-intensive industries are regionally distributed along the Ebro River basin (Map A.16.3), requiring technological advancements to lower emissions. Looking at the individual sectors, steel shows a slow but steady reduction in emissions, while the chemical sector faces more complex decarbonisation challenges, though progress has been made since 2005. In the cement sector, emissions have significantly decreased, largely due to a

reduction in national production. The nonferrous metals sector has made progress towards reaching common targets since the 2000s. Therefore, continued efforts are particularly important in Catalonia, a region with high energy-intensive chemical activity.

Map A17.2: **Energy-intensive industries 2021: Country Study Spain**



Source: Syndex based on data from AEGE, UNESID, FEIQUE, OFICEMEN, AEA, MITECO

Investment in alternative fuel infrastructure in Spain presents an opportunity to cut emissions in the transport sector. At national level, access to alternative fuel infrastructure was slightly below the EU average in 2022, with 240 electric vehicle charging points available within a 10-kilometer distance of where people lived, compared to the EU average of 287 ⁽²⁸³⁾. At the same time, significant regional disparities were evident: Ceuta, Melilla, Castilla-La Mancha and Extremadura had the lowest access, while Madrid and Cataluña recorded the highest levels of availability for such infrastructure using this metric.

The green energy transition, along with the growing role of renewable energy, offers unique opportunities for less developed and transitioning Spanish regions, particularly in rural areas ⁽²⁸⁴⁾. In 2023, disparities in

⁽²⁸²⁾ Double insularity refers to geographical remoteness from 1) the continental part of the Member State and from 2) the European Union (EP report 'Islands of the European Union: State of play and future challenges, March 2021, [Research for REGI Committee - ISLANDS OF THE EUROPEAN UNION: State of play and future challenges](#) | Think Tank | European Parliament)

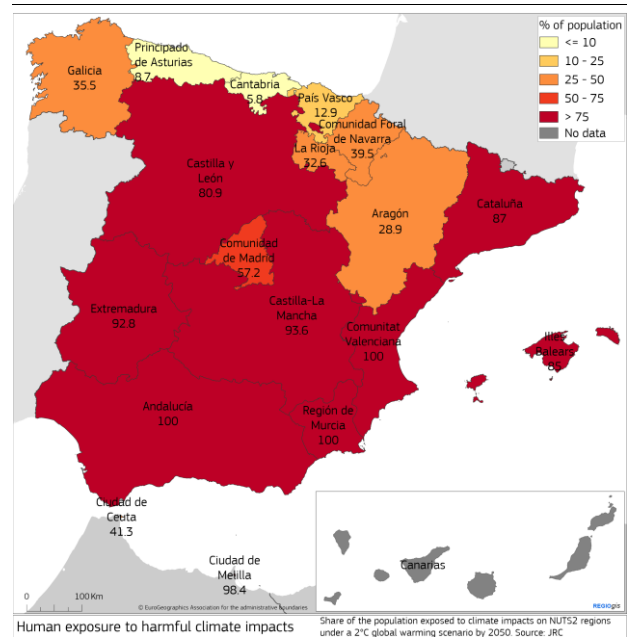
⁽²⁸³⁾ Indicators of access to alternative fuel infrastructure are based on calculations by DG REGIO and the JRC, using data from the European Alternative Fuels Observatory (EAF0), Eurostat, TomTom and Eco-Movement.

⁽²⁸⁴⁾ Source: JRC, see: 9th Report on economic, social and territorial cohesion, Map 4.5.

untapped potential for solar, wind, and hydro power among Spain's NUTS 2 regions were significant. Regions such as Canarias, Ciudad de Melilla and Asturias rank among the top-performing regions in the EU. By contrast, Andalucía, Aragón, Castilla-La Mancha and Murcia were among the EU's lower-performing regions, suggesting they have a high untapped potential to benefit from the green transition.

Most Spanish regions are likely to face increased risks from floods, forest fires and water shortages ⁽²⁸⁵⁾ (Map A17.4). Effective climate risk management and prevention strategies reflecting Spain's distinct geography and risk prospects are crucial to mitigate the escalating impacts of extreme weather events, and water scarcity. These phenomena will exert significant pressure on natural resources, particularly water, and especially in tourism-intensive regions and the islands. Therefore, prioritising efficiency in water use and nature-based solutions is important to ensure long-term economic sustainability in many Spanish regions (see also Annex 9).

Map A17.3: **Human exposure to harmful climate impacts**



Source: JRC based on Eurostat

⁽²⁸⁵⁾ Source: JRC, see: 9th Report on economic, social and territorial cohesion, Map 4.1.