EUROPEAN
COMMISSION

Brussels, 16.6.2021
SWD(2021) 147 final

COMMISSION STAFF WORKING DOCUMENT

Analysis of the recovery and resilience plan of Spain

Accompanying the document

Proposal for a Council Implementing Decision

on the approval of the assessment of the recovery and resilience plan for Spain

{COM(2021) 322 final}

Table of contents

1. EXECUTIVE SUMMARY

Despite several recent years of steady growth and job creation, a number of challenges persist in Spain. Spain enjoyed six years of strong economic growth accompanied by dynamic job creation between 2013 and 2019, but a number of structural weaknesses have not been fully overcome. The high unemployment rate, notably for young people, and labour market segmentation make it difficult for the new generations to find a job and make a decent living, and affect productivity and social cohesion. Economic efficiency, as measured by total factor productivity, remains subdued due to low innovation in many firms and regions, regulatory fragmentation, labour market segmentation, and skills gaps. Climate change poses important policy challenges for water and waste management, energy and resource efficiency, emissions and renewable energy. In this scenario, a still high external and internal debt, both private and public, remained a source of vulnerability. Fiscal sustainability is a challenge for the country, even more in light of its worrisome demographic situation.

In this context, the COVID-19 pandemic hit Spain's population and economy particularly hard, taking a significant toll on life and social and business activity. In doing so, it aggravated existing challenges. The severe outbreak of the COVID-19 pandemic in Spain and the containment measures taken in response to it resulted in an unprecedented decline in GDP in 2020 (-10,8%), which will not be recovered until the end of 2022. Despite government support shielding the labour market, the self-employed and firms throughout the crisis, unemployment and corporate liquidity have become major concerns. The unemployment rate increased to 15,5% in 2020 and it is forecast to slightly increase in 2021 before falling in 2022, to around 14,4%. Impaired firm profitability could also lead to the materialisation of corporate insolvencies with risks for productive capacity and employment. A further package of measures to support SMEs has been adopted in March 2021 to limit this risk.

As a result of the severe contraction in GDP caused by the COVID-19 pandemic and the policy response required to tackle its consequences, the budgetary outlook has worsened. The general government deficit widened by more than 8 pps. to 11,0% of GDP in 2020. This, together with the impact from the SAREB reclassification [[1]], has increased the general government gross debt-to-GDP ratio by almost 25 pps, from 95,5% of GDP in 2019 to 120% in 2020. As growth resumes and the deficit narrows, the debt ratio is expected to gradually decrease to around 116,9% of GDP by the end of 2022.

Spain has requested EUR 69,5 billion of non-repayable support under the Recovery and Resilience Facility. Spain's recovery and resilience plan makes a significant contribution to supporting the country's economic rebound and contribute to a green, digital and inclusive

[[1]] https://ec.europa.eu/economy_finance/forecasts/2021/spring/ecfin_forecast_spring_2021_es_en.pdf.

future [2]. The plan is structured around the four cross-cutting objectives of the green and digital transitions, social and territorial cohesion and gender equality. It is designed to provide a response to Spain's key structural challenges, in line with the priorities identified in the most recent recommendation on the economic policy of the euro area [3] and a significant subset of the recent country-specific recommendations addressed to Spain by the Council. [4]

The plan pursues the general objective of the Facility to promote the Union's economic, social and territorial cohesion and is balanced in its response to the six policy pillars referred to in Article 3 of the Regulation [5]. The balanced set of reforms and investments contained in the 30 components of the plan reflects the overall financial allocation as well as the challenges the country faces. The green and digital pillars contributions are significant in terms of reforms and investments put forward (pillars 1 and 2). The plan includes a substantial allocation for the green and digital transition (respectively, EUR 27,6 billion and EUR 19,6 billion). Most components in the plan are expected to contribute to smart, inclusive and sustainable growth, notably through support to enable a swift twin transition (pillar 3). A significant number of components contribute significantly to social and territorial cohesion, mostly through measures to address challenges in the labour market and enhance employability, investments on social inclusion and through improvements in the deployment of public services and infrastructure throughout the territory (pillar 4). Several of the components support significantly health, economic, social and institutional resilience, notably through measures seeking to improve the functioning of the public administration, the national health system and to preserve and enhance the natural capital of the country. Measures that seek to enhance the effectiveness of and fairness of tax revenue collection and spending are expected to contribute to economic and social resilience (pillar 5). In addition, a number of components are designed to support the policies for the next generation through investments in education, skills, the labour market, social inclusion and social housing (pillar 6).

The plan is expected to contribute to address a significant subset of the recent country-specific recommendations addressed to Spain by the Council. [6] The plan of Spain is

---

[2] The recovery and resilience plan of Spain has been published by the Spanish authorities at: https://www.lamoncloa.gob.es/presidente/actividades/Paginas/2020/espana-puede.aspx.
[3] Pending final adoption by the Council, after endorsement by the European Council. The text agreed by the Eurogroup on 16 December 2020 is available at: https://data.consilium.europa.eu/doc/document/ST-14356-2020-INIT/en/pdf.
[4] Spain submitted its National Reform Programme on 30 April. The information provided in the National Reform Programme is being considered and jointly assessed in this Staff Working Document with the Recovery and Resilience Plan.
[5] Regulation (EU) 2021/241 of the European Parliament and of the Council of 12 February 2021 establishing the Recovery and Resilience Facility (hereafter 'the Recovery and Resilience Facility Regulation').
[6] Council Recommendation of 20 July 2020 on the 2020 National Reform Programme of Spain and delivering a Council opinion on the 2020 Stability Programme of Spain, OJ C 282/54, 26 August 2020, and Council Recommendation on the 2019 National Reform Programme of Spain and delivering a Council opinion on the 2019 Stability Programme of Spain, OJ C 301, 5 July 2019.

expected to contribute substantially to address the country-specific recommendations on fostering public and private investment to help the recovery. In doing so, it is expected address the country-specific recommendations on investment in innovation and the digital and green transition of the country. The plan also includes measures to reduce the high share of temporary contracts and to reinforce active labour market policies that are expected to improve the functioning of the labour market. The plan is expected to help address the existing fragmentation of unemployment protection, which resulted in gaps. It is also expected to contribute to the provision of labour market relevant skills and qualifications that should accompany the green and digital transition of the country. Access to digital learning can be significantly boosted by the plan through investments in devices and skills, but also through the development of online courses. Educational outcomes may also improve as a result of investments at various stages of the education cycle. Measures in the plan also have the potential to contribute to address country-specific recommendations asking Spain to improve coverage and adequacy of minimum income schemes and family support. The plan is also expected to strengthen public procurement frameworks, and contribute to a better business environment. Finally, measures in the plan seeking a more effective public spending and tax system may contribute to fiscal sustainability.

The plan also includes labour market and pension system reforms whose final design has been left open, as it is subject to the outcome of the process of social dialogue. With the aim of preserving employment, the plan includes the set-up of a flexibility and job stability mechanism that builds on the use made of short-time work schemes. The new mechanism is expected to promote access to training and voluntary mobility for workers in case of downturns. The plan also includes a modernisation of the collective bargaining system, which is to be carried on the basis of an evaluation identifying existing shortcomings in the system. In order to contribute to addressing country-specific recommendations in the labour market domain, the overall reform package of labour market reforms should strike the right balance between flexibility and security. The plan also includes a reform of the pension system with the aim of preserving its adequacy and long-term sustainability. For these labour market and pension system reforms, the final design of the measures is expected to reflect the outcome of the ongoing social dialogue process. These reforms are to be accompanied by an analysis of different options to ensure their medium to long term fiscal sustainability.

The plan is expected to contribute to the green transition, the protection of the environment, including through a better management of water and waste, and to the enhancement of biodiversity. Measures in the plan support the decarbonisation of Spain and its energy objectives, as set out in its National Energy and Climate Plan (hereafter 'NECP') [[7]], and are an important step towards achieving climate neutrality in 2050. The green transition is supported by measures to promote urban and long-distance sustainable mobility and to increase the energy efficiency of buildings, decarbonise industry and reduce

[[7]] https://ec.europa.eu/energy/sites/ener/files/documents/es_final_necp_main_en.pdf.

energy dependency, as well as to deploy new technologies for renewable hydrogen and renewables. Measures are also expected to help mitigate the adverse effects of climate change by preserving coastal spaces, ecosystems and biodiversity, and promote the circular economy by improving the management of water and waste in the country. Together, the measures supporting climate change objectives in Spain's plan account for 39,7% of the plan's total allocation. All measures in the Spanish plan comply with the 'do no significant harm' principle, in line with the Technical Guidance published by the Commission. [8]

The digital transition is supported by investments on digital skills and in the digitalisation of the public administration, industry and business, as well as on the purchase of digital equipment for education. Substantial investments are designed to promote the digitalisation of the public administration and of the National Health Service, and simplify public interactions with businesses and citizens**.** The plan invests in the provision of basic digital skills to the general population, the unemployed and the employed with lower skills. The provision of advanced digital skills could have a significant impact on the employability of people further to the green and digital transition. Investments in digital connectivity (including 5G) and in the digitisation of the industry and small and medium-sized enterprises, including through the use of artificial intelligence, will allow Spanish firms to take better advantage of the opportunities offered by an increasingly digital economy. Investments are also made in the digitalisation of education, notably through the purchase of digital equipment and training for its use. The measures with a digital impact account for 28,2% of the plan's total allocation.

Once fully implemented, Spain's plan has the potential to make a lasting impact by prompting structural changes in the public administration, institutions and policies. Relevant measures in this respect include changes that seek to enhance the effectiveness of the public administration, amongst others through its digitisation and through the strengthening of the public procurement framework, the efficiency of the justice system and the evaluation of public policies and spending. Further structural, lasting change may stem from other measures seeking to improve the business environment, notably through the reduction of market fragmentation and through better regulation. Measures in the plan may also lastingly enhance the productivity and competitiveness of Spain through a swifter adaptation of its industry, energy and transport system to the green and digital transition. This impact may be reinforced by measures adopted to enhance skills at various levels, to reduce segmentation in the labour market, modernise social protection and to address the gender gap, which in turn may help enhance social cohesion. Regions are responsible for the implementation of a substantial set of measures. Ensuring a broader ownership during the implementation of the plan will be important to enhance its effectiveness and lasting impact.

---

[8] Technical Guidance on the Application of 'do no significant harm' under the Recovery and Resilience Facility Regulation (hereafter 'DNSH Technical Guidance'), COM (2021) C58/01.

Spain has established an adequate structure to implement the plan as well as to monitor and report on progress. The proposed milestones and targets are clear and seem realistic and the proposed indicators are relevant, acceptable and robust. The new Secretariat-General for European Funds of the Ministry of Finance will act as a coordinator for the plan and contact point with the European Commission. Line Ministries will be responsible for the implementation of the investments and reforms within the scope of their competence. The implementation of the plan will be subject to the control of the Comptroller General of the central government (*Intervención General de la Administración del Estado* – IGAE).

The plan's strategy, which builds on the 2019 Agenda for Change of the Government of Spain, is entirely coherent. The four cross-cutting objectives in the plan (digital and green transition, social cohesion and gender equality) and the ten policy areas that structure it are expected to ensure that measures are coherent across and within each of the 30 components of the plan. Reforms and investments are generally supportive of one another. Coherence is also embedded transversally in the plan through a set of reforms improving the functioning of the public administration. The effort required to frontload most of the reforms improving the business environment in the first years of the plan may contribute to a more effective delivery of the investments envisaged by the plan.

Spain has provided individual cost estimates for all investments, as well as for those reforms for which associated costs have been specified in the plan. The justifications provided by Spain on the amount of the estimated total costs are in most cases reasonable, plausible, in line with the principle of cost efficiency, and commensurate to the expected national economic and social impact. Spain has provided sufficient information and evidence that the amount of the estimated total costs is not covered by existing or planned Union financing. In addition, adequate governance and control systems provide additional assurance to avoid double funding from the Facility and other Union programmes. Finally, the amount of estimated total costs of the recover and resilience plan is commensurate to the expected national economic and social impact. However, some gaps remain, in terms of the information and evidence provided on reasonability and plausibility of the estimated costs which preclude the highest rating of this assessment criterion.

Assessment and rating of the recovery and resilience plan of Spain under the criteria laid down in Article 19(3) of the Recovery and Resilience Facility Regulation in accordance with its Annex V.

(1) Balanced Response	(2) CSRs	(3) Growth, jobs…	(4) DNSH	(5) Green target	(6) Digital target	(7) Lasting impact	(8) M & T	(9) Costing	(10) Control Systems	(11) Coherence
A	A	A	A	A	A	A	A	B	A	A

2. Recovery and resilience challenges: scene-setter

2.1. Macroeconomic outlook and developments since the 2020 country report

The severe outbreak of the COVID-19 pandemic in Spain and the strict lockdown measures taken in response to it resulted in an unprecedented decline in GDP in 2020 (-

10,8%). The high number of infections in the first two months of 2021 forced Spain to tighten restrictions, which led output to drop further in the first quarter of the year (-0,5% of GDP, q- o -q). With the lifting of some restrictions in March, and the acceleration in the pace of vaccination, economic activity is set to begin growing over the second quarter and to continue more vigorously in the second half of the year. As was the case with the downturn in 2020, the recovery is also expected to remain uneven across sectors. Manufacturing production has started to pick up, while sectors with high social-interaction, such as leisure and tourism-related activities, are set to recover at a slower pace.

According to the Commission 2021 spring forecast, real GDP is projected to grow by 5,9% in 2021 and by 6,8% in 2022. As a result, Spain's GDP is expected to return to its pre-pandemic level by the end of 2022. With the prospect of a relaxation of restrictions in the second half of 2021, part of the accumulated savings prompted by the pandemic is expected to be unwound, spurring private consumption, but also investment. The higher absorption of Recovery and Resilience Facility ('RRF') funds envisaged in 2022, with potential crowding-in effects on private investment and a carry-over effect from 2021, are forecast to provide a noticeable boost to economic growth in 2022. The contribution of external demand to GDP growth is set to turn positive in 2022, when tourism-related activities are likely to approach their 2019 level.

Inflation was slightly negative in 2020 due to a fall in energy prices. Inflation is expected to rebound in 2021 to 1,4%, as a more sustained outlook for demand spurs a gradual rise in the prices of consumer services. Upward pressures are also likely to come from prices of electricity and of fuels such as diesel and petrol.

Short-time work schemes helped mitigating the impact on the labour market by preserving jobs and income of workers in the most affected sectors. Existing short-time work schemes ('ERTEs') were made more generous at the outset of the crisis to mitigate job losses and they are to remain in place until the end of September 2021. In addition, several measures were taken to protect the self-employed by means of benefits for suspension of activity. Despite these measures, the fall in employment increased the unemployment rate to 15,5% in 2020 from 14,1% in 2019. Unemployment is forecast to slightly increase again in 2021 (15,7%) before falling in 2022, when job creation is expected to reduce it to around 14,4%. In this context, further increases to the minimum wage seem to be envisaged [9]. Corporate liquidity has been enhanced by a programme of public guarantees for new bank loans, tax deferrals, and payment moratoria, among other measures. Nevertheless, impaired profitability could lead to the materialisation of corporate insolvencies, mainly concentrated in those sectors most affected by activity restrictions, when policy support measures are

[9] The Bank of Spain (2021) has analysed the impact on employment of the 2019 minimum wage increase (22,3%). Its analysis quantifies a decrease in employment levels of 0,6 to 1,1 pps., and suggests a larger adverse impact on the job losses of elder workers, and a sharper reduction in hours worked and in job creation for younger workers.

wound down. This could lead to an increase in unemployment and reduced productive capacity.

To limit insolvency risks in the short term, the authorities adopted in March 2021 a package of measures to support SMEs. A EUR 3 billion restructuring fund will allow to extend the maturity or convert to equity those loans backed by public guarantees. A recapitalisation fund worth EUR 1 billion will support the recapitalisation of SMEs, under certain conditions. This fund complements another recapitalisation fund worth EUR 10 billion for large companies that was set up in July 2020. Measures for SMEs also include a support fund (EUR 7 billion) to cover fixed costs of companies having suffered a fall in revenues of at least 30% in 2020 compared to 2019.

The increase in unemployment and the fall in incomes due to the crisis are likely to result in higher poverty and long-term unemployment levels. Persons that were already struggling to find employment before the pandemic, like the low-skilled, young, but also non-EU born, are expected to see a further deterioration in their position on the job market. The low-skilled and non-EU migrants also face the largest risk of social exclusion and poverty. They are likely to benefit later from the recovery as many are employed in the sectors that have been hardest hit in the crisis, such as tourism. At 25,3% (2019), the share of people at risk of poverty or social exclusion is amongst the highest in the EU, and the crisis is expected to further increase this risk for vulnerable groups.

As a result of the COVID-19 crisis and the policy response to it, the general government deficit widened by more than 8 pps. to 11,0% of GDP in 2020. A few one-off events, in particular the reclassification into the general government sector of SAREB, also took place, adding around 1 pp. to the deficit ratio and 3 pps. to the debt ratio in 2020. In 2021, the deficit is projected to narrow to around 7,6% of GDP, as a subsiding pandemic and the impact of a gradual implementation of the Recovery and Resilient Plan (‘RRP’ or ‘the plan’) of Spain leads to a rebound in economic activity, while the net impact of temporary emergency measures to address the economic consequences of the pandemic are set to weigh less on public finances. Thanks to a stronger impact on economic growth from the RRP in 2022, the deficit is forecast to narrow to 5,2% of GDP in 2022. Public guarantees provide crucial support, but also constitute a risk to the fiscal outlook. Due to the large government deficit, the severe contraction in GDP and the impact from the SAREB reclassification, the general government gross debt-to-GDP ratio rose by almost 25 pps. from 95,5% of GDP in 2019 to 120% in 2020. As growth resumes and the deficit narrows, the debt ratio is expected to gradually come down to around 116,9% of GDP by the end of 2022.

Spain’s public debt and deficit were high before the COVID-crisis. Spain’s debt-to-GDP reached its previous peak in 2014 at 100,7% of GDP and declined gradually to 95,5% of GDP in 2019. Over the same period, the deficit was smaller than 3% of GDP only in 2018-2019. Although the debt ratio has declined only about 5 pps. over the 2014-2019 period, interest expenditure declined by 1,1 pps. to 2,3% of GDP in 2019 owing to favourable interest rate environment. At the same time, the average maturity of debt has been extended.

Spain faces high fiscal sustainability risks in the medium term. This conclusion is based on both the sustainability gap indicator (S1) and the debt sustainability analysis. [[10]] The former indicator indicates that Spain's structural primary balance would need to improve by 4.9% of GDP in cumulative terms over the five-year period to 2027 relative to the baseline scenario to bring the debt-to-GDP ratio to the reference value of 60% by 2042. The debt sustainability analysis indicates that under the baseline, which exceptionally assumes a gradual return of the structural balance to pre-crisis (forecast) level. [[11]] Spain's public debt is projected to stabilise, and slightly decline over the second half of the period, although remaining at a high level (reaching about 117,4% of GDP in 2031). This result is driven by the weak fiscal position (with a structural primary deficit), while the negative interest – growth rate differential is expected to remain negative, containing the debt dynamic. Moreover, the debt trajectory is sensitive to macroeconomic shocks. When taking into account a large range of possible temporary shocks to macroeconomic variables (through stochastic projections), it is probable that the debt ratio could be higher in 2025 than in 2020.

Before the pandemic, macroeconomic imbalances had decreased, partly due to strong GDP growth. The imbalances related to high external and internal debt, both public and private, in a context of still high unemployment had cross-border relevance and were a source of vulnerability. In this regard, the COVID-19 crisis has exacerbated the imbalances that had persisted for several years in Spain, to a substantial extent due to the decline in GDP, and vulnerabilities linked to external, private sector and government debt remain. [[12]] The implementation of policy measures in the Recovery and Resilience Plan can prove decisive to mitigate some outstanding vulnerabilities of the Spanish economy and steer a reduction of existing imbalances, particularly from 2022, when strong demand effects and possible carry-over effects from 2021 are expected to be accompanied by a gradual contribution from the supply side.

The macroeconomic scenario underpinning the Spanish stability programme and the RRP is realistic in 2021 and 2022. The Commission 2021 spring forecast expects real GDP in Spain to grow by 5,9% in 2021 and 6,8% in 2022. This is slightly lower than the Government projections for GDP growth, as it is forecast to be of 6,5% in 2021 and 7,0% in 2022. While the Government's projections are based on a more frontloaded use of the funds, resulting in a faster economic impact of the measures funded by the Recovery and Resilient Facility, the Commission expects a more gradual absorption.

The macroeconomic and fiscal outlook continue to be affected by high uncertainty related to the COVID-19 pandemic and its economic consequences. While uncertainty has

[[10]] European Commission Debt Sustainability Monitor 2020, Institutional Paper 143, February 2021.
[[11]] See the Monitor for full methodological description.
[[12]] IDR, Spring Package 2021.

decreased slightly, the outlook for Spain's economy is still subject to a larger degree of uncertainty than normal. This is due to uncertainties linked to the recovery of tourism-related activities, the response of private agents to the potential relaxation of confinement measures, and the size and impact of public measures to contain the effect of the pandemic and support the recovery, including the actual absorption of the RRP.

Table 2.1. Comparison of macroeconomic developments and forecasts

	2019	2020	2021		2022		2023	2024
			COM	RRP	COM	RRP	RRP	RRP
Real GDP (% change)	2,0	-11,0	5,9	6,5	6,8	7,0	3,5	2,1
Inflation (% change)(1)	0,8	-0,3	1,4	1,2	1,1	1,5	1,6	1,9
Employment (15-74 years, % change)	2,3	-7,5	4,5	4,0	2,0	2,7	1,1	0,9
Unemployment rate (%)	14,1	15,5	15,7	15,2	14,4	14,1	13,2	12,7
GG net lending (% of GDP)(2)	-2,9	-11,0	-7,6	-8,4	-5,2	-5,0	-4,1	-3,3
Government debt (% of GDP)(2)	95,5	120,0	119,6	119,5	116,9	115,1	113,3	112,1

(1) Inflation is the Harmonised Index of Consumer Prices except for the RRP figures, where it is the GDP deflator.
(2) For the RRP, the figures are from the Spanish Stability Programme 2021-2024, April 2021.

2.2. Challenges related to sustainable growth, cohesion, resilience and policies for the next generation

Before the pandemic, Spain had enjoyed six years of strong economic growth accompanied by dynamic job creation. Between 2013 and 2019, real GDP grew by 16,5%, and employment by 14%, well above the euro area average. However, structural weaknesses remained. Despite the decline in unemployment, too many working age people remained without a job or could not make a decent living. Productivity was also growing slowly due to, among others, low innovation in many firms and regions, regulatory fragmentation and other barriers to firm growth, labour market segmentation and skills gaps. [[13]] Spain is also one of the European countries most exposed to climate change, which poses important policy challenges for water and waste management, energy and resource efficiency, emissions and renewable energy.

[[13]] Bauer et al. (2020) and Martínez Turégano (2020).

Smart, sustainable and inclusive growth

In Spain, high labour market segmentation facilitates job destruction during downturns, makes unemployment highly pro-cyclical and hurts productivity and equality. About 22% (26% before the crisis) of employees in the private sector are on temporary contracts and in the public administration the figure reaches 30% (28% before the crisis). As the current crisis has shown, this puts the brunt of adjustments on temporary workers, while permanent workers tend to be more shielded from economic fluctuations. It also results in fewer incentives to invest in training of temporary workers, and therefore has a negative impact on labour productivity growth. In addition, workers with temporary contracts are in a more vulnerable position as they often earn lower salaries, and have less effective access to social protection, which fuels inequality and in-work poverty. Reducing labour market segmentation would therefore significantly improve productivity and reduce inequalities.

The Spanish science and innovation system suffers from under-investment and weak governance. Notwithstanding the announced temporary increase in Spain's public R&D expenditure, important bottlenecks remain. The governance system and financing mechanisms of Public Research Organizations ('PRO') and Universities coupled with their insufficient ability to build strong linkages with business hinder their scientific competitiveness and contribution to the Spanish economy. Despite the initiatives to enhance public research and private activities envisaged in the new Strategy for Science, Technology and Innovation ('EECTI') 2021-2027, the State Plan for Science, Technology and Innovation ('PEICTI') 2021-2023 and the RRP, further efforts to increase the block funding of PROs and Universities based on their performance, as well as to establish flexible and modern governance models that strengthen the links with the private sector are needed.

Spain needs to reduce regulatory fragmentation and barriers and improve support to innovative businesses, in particular SMEs. Spain is one of the weakest performers in Single Market indicators. Regulatory fragmentation and barriers in Spain make SMEs less productive and not able to benefit from economies of scale. The Law on Market Unity, adopted in 2013, is an important tool to overcome market fragmentation and improve competition during the recovery. While it has been enforced by courts and competition authorities, a stronger and sustained coordination between the different levels of government is also essential for the law to deliver its full effects. Business would also benefit from a stronger framework for public procurement.

Social and territorial cohesion

The COVID-19 crisis may deteriorate social cohesion, in a context of pre-existing income inequalities and high risk of poverty or social exclusion, especially among children. High unemployment rates, labour market segmentation and the limited capacity of social transfers (excluding pensions) to reduce poverty weigh on social cohesion in Spain. Regional disparities are the widest in employment and social outcome indicators, where most regions underperform relative to the EU-average.

There is a risk of widening regional disparities following the outbreak of the COVID-19 pandemic. The tourism sector was particularly hard hit by travel restrictions and lockdown measures. Hence, economic activity in regions with a high share of jobs related to tourism is disproportionately affected. This is particularly the case for the regions on the Mediterranean coast and the Balearic Islands and the Canary Islands, where more than one fourth of jobs are linked to tourism, whereas regions with a higher share of manufacturing and other service sectors are likely to rebound more easily after the lockdowns.

The lack of opportunities and the search for better living conditions are the main cause of depopulation of rural areas. Overcoming the demographic challenge of the urban and rural divide should be mainstreamed into policy action to improve the business environment, access to basic public services in the fields of health, education and social-leisure, access to connectivity and digital skills, innovation and technology, and transport infrastructure. This would provide better conditions for enterprises to set up in rural areas, as well as for economic diversification and job creation in there.

Health, and economic, social and institutional resilience

The COVID-19 pandemic has revealed structural weaknesses in the Spanish health system. The unprecedented surge in demand for intensive care rapidly brought the health system close to a breaking point, stretching the health workforce to the limit, highlighting staff shortages and precarious working conditions. At the regional level, the crisis revealed uneven capacities to cope with the shock. The mechanisms of co-ordination across the regions, between health and long-term care, and between different levels of government have shown shortcomings. A more resilient health system is critical to better control potential disease outbreaks in the future. Issues to tackle are the modernisation of primary care, shortages in the healthcare workforce, prevention and health promotion measures, the integration of health and social care and the deployment of eHealth tools. The health system also needs to be adapted to the needs of the ageing population, as nearly 60% of Spaniards aged 65+ have at least one chronic disease, almost 40% have reported symptoms of depression and more than 20% have some limitations in daily activities.

Measures adopted by the authorities to support corporates and households have helped mitigate the impact of the crisis on the banking sector. The banking sector was relatively robust at the on-set of the COVID-19 crisis with comparatively good asset quality, capitalisation and liquidity position. The borrower relief measures (i.e. legislative loan moratoria and voluntary moratoria granted by banks) and the public guarantee schemes have prevented the deterioration in asset quality and facilitated the flow of credit to the economy. Credit activity has been mainly supported by the expansion of lending to non-financial corporations backed by state guarantees. Banking sector capitalisation marginally improved supported by the supervisory and regulatory relief measures adopted since the onset of the pandemic. While no significant cliff-edge effects are expected when loan moratoria expire fully, a more marked deterioration in asset quality is likely to emerge once support measures are phased out. Due to the increase in loan-loss provisions and by one-off measures adopted by several banks, banking sector profitability has remained under pressure. Banking sector consolidation has continued notwithstanding the difficult operating environment for banks.

Emergency measures have played an important role in cushioning the effect of the economic downturn in 2020, together with the existing tax and benefit system. Drops in households' market incomes have been largely mitigated by the short-time work schemes ('ERTEs') and other emergency measures taken to protect incomes, as well as through the pre-existing tax and benefits system. [14] The national minimum income scheme introduced in 2020 has also acted as a social safety net, and has the potential to overcome the previous fragmented systems. This way, automatic stabilisers and discretionary measures have limited the rise in income inequality and poverty risk.

Improving the functioning of the fiscal framework is essential to warrant an efficient use of public investment to strengthen the medium- and long-term sustainability of public finances. Spain's Independent Authority for Fiscal Responsibility ('AIReF') completed 11 expenditure reviews in 2019 and 2020, which also covered an assessment of existing tax benefits. If fully implemented, these have the potential to lead to improvements in the efficiency and effectiveness of public spending. The effectiveness of the tax administration could also be further enhanced.

Improving the quality of public expenditure would also require strengthening the public procurement framework. Spain had already taken steps to comply with the Directive 2014/24/EU [15] by creating the independent Office for Regulation and Supervision of Public Procurement and the National Evaluation Office. The first corresponds to the enforcement body under Article 83(1) of that Directive and has powers to act across the whole Spanish territory to fight breaches in procurement matters through its regulatory and supervisory action. The second is meant to issue mandatory reports analysing the financial sustainability of public works and service concession contracts prior to the approval of projects (serving as basis for tendering procedures) to both the central and local governments, as well as regional governments that decide to adhere to it. However, these governance bodies are not yet fully set up or completely operational and the adoption of the nation-wide public procurement strategy has been delayed. Their effectiveness will depend crucially on the resources allocated to its implementation and the degree of ownership at all levels of government.

Policies for the next generation, children and youth, including education and skills.

Spain could further enhance the labour-market relevance of its education system. The education expenditure as a share of GDP remains below the EU average and investment in

---

[14] The findings in Almeida et al. (2020) and Christl et al. (2021) based on the Euromod model, suggest that the 2020 tax-benefit system in Spain absorbed about two thirds of the shock in market income, half of the cushioning effect due to the monetary compensation schemes.

[15] Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC, http://data.europa.eu/eli/dir/2014/24/2020-01-01.

education decreased in the last decade. Schools are well equipped with digital infrastructure and tools, but teachers' digital competences are not always up to the challenge. Using digital means for teaching remains limited and students' digital competences have to improve. In particular, the crisis has revealed a sharp socio-economic divide in students' access to digital technology. In spite of recent improvements, Spain still has one of the highest rates of early leavers from education and training in the EU (16% in 2020), which contributes to the high share of low skilled in the working age population and exacerbates pre-existing socio-economic inequalities. Basic skills levels have not improved significantly and regional differences remain significant.

Spain is one of the countries with higher skill mismatches in the labour market in the EU. Medium to high-level technical skills, and especially ICT specialists, are in shortage. There are under-utilised skills in parallel, particularly amongst higher education graduates. Career guidance and orientation are key to reduce skills mismatches. The gender gap in science, technology, engineering and mathematics ('STEM') remains high. The relatively low enrolment in vocational education and training ('VET') amplifies shortages of medium to high technical skills, including those needed for the transition to a green and digital economy. Participation in adult learning is currently low, especially for low-skilled people, who represent one the highest share of the active population in the EU. The share of long-term unemployed in the active population is among the highest in the EU. Young people in Spain have the highest unemployment rate in the EU, and the share of "those neither employment, nor in education or training" remains well above the EU average. Public employment services and current active labour market policies are not effective enough in supporting sustainable jobs and re-skilling and up-skilling the workforce.

Social expenditure remains oriented towards the older generations, while the high rate of child poverty weighs on equal opportunities. The difficult economic and social context resulting from the pandemic calls for a more balanced approach towards intergenerational solidarity in favour of the younger generations. The crisis is likely to increase the high level of poverty and social exclusion despite the new minimum income scheme introduced in 2020. In a context of very low fertility rates, families with children are particularly exposed. Social transfers (excluding pensions) have a low impact on child poverty reduction. Income support to children in Spain, which is one of the lowest in the EU, builds to a large extent on reducing the tax burden born by families with children. Lower-to-medium income families are not entitled to the country's strict means-tested child benefits, partly integrated in the minimum income scheme as of 2021, and tax deductions are of a more limited advantage to them. Unemployment assistance for the long-term unemployed and those not qualifying for contributory schemes is currently scattered across multiple schemes, resulting in low coverage and effectiveness in activation.

2.3. Challenges related to the green and digital transition

Green dimension

The recovery and resilience plan should contribute to the green transition and at least 37% of the plan's total allocation needs to contribute to climate objectives. The measures in the plan are expected to contribute to achieving the 2050 climate neutrality objective, and the increased 2030 energy and climate targets, taking into account the NECP. In particular, the financial contribution for Spain allows frontloading investments necessary to reach the

EU increased climate ambition to reduce net greenhouse gas emissions by at least 55% by 2030 compared to 1990, towards EU climate neutrality by 2050, as agreed by the European Parliament and the Council within the Climate Law. It should also contribute to meeting environmental targets for waste, pollution control, sustainable mobility, biodiversity protection and restoration, marine and water resources, and support the transition to sustainable food systems, as well as to the circular economy, while ensuring that nobody is left behind.

Water, waste and biodiversity

Despite some progress, many challenges remain for water management in Spain. This applies to water governance, pricing policy and water body restoration. Implementing an appropriate pricing policy to recover the costs of services in all river basin districts would promote water efficiency, especially in the agriculture sector. Further infrastructure investments are needed to improve water management, such as wastewater collection and treatment, reduction of leaks in the networks and improve water supply. Despite efforts undertaken as part of the river basin management plans, the overall quality of groundwater has substantially deteriorated in recent years, and there is a need to reduce the surplus of nitrogen and phosphorus generated by agricultural activities. Despite efforts to modernise irrigation systems, pressure on water availability requires particular attention and continued progress is needed. Spain should take further advantage of the potential of reusing water.

Despite progress in the transition towards the circular economy, waste management remains a challenge, but with substantial differences between regions. The amount of landfilled waste, which remains considerable, is preventing faster progress towards the circular economy. Spain is one of the countries who has missed the EU target of recycling 50% of municipal waste by 2020 (the overall recycling rate was of 35% in 2019). The EU has set up even more ambitious targets for the next decade, including achieving 55% recycling of municipal waste by 2025. Therefore, significant efforts are needed to increase the prevention, minimisation, sorting, reuse and recycling of waste, thereby diverting waste away from landfills or incinerators. Supporting circular economy innovations and business models could further support the circular economy in Spain.

Spain has a very rich biodiversity. Around 27% of the Spanish territory is covered by the Natura 2000 network (EU average is 18%). This poses important challenges in terms of conservation, management and resources, but also provides important opportunities to preserve biodiversity, support ecosystem services and achieve positive outcomes from a socio-economic perspective. Spain could further capitalise on its rich natural capital to promote green growth and job creation, for instance, through more environmentally sustainable forms of tourism.

GHG emissions and air quality

The emission of several air pollutants has decreased over the last decades in Spain. However, ensuring a good level of air quality continues to raise concern, mainly related to nitrogen dioxide (NO_2) emissions. In particular, conventional personal transport exacerbates existing problems with air quality and traffic congestion in the main metropolitan areas, namely Madrid and Barcelona, leading to health, social and economic costs that could be avoided or minimised.

According to Spain's existing climate targets, it aims to reduce greenhouse gas (GHG) emissions reduction by 23% by 2023 (compared to 2005) and to achieve climate neutrality by 2050. Spain has overachieved its 2020 target for GHG emission reductions in sectors not covered by the EU Emissions Trading System ('ETS'). In these sectors GHG emissions have been reduced by 14%, well above the binding national target of 10% by 2020 under the Effort Sharing Regulation ('ESR'). [16] However, in the absence of new measures, Spain is expected to miss its existing 2030 GHG emission reduction target of 26% compared to 2005 by 10 percentage points. This could be avoided if the measures outlined in the NECP were implemented. In this scenario, the current 2030 ESR target would be overachieved by 13 percentage points.

Transport is the sector in which GHG emissions continue to grow most. The transport sector accounted for 26% of GHG emissions in 2017. The transport measures in the NECP, including encouraging a modal shift, are key for Spain to achieve its GHG emission reduction targets. The NECP measures would lead to a reduction of GHG emissions from transport by one third. Spain should therefore implement the NECP, in particular regarding the measures proposed for the transport sector, to ensure achieving its GHG emission reduction goals.

Climate change

Spain is one of the Member States that is most exposed to the adverse effects of climate change. It is a core challenge anticipating and managing the adverse effects of climate change, such as floods, coastal erosion, droughts, heat waves, reduced water resources, loss of biodiversity and natural ecosystems, and forest fires. These natural hazards are expected to become even more frequent and extreme in the future. Therefore, measures in risk prevention and preparedness, climate change adaptation and nature-based solutions are required in Spain. Continued support to agricultural and forest practices that are beneficial for biodiversity and ecosystem resilience are needed, including fostering organic farming, promoting the sustainable use of pesticides, regenerating silvo-pastoral systems, preventing and managing forest fires, and promoting agro-forestry.

Renewable energy

Spain aims to contribute to the current EU's 2030 target for renewable energy by reaching 42% of renewables in gross final energy consumption by 2030. This ambition is above the required share of 32% of renewables in gross final energy consumption that results from the formula in Annex II to Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate

[16] Regulation (EU) 2018/842 of the European Parliament and of the Council of 30 May 2018 on binding annual greenhouse gas emission reductions by Member States from 2021 to 2030 contributing to climate action to meet commitments under the Paris Agreement and amending Regulation (EU) No 525/2013 (OJ L 156, 19.6.2018, p. 26).

Action. [17] The largest share of renewable energy is attributed to the electricity sector. To achieve the target, Spain should focus on further developing electricity from renewable sources (e.g. offshore wind, solar), fostering renewable hydrogen and support the sectoral integration of renewable energy. Promoting the use of renewable heating and cooling systems is also needed. Full implementation of the NECP would allow Spain to achieve a substantial increase in renewables with a view to achieve climate neutrality by 2050. Further reflection on how to improve the integration of the energy system could also help making this increase more cost-effective. While increasing the share of renewable energy sources, Spain needs to fully take into account the impact from combustible renewable fuels on air quality.

Energy efficiency

Fostering energy renovations of buildings remains a challenge, but it could speed up energy savings and contribute to the economic recovery. In the context of the Renovation Wave, there is scope for Spain to intensify efforts to improve the energy performance of the existing building stock, including with the aim to address energy poverty. Such measures would ensure achieving the national contribution for energy efficiency and the cumulative energy savings target. It is estimated that following an average annual renovation rate of 2,6% at the cost optimal level, the primary energy saving potential in Spain is approximately 108 TWh by 2050. Over the 2021-2050 period, this is expected to generate more than 7 million of full time equivalent jobs. [18] In the NECP, Spain has a number of specific energy-efficiency actions for buildings, including to renovate (i) 1 200 000 residential buildings by 2030, and (ii) heating and cooling systems of 300 000 residential buildings on average per year.

Electricity interconnectors

Continued cooperation with France and Portugal is key to foster the internal energy market and ensure energy security, in particular by supporting cross-border and cross-regional interconnections. The NECP sets the targets of 10% energy interconnection capacity by 2020 and 15% by 2030. These targets emphasise the need to implement key infrastructure projects, notably planned Important Projects of Common European Interest (‘IPCEIs’) as well as several grid-reinforcement projects necessary to further integrate renewable energy capacity. Spain should continue to increase the level of energy interconnection capacity to achieve the 2030 target.

The table below gives an overview of Spain’s objectives, targets and contributions under the Governance Regulation.

---

[17] Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action, OJ L 328, 21.12.2018, p. 1–77 (hereafter the ‘Governance Regulation’).

[18] Zangheri et al., 2020.

Table 2.3.1: Overview of Spain's objectives, targets and contributions under the Governance Regulation

National targets and contributions	Latest available data	2020	2030	Assessment of 2030 ambition level
Binding target for greenhouse gas emissions compared to 2005 under the Effort Sharing Regulation (%)	-14%	- 10%	-26%	As in ESR. Total GHG target implies -39%
National target/contribution for renewable energy: Share of energy from renewable sources in gross final consumption of energy (%)	18,4% (2019)	20%	42%	Sufficiently ambitious (the result of the RES formula is 32%)
National contribution for energy efficiency:				
Primary energy consumption (Mtoe)	120,8 (2019)	123,4	98,5	Sufficient
Final energy consumption (Mtoe)	86,3 (2019)	87,23	73,6	Sufficient
Level of electricity interconnectivity (%)	6,5%	10%	15%	N/A

Sources: Assessment of the final national energy and climate plan of Spain, SWD (2020) 908 final; Eurostat where data is indicated for specific years.

Digital dimension [19]

The recovery and resilience plan should contribute to the digital transition and at least 20% of the plan's total allocation needs to contribute to digital objectives. The measures in the plan should, inter alia, contribute to the digital transformation of the economic and social sectors (including public administration, public services, and the justice and health systems). The objective of the measures in the plan should be to improve not only the competitiveness, but also the resilience, agility and security of companies and public actors, all while ensuring inclusiveness.

Spain is an intermediate performer on the European Commission's Digital Economy and Society Index ('DESI') for 2020. The main deficit lies in human capital, according to DESI. Investments that enable students and schools to develop virtual classes became extremely important during the COVID-19 crisis. In 2019, 43% of the Spanish population lacked basic digital skills. To increase resilience, Spain should also further promote the

[19] Figures presented in these sub-sections are from the European Commission's Digital Economy and Society Index ('DESI') for 2020, unless otherwise specified.

digitalisation of businesses, including SMEs, very small enterprises and the self-employed, to help them in the transition towards the digitalisation of productive processes and distributions channels (enhancing e-commerce). Spanish firms could also increase their productivity and competitiveness through improved management competences.

Spain's overall connectivity score has further improved, but the rank remains 5th in the DESI 2020. The country performs particularly well when it comes to VHCN (Very High Capacity Network) coverage. The deployment of FTTP (Fiber to the premises) networks continues to be an important feature of the Spanish digital market, covering 84.9% of households, above the EU average of 42,5%. Despite the significant differences between urban and rural areas, rural FTTP coverage in Spain reaches 59,5% of households, significantly above the rates of both EU rural and total FTTP coverage (21% and 34% respectively). In June 2019, SETID (S*ecretaría de Estado de Telecomunicaciones e Infraestructuras Digitale*s) published a draft proposal for managing the 700 MHz, 1,5 GHz and 26 MHz bands in which general aspects of the auctions where consulted. After delays due to the COVID 19 pandemic, the tender specification and launch of the auction for the 700 MHz band was published on 31 May 2021. Spain decreased four positions in the 5G readiness indicator (from 6th to 10th), as it has not assigned any additional spectrum in the 5G pioneer bands.

According to the European Index of Digital Entrepreneurship Systems ('EIDES') [20], that compares framework conditions for digital start-ups and scale-ups in Europe, framework conditions for digital start-ups and scale-ups in Spain considerably improved between 2018 and 2020. As a result, Spain moved from the Catchers-up to the Followers group. Relative strengths of the Spanish digital innovation ecosystem include access to finance and networking and support. Among weaknesses of the Spanish digital innovation ecosystem are culture and informal institutions and regulation and taxation.

The level of venture capital and artificial intelligence investments in Spain reflect the positive improvements of framework conditions for start-ups and scale-ups in Spain. Between 2014 and 2019, venture capital investments increased approximately threefold from around EUR 0,5 billion in 2014 to nearly EUR 1,5 billion in 2019. With the level of artificial intelligence investments between EUR 16,3 and EUR 18 per capita, Spain lies above the EU average. However, at 0,06% of GDP in 2020 (cf. 0,16% for EU27), venture capital financing fell back to 2017 levels, and thus remains underdeveloped. [21]

The wide digital gap between urban and rural areas remains to be closed. Overall, connectivity is good, but Next Generation Access broadband coverage in rural areas is only 58,7% (2019) as compared to almost 92% at national level. Improved coverage would support the digital transition of the Spanish farming sector, for example through reinforced

[20] https://ec.europa.eu/jrc/en/EIDES.
[21] Benedetti Fasil et al, 2021.

efforts on digital skills in rural areas and by exploiting the digital technologies to better monitor and optimise agricultural production processes.

Spain ranks 16th in the EU on human digital capital in DESI 2020, rising in the ranking since the previous year. The level of basic digital skill is around the EU average: 43% of people between 16 and 74 years of age lack basic digital skills (against the EU average of 42%). The share of ICT specialists in total employment increased and it is now close to the EU average (3,8% against EU average of 3,9%). The share of ICT graduates in Spain also increased and now accounts for 4% of all graduates. The share of female ICT specialists remains stagnant at a mere 1,1% of total female employment. In 2019, Spain signed the European Declaration on boosting the participation of women in digital.

Regarding the higher education offer of advanced digital skills, Spain has an intermediate position. Spain holds a higher proportion of masters' programs teaching high-performance computing than the EU average (1,28% against 1,20% in the EU), and data science (4,88% against 4,61% in the EU). The penetration rate is however lower than in the EU for artificial intelligence (3,44% against 3,93%) and cybersecurity (1,52% against 1,86%). [22]

Confinement measures may explain the increase in the use of internet services in Spain in 2020, with the country performing above the EU average. People in Spain are keen to carry out a range of online activities in line with the rest of the EU, such as making video calls, reading news online or using social networks. Compared to the EU average, the highest ranked activities are taking online courses and playing music, videos and games online.

On the integration of digital technology, Spain ranks 13th among EU countries in DESI 2020. Spanish businesses take advantage of the opportunities presented by digital technologies in line with the EU average, as 43% of businesses have an electronic information sharing system in place (against the EU average of 34%) and 9% of Spanish businesses access big data analysis (against 14%). Almost one third have at least two social media accounts to promote their products and services and 22% of companies use the cloud (26% in the EU). Finally, 24% of SMEs sell online (above the EU average of 17%), though only 7% of all SMEs sell across borders to other EU countries and 10% of turnover is generated by online sales.

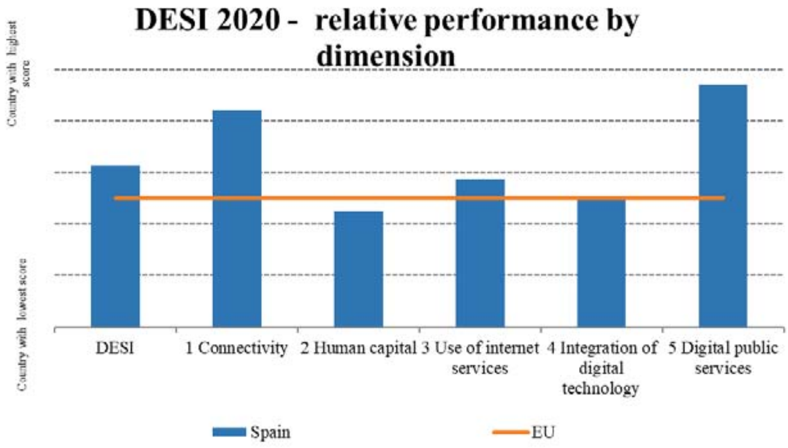
The adoption of new digital technologies will provide benefits in many sectors of the Spanish economy. Spain stands to benefit greatly from the digital transformation if all SMEs and micro-enterprises adopt the use of new technologies in their business activities. According to the DESI 2020, measures to include digitisation and embrace AI and other emerging technologies can boost the innovation capacity of the Spanish economy, driven by SMEs.

---

[22] Righi et al., 2020.

Spain ranks 2nd in the EU on digital public services in DESI 2020, well above the EU average. Spain rose by two positions in the 2020 ranking compared to the previous year. This is the chapter in which the country performs best. Indicators show a high level of online interaction between public authorities, citizens and businesses. Spain performs very well on the open data indicator, with 94% of the maximum score. 82% of Spanish internet users actively engage with e-government services, 6 percentage points more than the previous year.

Graph 2.3.2: Performance of Spain in the Digital Economy and Society Index (DESI 2020)



Note: EU aggregate corresponds to EU28, based on 2020 DESI report.

Box 2.3.3: Progress towards the Sustainable Development Goals and the four dimensions underpinning the Annual Sustainable Growth Strategy

In this figure, the United Nations' Sustainable Development Goals are represented under a specific Commission guiding principle for competitive sustainability from the 2021 Annual Sustainable Growth Strategy, to which they are strongly associated. It should be noted that most Sustainable Development Goals contribute, to varying degrees, to several guiding principles.

1. No poverty
2. Zero hunger
3. Good health and well-being
4. Quality education
5. Gender equality
6. Clean water and sanitation
7. Affordable and clean energy
8. Decent work and economic growth
9. Industry, innovation and infrastructure
10. Reduced inequalities
11. Sustainable cities and communities
12. Responsible consumption and production
13. Climate action
14. Life below water
15. Life on land
16. Peace, justice and strong institutions
17. Partnership for the goals

The objectives of the Sustainable Development Goals (SDGs) have been integrated in the European Semester since the 2020 cycle. This integration provides a strong commitment towards sustainability in coordination with the economic and employment policies of the EU. In that respect, this section outlines Spain's performance with respect to the SDGs with particular focus on the four dimensions underpinning the 2021 Annual Sustainable Growth Strategy and in relation to its relevance to the RRP (green transition, fairness, digital transition and productivity, and macroeconomic stability), indicating possible areas where investments and reforms in line with the objectives of the Facility could further accelerate the progress on the SDGs.

Green Transition

Spain has made progress on almost all SDGs related to the green transition. Progress has been recoded especially for SDG 13 "Climate action", where Spain has reduced its GHG emission intensity of energy consumption by 17% between 2000 and 2018, above the EU average of 15%. This is also reflected in the increase of the share of renewable energy in gross final consumption to 18,4% in 2019. Also for SDG 14 “Life below water”, Spain shows good progress: in coastal bathing sites with excellent water quality as a share of all coastal bathing sites, Spain has increased from 87% in 2013 to over 93% in 2019, above the EU average of 88% in 2019. Progress has also been made for SDG 7 “Ensure access to affordable, reliable, sustainable and modern energy for all”, where Spain has increased its share of renewable energy in gross final energy consumption from 15% in 2013 to 18% in 2019. However, Spain remains below the EU average of 20% in 2019. For SDG 11 “Sustainable cities and communities”, Spain has slightly increased its municipal waste recycling rate of 32,5% in 2013 to 35% in 2019 but remains substantially below the EU average of over 47%.

Fairness

Prior to the pandemic, Spain had made moderate progress on almost all SDGs related to fairness. Good progress has been recorded for the SDG 5 “Gender equality”, where the gender pay gap has decreased by 3 percentage points between 2014 and 2020, significantly faster than in the EU on average and from a level that was already below the EU average. The participation in early childhood education for children aged between 4 and compulsory school age has increased from 97,1 in 2014 to 97,8% in 2019, above the EU average (SDG 4 “Quality education”). For SDG 10 “Reduced inequalities”, Spain has reduced its income inequality faster than the EU on average from 6,81 in 2014 to 5,94 in 2019, but still remained above the EU average in 2019 (4,99). Similarly the share of people at risk of poverty or social exclusion (SDG 1 “No poverty”) declined from 29,2% in 2014 to 25,3% in 2019, but remained well above the EU average (20,9%). The decline was mainly driven by the fall in the share of people living in households with zero or very low work intensity from 17,1% in 2014 to 10,8% in 2019, remaining however well above the EU average (8,3%).

Notwithstanding the improvements, the current levels for some indicators are among the highest in the EU such as for the share of early school leavers (16% vs % 10,1% in 2020 respectively in Spain and the EU on average), in-work poverty (12,7% vs 9% in 2019) and people at risk of poverty (20,7% vs 16,5% in 2019).

Digital transition and productivity

When it comes to the digital transition and productivity, progress is also observed for most SDGs, although performance in a number of them still remains below the EU. For the SDG 4 “Quality education” Spain made strong progress in reducing the share of early leavers from education and training to below 20%. Also for SDG 8 “Decent work and economic growth”, Spain made progress in reducing the share of young people neither in employment nor in education and training (‘NEET’) from 19,4% in 2015 to 17,3% in 2020, and in increasing the employment rate from 62% in 2015 to 65,7% in 2020, although most of the progress occurred until 2019 before the crisis. Despite the progress Spain still performs clearly below the EU average for early leavers, NEETs and the employment rate. For SDG 9 “Industry, innovation and infrastructure”, Spain slightly increased the share of GDP spent on R&D, but the figure remains well below the EU average of 2%. Similarly, Spain slightly increased the share of personnel employed in R&D over the same period, while remaining clearly below the EU average.

Macroeconomic stability

Due to the impact of the COVID crisis, real GDP per capita in Spain was lower in 2020 compared to 2015 (SDG 8 "Decent work and economic growth). This is reflected in a rapid increase of the general government debt to GDP ratio, from 99,3 % in 2015 to 120% in 2020, to levels clearly above the EU average (90.7% in 2020). Investments as a share of GDP have grown up to close to 20% in 2019, though are still lower than in the EU on average, but overall resource productivity, measured as euros per kilogram, has risen strongly between 2014 and 2019 from 2,65 to 2,8, and is clearly higher than in the EU on average (2,09 in 2019).

3. OBJECTIVES, STRUCTURE AND GOVERNANCE OF THE PLAN

3.1. Overall strategy of the plan

The Recovery and Resilience Plan of Spain (the 'plan') is conceived as a roadmap for the recovery and modernisation of the Spanish economy after the COVID-19 crisis. The plan broadens the scope of the programme of structural reforms set forth by the government in the 2019 Agenda for Change. It has a triple objective to: (i) work as a countercyclical lever to provide momentum to the economy in the short term, (ii) support the large structural transformation of the economy, and (iii) steer the transformation towards a more sustainable and resilient growth model.

The plan will entail a significant volume of public and private investment in the coming years. It aims at mobilizing EUR 9,5 billion of non-repayable support primarily concentrated in the first three years (2021-2023), to maximize their impact on the rapid reconstruction of the economy.

The plan is structured around four cross-cutting axis placed at the centre of the economic policy strategy from the outset: ecological transition, digital transformation, gender equality and social and territorial cohesion. The ten policy areas of the Plan aim at driving activity and employment to modernise the economy and society of Spain: (i) urban and rural agenda, the fight against rural depopulation and agricultural development; (ii) resilient infrastructures and ecosystems; (iii) a just and inclusive energy transition; (iv) a public administration for the 21st century; (v) modernisation and digitalisation of the industrial fabric and SMEs, recovery of the tourism sector and promotion of Spain as an entrepreneurial nation; (vi) pledge to support science and innovation and strengthen the capabilities of the national health system; (vii) education and knowledge, lifelong learning and capacity building; (viii) the new care economy and employment policies; (ix) promotion of the culture and sports industries and; (x) modernisation of the tax system for inclusive and sustainable growth. These ten policy areas translate into the 30 components of the Plan. For the remainder of the document, Components in the Plan will be named as in Table 3.1 below (note: these names are short versions of the full titles used by Spain in the RRP).

Table 3.1: Overview of the plan: components and estimated costs

Policy Area	Component *(shortened names)*	Estimated costs (EUR m)
01. Urban and rural agenda, combating depopulation and developing agriculture	01. Sustainable mobility (urban)	6 536
	02. Renovation	6 820
	03. Agri-food and fisheries	1 051
02. Resilient infrastructures and ecosystems	04. Ecosystems and biodiversity	1 642
	05. Coast and water resources	2 091
	06. Sustainable mobility (long-distance)	6 667
03. Fair and inclusive energy transition	07. Renewables	3 165
	08. Electricity infrastructure	1 365
	09. Hydrogen	1 555
	10. Just transition	300
04. An administration for the XXI century	11. Public administration	4 239
05. Modernisation and digitalisation of the industrial and SME fabric, restoring tourism and boosting Spain's entrepreneurial nation	12. Industrial policy	3 782
	13. Support to SMEs	4 894
	14. Tourism	3 400
	15. Digital connectivity	3 999
06. A pact for science and innovation. Capacity building of the National Health System	16. Artificial Intelligence	500
	17. Science, technology and innovation	3 457
	18. Reform of health system	1 069
07. Education and knowledge, continuing training and skills development	19. Digital skills	3 593
	20. Vocational training	2 076
	21. Education	1 648
08. New care economy and employment policies	22. Care economy, equality and inclusion	2 492
	23. Labour market	2 363
09. Boosting the culture and sport industry	24. Cultural industry	325
	25. Audiovisual	200
	26. Sports	300
10. Modernisation of the tax system for inclusive and sustainable growth	27. Prevention of tax fraud	-
	28. Tax system	-
	29. Effective public spending	-
	30. Pension system reform	-
TOTAL		**69 528 [23]**

[23] This amount is marginally in excess of the plan's total allocation of EUR 69 512 589 611. The plan's total allocation corresponds to the financial contribution in the form of non-repayable support available to Spain after deduction of Spain's proportional share of the expenses of Article 6(2) of Regulation (EU) 2021/241, calculated in accordance with the methodology of Article 11 of that Regulation.

The first policy area contains measures to facilitate the urban and rural agenda of Spain (Components 1 (Sustainable urban mobility), 2 (Renovation) and 3 (Agri-food and fisheries)). They include measures to foster the energy renovation of buildings, including social housing, and to promote sustainable mobility in urban and metropolitan areas. The COVID-19 pandemic has also highlighted the importance of a robust agri-food system with the highest environmental standards, and measures in the components seek to reinforce it, boosting also its environmental and digital transformation.

The second policy area focuses on the resilience of ecosystems and infrastructures. Attention is devoted to the natural capital of Spain (biodiversity, coastal zones and water resources), with a view to strengthening nature-based solutions to adapt to climate change (Components 4 (Ecosystems and Biodiversity) and 5 (Coast and Water Resources)). When it comes to infrastructures, the Plan is also expected to support logistics and inter-modality, foster the development of the European railway network as well as the digitalisation and sustainability of freight transport through measures in Component 6 (Sustainable Long-Distance Mobility). This will allow to mobilise large volumes of investment and have a structural impact on society and the economy.

The third policy area seeks to foster a decarbonised, competitive and efficient energy sector (Components 7 (Renewables), 8 (Electricity infrastructure), 9 (Hydrogen) and 10 (Just Transition)). Its objective is to harness the renewable energy potential of Spain and existing value chains relevant for competitiveness. It should also promote the development of fast-growing sectors in Spain.

The aim of the fourth policy area is to modernise the public administration of Spain (Component 11 (Public administration)). It mostly aims at the modernisation of administrative processes, including via the digitalisation of the administration, as well as the energy transition of its infrastructure and fleets of vehicles. Measures strengthening the public procurement framework and coordination between levels of government, as well the introduction of an ex-ante public policy evaluation, have also been included. Finally, it also introduces measures to improve recruitment for civil servants and to reduce the share of temporary workers in the public sector.

The fifth policy area should contribute to the modernisation of the industry-services ecosystem in Spain (Components 12 (Industrial Policy), 13 (Support to SMEs), 14 (Tourism) and 15 (Digital Connectivity)). It will seek to accelerate the digitalisation and energy transition of industry in Spain, amongst others through strategic projects affecting the whole value chain in certain areas. Some of the actions will prepare the ground for firms to be able to take part in planned IPCEIs. The aim is to promote services at the forefront of innovation and technological development and first industrial deployment in key areas such as next generation cloud infrastructure and edge services, microelectronics, secure satellite communications and automotive batteries. SMEs are the focus of several measures in this policy area, given their importance in Spain. Measures to improve the business environment, including through a more efficient justice system, are also envisaged. There is a strong focus on supporting the competitiveness of SMEs. Measures to support the modernisation of the tourism industry are part of this policy area.

The sixth policy area focuses on science and innovation in general, notably in some strategic determinants, such as artificial intelligence, and it promotes reforms and

investments in the health system (Components 16 (Artificial Intelligence), 17 (Science, technology and innovation) and 18 (Reform of the health system)). It should enable Spanish firms and researchers to participate more actively in a stronger pan-European research system. The impulse given to research and innovation should underpin and accelerate the modernisation of production processes. First, through the incorporation of existing technologies to incremental innovation and an increase in competitiveness and intangible assets, but also through the launch of innovation processes with a truly disruptive perspective. Measures also aim at rendering the national health system more resilient to ensure the efficient response during shocks and address more systemic challenges which the COVID-19 pandemic highlighted.

The seventh policy area seeks to strengthen talent and skills at all levels in Spain, with a particular focus on digital skills and vocational education and training (VET), which are key for the green and digital transitions (Components 19 (Digital Skills), 20 (Vocational Training) and 21 (Education)). It also seeks to promote activity in the areas of skills transfer and training.

The eighth policy area puts forward proposals to address the high structural unemployment rate and segmentation among workers and to reduce child poverty (Components 22 (Care Economy, Equality and Inclusion) and 23 (Labour market)). The set of measures envisage to address duality and to reduce adjustments that seek to cope with adverse economic situations through job destruction, in an attempt to preserve employment and fight precariousness. The definition of its detail has been explicitly left open, with a view to leaving space for the agreement and endorsement by social partners. A reform of family support aims at improving protection and material support (in cash and in kind) for families, with a view to reducing child poverty. Finally, another reform aims at modernising other non-contributory social benefits to improve their protection and activation roles.

The ninth policy area seeks to boost the culture, audiovisual production and videogames and sports sector, which pay an important contribution to economic activity and to the well-being and health of persons (Components 24 (Cultural industry), 25 (Audiovisual) and 26 (Sports)). Advantage is taken in these fields of the opportunities brought by digitalisation.

Finally, the tenth policy area envisages a comprehensive reform of the tax system with a view to increasing revenues and decreasing expenditure in the form of tax rebates. This is done to regain fiscal sustainability and sustain investments put in motion with the support of the RRF, while improving the fairness of the system and fostering environmental taxation. It also aims at reforming the pension system by building on the Toledo Pact recommendations, which benefit from a broad parliamentary consensus (Components 27 (Preventing Tax Fraud), 28 (Tax system reform), 29 (Effective Public Spending) and 30 (Pension System Reform)).

The plan contains 102 reforms and 109 investments. As regards timing, the plan foresees that practically all reforms will be adopted and implemented within the timespan 2021-2023. As regards investments, while those envisaged under five components will be fully delivered by 2023, for the remaining components with investments (21) a part of the investments will be fully implemented after that date.

3.2. Implementation aspects of the plan

Consistency with other programmes

The Plan of Spain provides detailed justification for its consistency with the objectives and priorities of other initiatives, such as the National Reform Programme of Spain, the European Digital Agenda and the National Energy and Climate Plan. While no information is provided on the Youth Guarantee implementation plans, there are no indications in the information provided that indicate that inconsistencies would arise.

As regards the Multiannual Financial Framework 2021-2027, the Partnership Agreement with Spain and the Operational programmes to be developed for the implementation of the Structural Funds are still at very preliminary stages of preparation. The RRP stipulates that their structure shall complement the projects supported by the RRF to optimise the use of all the European funds allocated to Spain. This is particularly relevant for areas where investments that will be kick-started with RRF support could at a later stage benefit from support under ERDF and ESF+ in order to ensure their impact in the long-term, such as the creation of new places in VET or early childhood schooling. Finally, the plan indicates that most regions have prepared or updated their own strategic investment plans, which appear to be broadly aligned with the 30 components of the RRP. Spain will neither use RRF funds for support under the Technical Support Instrument, nor to contribute to its national compartment under the InvestEU programme.

Consistency with the challenges and priorities identified in the most recent euro area recommendations

The plan of Spain is aligned with the Commission Recommendation for a Council Recommendation on the economic policy of the euro area, which will set out the general policy framework for Member States and their respective Recovery and Resilience Plans [[24]].

- In relation to recommendation 1 to ensure a policy stance which supports the recovery, measures in the RRP are expected to continue to mitigate the impact of the crisis and trigger recovery. In the medium term, the commitment to support investment and restore the sustainability of public finances will come will come notably through measures in Components 28 (Tax system reform) and 29 (Effective Public Spending), which aim to strengthen the fiscal system and improve the efficiency of public spending, respectively. The modernisation of public procurement envisaged in Component11 (Public Administration) of the plan can also play a role in this respect.

[[24]] Pending final adoption by the Council, after endorsement by the European Council. The text agreed by the Eurogroup on 16 December 2020 is available at: https://data.consilium.europa.eu/doc/document/ST-14356-2020-INIT/en/pdf.

- With respect to recommendation 2 to improve convergence, resilience and sustainable and inclusive growth, reforms and investments in the plan are expected to support productivity and better functioning markets and public administrations. This should foster private investment to address the recovery and the twin green and digital transition. The plan also shows commitment to deepen the Internal Market in its Component 13 (Support to SMEs), including the digital one through Component 15 (Digital Connectivity). In parallel, efforts will be made to correct labour market segmentation in Component 23 (Labour market reform), to match the skills of human capital through the modernisation of education and training in Components 20 (VET) and 21 (Education), and to promote effective active labour market policies across the national territory in Component 23 (Labour market reform). This is to be done within the framework of social dialogue and with the broadest possible consensus, with a view to ensuring that reforms are effective in the medium and long term. Further reforms of the tax system are planned under Component 28 (Tax reform system) of this Plan to move towards greener taxation.
- When it comes to recommendation 3 to strengthen national institutional frameworks, measures have been taken to simplify administrative procedures for the efficient absorption of European funds, in particular those of the RRF. The Plan also provides for measures to modernise and digitalise public administrations in its Component 11 (Public Administration), particularly in the areas of health, justice and public employment services. In the area of business climate, reforms envisaged as part of Component 13 (Support to SMEs) can help remove unnecessary or disproportionate administrative barriers to business creation and growth. They can also facilitate business restructuring processes through amendments to the insolvency framework.
- In relation to recommendation 4 to ensure macro-financial stability, the positive impact of the plan on economic resilience and long-term fiscal sustainability should come through fiscal adjustments foreseen in Components 28 (Tax reform system), 29 (Effective public spending) and 30 (Pension system reform), in addition to the increase in potential growth resulting from the implementation of the plan itself.

National arrangements for the implementation of the plan

The national arrangements for the implementation of the plan have been set out in Royal Decree-Law 36/2020 of 30 December approving urgent measures for the modernisation of the public administration and the implementation of the Recovery Plan [25]. A Commission for Recovery, Transformation and Resilience, which gathers all Ministers competent for the plan, has been set up and will be chaired by the President of the Government. The Deputy Ministers for Economic Affairs and Business Support, Finance, Budget and Expenditure, Social Rights, the Secretary General for European Funds, and the Secretary General for Economic Affairs and G20 of the Cabinet Office of the Prime Minister

[25] https://www.boe.es/diario_boe/txt.php?id=BOE-A-2020-17340 (hereafter ‘Royal Decree-Law 36/2020’).

will also take part in it. This Commission has established the general policy guidelines for the development and implementation of the Recovery Plan and shall monitor its implementation. Its work will be assisted by a Technical Committee of 20 members of the public administration chaired by the Secretariat-General for European Funds.

A newly set up Secretariat-General for European Funds within the Ministry of Finance will be the responsible authority for the plan vis-a-vis the European Commission. Together with a new Directorate-General for the Recovery and Resilience Facility, the existing Directorate-General for European Funds, which has gained experience over decades in the management of European Funds, will also be part of this Secretariat-General. This authority will be key in monitoring the submission of payment claims, which will be based on the achievement of milestones and targets. While the Ministry responsible for each measure will be in charge of taking action to achieve the related milestones and objectives in line with the budgeted resources, the Secretariat-General for European Funds will be the body drawing up the requests for payment to the European Commission. Each payment request shall be accompanied by a management declaration based on reports issued by the bodies responsible for the components. In addition, the General Comptroller of the State Administration (*Intervención General de la Administración del Estado* - IGAE) will carry out checks to certify the achievement of milestones and objectives, as well as the results achieved. Funds allocated to the implementation of the plan will be included in the budget of the central government. Spain will have in place a system capable of downloading all information required in accordance with Article 22(2), point (d), of the RRF Regulation, should the Commission request it.

Arrangements have been set up to involve key actors to implement the plan. A new Sectoral Conference for the plan is set up with the aim of channelling cooperation between regions, local entities and central government to implement the plan. As regards parliamentary scrutiny, Article 22 of Royal Decree-Law 36/2020 provides that the government shall report quarterly on the progress of the Recovery, Transformation and Resilience Plan to the Joint Parliamentary Committee for the European Union.

Gender equality and equal opportunities for all

The RRP of Spain has a strong focus on gender equality, which is one of the cross-cutting axes guiding the Spanish recovery process, alongside the green transition, digital transformation, and social and territorial cohesion. Spain describes existing national challenges in terms of gender equality, including whether they result from the pandemic or are more structural, and presents the expected impacts of the plan on gender gaps (employment, pay, digital skills). The plan describes to a lesser extent challenges related to equal opportunities for all. It follows a dual approach: on the one hand, it encourages the development of processes that incorporate gender equality and equal opportunities for all, such as data collection, inclusion of equality considerations in public procurements, calls for public tenders or consultations. On the other hand, the plan also assesses the extent to which and how each component contributes to these equality objectives. The assessment of the contribution of the plan to address existing challenges is contained in Section 4.3.

Consultation process

The plan includes a summary of outreach efforts carried out to prepare the plan. Article 18(4), point (q), of the Recovery and Resilience Regulation stipulates that RRPs shall include a summary of the consultation process carried out for their preparation and implementation. The objective of the consultation is to improve the quality of the RRPs and enhance transparency, as well as to ensure the effective implementation of reforms and investments. While RRPs are prepared at national level for coordination and coherence, ensuring national ownership is key for their effectiveness, which is assessed in Sections 4.7 and 4.8.

Several targeted consultations for the preparation of the plan have taken place in Spain. Spain has not carried out a public consultation on the plan as a whole. Instead, it has opted for targeted consultations that focused on certain measures or policies. Several consultations have gathered input on specific measures from social partners and stakeholders, including potential beneficiaries of the plan. With regards to involving the Parliament, Article 22 of Royal Decree-Law 36/2020 of 30 December on the implementation of the Recovery, Transformation and Resilience Plan, provides that the Government shall report quarterly on the progress of the Recovery, Transformation and Resilience Plan to the Joint Parliamentary Committee for the European Union. Two hearings were held with that Committee on 29 January and 25 February 2021, with the aim of providing information on the plan and of providing a space for discussion with the other parliamentary groups. A summary of the plan was presented by the Prime Minister and debated in Parliament on 14 April 2021. [[26]]

Ownership of the plan by regions will be key for effective delivery, since they play a key role in the design and implementation of many policies and investments. The Regulation recognises regional and local authorities as key partners to implement reforms and investments. In this regard, sectoral conferences are the mechanism where representatives of central and regional governments competent for a given area meet to cooperate. The new sectoral conference for the Recovery and Resilience Facility has met for its set-up (21 January), and to have the plan to be submitted to the Commission presented to it (19 April). The RRP submitted on 30 April explains that sectoral conferences responsible for individual sectors have discussed several specific measures of the plan. A more active involvement of the regions could facilitate an effective implementation of reforms and investments. When it comes to the more than 8 000 local authorities, they have been included in the dialogue through their representative body, the Spanish Federation of Municipalities and Provinces. This Federation participates in the Sectoral Conference of the Recovery, Transformation and Resilience Plan. The specific input of local authorities for measures on mobility was sought in ad hoc meetings and through three specific calls for expressions of interest.

[[26]] See Diario de Sesiones Congreso de los Diputados, Pleno y Dip. Perm., núm. 94, 14 April 2021

Social partners and other stakeholders, including individual companies and experts, have given views on specific measures. A dedicated Dialogue Table for the RRP was set up to serve as a forum for the government and social partners to meet to consult and monitor. Furthermore, a number of legislative reforms envisaged as part of Component 23 (Labour Market) of the plan are subject to the social dialogue process and the description of their detail has been left open to preserve that process. As regards the consultation of business on investments to be made, Spain has used calls for expressions of interest. Various Ministries have made at least nineteen calls for expressions of interest with a common and coordinated pattern (see Table 4.8.1). Calls have enabled economic actors to identify transformative projects. The different Ministries have collected a wide range of proposals that will serve as basis for strategic projects to be supported by the plan. Since the calls are addressed to potential beneficiaries, it is important that competition is not distorted in the subsequent calls for grants that may follow the specific projects to be defined. Finally, several fora of experts and advisory councils have provided input too.

Digital security self-assessment

Spain has provided a security self-assessment for investments in digital capacities and connectivity. In Component 15 (Digital Connectivity) of the plan, Spain explains that, as part of the two reforms envisaged under the component, it will adopt the recommendation of the European Commission on Connectivity [[27]] and the law on the requirements to ensure the security of 5G electronic communications networks and services, which will include the key recommendations of the European Commission Communication of 29 January 2020 “Secure 5G deployment in the EU — Implementation of the EU toolbox” [[28]]). For investments in data spaces, Spain explains that the security assessment will align to the evolving work programmes of the European Union on cybersecurity certification, as laid down in Regulation (EU) 2019/881 of the European Parliament and of the Council on ENISA (European Cybersecurity Agency) and on information and communications technology cybersecurity certification. Strategic measures mentioned in the security self-assessment would need to be closely monitored during the implementation of the plan.

Cross-border and multi-country projects

The RRP of Spain includes measures that are expected to contribute to progress on existing or future cross-border or multi-country projects. This is the case in transport (TEN-T in Component 6 (long-distance sustainable mobility)). There are also cross-border projects investments in connectivity foreseen in the Connecting Europe Facility 2 (EUR 125 million to improve digital connectivity by means of submarine cables in Component 15 (Digital connectivity) and participation in multi-country projects in research and innovation (R&I partnerships in Horizon 2020 and Horizon Europe, pan-European research infrastructures and multi-country projects for health purposes (The Genome of Europe,

[[27]] C (2020) 6270
[[28]] COM (2020)50

personalised medicine and high security laboratories) in Component 17 (Science, technology and innovation). Finally, the plan also includes measures that would facilitate the participation of Spanish firms in planned cross-border or multi-country projects, including on Important Projects of Common European Interest (IPCEIs). These measures relate to projects on renewable hydrogen (EUR 300-750 million in Component 9 (Hydrogen) [29]), industrial value chains, including the one for the production of electric vehicles (EUR 2,5 billion in Component 12 (Industrial Policy)), secure satellites communications, next generation cloud and edge computing and microprocessors (EUR 375 million in Component 15). In this context, Section 2.5.3 of the RRP refers in detail to cooperation plans with Portugal, France and Italy to advance on specific areas.

Communication Strategy

The government is finalising a communication strategy on the plan, including on access to finance for businesses and citizens. This strategy, which aims at increasing public awareness of the role of the European Union in overcoming the crisis, with a specific focus on the contribution of youth to the European project. The Communication on the RRF will seek to ensure transparency on the reforms and investments envisaged as part of the RRP, as well as on progress towards meeting the milestones and targets. Specific attention will be paid to communicating the plan's contribution to the digital and green transition. Information about opportunities will be provided to potential beneficiaries, as well as on the requirements, allocation and management of the funds. Finally, communication actions will also target management authorities (including regions and local authorities) as regards their responsibilities for the management, monitoring and control of funded actions.

A specific web site for dissemination of information on the RRP is ready to be launched upon adoption of the Council Implementing Decision. In addition, dedicated events will be organised focused on communicating the general elements of the plan and specific components. Specific actions will also target media focusing on communication of opportunities and the development and impact of measures, increasing public awareness more generally. Component 11 (Public administration) provides further details regarding this communication strategy.

State aid

State aid and competition rules fully apply to the measures funded by the Recovery and Resilience Facility. Union funds channelled through the authorities of Member States, like the RRF funds, become State resources and can constitute State aid if all the other criteria of Article 107(1) TFEU are met. When this is the case and State aid is present, these measures must be notified and approved by the Commission before Member States can grant the aid, unless those measures are covered by an existing aid scheme or comply with the applicable conditions of a block exemption regulation, in particular the General Block Exemption

[29] Depending on use of the budget line allocated to Component 9 (Hydrogen) by other investments.

Regulation ('GBER') declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 TFEU [30]. When State aid is present and it requires notification, it is the duty of the Member State to notify State aid to the Commission before granting the aid. In this respect, the State aid analysis carried out by Spain in the recovery and resilience plan cannot be considered a State aid notification. In as far as Spain considers that a specific measure contained in the recovery and resilience plan entails *de minimis* aid or aid exempted from the notification requirement, it is the responsibility of Spain to ensure full compliance with the applicable rules. Measures in the plan should also be compatible with the EU's international obligations, in particular under World Trade Organization rules.

4. SUMMARY OF THE ASSESSMENT OF THE PLAN

4.1. Comprehensive and adequately balanced response to the economic and social situation

The Plan explains in detail how it addresses the six pillars of Article 3 of the Recovery and Resilience Facility Regulation, namely: (i) green transition, (ii) digital transformation, (iii) smart, sustainable and inclusive growth, (iv) social and territorial cohesion, (v) health and economic, social and institutional resilience, and (vi) policies for the next generation. Table 4.1 below summarises the coverage of each of the components in the Spanish RRP to one or more of the six pillars. Spain submitted its National Reform Programme on 30 April 2021. The information provided in the National Reform Programme is being considered and jointly assessed in this Staff Working Document together with the Recovery and Resilience Plan.

[30] Commission Regulation 651/2014, OJ L 187, 26.6.2014, p. 1.

Table 4.1. Coverage of the six pillars of the Facility by the Spanish RRP components

	Green transition	Digital transformation	Smart, sustainable & inclusive growth	Social and territorial cohesion	Health, and economic, social and institutional resilience	Policies for the next generation
01. Sustainable urban mobility	●	○	○	○		
02. Renovation	●		●	●		○
03. Agri-food and fisheries	●	○		○		
04. Ecosystems and biodiversity	●	○		○	●	
05. Coast and water resources	●	○		○	●	
06. Sustainable long-distance mobility	●	○	○	○		
07. Renewable energy	●		○	○		
08. Electricity infrastructure	●	●	○			
09. Hydrogen	●		○			
10. Just transition	●		○	●		
11. Public administration	○	●	●	○	●	
12. Industrial policy	●	●	●		●	
13. Support to SMEs		●	●	○	●	
14. Tourism	○	●	●	●		
15. Digital connectivity		●	●	●		
16. Artificial Intelligence		●	●			
17. Science, technology and innovation	○		●			○
18. Reform of health system		○			●	○
19. Digital skills		●	○			●
20. Vocational training	○	○	○	○		●
21. Education		○		○		●
22. Care economy, equality and inclusion		●		●	●	○
23. Labour market reform	○	○		●		○
24. Cultural industry		○	●			
25. Audiovisual		○	●			
26. Sports	○	○			○	
27. Prevention of tax fraud					●	
28. Tax system reform	●				●	
29. Effective public spending					●	
30. Pension system				●		

reform							

Key: "●" investments and reforms of the component significantly contribute to the pillar; "○" the component partially contributes to the pillar

The Plan proposes an appropriate overall balance of reforms and investments addressing the six pillars, reflecting the plan's total financial allocation as well as the challenges the country faces. The green and digital pillars contributions are very significant in terms of reforms and investments put forward. This reflects the substantial allocation foreseen in the plan for the green and digital transition (respectively, 39,7 % and 28,2%). Most components contribute to smart, inclusive and sustainable growth. Seventeen components contribute to the social and territorial cohesion in the ways described below. Eleven components support health, economic, social and institutional resilience. In addition, eight components support the policies for the next generation.

Green transition

The first ten components of Spain's RRP focus on supporting the green transition, including biodiversity, with a total estimated cost of EUR 31,2 billion, which to a large extent contributes to the climate change objectives. This amount represents almost half of the total RRF allocation for Spain in the form of non-repayable financial support of EUR 69,5 billion. Of these EUR 31,2 billion, EUR 13,2 billion are allocated to sustainable mobility; EUR 6,8 billion earmarked to energy renovations and construction of buildings (an additional EUR 1 billion for energy renovation in public buildings under Component 11 Public administration, and over EUR 150 million to upgrade existing sports facilities); EUR 6,1 billion to infrastructure, renewables and green technologies (including hydrogen); EUR 2,7 billion to agri-food, fisheries, biodiversity and ecosystems; almost EUR 2,1 billion to water management and coastal protection; and EUR 300 million to the just transition. In addition, EUR 850 million are allocated to waste management and the circular economy in Component 12 (Industrial Policy). Certain measures in some other components also contribute to the green transition. The contribution of these measures to the green transition is explained in detail in Section 4.5.

Digital transformation

The Spanish RRP includes ten components that significantly contribute to the pillar of digital transformation. This is complemented by another eleven components that partly contribute to this pillar. Digital measures are included in the majority of the components of the Spanish plan reflecting the broad and cross-cutting nature of the envisaged digitalisation efforts. Digital transformation is expected to be one of the key drivers of growth and productivity in Spain during the coming years. The contribution of the different measures is explained in detail in Section 4.6 below.

Smart, sustainable and inclusive growth

Several measures spread across different components aim to strengthen Spain's competitiveness and productivity, notably for SMEs, as well as to improve R&D and innovation. The competitiveness of SMEs and their digitalisation are supported by Component 13 (Support to SMEs) (EUR 4,9 billion). Several reforms seek to enhance the business environment, notably for the very high number of SMEs in Spain. The growth of SMEs is promoted through several regulatory reforms that aim to achieve better regulation, and through investment in entrepreneurship skills, capacity building and financial support. Specific actions are expected to support retail shops which have been hit hard by the pandemic. The creation and growth of highly innovative start-ups will be supported by creating a favourable framework, including a start-up law, and through the set-up of a NEXT-TECH public-private fund to scale up start-ups in the area of disruptive technologies. Reforms will also seek to tackle late payments, notably when they affect SMEs in commercial transactions. The plan includes a substantial investment in the digitalisation of SMEs (EUR 3,5 billion), with the deployment of a programme to adopt basic digital solutions and measures targeted at the adoption of advanced technologies by SMEs. Other investments to integrate artificial intelligence and robotisation into the value chains of SMEs, and to promote their access to existing supercomputing capacities, are supported by Component 16 (Artificial Intelligence). Finally, there are actions to support trade and the internationalisation firms and to attract foreign investment.

The plan will seek to recover and transform the tourism sector, which has been particularly affected by the restrictions adopted to fight the pandemic (EUR 3,4 billion). The Spanish tourism sector accounted for approximately 12% of GDP before the pandemic. Component 14 (Tourism) contains specific measures targeted to increase the resilience of tourism-dependent localities (Canary Islands, Balearic Islands, where tourism represents 35% of the regional GDP, as well as in the autonomous cities of Ceuta and Melilla). It also contains actions to diversify touristic offer throughout the territory. A EUR 1.9 billion investment is planned to support the transition to a sustainable tourism model, mostly through the implementation of sustainability plans in 165 various destinations. Investments on digitalisation, energy efficiency and competitiveness (including the rehabilitation of 50 historical sites by 2023) are also foreseen.

The Spanish RRP is also expected to foster the modernisation of the Spanish industry-services ecosystem through measures in Component 12 (Industrial Policy) (EUR 3.8 billion). The objective of the investments will be to digitalise the value chain and to improve the energy efficiency of key strategic sectors, including the automotive sector and its transition towards electric vehicles and the agri-food, health, aeronautics and shipping sectors. The development of data platforms and spaces, as well as advanced data-driven digital products and services for the digital transformation of the production sector, will be supported with a view to increasing productivity. There are also measures to improve efficiency in water, waste, energy and resource management, emissions, and renewable energy within the framework of the circular economy.

The effectiveness of the System of Science, Technology and Innovation will be promoted through reforms and investments in Component 17 (Science, Technology and Innovation) (EUR 3.5 billion), Component 16 (Artificial Intelligence) (EUR 500 million) and Component 21 (Education) of the plan (EUR 1,6 billion). Spain will reform the Law on Science, Technology and Innovation to enhance the governance of the sector, develop new research careers to stabilise professional prospects and foster knowledge transfer. Investments are planned to strengthen the capacity and the infrastructures of R&D&I system, to foster cooperation in R&I with the autonomous communities, to boost knowledge and technology transfer, and to introduce a new scientific career offering solid professional development paths to research staff. Investments are planned to digitalise the management of R&D&I and in research, human capital, and knowledge transfer. Public-private partnerships will be fostered, notably in innovation projects with a high technology readiness level (‘TRL’) to translate research into innovation. Investments will also target major infrastructures of the System of Science, Technology and Innovation, including Data and Computing Infrastructures, to upgrade them to international standards. Specific plans are expected to focus on the following key priority areas: green transition, health, automotive and aerospace. Spain also plans to modernise the university system by establishing minimum qualitative standards for research and to improve the employability of graduates and relevance of training to new market needs driven by innovation. In this area, it is worth recalling that sectorial support to policy reforms could be provided by the Horizon Policy Support Facility, which gives Member States and countries associated to Horizon Europe practical support to design, implement and evaluate reforms that enhance the quality of their research and innovation investments, policies and systems.

Social and territorial cohesion

Social cohesion will be strengthened through measures to address structural weaknesses of the Spanish labour market, such as the high unemployment and youth unemployment rates and the widespread use of temporary contracts. To this end, legislative reforms envisaged in Component 23 (Labour Market) seek to simplify the contractual arrangements by reducing the exceptions to open-ended contracts. Based on the experience of short-time work schemes, legislative reforms will also seek to preserve employment through the introduction of a flexibility and stabilisation mechanism that shall provide companies with tools to deal with adjustments without job destruction, and is expected to reskill and upskill workers and hence facilitate job-to-job transitions. Active labour market policies will be reinforced, including through a reform of hiring incentives. The Plan also envisages actions to enhance the digitalisation of public employment services and streamlining the system of non-contributory unemployment assistance. Legislative reforms seek to improve working conditions through the regulation of teleworking, the presumption of the employment status of platform workers and through changes in the regulation of subcontracting. Investments aim to foster upskilling and reskilling of workers, boost the social economy and develop integration pathways for the beneficiaries of the nationwide minimum income scheme.

The plan is expected to modernise and strengthen social services and inclusion policies through measures in Component 22 (Care Economy, Equality and Inclusion) (EUR 2,4 billion). The plan puts a particular focus on the long-term care model. It seeks to respond to an increasing demand for different long-term care services due to an ageing population, as well as to promote innovation and a people-centred care model. For the medium term, the plan foresees a national deinstitutionalisation strategy. The objective is to move to a model geared towards community care, which would take better account of the needs and preferences of people in need of support, while ensuring in parallel support to the families caring for them and cost-efficiency. Measures to promote innovation and the use of new technologies should ensure care throughout the territory, better identify needs and improving quality. A reform aims at modernising non-contributory social benefits to improve their protection and activation roles. The adoption of a framework law to guarantee common standards on the provision of social services will contribute to reducing disparities relating to the type, level and quality of services provided. Furthermore, a new law for the protection of families will take into consideration different types of family structures and determine entitlements to benefits and services on the basis of their features and income levels. The reform is expected to reduce child poverty and strengthen protection for families with special needs or in vulnerable situations, such as single-parent households, or those at risk of poverty or social exclusion. Other specific actions aim at supporting victims of gender-based violence, and at improving the capacity of the reception system for asylum-seekers and other people in need of protection.

Territorial cohesion will be reinforced though a better deployment of public services and infrastructure throughout the territory. Several components specifically relate to these objectives. Component 6 (Sustainable long-distance mobility) will support territorial cohesion by reinforcing inter-regional sustainable mobility, in particular through investments in the European Corridors (EUR 3,2 billion) and the Trans-European Network for Transport Program (EUR 1,8 billion). Component 15 (Digital Connectivity) is expected to reinforce territorial cohesion through the deployment of ultrafast broadband to rural areas (EUR 812 million). Moreover, measures in Component 11 (Public administration) will also support territorial and social cohesion by digitalising key public services and enhancing access to them in rural areas. This objective will also be achieved though incentives to ensure the deployment of health sector workers throughout the territory in Component 18 (Reinforcement of the Health Sector). Components 20 (Vocational Training) and 21 (Education) is expected to reinforce social and territorial cohesion by providing better educational opportunities in rural areas through digital means (both described in further detail bellow under the policies for next generation pillar). Measures in Components 3 (Agri-food and fisheries), 4 (Ecosystems and biodiversity). 5 (Coast and water resources). 6 (Sustainable long-distance mobility) and 7 (Renewable energy) will support the preservation of natural capital and scarce resources such as water, as well as to promote the energy transition of islands.

Health, and economic, social and institutional resilience

The resilience of the health sector should be strengthened by various investments and reforms contained in Component 18 (Reform of the Health System) (EUR 1 billion) and in other Components such as 17 (Science, Technology and Innovation). The capacities of the health system will be strengthened through investments in equipment, the professional skills of its workforce and by reducing temporary employment in the sector. The Plan is expected to also ensure a more efficient consumption of medicines and medical devices through legislative reforms. The capacity of the National Health System to prevent and address potential global health threats such as COVID-19 will be reinforced by strengthening the capacities for surveillance, early detection and a rapid response to health crisis and by investing in epidemiological surveillance systems. Through this component and Component 26 (Sports), the plan promotes healthy lifestyles, which should prevent sickness and delay fragility. Finally, a Health Data Center (Data Lake for the health sector) will be established to allow for big data analysis for diagnostic and treatment purposes. This is part of a broader process to boost the digitalisation of health services, interoperability and networked services at national, European and international level. Other complementary investments in digitalisation of healthcare are included in Component 11 (Public Administration) and 19 (Digital skills). Finally, innovation in the health sector will be supported by a EUR 490 million investment in Component 17 (Science, Technology and Innovation). The investment will enhance the strategic capacities and internationalisation of the National Health System, notably in what concerns personal medicine, research on ageing, and participation in the multi-country project “The Genome of Europe”.

The institutional resilience of Spain will be strengthened through reforms and investments to enhance its public administration (EUR 4,2 billion). Reforms in Component 11 (Public Administration) will relate to different areas, including regulatory reforms to improve human resources management in the public administration (including to reduce the number of temporary employees), the institutional architecture of economic governance, measures to strengthen the public procurement framework and additional steps to reinforce ex-ante public policy evaluation. The digitalisation of public services has proven key to establish support mechanism during the pandemic. Under Component 11 (Public administration), Spain plans investments to digitalise the public administration and actions to strengthen the coordination between the different levels of government. The Plan seeks to digitalise key areas related to health, employment (public employment services), justice, social security and inclusion policies, as well as the digitalisation of territorial administrations. It also envisages actions to enhance the public sector cybersecurity capacities, which are key to detect and respond to cyberattacks.

The resilience of the country to face and mitigate the impact of climate change will be strengthened through measures to protect its natural capital and react to natural disasters. For instance, Component 4 (Ecosystems and biodiversity) includes a measure on the renewal and modernisation of the fleet of aerial firefighting equipment, and the improvement of means and infrastructure associated with the prevention and reduction of damage due to natural hazards. Furthermore, Component 5 (Coast and water resources) includes actions to mitigate flood risk through implementing the Coastal Adaptation to Climate Change Action Plan, improving the safety of dams and reservoirs, and reducing risk and damage in case of flooding.

Finally, more effective public spending and the modernisation of the tax system, including to prevent fraud, also aim at supporting economic resilience through measures in Components 27 (Prevention of Tax Fraud), 28 (Tax system reform) and 29 (Effective public spending). These include reforms to strengthen public revenues in the mid-term by combating the informal economy and fiscal fraud, adapting taxation to the current circumstances and the evolving economy and society, and improving the efficiency of public spending. In addition, the economic resilience of Spain should be reinforced by measures fostering the employability of people and productivity of firms. Investments to increase the employability of people, including vulnerable groups, and enhancing skills will be key to empower the active population to face a dynamic context (measures in Components 19, 20, 21 and 23). Several other measures may help strengthening the productivity of firms, especially SMEs and innovative companies (see sub-section on smart, sustainable and inclusive growth).

Policies for the next generation

The Spanish Plan highlights how the pandemic has particularly impacted young people's life and work opportunities. Uncertainty about future income is greater among young people, workers with a temporary contract and those with low incomes. Young people have a lower employment rate than the rest of the population and a significantly higher rate of individuals without earned income, a key determinant of inequality. The share of temporary contracts in Spain is very high, especially among young people. Young people and temporary workers benefited less from short-time work schemes. The pandemic has marked a decrease in worked hours (increase in the rate of undesired part time work) and in the duration of their contracts.

Once the recovery is under way, the rebuilding of budgetary buffers will require an effort to which also young generations will be called to contribute, as acknowledged by the plan. Likewise, the ageing of the Spanish population will cause a very substantial dependency ratio to be shouldered by the young. Overall, many of the pre-existing challenges prior to the pandemic, often exacerbated by the pandemic, especially affect young people: the education system, labour market, housing, uncertainty and instability of the income. Challenges such as the ecological transition, and population ageing in a context of low birth rates, will have significant consequences on the current and future young generations.

The Spanish Plan includes reforms and investments particularly addressed to the young people in the areas of education, digital skills and the labour market, for approximately EUR 9 billion. Firstly, it invests to enhance education and digital skills at all levels. Component 21 (Education) of the plan aims at increasing enrolment in early childhood education and care progressively. For that purpose, the plan invests significantly in the creation of publicly owned places for child early education and care, with a stated focus on children at higher risk of poverty or social exclusion and rural areas. In the area of primary and secondary education, the same component aims at improving educational outcomes by reducing early school leaving and high repetition rates, reducing segregation in public schools on the basis of the students' background, and by developing a new curriculum for key competences (including digital). The Plan also includes a EUR 1,4 billion investment to complete the digitalisation of the Spanish education system through deployment of digital systems in public and publicly subsidised schools, and through support for the preparation and revision of digital plans for school centres and advanced digital skills for teachers. Finally, Spanish university students find more difficulties than peers in other Member States to find a job and position commensurate with their training, regardless of specialization. Component 21 (Education) aims at modernising the university system, by adapting the organisation of university courses to today's society and to technological transformation. The RRP includes reforms of the selection systems for teaching and research staff (Components 21 and 17) and further introduces a more performance-based financing of education and research institutions. These measures should help improve the quality of education. In addition, the plan strengthens the teaching of digital skills and improves distance learning at all levels of education.

By identifying the skills needed and by increasing the Vocational Training offer in strategic sectors, the plan seeks to foster opportunities for younger generations when entering the labour market. The plan intends to make the VET system more dynamic and flexible to respond to both present and future skills need of enterprises, including through a closer collaboration with businesses. Component 20 (Vocational Training) aims at modernising and strengthening vocational education and training system (VET), adapting it to support the transformation of the economy, in particular in technical and digital skills. Finally, Component 19 (Digital Skills) of the plan also invests in the training for ICT specialists through scholarships and through the development of massive online open courses in cybersecurity. Artificial intelligence and other key emerging technologies, which will support young generations in their professional prospects.

Targeted investments seek to improve the situation of young workers, who are more often affected by precariousness. Component 23 (Labour Market) includes reforms mentioned above to reduce temporary employment, particularly salient for young generations, and invests in upskilling and reskilling and an *Action Plan against Youth Unemployment* (EUR 765 million). The Plan targets young people through grants for work-based training in public school workshops, first professional experience in public administration and the recruitment of young researchers. By focusing on recognizing existing skills and promoting upskilling towards more intermediate skills, measures in Component 20 (Vocational Training) contribute to improve the employability and job mobility of young people with lower skills. By setting out a continuum of short training courses/modules that can be combined, the possibility of accumulating skills over time enables life-long learning according to personalized upskilling and re-skilling paths that lead to new certified qualifications. These measures intend to facilitate the youth integration into the labour market, train them towards future-oriented sectors and offer reinforced and personalized support in their active job search.

In a context of low fertility rates, the plan is also expected to enhance young people's access to adequate housing and childcare. Access to housing could be facilitated through measures in Component 2 (renovation), which includes a EUR 1 billion investment in social housing. Expanded day-care facilities for infants under Component 21 (Education) will also help young couples. Component 22 (Care economy, Equality and Inclusion) and 28 (Tax system reform) will review the current system of family benefits to increase coverage and reduce child poverty.

Conclusion on the assessment of criteria 2.1 of Annex V to the RRF Regulation

The Spanish recovery and resilience plan contributes in a comprehensive and adequately balanced manner to all six pillars referred to in Article 3, considering the specific challenges of Spain and taking into account the financial contribution. In particular, the green and digital dimension are very visible in the plan. The full implementation of the plan is expected to contribute to a decisive impulse towards a more sustainable and inclusive growth, including by raising Spain's potential growth in the medium term, strengthening the social and economic cohesion, the resilience of the institutions and the prospects of the next generation.

Taking into consideration all reforms and investments envisaged by Spain, its Recovery and Resilience Plan represents, to a large extent a comprehensive and adequately balanced response to the economic and social situation, thereby contributing appropriately to all six pillars referred to in Article 3 of the RRF Regulation, taking the specific challenges and the financial allocation of Spain into account. This would warrant a rating of A under the assessment criterion 2.1 in Annex V to the RRF Regulation.

4.2. Link with country-specific recommendations and the European Semester

The RRP of Spain is expected to contribute to addressing a significant subset of challenges identified in the relevant country-specific recommendations, including fiscal aspects thereof, addressed to Spain in the context of the European Semester. Table 4.2.1 at the end of the section presents the mapping of the selected challenges, the associated CSRs and the thirty components of the Spanish RRP.

Public finances and taxation

The Council issued a CSR to Spain to pursue fiscal policies aimed at achieving prudent medium-term fiscal positions and ensuring debt sustainability, while enhancing investment, when economic conditions allow for it (CSR 2020.1.2). The sustainability of public finances is a challenge subject both to CSRs and the Macroeconomic Imbalance Procedure ('MIP'). As explained in Section 2.1, Spain's already high government deficit and debt ratio have risen further due to the COVID-19 crisis. Recovery and resilience plans should provide a platform for Member States to regain prudent fiscal positions, once the economic conditions will allow for it. An overall assessment of all the measures in the plan of Spain should provide enough reassurance that prudent fiscal policies can be pursued again, once support from the RRF comes to an end and when the general escape clause of the Stability and Growth Pact applies again. In this regard, it is worth noting that Article 5 of the Recovery and Resilience Facility Regulation limits the instances in which support from the Facility can be used to substitute recurrent national budgetary expenditure to duly justified cases. For this reason, Spain has provided reassurances about the sustainability of the measures that may result in the creation of entitlements to the national budget, as is shown in Section 4.9 below.

Pension system and long-term fiscal sustainability

Addressing effectively the sustainability challenges embedded in the pension system would reduce overall risks to the sustainability of public finances in the medium and long term. According to the 2021 Ageing Report [[31]], public pension expenditure is projected to increase as a share of GDP until 2050 and to decrease thereafter. In 2019, the Council issued a CSR asking Spain to preserve the sustainability of its pension system (CSR 2019.1.4). Based on a broad political consensus, the reform of the pension system envisaged as part of Component 30 (Pension system reform) includes measures re-linking pensions to the consumer price index on a permanent basis and dissociating initial pension levels from changes in life expectancy. These elements would increase pension expenditure in the medium to long term, unless their impact is sufficiently offset by compensating measures. Various other measures included in the component seek to bring the effective retirement age closer to the statutory retirement age, change the contribution base for self-employed, increase the contribution period for the calculation of pension benefits and increase the maximum contribution bases together with the corresponding pension benefit

---

[[31]] See European Commission (DG ECFIN) and Economic Policy Committee (AWG): "The 2021 Ageing Report Economic & Budgetary Projections for the EU Member States (2019-2070)", European Economy, Institutional
Paper No 148.

levels. These measures are expected to partially mitigate the overall impact of the reform on fiscal sustainability. In addition, the plan envisages that the labour market reforms (e.g. more effective active labour market policies, including for older workers) contribute to increasing employment rates, which would also contribute to mitigate the fiscal impact of the pension reforms.

In the event that offsetting and flanking measures were not sufficient to address the CSR related to fiscal sustainability, the overall fiscal impact of increased pension expenditure would have to be further mitigated by commensurate fiscal adjustments in the future. Commitments to reduce expenditure and increase tax revenues are included in the tax reforms announced as part of Components 28 (Tax system reform) and 29 (Effective public spending), and the Spanish authorities have committed to dates for the delivery of those reforms as part of the milestones and targets of the plan. They are expected to improve the budgetary position over time. On this basis, it can be concluded that the plan contributes to addressing the CSR on fiscal sustainability.

Beyond the pension system reform, other reforms in the plan may result in the creation of permanent entitlements to be borne by the national budget. This is the case of the expansion of services under the universal health cover in Component 18 (Reform of the Health System), certain reforms integrating temporary staff as permanent one in the healthcare sector also in Component 18 (Health Reform System), the creation of publicly owned childhood early education places in Component 21 (Education) and new VET places in Component 20 (Vocational Training). For some of these measures, support from the European Structural and Investment Funds ('ESIF') could alleviate part of the burden on the national budget so that the investment can be sustained in the medium-term. The Spanish authorities have committed to explore this possibility together with regions (who are competent for these policies) with a view to ensuring a lasting impact of RRF investments. This is the case notably for the salaries of teachers for childhood education, as well as for the new VET places.

Fiscal policy and fiscal governance

Adjustments in key areas of the budget are the most direct tool to ensure that the plan contributes to regaining fiscal neutrality in the medium to long-term. Improvements in the efficiency of public spending will be promoted as part of Component 29 (Effective public spending), in particular by strengthening the mechanisms for spending reviews. The plan is expected to reinforce the public procurement framework through the set-up of the National Evaluation Office and the adoption of the National Public Procurement Strategy foreseen in Component 11 (Public administration), which had been long delayed. In addition, a legislative reform to reinforce the ex-ante evaluation of public policies envisaged as part of Component 11 (Public administration) can contribute to a better use of public money. Component 28 (Tax system reform) includes a reform of the tax system that seeks to meet expenditure and investment needs. In addition to making some adjustments to taxes with a redistributive approach, the aim is to adapt the tax system to the challenges arising from digitalisation and the ecological transition. Furthermore, Component 1 (Sustainable urban mobility) envisages the introduction of a revenue system that guarantees the necessary funds for the conservation of the state road network. Finally, actions foreseen in Component 27 (Prevention of tax fraud) seek to prevent new forms of tax fraud, increase the effectiveness of tax control and incentivise taxpayers' voluntary compliance with their tax obligations. Finally, to the extent that investments and reforms in the plan are expected to boost the recovery and promote greater participation in the labour market, the Spanish authorities estimate that at least 800 000 jobs will be created, which would generate substantial tax revenues.

In 2019, the Council issued a CSR asking Spain to strengthen its fiscal and public procurement frameworks at all levels of government (CSR 2019.1.2)**.** This CSR sought to pursue a more automatic activation of measures to prevent and correct deviations from fiscal targets at the local level, and enhance the contribution of the domestic spending rule to the sustainability of public spending. This CSR is only partially addressed by the plan. The activation of the general escape clause of the Stability and Growth Pact at EU level, and of rules mirroring that provision of the Pact at national level in Spain, diminished the urgency to carry out a review of the institutional framework governing the prudent management of the public finances at the present juncture. Nevertheless, measures to ensure the efficiency of expenditure in Component 29 (Effective public spending) and to strengthen the public procurement framework in Component 11 (Public administration) can play a positive role in strengthening the fiscal frameworks of Spain and contribute to partially addressing the relevant CSR.

Health & long-term care

Efforts are needed to increase the resilience and performance of the health system, and some of the measures foreseen in the plan are expected to contribute to that goal. In 2020, the Council recommended Spain to strengthen its health system's resilience and capacity as regards health workers, critical medical products and infrastructure (CSR 2020.1.2). The Commission has acknowledged in the past that the Spanish health system has been delivering good health outcomes, but the outbreak of the COVID-19 pandemic put an unprecedented strain on the system and revealed its vulnerability to shocks. These have been detailed in Section 2.2. To address those vulnerabilities, a legislative reform in Component 18 (Reform of the Health System) will improve the working conditions of health workers, notably to reduce the use of temporary contracts. Measures in that component, such as a EUR 796 million investment in high-technology equipment in hospitals, as well as reforms to extend the portfolio of services offered by the National Health System to interventions only partially or not covered previously (such as for dental care, early childhood healthcare, genomics and orthopaedic and prosthetic care), should contribute to improve healthcare coverage aligning services to the needs of the ageing population and territorial cohesion. Investments to foster the digitalisation of the health system and the use of big data and investments in personalised medicine will contribute to innovation.

The plan also seeks to tackle the challenge of a rapidly ageing population, which will result in increasing healthcare and long-term care demands. Component 18 presents plans for the roll-out of the primary care reform, but Spain has not included associated investments in this area in the plan. Measures in Component 18 (Reform of the Health System) and Component 26 (Sports) of the plan will support prevention and health promotion measures which respond to the demographic and epidemiological shifts in the population. The Plan responds to some extent to the increased demand for healthcare and long-term care and may help alleviate fiscal sustainability concerns in the future. Cost-effective solutions are necessary to ensure access to a sustainable healthcare of quality for all in the future. Investments to implement a cost-efficient use of medicines and medical devices in Component 18 (Reform of the Health System) will contribute to that goal. Overall, the measures and investments in the plan contribute to address challenges in this CSR. Finally, it is important to ensure that the ambitious primary care reforms are implemented with the necessary resources.

Labour market reforms

In 2020, the Council issued to Spain a CSR to support employment through arrangements to preserve jobs, effective hiring incentives and skills development (CSR 2020.2.1). Despite years of strong job creation, the Spanish labour market still recorded high levels of unemployment and labour market segmentation before the COVID-19 outbreak. In 2019, the Council had issued a CSR to Spain to foster transitions towards open-ended contracts, including by simplifying the system of hiring incentives (CSR 2019.2.3 and 4). As explained in Section 2.1, the unemployment rate increased in 2020 as a result of the crisis, and a further increase is expected in 2021. This is likely to weigh heavily on the already limited capacity of employment services to support workers and employers and on social services. Recitals to the 2020 CSR explained that the way to recovery should be based on measures to support employment taken in consultation with social partners, such as gradually phasing-out short-time work schemes, reviewing the system of hiring incentives to better promote sustainable forms of employment, notably for young workers, as well as through flexibility in working conditions. [32]

In this context, the plan of Spain contains measures that should contribute significantly to reducing the high share of temporary contracts, including in the public sector. Component 23 (Labour Market) of the RRP envisages a reform of the labour market that should already take place in 2021. The reform will reduce the number of types of contracts to three (open-ended, temporary and training contract), as well as the justifications that employers may invoke to use temporary contracts. This should reduce the extended use of temporary contracts in the private sector. In addition, inspections and sanctions to fight abuse of these contracts in certain sectors will be reinforced. Moreover, the plan should contribute to achieve a significant progress to reduce the share of temporary contracts in the public administration (30%), where their use is even more prominent than in the private sector (22%). This is notably the case in health, education and justice. Measures in Component 11 (Public administration) envisage a stabilisation process for structural posts occupied by temporary staff through calls for public employment, as well as regulatory changes to avoid abuses in the use of short-term contracts in the administration and changes to allow for a better planning of staff needs. The reform of the statute of health workers in Component 18 (Reform of the Health System) envisages the conversion of temporary contracts into permanent ones for staff who have been performing tasks under a fixed-term contract over a

[32] 2020 CSRs to Spain, recital 20.

given length of time. Together, these measures are expected to significantly contribute to reducing the share of temporary contracts.

A new mechanism for flexibility and stability aims at enabling employers to deal with adjustments in the cycle without job destruction, through the use of structural short-time schemes. Short-time work schemes, which had existed in Spain for long, were used extensively during the crisis to preserve jobs and income of workers in the most affected sectors [[33]]. These schemes have played a key stabilising role by absorbing a large share of the market income shock for households [[34]]. Building upon the experience of short-time work schemes, a new permanent mechanism for internal flexibility, job stability and reskilling of workers in transition will be introduced through a legislative reform envisaged in Component 23 (Labour Market) with a view to containing levels of unemployment over the years to come. Workers under the new scheme should benefit from training to help them cope with technological or demand innovations and facilitate reallocation between sectors and firms, where adjustments may require them. The cost of the new short-time work schemes will be financed through a tripartite fund to which employers, employees and the State will contribute. The Spanish government is intending to seek further support from the RRF (in the form of a loan) to partially finance the scheme. By the time of the adoption of the reform at the end of 2021, an assessment of the funding arrangement of the tripartite fund included therein will be completed with a view to ensuring fiscal sustainability in the medium to long term. The assessment will consider different options and scenarios.

The Plan also seeks to modernize active labour market policies, as well as to simplify and increase the effectiveness of hiring incentives. Measures in Component 23 (Labour Market) will serve to implement the recommendations in this sense issued by the Spanish Independent Authority for Fiscal Responsibility (‘AIReF’) in its 2019 Spending Review report: “Hiring incentives”. Actions to improve the level of digital skills amongst the unemployed are also envisaged in Component 19 (Digital Skills).

The Plan envisages a reform of the collective bargaining system with the aim of improving its effectiveness. The details of this reform have been left open to reflect the outcome of social dialogue. Milestones included in the proposal for a Council Implementing Decision on the approval of the assessment of the recovery and resilience plan of Spain reflect the need to ensure that the reform envisaged in Component 23 (Labour Market) is carried out in respect of social dialogue, and as part of a comprehensive approach that balances the need for flexibility and security in the labour market in order to support a job

---

[[33]] Short-time schemes or ERTES allow for contract suspension and reduction of working hours due to force majeure for a given period of time. During that time, companies are (totally or to a very large extent) exempted from paying their Social Security contributions.

[[34]] See Christl et al. (2021).

rich recovery. [35] While details on the amendments that are expected to be introduced in the system could not be provided by Spain in order not to prejudge the outcome of social dialogue on the measure, the reform is to be accompanied by an ex-ante assessment report of shortcomings in the current legislation governing collective agreements. The design of the reform is expected to support competitiveness and job creation, notably by ensuring that firms can adjust swiftly to economic developments, and that wages are responsive to productivity developments in the medium term. [36]

Overall, the RRP of Spain includes measures to reduce labour market segmentation and to reinforce active labour market policies that are likely to improve the functioning of the labour market. All the reforms in the plan should be completed in full respect of social dialogue to ensure the widest ownership and will be part of a comprehensive approach balancing the need for flexibility and security in the labour market.

Education

Access to digital learning will be significantly boosted by the plan through investments in devices and skills, but also through the development of online courses. In 2020, the Council issued a CSR to Spain to improve access to digital learning (CSR 2020.2.7). Measures in Component 21 (Education) of the RRP of Spain will significantly contribute to addressing this CSR, notably through the provision of digital devices to at least 300 000 students and of interactive systems to around 24 000 classrooms in public and publicly subsidized schools. Around 700 000 teachers will receive digital training, and support for the preparation or revision for a Digital Strategy for 22 000 school centres given. Component 19 (Digital Skills) will also support this CSR through actions targeting the whole population in Spain, including specific measures for the elderly, the unemployed and vulnerable children. In addition, access to online training for IT professionals will be provided to at least 18 000 of them, through the development of massive open online courses in cybersecurity, artificial intelligence and other key emerging technologies. Digital resources for the online dissemination and teaching of the Spanish language will also be developed with RRP support through investments in that component. Other components contain actions to promote digital learning in specific sectors, such as Components 3 (Agri-food and fisheries), 13 (Support to SMEs), 14 (Tourism) and 24 (Cultural Sector).

The plan is expected to contribute to the provision of labour market relevant skills and qualifications that should accompany the green and digital transition of the country. In 2019, the Council issued a CSR to Spain on increased cooperation between education and businesses with a view to improving the provision of labour market relevant skills and qualifications, in particular for information and communication technologies (CSR 2019.2.10

---

[35] The most recent country report of Spain had recalled the need to preserve the elements of the 2012-2013 labour market reforms that are acknowledged to have played an important role in promoting the job-rich economic recovery that started in 2014.
[36] OECD (2021), Economic Surveys: Spain, pages 37-38.

and 11). Raising the share of students in science and digital technologies, making vocational education and training more attractive and ensuring flexible upskilling and reskilling opportunities could help meet the growing demand for the technical skills needed for the green and digital transitions, as signalled in recent country reports. Measures envisaged in Components 19 (Digital Skills), 20 (Vocational Training) and 21 (Education Reform) aim to substantially expand and adapt the VET offer to labour market needs, to reinforce the digital elements in that training, and to increase the number of ICT professionals and to reinforce their advanced digital skills. These measures will substantially contribute to addressing this CSR. For VET courses, investments should allow for the creation of simulators, digital twins and technological hubs to promote the digital transformation of the VET training. EUR 1,2 billion will be invested in Component 19 (Digital Skills) and Component 20 (Vocational Training) for this purpose over the next three years, and these actions will be complemented by other actions funded by ESIF. In addition, measures foreseen in Components 17 should contribute to ensure that research and innovation policies are more effective, and create the conditions for maximising the contribution of R&I to addressing major socio-economic and environmental challenges.

Educational outcomes may also improve as a result of investments at various stages of the education cycle. In 2019, a CSR was issued to Spain to reduce early school leaving and improve educational outcomes, taking into account regional disparities. The substantial expansion of the VET offer envisaged as part of Component 20, together with efforts to adapt it to labour market needs, may substantially contribute to reduce early school leaving. Moreover, improving educational and career guidance and providing adequate support to students with disadvantages and regions lagging behind will contribute to better educational outcomes in Spain. For that purpose, a EUR 320 million investment is foreseen in Component 21 (Education) also for the continuation of targeted support for vulnerable students in centres that face educational complexity challenges under the PROA+ programme. Actions to enhance digital skills amongst vulnerable children are also envisaged as part of Component 19 (Digital Skills). In addition, measures in Component 21 (Education) of the plan seek to achieve this outcome through the implementation of a competence-based curriculum further to the adoption of a new education law in December 2020. Recitals to the 2020 CSRs issued to Spain highlighted that the success of measures that were to be adopted at the time with a view to achieving these objectives would depend on the broad and long-lasting social and political consensus around the reforms [[37]].

Poverty reduction & social inclusion

The plan is also expected to help address the existing fragmentation of unemployment protection, which resulted in gaps. In 2020, the Council issued a CSR to Spain to reinforce unemployment protection, notably for atypical workers (CSR 2020.2.4). As regards unemployment assistance for the long-term unemployed and workers not qualifying for

[[37]] 2020 CSRs to Spain, recital 20.

contributory schemes, support is currently provided across multiple schemes, resulting in low coverage. Measures in Components 22 (Care Economy, Equality and Inclusion) and 23 (Labour Market) take a step forward in trying to remedy this situation and will contribute to a large extent to addressing this CSR. Investments will also develop integration pathways for the beneficiaries of the nationwide minimum income scheme.

Measures in the plan have the potential to contribute to address CSRs asking Spain to improve coverage and adequacy of minimum income schemes and family support (CSR 2020.2.5 and 2020.2.6). As regards the CSR on minimum income schemes, the permanent national income guarantee scheme introduced by Spain in June 2020 will be expanded and integration pathways for beneficiaries reinforced. This scheme was introduced with the aim of setting a minimum floor at national level, for regions to top up and complement with their existing schemes. The implementation of the initial scheme is still ongoing. In that context, measures envisaged in Component 22 (Care Economy, equality and inclusion) of the recovery and resilience plan of Spain are expected to substantially contribute to enhance its impact on poverty-reduction by extending its coverage to persons that were not supported so far, including to support their socio-economic inclusion. As regards family support, Component 22 envisages a legislative reform to strengthen material support (in cash and kind) to children in vulnerable situations, which is to be complemented with a review of support to families through the tax system. While the objective of reducing the high child poverty rates should guide reforms to family support announced as part of Components 22 and 28 of the plan, any amendments in this area should also have due regard to the low fertility rates in the country.

Research and Innovation Policies

The RRP is expected to contribute to enhance the effectiveness of research and innovation policies and accelerate the diffusion of innovation to support the recovery and increase the resilience. In doing so, it will help address the challenge already highlighted by the CSR addressed by the Council to Spain (CSR 2019.3.6). Reinforcing the governance of research and innovation at all levels, as well as increasing the quality of research through the use of systematic evaluations to promote excellence, and incentives for research organisations to cooperate with the private sector, are expected to help address this recommendation. This will partly be achieved by a reform of the regulatory framework for innovation foreseen in Component 17 (Science, Technology and Innovation), by reorganizing public research undertaken in the universities system, by providing additional support for Public Research Organizations and by establishing a new scientific carrier path seeking to attract and retain talent in research. All of the former measures are envisaged in Component 17 (Science, Technology and Innovation). In addition, a reform of the university system is envisaged as part of Component 21 (Education) to be accompanied by EUR 383 million investments in the training of teachers, to attract and retain talent in Spanish universities. This is also supported by investments for the creation of a network of excellence, a talent hub and several chairs on artificial intelligence as part of Component 16 (Artificial Intelligence). The 60% increase in R&D&I investment is expected to help address significant gaps arising in the Spanish science, technology and innovation system due to the fall of past public investment. The component also targets specific sectors to help support the green transition (for instance, by bringing down emissions of aerospace and automotive vehicles), as well as the digital, and health system to better prepare for future pandemics. The reform of the governance of the science, technology and innovation system includes the reorganisation and merging of several PROs as well as new qualitative criteria to grant the status of "university". These changes are expected to attract new interest and investment from private sector to joint public-private initiatives for technology transfers as well as from the centre for technological and industrial development ('CDTI'). Although it is claimed that most of the envisaged initiatives will be delivered jointly by the state and the regions, it is however still unclear how policy and strategic coordination will be orchestrated between the different levels of regional governance.

Investment

The EUR 69,5 billion non-repayable supporting the RRP of Spain will contribute substantially to addressing CSRs on fostering public and private investment to help the recovery. In 2020, the Council issued a CSR to Spain to front-load mature public investment projects and promote private investment to foster the economic recovery. The CSR suggested to focus investment on the green and digital transition, in particular on fostering research and innovation, clean and efficient production and use of energy, energy infrastructure, water and waste management and sustainable transport (CSRs 2020.3.3, 4, 5, 6 and 7). A similar recommendation was issued to Spain in 2019 (CSRs 2019.3.1, 2, 3, 4 and 5). The public investment delivered by the RRP is expected to mobilise private investment in many sectors, such as the energy and industrial transition of the county, but also building renovation, the agri-food sector, fisheries, health and key digital technologies.

The digital transition

The RRF impulse will be an opportunity for Spain to move forward faster than expected on the advancement of new technologies. With 28,2% of the plan's total allocation devoted to digital investments, the RRP will accelerate the digitalisation of the Spanish economy and society. Component 15 (Digital Connectivity) will improve the already good level of digital connectivity through investments in the digital infrastructure network, with a particular focus on rural or less populated areas. Support will be given to support SMEs in their digital transition through measures in Component 13 (Support to SMEs). Support will also be provided to promote digitalisation projects through measures contained in various components and pertaining to strategic sectors such as agri-food, automotive, tourism, culture and audiovisual and energy, including to enhance the use of the opportunities offered by artificial intelligence through Component 16 (Artificial Intelligence). More detail on these measures is provided in Section 4.6.

Although Spain is already doing well in the area of digital public services, the RRP will provide additional impulse to the digitalisation of the public administration through investments in Component 11 (Public administration), but also through reforms to simplify and digitalise the procedures for setting up a business, as well as to digitalise further the justice system (Component 13 (Support to SMEs)), the health sector (Component 18 (Reform of the Health System)), of education and VET (Components 21 and 20) and of sports federations (Component 26 (Sports)).

In order to allow society at large to reap the fruits of these investments, support to increase basic and advanced digital skills will be ensured for different groups of the population through the implementation of the National Framework Strategy to enhance

Digital Skills. Investments in Component 21 focus on the digitalisation of education. In addition, a EUR 735 million investment under Component 19 (Digital Skills) will increase digital skills for all citizens, with actions targeting the elderly, the unemployed and vulnerable children, and through awareness-raising campaigns. Based on data from INE in 2019, 3,62% of the labour force have very limited digital skills (approximately 832 600 people). The plan will invest EUR 1 256 million in training at least 60% of those persons. Measures in the plan should also help increase the share of ICT specialist in Spain through scholarships and the development of massive open online courses.

Green and energy transition

Adapting to climate change, ensuring a more efficient water and waste management, reducing emissions from transport, further decarbonising energy and increasing energy efficiency are challenges that the RRP will contribute to address. The plan aims to pave the way for the green transition of Spain. Regulatory changes envisaged as part of Components 1 to 10 of the plan are expected to help achieving environmental objectives by promoting investments in energy efficiency, the responsible use of natural resources (in particular water), waste management activities (as part of Component 12 Industrial Policy), and renewable energy. Component 28 (Tax system reform) includes environmental tax reforms that will contribute to the green and energy transition.

Investments envisaged in the RRP aim to increase energy efficiency and foster decarbonising the energy system. An ambitious EUR 7,8 billion investment envisaged in Components 2 (Renovation) and 11 (Public administration) should contribute to substantial energy renovations of residential and public buildings. The deployment and integration of renewable energy and storage will be facilitated by Components 7 (Renewables) and 8 (Electricity infrastructure), business models based on the energy transition will be encouraged by investment in Components 7 (Renewables), 10 (Just Transition) and 12 (Industrial Policy); and renewable hydrogen supported by Component 9 (Hydrogen). Component 10 (Just Transition) should help mitigating socio-economic challenges arising from the green transition.

Strategic projects for the transformation of the industry (the so-called PERTEs) foreseen in Component 12 (Industrial policy) will seek to implement the twin transitions across the whole value chain within a given sector, while at the same time enhancing social and territorial cohesion on that project. EUR 2,5 billion will be invested in this area, including for the decarbonisation of the Spanish industry.

The plan is expected to contribute to mitigate the vulnerability of Spain to the adverse effects of climate change due to its geographical location and topography. The negative impacts of climate change will result in reduced water resources, coastal erosion, loss of biodiversity and natural ecosystems, increased soil erosion and more frequent extreme weather-related hazards. Measures foreseen in Components 4 (Ecosystems and biodiversity) and 5 (Coast and water resources) of the plan will contribute to the protection of the environment through actions for the conservation and restoration of ecosystems and their biodiversity, and sustainable management and protection of natural resources (forests, rivers, wetlands, estuaries, etc.).

Finally, the CSR recommendation addressed to Spain in the area of electricity interconnections will be addressed outside the framework of the RRF (CSR 2019.3.5). Spain, together with Portugal and France, is strongly committed to increasing electricity interconnections with the rest of the EU for a better integration of the EU internal energy market, as foreseen in the NECP. This commitment is evidenced by Joint Declarations of the recent summits held with Portugal (October 2020) and France (March 2021). Cooperation at national, regional and EU level should be continued to advance key electricity interconnections, meeting both energy and climate objectives, including in the framework of the Connecting Europe Facility 2.

Transport

Investments in the plan seeking to foster sustainable mobility, including through a better use of the rail network, should contribute to bring greenhouse emissions down in Spain. Measures in Components 1 and 6 of the plan should also allow for progress on sustainable mobility in Spain. Transport is the sector in which GHG emissions keep growing most in Spain. To reduce the current reliance on carbon-intensive road freight, investments need to focus on making better use of the rail system. The use of rail freight transport will be enhanced through the completion of the missing corridors and through the development of intermodal transport nodes. The setting-up a financing system for the conservation and maintenance of public roads envisaged in Component 1 (Sustainable urban mobility), which internalises environmental costs, is also expected to contribute to the modal shift from road to rail and decrease emissions. Component 1 (Sustainable urban mobility) also envisages significant investments in electric mobility (including charging infrastructure and support to electric vehicles), and the creation of low-emission zones to improve urban public transport while making it more environmentally sustainable.

Public administration and business environment

Restrictiveness and fragmentation of regulation within Spain weigh on the business environment and prevent companies from benefitting from economies of scale. For this reason, a long-standing CSR has asked Spain to fully implement the Law on Market Unity (CSR 2019.4.1). This law is a better regulation tool that aims to remove unnecessary and disproportionate regulatory barriers to the access to and operation of economic activities throughout Spain. In addition, it includes provisions to foster better regulation principles across the various tiers of government. Reforms envisaged in Component 13 (Support to SMEs) are expected to contribute to enhance its application. The plan announces that the Law on Firm's Creation and Growth will amend certain parts of the Law on Market Unity with a view to providing more clarity on those provisions whose interpretation had resulted in difficulties in its implementation. The reform is also expected to improve the mechanisms laid down to protect market operators against regulatory action. In addition to those mechanisms, a new Sectoral Conference on Business Regulatory and Climate Improvement will be set up to facilitate the correct application of the principles of good regulation by all public administrations at all territorial levels. It will replace the former sectorial conference set up for this purpose and focus efforts on future regulation, notably the one accompanying recovery. It will follow-up on work done within other sectorial conferences, to ensure a better coordination, monitoring and promotion of better regulation across the board. As regards professions, their regulation will be improved through different means. First, a legislative reform will implement Directive 2018/958, of the European Parliament and Council, on a proportionality test before adoption of new regulation of professions. [38] Second, a reform will ensure that access to the exercise of the activities of lawyers and *procuradore*s is subject to the same qualification requirements and that only maximum fees apply to the services of *procuradores.* The reform will also allow the joint provision of services of defence before the court and legal representation before the court (*procura*) by professional firms.

The RRP of Spain is also expected to contribute to a better business environment throughout the life of a company, from its set up to its end. The Spanish market for venture capital financing of SMEs, and especially of very small firms, is unattractive for investors. In addition, payment practices in Spain weigh on SMEs' liquidity. For that reason, the Council issued in 2020 a CSR to Spain to ensure the effective implementation of measures to provide liquidity to small and medium-sized enterprises and the self-employed, including by avoiding late payments (CSR 2020.3.1). The Law on Firm's Creation and Growth announced in Component 13 (Support to SMEs) will reduce drastically the minimum capital required for the creation of a limited liability company, digitize the entire set-up process and improve access to diversified sources of finance for business growth. As regards innovative start-ups, a new regulatory framework foreseen in the same Component will facilitate their emergence. In addition, the effectiveness of rules to tackle late payment will be strengthened, notably to protect SMEs from unfair practices in business-to-business transactions. The shift towards an early payments culture could be based on guidelines on publicity and transparency of payment periods, best business practices and mechanisms for better enforcement, such as an out-of-court dispute resolution system.

The plan includes measures to improve the effectiveness of the justice system, notably its efficiency. The timely resolution of insolvency proceedings plays a key role in ensuring the liquidity of companies and an effective reallocation of resources, as well as in promoting entrepreneurship and the stability of the financial sector. In that context, the reform of the insolvency framework envisaged as part of Component 13 (Support to SMEs) will introduce preventive debt restructuring and debt relief for natural persons and improve the effectiveness of pre-insolvency and second chance instruments. In addition, investments in digitalisation and three legislative reforms in Component 11 (Public Administration) will seek to enhance the efficiency and digitalisation of judicial proceedings, as well as a more effective organisation of the justice system. The efficiency of procedures will build on a shortening of the length of procedures in all jurisdictions, and on the promotion of alternative out-of-court settlement mechanisms. The reform of the organisation of the judicial map intends to replace the high number of unipersonal first-instance courts by 431 collegial organs (*tribunales de instancia),* and implement the Judicial Office throughout the whole justice system. In addition, a reform of the Code of Criminal Procedure is envisaged as part of Component 11 (Public Administration). The draft reform seeks to allocate the head lead of judicial

[38] Directive (EU) 2018/958 of the European Parliament and of the Council of 28 June 2018 on a proportionality test before adoption of new regulation of professions, http://data.europa.eu/eli/dir/2018/958/oj.

investigation to prosecutors, while in the current system it is led by investigative judges. These reforms aim to improve the effectiveness of the justice system, thereby boosting economic activity and attracting investment. These reforms should all be adopted further to due consultation of the relevant stakeholders, including the National Council for the Judiciary and the General Prosecutor’s Office.

Other public administration aspects

Stronger and sustained coordination between the national, regional and local authorities would render the implementation of policies more effective, and the plan contains measures to reinforce existing mechanisms for coordination. Coordinating different levels of government is a challenge in policy areas where both national and regional levels are involved in reforms. These include better regulation, as well as active labour market policies, education, health care and social services. As a result, the Council issued a CSR to Spain to strengthen coordination between levels of government in 2020 (CSR 2020.4.1). Besides the actions on regulatory fragmentation envisaged as part of Component 13 (Support to SMEs), the plan of Spain addresses this recommendation through regulatory changes envisaged to Law 40/2015 on the legal system for the public sector in Component 11 (Public administration). These changes seek to reinforce existing mechanisms for cooperation across levels of government, such as the conference of Presidents, where the heads of the central and regional government meet, through the creation of a permanent secretariat, and the sectoral conferences (by spelling out when agreements will be of mandatory compliance and by making compulsory the preparation, approval and publication of multiannual policy objectives and result indicators, as well as transparent mechanisms of monitoring and evaluation). They also establish the need to ensure interoperability between central and regional government IT platforms.

Finally, the plan seeks to strengthen the public procurement framework, which is key for the efficient use of funds provided by the RRF. The implementation of the RRP of Spain will significantly contribute to address CSRs to strengthen the public procurement framework (CSR 2020.4.2 and CSR 2019.1.3). Component 11 (Public administration) includes the adoption of the National Public Procurement Strategy, a high-level policy document that had been long delayed (the law on the public sector contracts stipulated its adoption by August 2018). This Strategy is intended as a tool for making public procurement more efficient. Measures in that component seeking to ensure that the governance structure for public procurement created in 2018 is fully operational will be key to ensure an efficient delivery of RRF funds (notably, the Independent Office for Regulation and Supervision of Public Procurement and the National Evaluation Office). Measures foreseen in the RRP may facilitate the effective implementation of the switch to mandatory electronic procurement at all levels of government, as well as a better sharing of data between them.

The Spanish RRP addresses well the recommendations and challenges in a significant number of areas. This is notably the case in the areas of the green and digital transitions. To a large extent, the plan also does so in the areas of digital skills, research and innovation, health, active labour market policies and labour market segmentation, support to the long-term unemployment and to families, public procurement and the business climate.

Response to the economic and social situation

Medium to long-term recovery prospects for Spain will depend on investments to increase productivity and innovation. The plan focusses on investments to embrace faster the digital and green transitions, notably in sectors that will help firms regain competitiveness. The weak productivity growth observed before the crisis is also addressed through investments in people and in improving the business climate. Measures supporting skills across different population groups (in particular digital ones), the digitalisation of businesses, notably SMEs, and a more effective public administration, including the national justice system, and business climate contribute to that goal. When it comes to innovation, the RRP also seeks to reinforce the private and public partnerships in research and in industrial transformation.

The plan also focuses on measures to enhance social and territorial cohesion, which could worsen due to the crisis. As described in Section 4.1 above, the plan contains measures that seek to preserve employment and to overcome segmentation, to fight child poverty and modernise social protection services. If successfully implemented, they will strengthen social cohesion. The modernization of the tax system envisaged in the plan should also result in a redistribution of resources towards those most in need.

The plan contains a series of measures that are expected to effectively address the country's challenges in the area of gender equality and equal opportunities for all. These include several reforms and investments aiming at mitigating the disproportionate negative impact of the crisis on women. Legislative measures in Component 23 (Labour Market) seek to eliminate the gender pay gap and to increase transparency and equality between men and women in the labour market. Other measures include a substantial investment in the creation of places for early childhood education to facilitate women's participation in the labour market (EUR 670 million). They also include actions to promote STEM vocations at schools (EUR 256 million), investment to support female entrepreneurships (EUR 46 million) and support to women victims of gender-based violence (EUR 153 million), as well as measures to attract internationally talented women to carry out research projects, investments in the care sector and measures to increase the participation of women in the transport, audiovisual and professional sport sectors.

The plan also has a strong focus on social cohesion and shows a clear willingness to address other forms of inequalities, in particular those experienced by young unemployed people. The plan could however be more specific as regards the beneficiaries of the measures addressed to vulnerable and disadvantages groups (Roma, migrants and the elderly). Certain measures specifically targeting migrants or persons with a migrant background are envisaged, e.g. for the integration of asylum-seekers and other persons in need of protection in Component 22 (Care Economy, Equality and Inclusion), the prevention of early school living, as well as broader educational support later on in life in Components 20 (Vocational Training) and 21 (Education). Measures will also ensure that digital devices and skills are provided to them. Several measures in Components 1 (Sustainable urban mobility), 2 (Renovation), 20 (Vocational Training), 22 (Care Economy, Equality and Inclusion) and 23 (Labour market reform) relate to persons with disabilities, in particular in relation to employment, vocational training, transport and access to public buildings. The reform of the education law included in Component 21 foresees the integration of students that are currently attending the so-called special education centres into ordinary schools within ten years. The RRP explains that a ten-year plan will be drawn up together with the regions. That plan is expected to support the integration of students with special needs in ordinary centres. The same plan is also expected to ensure that special education schools can continue welcoming students whose needs can be better met in them, and at the same time provide support to ordinary centres for the integration of students with special needs. As the scope of the ten-year plan exceeds that of the Facility, this aspect of the reform does not rely on RRF support.

The plan seeks to mitigate regional disparities in Spain in the areas of employment, educational outcomes, early school leaving rates, poverty and inequality with targeted investments. Despite a significant improvement in digital infrastructure, the urban-rural divide persists. The Plan seeks to overcome them through targeted investments that take due account of these differences and focus on vulnerable areas. Equally, actions for the modernization of industry foreseen in the plan and to bridge the digital divide seek to ensure that all territories are allowed to embrace swiftly and reap the benefits of the digital and green transition.

Identified risks to fiscal sustainability in the medium- to long-term stem partly from the need to take better account of existing challenges to productivity, social and territorial cohesion. To the extent that investments in those areas are successful in increasing productivity, employment and social cohesion, they should be offset through increased employment and growth in the medium to long-term. The Spanish RRP thus represents a comprehensive and adequate response to the economic and social situation of Spain.

Boost the growth potential in a sustainable manner

In order to support the long-term growth potential of Spain's economy, the plan is designed to tackle the main barriers to investment. The plan seeks to improve labour market regulations and the lack of availability of skilled workers. Measures in the plan also seek to tackle the fragmentation and ensure better regulation; facilitate access to finance for SMEs and innovative start-ups, as well as to enhance the functioning of the public administration, including for a more effective application of the public procurement framework. The plan also contains investments seeking to address the low investment in research and innovation, and reforms to enhance cooperation between science and business. Finally, the plan seeks to address the cost of energy and the impact of climate changes (see Sections above for details). The Spanish Government estimates the plan will increase potential growth by 0,4% annually in the medium-term. With the profile of investments and reforms, the plan should both boost productivity, growth and jobs as well as contribute to addressing the sustainable development goals. By addressing these challenges, the Spanish Plan helps to significantly boost the growth potential of its economy in a sustainable manner.

Conclusion for criterion 2.2 in Annex V to the RRF Regulation

Taking into consideration the reforms and investments envisaged by Spain, its recovery and resilience plan is expected to contribute to effectively addressing all or a significant subset of challenges identified in the country-specific recommendations, or challenges in other relevant documents officially adopted by the Commission under the European Semester, and the recovery and resilience plan represents an adequate response to the economic and social *situation of Spain. This would warrant an A under the assessment criterion 2.2 in Annex V to the RRF Regulation*.

Table 4.2.1 Mapping of country challenges identified in 2019-20 country-specific recommendations and the 30 Spanish RRP components

Country challenges (as identified in Section 2)	Associated CSR (2019-2020) and European Semester recommendations	Component 1- Sustainable urban mobility	Component 2: Renovate	Component 3: Agri-food and fisheries	Component 4: Ecosystems and biodiversity	Component 5: Coast and water resources	Component 6: Sustainable long-distance mobility	Component 7: Renewable energy	Component 8: Electricity infrastructure	Component 9: Hydrogen	Component 10: Just Transition	Component 11: Public administration	Component 12: Industrial policy	Component 13: Support to SMEs	Component 14: Tourism	Component 15: Digital connectivity	Component 16: Artificial Intelligence	Component 17: Science, technology and innovation	Component 18: Reform of the health system	Component 19: Digital Skills	Component 20: Vocational training	Component 21; Education	Component 22: Care Economy, Equality and Inclusion	Component 23: Labour Market Policies	Component 24: Cultural Industry	Component 25: Audiovisual	Component 26: Sports	Component 27: Prevention of tax fraud	Component 28: Tax system reform	Component 29: Effective public spending	Component 30: Pension System Reform
Fiscal sustainability																															
Fiscal policy and fiscal governance	2019.1.2, 2020.1.1	○										○																○	○	○	
Health care and long-term care	2020.1.2																		○				○				○				
Long-term sustainability of the public finances	2019.1.4., 2020.1.3	○										○																○	○	○	○
Labour market																															
Employment protection and framework for contracts and incentives to work and create jobs	2020.2.1 and 2020.2.2, 2019.2.3 and 2019.2.4.											●							●					○					○	○	
Unemployment benefits	2020.2.4, 2019.2.6																						○	●							
Active labour market	2019.2.1																			○	○		○	●					○	○	

policies																															
Education																															
Access to digital learning	2020.2.7			○										○	○		○			●	●	●			○						
Reduce early school leaving and improve educational outcomes, taking into account regional disparities	2019.2.8 and 2019.2.9																			●	●	●									
Increase cooperation between education and businesses	2019.2.10																	●			●	●									
Social Policies																															
Improve support to families	2020.2.6,2019.2.5		●																	●		●	●						○		
Ensure that social services have the capacity to provide effective support	2019.2.2.																						●								
Improve adequacy and coverage of minimum income schemes	2020.2.5, 2019.2.7																						●	●							
Research and Innovation																															
Enhance the effectiveness of policies on research and innovation	2019.3.6																	●				○									
Investment																															
Focus investment on fostering innovation	2020.3.3, 2019.3.1	●											●	●	●		●	●	○	○	○	●									
Green and digital transition	2020.3.3., 2020.3.5, 2019.3.2	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○	○	●	●	●	○			
Transport	2020.3.6, 2019.3.4	●					●																								
Energy	2020.3.4, 2019.3.3 and 2019.3.5		●				●	●	●	●	●		●																●		
Public administration and business climate																															
Enhance measures to provide liquidity to SMEs and the self-employed	2020.3.1													○																	
Further implementation of	2019.4.1													○																	

the Law on Market Unity																															
Strengthen public procurement frameworks	2020.4.1, 2019.1.3											●																			
Improve coordination across levels of government	2020.4.1, 2019.4.2		○									○	○	○				○					○								

Key: "●" investments and reforms of the component significantly address the challenge; "○" the component partially addresses the challenge

4.3. Growth potential, job creation, economic, institutional and social resilience, European Pillar of Social Rights, mitigating the impact of the crisis, and social territorial cohesion and convergence

Fostering economic growth and jobs

The mix of investments and reforms presented by Spain are expected to stimulate growth through multiple channels, including improvements in total factor productivity, in line with the EU update of the 2020 new Industrial Strategy [39], **boosting trade capacity and increasing efficiency gains in the labour market while reducing its fragmentation.** The economic impact of the funds on the Spanish economy will be significant, particularly between 2022 and 2024, when strong demand effects would be accompanied by a gradual contribution from the supply side. The Spanish authorities estimate a cumulative increase in GDP level of 2,8%, 4,15% and 4,16% for the first three years of the implementation of the plan. These projections seem on the optimistic side, as they imply larger and more persistent multipliers than those reported in the literature [40], which supports the use of a multiplier of narrowly above unity in 2021 and slightly higher in 2022. Even using the latter multipliers, the Commission estimates also show sizable GDP effects, but more evenly spread over the years. The full implementation of the plan's measures could lead to an increase of GDP of between 1,8% and 2,5% by 2024 (see Box 4.3.1), enabling Spain to return to the pre-COVID-19 GDP level by the end of 2022. The implementation of reforms combined with the injection of public funds is expected to boost domestic demand, representing the main drivers of growth in the forthcoming years also thanks to gradual normalization of the households' savings rate.

According to the simulations run by the Commission, the long-lasting impact of the RRP could lead to a 0,8% higher GDP in 20 years (see Box 4.3.1). These simulations do not include the possible positive impact of structural reforms, which can be substantial and raise Spain GDP by 10% in 20 years' time. This increase is expected to be driven by gains in capital accumulation and total factor productivity, on the back of an ambitious package of growth and productivity-enhancing reforms and investments. The Spanish authorities mention a long-term productivity effect in the medium to long-term of 0,4 pps, but without providing details on how it is derived or for how long it will last. Reforms in the areas of skills and labour market policies have potential to bring about long-lasting effects on potential growth and to make it more inclusive. Likewise, the implementation of the Digital Spain 2025 Agenda in the context of the RRP may boost the digital transformation of the

[39] See European Commission, Updating the 2020 New Industrial Strategy, COM(2021) 350 final, 05.05.2021.
[40] The Spanish authorities justify the higher and more persistent multipliers used in their projections on the assumption that deeper and more persistent negative output gaps amplify the effectiveness of fiscal stimulus in crisis years. This suggests the possibility of upside risks to the more standard assumptions used by the Commission (see Box 4.3.1).

Spanish economy, both at individual (by increasing up to 80% the share of people with basic digital skills) and sectoral level (by digitalising the public administration and the SMEs).

The Spanish authorities estimate a cumulative increase in the employment level of 1,2%, 2,9% and 3,1% for the first three years of the implementation of the plan. The Commission's estimates also reflect a sizeable yet lower effect in employment, and more evenly spread throughout the implementation period (see Box 2). Due to the differences in the assumptions and methodology, the results of the Commission's assessment cannot be directly compared to the numbers reported in the RRP. In particular, the Commission's estimates only reflect the impact of investments and do not include the impact of the reforms included in the RRP. The measures having a larger direct or indirect impact on job creation are expected to be the new active labour market policies in Component 23 (Labour Market) (by improving job matching), the reinforcement of the Spanish Science, Technology and Innovation system in Component 17 (Science, Technology and Innovation) (via the 60% increase in investment), the Renovation Wave in Component 2 (due to its labour-intensive impact), the modernisation and digitalisation of the industrial fabric and SMEs in Component 12 (Industrial Policy) (by improving access to new markets via digital means), and tourism and the promotion of an entrepreneurial Spain in Component 14 (Tourism) (due to the importance of tourism in the Spanish economy), those on VET and digital skills in Component 20 (Vocational Training) (by increasing the supply of medium and high skills in high demand) and the modernisation and digitalisation of education in Component 21 (Education).

The Spanish authorities foresee substantial increases in the level of public investment and investment in R&D (both public and private) on the back of the RRP. Public investment remained subdued at around 2% of GDP in the years before the COVID-19 crisis. During the implementation of the plan (2021-2023), public investment could increase to 4% of GDP. Public investment in R&D could reach 1% of GDP during the implementation of the RRP and the Spanish authorities estimate that mobilisation of private investment will allow to increase overall investment in R&D well above the 2% of GDP pre-crisis target (Europe 2020 strategy). However, the plan does not indicate if these levels of public investment and R&D expenditure will be maintained after 2023.

Box 4.3.1 Stylised NGEU impact simulations with QUEST - SPAIN

Model simulations conducted by the European Commission using the QUEST model show that the economic impact of the NGEU in Spain could lead to an increase of GDP of between 1,8% and 2,5% by 2024. [41] After 20 years, GDP could be 0,8% higher. Spill-overs account for an important part of such impact.

According to these simulations, this would translate into 250 000 additional jobs. Cross border (GDP) spill-overs account for 0,4 pps in 2024, showing the value added of synchronised expenditure across Member States (line 2). Even in a scenario with a lower productivity of NGEU funds, it would still lead to a significant impact (line 3). [42]

Table 1: QUEST simulation results (%-deviation of real GDP level from non-NGEU case, linear disbursement assumption over 4 years)

Scenario	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2040
Baseline	1,3	2,3	2,4	2,5	1,9	1,2	1,3	1,3	1,3	1,3	0,8
of which spillover	0,3	0,4	0,4	0,4	0,4	0,3	0,2	0,2	0,1	0,1	0,0
Low productivity	1,1	1,9	1,8	1,8	1,1	0,4	0,5	0,5	0,5	0,5	0,3

This stylised scenario does not include the possible positive impact of structural reforms, which can be substantial. A model-based benchmarking exercise shows that undertaking structural reforms that would result in halving the gap vis-à-vis best performers in terms of indicators of structural reforms could raise Spain's GDP by 10% in 20 years' time, in line with findings for the EU average. [43]

Due to the differences in the assumptions and methodology, **the results of this stylised assessment cannot be directly compared to the numbers reported in Section 4 of Spain's RRP.**

Strengthening social cohesion

The RRP submitted by Spain includes measures that seek to address social cohesion challenges identified in previous country reports and country specific recommendations to Spain and monitored through the Social Scoreboard (see Box 4.3.2). These measures have the potential to contribute to the implementation of Action Plan of the European Pillar of Social Rights, endorsed by the Porto Summit.

The plan contains measures to improve educational outcomes and skills at all levels. Spain will invest significantly in affordable high-quality early childhood education and care ('ECEC' 0-3) for those in most need and extend guidance and support to vulnerable students.

[41] RRF amounts to roughly 90% of NGEU, which also includes ReactEU, Horizon, InvestEU, JTF, Rural Development and RescEU.
[42] Technically, the low productivity scenario considers a significantly reduced output elasticity of public capital.
[43] Varga, J, in 't Veld J. (2014), "The potential growth impact of structural reforms in the EU: a benchmarking exercise ", European Economy Economic Papers no. 541.
http://ec.europa.eu/economy_finance/publications/economic_paper/2014/pdf/ecp541_en.pdf.

The implementation of the new law on education aims to enhance inclusiveness and reduce the levels of segregation in public schools. Spain will also extend (135 000 new places) and modernise (with greater focus on green and digital skills) the offer in vocational education and training ('VET'). Together, these measures are expected to contribute to reduce early-school leaving rates and improve educational outcomes. In what concerns higher education, measures aim at promoting equal access for all students by increasing financial aid, by reforming the scholarship system and by reducing university prices. In addition, enhanced cooperation with businesses should contribute to improving labour market relevance of higher education and employability.

Spain envisages reforms and investments in the area of skills, notably digital, with a specific focus on upskilling of low skilled and on reskilling of the labour force in line with labour market needs. Investment in the accreditation of existing skills and in the provision of professional qualifications are set to offer access to an integrated system of life-long learning. There are new mechanisms to improve the involvement of employers in training provision, which is an ongoing challenge. Together these measures are expected to contribute to improve employability of the unemployed and provide new opportunities for those in the labour market.

Many of the investments in the areas of jobs and skills target the youth, with the aim of reducing the very high rates of youth unemployment rate and improve their employment prospects. These investments, combined with the modernisation of the VET system and the reinforced investments in guidance and support in basic education, respond to the challenge of fostering the labour market integration of young people neither in employment nor in education and training.

As regards the labour market, the Spanish Plan presents a wide array of reforms and investments that are expected to contribute to the principles of the European Pillar of Social Rights and have potential to address long-standing CSRs. The Spanish Government is still discussing the details of many of these reforms with the social partners. A simplification of the menu of contracts and a review of hiring incentives aim to generalise employment on open-ended contracts, thereby reducing high levels of labour market segmentation. Working conditions of specific groups may improve on the back of the reforms on teleworking, platform workers –riders, and subcontracting. The new mechanism for flexibility for firms and stability for workers based on the experience gathered with short-time work schemes (ERTEs) intends to improve internal flexibility in firms as an alternative to job destruction, while reskilling workers at risk of displacement and promoting labour mobility. A EUR 434 million investment is foreseen in Component 23 (Labour Market) for the purpose of training these workers. Active labour market policies (ALMP) and public employment services (PES) will be modernised with a view to provide a more effective support to jobseekers. The system of non-contributory cash benefits (including unemployment assistance) will be streamlined. Plans to strengthen cooperation between employment and social services and to facilitate labour market integration of people at risk of exclusion will build on the nationwide minimum income scheme ('MVI').

The Spanish RRP intends to mitigate pre-existing high levels of risk of poverty or social exclusion, which are expected to pick up in the context of the COVID-19 crisis. Reducing income inequality is an overarching priority of the plan. According to the macroeconomic impact assessment, the income distribution would be affected through both the supply and demand channel. First, the increase in public investment is expected to increase the total capital stock in the economy, thereby generating greater demand for employment. Likewise, GDP growth and higher income for economic agents is expected to create further demand for employment. Second, investments in the plan in the area of skills are expected to impact the composition of labour force in the medium-long run through the upskilling of low-skilled workers, directly affecting the wage distribution across active workers. According to the Spanish authorities, this is expected to contribute to reducing the GINI index, now above 30 points and slightly above the euro area average, by 5,7% over a 10-year period, in line with the GINI coefficients of the Nordic countries.

Spain envisages a set of measures aiming at increasing the activity rate and the productivity of women on the labour market in its Component 23 (Labour Market). To reduce the gender gap in the labour market, the plan includes two Royal Decree-Laws on equal pay for men and women and on equality plans for all companies with more than 50 workers. Measures will also be implemented to combat gender-based violence and support labour market integration of women. The Plan also foresees increase in public investment in early childhood education and care for 0 to 3-year-olds, the Care Economy Shock Plan and the reinforcement of inclusion policies. The authorities intend to boost the participation of women in senior positions in strategic areas and in sectors where their presence is still low, thereby contributing to a more efficient allocation of talent and reconciling the goal of a smaller gender gap with higher productivity growth.

The main objective of the pension reform to be agreed in the context of social dialogue is to maintain the purchasing power of pensioners over time, in line with practices in other Member States, while preserving the long-term sustainability of the pension system. Under the current system, the adequacy of pensions is among the highest in the EU and would remain above the EU average in the long term (both in terms of high replacement rates and low poverty risk of pensioners).

The Spanish RRP also includes a plan to boost social policies in its Component 22 (Care Economy, equality and inclusion). With one of the highest rates of child poverty in the EU and one of the lowest levels of support for families, Spain commits to improve the coverage of benefits for children that were not sufficiently protected through a new law on family protection. Spain will also carry out a comprehensive reform of the tax system, which will include a review of its distributional impact for families with children.

The Action Plan for the Care Economy also include reforms and investments that are designed to strengthen long-term care, responding to the impacts of an ageing population and an increasing demand for long-term care. The actions are geared towards promoting deinstitutionalisation, including investment in community care and home care solutions, but also include upgrading of institutional care, in line with the UN Convention on the Rights of Persons with Disabilities. Finally, within the framework of the Spanish Urban Agenda, investments in renovations of buildings in Component 2 of the plan will address energy poverty by improving energy efficiency and supporting the construction of social rental housing. The Accessible Country Plan includes investment in ensuring the rights of persons with disabilities to access public services.

Box 4.3.2: Employment and social challenges in light of the Social Scoreboard accompanying the European Pillar of Social Rights

The Social Scoreboard supporting the European Pillar of Social Rights points to significant employment and social challenges in Spain. The COVID-19 crisis has halted the positive labour market developments observed in the past years, exacerbating pre-existing structural problems and generating risks of an increase in the share of people at risk of poverty or social exclusion. Short-time work schemes (ERTEs) helped mitigating the impact on the labour market by preserving jobs and income of workers in the most affected sectors. Although these schemes have not prevented unemployment to rise and employment to drop, they helped containing the effects. Yet the high share of temporary workers amplifies the vulnerability of the Spanish labour market to the economic cycle.

Social Scoreboard for SPAIN

Equal opportunities and access to the labour market	Early leavers from education and training (% of population aged 18-24) (2020)
	Youth NEET (% of total population aged 15-24) (2020)
	Gender employment gap (2020)
	Income quintile ratio (S80/S20) (2019)
	At risk of poverty or social exclusion (in %) (2019)
Dynamic labour markets and fair working conditions	Employment rate (% population aged 20-64) (2020)
	Unemployment rate (% population aged 15-74) (2020)
	Long term unemployment (% population aged 15-74) (2020)
	GDHI per capita growth (2019)
	Net earnings of a full-time single worker earning AW (2019)
Social protection and inclusion	Impact of social transfers (other than pensions) on poverty reduction (2019)
	Children aged less than 3 years in formal childcare (2019)
	Self-reported unmet need for medical care (2019)
	Individuals' level of digital skills (2019)

Critical situation	To watch	Weak but improving	Good but to monitor	On average	Better than average	Best performers

Update of 29 April 2021. Members States are classified on the Social Scoreboard according to a statistical methodology agreed with the EMCO and SPC Committees. It looks jointly at levels and changes of the indicators in comparison with the respective EU averages and classifies Member States in seven categories. For methodological details, please consult the Joint Employment Report 2021; NEET: neither in employment nor in education and training; GDHI: gross disposable household income.

Youth are facing very high rates of unemployment, and the early school leaving rate remains among the highest in the EU, despite a noticeable reduction in recent years. The share of young people neither in employment, nor in education or training (NEET) remains high and has increased significantly up to 13,9% in 2020 from 12,1% in 2019. Young people have been proportionally more affected by job losses (-15% employed aged 15-24 vs -3,1% on average). Low education levels significantly increase the risk of future poverty and social exclusion.

The share of people at risk of poverty or social exclusion was comparatively high in 2019 (before the crisis), especially among children. Income inequality was also high and social transfers other than pensions had a limited capacity to reduce poverty. The national minimum income scheme adopted in June 2020 has constituted a major step in providing a minimum floor at national level, for regions to top up and complement with their own schemes**.** The scheme is compatible with other income sources (up to the relevant threshold). The Government is working on stepping up the rollout of the scheme and the development of its activation component.

The Recovery and Resilience Plan submitted by Spain contains a number of reforms and investments relevant for the implementation of the Pillar. It encompasses specific measures aiming to improve the employability of the youth and reduce further the early school leaving rate. It also puts forward a simplification of the menu of contracts to reduce the use of temporary hiring. The wide array of actions to upskill and reskill workers (including on digital skills), together with the modernisation of the vocational education and training system, have the potential to improve workers' employability and thus raise the employment rates and reduce unemployment. The Plan also foresees specfic actions to further increase participation of children in formal childcare, an indicator in which Spain is already among the best performers. The capacity of the RRP to reduce the at risk of poverty or social exclusion rate or income inequalities will rely, to a large extent, on its success in addressing labour market segmentation and reducing child poverty.

The reforms envisaged in the area of active labour market policies (ALMPs) have the potential to partly address important long-standing CSRs in this domain. The plan encompasses multiple interventions relevant in this area, tacking stock of previous recommendations from the independent fiscal authority (AIReF). They include reforming the system of hiring incentives, developing individual pathways for counselling, reinforcing the system of adult learning, setting up a one-stop shop for young people, improving the coordination between employment and social services and modernising public employment services (including the digitalisation of profiling tools). To complement these measures, reinforcing the capacity of public employment services (including with adequate human resources) will be key to ensure an improved and more efficient delivery of ALMPs.

The RRP also includes reforms and investments which are expected to improve access to healthcare, and in doing so contribute to Principle 16 of the Pillar. The Plan will intervene to enhance accessibility of health services in less well derserved areas by addressing shortages of healthcare workforce and equipment. Planned reforms and investments will also contribute to expand further the services provided by the system.

Reducing vulnerability and increasing resilience

The COVID-19 crisis has exacerbated the imbalances that persisted for several years in Spain, notably the combination of large stock of external and internal debt, both public and private, which were on a downward path prior to the outbreak of the pandemic. This leaves the country exposed to adverse shocks or shifts in market confidence which would have harmful implications for the real economy, especially given the still high level of unemployment.

The implementation of policy measures in the RRP is expected to mitigate some outstanding vulnerabilities of the Spanish economy. Notably, the economic output of the investments envisaged in the plan are expected to boost GDP growth in the next years, which will be a driver of the needed deleveraging process both in the private and public sector. In addition, measures may go some way towards addressing the persistent labour market segmentation and raising employment rates. Measures aimed at the upskilling of the labour force can enhance firms' competitiveness, producing positive spillovers in the economy.

Measures in a number of components in the plan are also expected to improve Spain's external debt position by increasing competitiveness and reducing energy imports. The reduction of Spain's external net debtor position in terms of GDP came to a halt in the first half of 2020, mainly due to the sharp contraction in GDP. The reduction in the level of economic output led Spain's NIIP to worsen from -74% of GDP at the end of 2019 to -84% of GDP by end-2020. The reforms and investments outlined in Components 12 (Industrial Policy), 13 (Support to SMEs) and 14 (Tourism) in the plan aim at raising the competitiveness of Spain's business fabric, as well as investments in Components 19 (Digital Skills), 20 (Vocational Training), 21 (Education) and 23 (Labour Market) at upskilling the labour force and reducing the fragmentation of the labour market. Moreover, investments in research and innovation in Components 16 (Artificial Intelligence) and 17 (Science, Technology and Innovation) can contribute to enhanced competitiveness, while investments in renewable energy and energy efficiency in Components 2 (Renovation), 7 (Renewable), 8 (Electricity infrastructure), 9 (Hydrogen) and 10 (Just Transition) can contribute to reducing energy imports. The commitment to the industry-services ecosystem, and the boost to entrepreneurship are expected to account for an estimated improvement of 0,2 percentage points in the long-term growth rate of exports, according to the Spanish authorities.

Measures in Component 13 (Support to SMEs) of the plan can also help tackle increasing private debt. While Spain displayed elevated, but declining, private indebtedness since the financial crisis up until 2019, the private sector debt-to-GDP ratio increased following the outbreak of the pandemic in spite of the implementation of liquidity and guarantee support measures aimed at mitigating its impact. The debt accumulated by the non-financial private sector increased to 147,4% in the last quarter of 2020, up by 17,1 pps. since the beginning of the year. Notably, NFCs debt level stands 30 pps. and 25 pps. above the prudential threshold and the fundamental benchmark, respectively. This upward evolution reflects both the increase of indebtedness in the corporate sector, which remains a significant issue to monitor in the aftermath of the pandemic and, to a larger extent, the sizeable fall in GDP experienced by Spain in 2020. Excessive corporate indebtedness could hamper firms' capacity to undertake significant investments therefore limiting productivity growth. The Plan foresees a reform aimed at the modernisation of the insolvency framework in its

Component 13 (Support to SMEs), which is expected to be implemented by the end of 2021. It will facilitate preventive debt restructuring and debt relief for natural persons and improve the effectiveness of pre-insolvency and second chance instruments, with the goal of preventing insolvency situations and facilitate resource reallocation.

Certain measures in Components 11 (Public administration) and 29 (Effective public spending) of the plan are expected to pave the way for stronger fiscal frameworks in Spain. Public debt rose by around 25 percentage points from 2019 to 2020, standing at 120% of GDP, primarily due to the large negative government balance, the fall in economic activity and the inclusion of SAREB's liabilities in the total public debt, along with the deficit increasing to 11% in 2020. While Spain does not face fiscal sustainability risk in the short run, mainly thanks to the current favourable financing conditions on markets, the worsening economic outlook could pose a challenge in the medium term. Prior to the outbreak of the pandemic, limited progress was achieved in the field of fiscal governance. The crisis triggered by the COVID-19 led the authorities to implement policies aimed at cushioning the economic impact of the pandemic and fiscal consolidation efforts were suspended with the activation of general escape clause of the Stability and Growth Pact. The envisaged policies seeking to reform the public procurement system as well as ensuring more efficient public policies, taxation and spending, could lay the ground towards the strengthening of the fiscal framework for Spain moving forward. Overall, the measures set out in the plan contribute (albeit in part) to tackling the country's existing vulnerabilities from a fiscal standpoint.

Cohesion and convergence

Territorial cohesion, together with social cohesion, is one of the four axis on which the plan is built upon, and it is systematically addressed throughout the ten driving policy areas for recovery. Recital 3 of the RRF Regulation recalls that the different starting positions and specificities of regions should be taken into consideration in the implementation of Union policies. Efforts to reduce disparities should in particular benefit islands and outermost regions. The budget of the recovery and resilience plan is not broken down into regional envelopes, and the existing disparities among the autonomous communities in Spain are not explicitly mentioned. Instead, the plan builds on territorial cohesion on the basis of the uneven distribution of the population throughout the national territory. The investments actually address the disparities and unequal opportunities that exist between the more populated urban areas and the declining rural areas, the so-called "demographic challenge".

The plan is aligned with the national strategy against the demographic challenge, which includes 130 measures to support rural areas and small municipalities The plan includes for example a dedicated investment to improve energy efficiency in municipalities below 5 000 inhabitants in its Component 2 (Renovation). Territorial cohesion is also promoted through the deployment of ultra-fast broadband in its Component 15 (Digital Connectivity). Moreover, initiatives in several components will boost entrepreneurship in rural areas, improve access to education (including early childhood education and care, digital skills and vocational education and training), and support the restoration and maintenance of cultural heritage, water management, nature tourism, among others.

In addition, there is a dedicated component to facilitate a fair green transition in certain areas of the country that are particularly exposed to its economic and social consequences. The objective of Component 10 (Just Transition) is to minimise the challenges arising from the green transition in areas where the main economic activity currently depends on carbon-intensive and polluting sources of energy, namely coal mining, coal-powered plants and nuclear plants that are to be de-committed.

Conclusion on assessment criterion 2.3 of Annex V to the RRF Regulation

Taking into consideration all reforms and investments envisaged by Spain, its recovery and resilience plan is expected to effectively contribute to strengthen growth potential, job creation, and economic, social and institutional resilience of the Member State, on contributing to the implementation of the European Pillar of Social Rights, including through the promotion of policies for children and youth, and on mitigating the economic and social impact of the COVID-19 crisis, thereby enhancing the economic, social and territorial cohesion and convergence within the Union. This would warrant a rating of A under the assessment criterion 2.3 of Annex V to the RRF Regulation.

4.4. The principle of 'do no significant harm'

The Regulation establishing the Recovery and Resilience Facility provides that no measure included in the recovery and resilience plan should lead to significant harm to any of the six environmental objectives within the meaning of Article 17 of the Taxonomy Regulation [44]. In line with the RRF Regulation and the Technical Guidance on the Application of 'do no significant harm' under the Recovery and Resilience Facility Regulation (hereafter 'DNSH Technical Guidance') [45], Member States provide a 'do no significant harm' (DNSH) assessment, on which basis the Commission assesses whether each measure of the plans comply with the DNSH principle. Spain has included a detailed DNSH assessment for each measure included in its plan.

The evidence provided on the criteria used for the selection and design of measures is sufficient to conclude that no measure in the plan is expected to do significant harm to environmental objectives. By selecting measures that either contribute substantially to environmental objectives, or have no or an insignificant foreseeable impact on environmental objectives, many measures in the plan can be considered DNSH compliant from the outset (e.g. certain measures in education and training, labour market, public administration, and culture and sports). Other measures are designed to ensure compliance with DNSH, including broad support schemes that span across sectors and activities (e.g. in R&D&I, and support to SMEs). For measures requiring a 'substantive DNSH assessment' according to the DNSH

[44] The six environmental objectives comprise (1) climate change mitigation, (2) climate change adaptation, (3) sustainable use and protection of water and marine resources, (4) the circular economy, (5) pollution prevention and control, and (6) protection and restoration of biodiversity and ecosystems.

[45] COM (2021) C58/01, Technical Guidance on the Application of 'do no significant harm' under the Recovery and Resilience Facility Regulation, as already mentioned in footnote 8.

Technical Guidance (e.g. sustainable mobility, industrial policy, digitalisation), Spain has substantiated that the measures do not lead to significant harm.

In order to ensure compliance with DNSH, milestones and targets specify that specific evidence and commitments are required during the implementation of certain measures. This is the case, for example, for measures supporting strategic projects covering installations under the EU Emissions Trading System (ETS) and specific waste management activities in Component 12 (Industrial Policy), irrigation for agricultural production in Component 3 (Agri-food and fisheries), and broad support schemes spanning across sectors and activities in Components 13 (SME support), 14 (Tourism), and 17 (Science, technology and innovation). There are additional measures that are designed with the aim to ensure DNSH compliance, including at the level of milestones and targets (e.g. vehicles, vessels, special-purpose aircrafts).

Component 12 (Industrial Policy) of the plan foresees financial support to strategic projects for the recovery and transformation of Spain's industry, which may include installations covered under the EU Emissions Trading System (ETS). The DNSH Technical Guidance sets out that for economic activities where there is no technologically and economically feasible alternative with low environmental impact, Member States may demonstrate that a measure does no significant harm by adopting the best available levels of environmental performance in the sector. In the context of the EU ETS, this is particularly relevant for the climate change mitigation objective. Among other conditions, Spain has sought to ensure DNSH compliance by making the selection of supported projects conditional upon achieving GHG emissions that are at least below the relevant benchmarks established for free allocation [[46]]. Where the emission reductions are not substantially lower than the relevant benchmarks, Spain has committed to provide an explanation on why this level of emission reductions cannot be achieved. This condition is substantiated in the component description (as reflected in the proposal for a Council Implementing Decision), included in the DNSH assessment and incorporated in the milestones and targets for this measure. The selection criteria additionally are designed to exclude specific activities such as those related to fossil fuels, indirect ETS cost compensation, the disposal of waste in landfills mechanical biological treatment plants or incinerators, among others, and ensure that activities comply with the relevant EU and national environmental legislation. This is expected to ensure that projects supported under the Facility are in accordance with the DNSH Technical Guidance and do not lead to significant harm to any of the six environmental objectives within the meaning of Article 17 of the Taxonomy Regulation.

Spain aims to improve waste management practices, including waste collection, recycling and circular economy measures mainstreamed across the plan. This comprises dedicated measures in Component 12 (Industrial Policy) and mainstreamed actions in Components 2 (Renovation), 3 (Agri-food and fisheries), 4 (Ecosystems and biodiversity), 5

[46] Benchmarks as set out in the Commission Implementing Regulation (EU) 2021/447.

(Coast and water resources) and 14 (Tourism). As part of this set of interventions, Spain is planning to increase the resource efficiency of existing mechanical biological treatment (MBT) facilities. Article 17 of the Taxonomy Regulation stipulates that no measure can lead to a significant increase in the incineration or landfilling of waste to avoid doing significant harm to the circular economy objective, including as a primary indirect effect of the measure. Spain seeks to ensure DNSH compliance by committing as part of the milestones and targets to improving the resource efficiency or retrofitting to recycling operations of separated waste to compost bio-waste and anaerobic digestion of bio-waste only existing MBTs without leading to an extension in the capacity or lifetime of the assets. This will be ensured at plant level. Therefore, the measure is designed to be DNSH compliant, as it is not expected to lead to a significant increase in the incineration or landfilling of waste.

The RRP of Spain also aims to improve the efficiency and sustainability of irrigation through measures in Component 3 (Agri-food and fisheries), which is considered DNSH compliant since reclaimed water is being used, water efficiency improved and investments only covers existing irrigation activities. Spain aims to modernise and upgrade its irrigation system for the agri-food sector in line with the Water Framework Directive [[47]]. To ensure DNSH compliance, in particular with the sustainable use and protection of water and marine resources objective, Spain introduced selection criteria for the projects supported under the Facility. The plan exclusively invests in existing irrigation activities and commits to complying with the minimum requirements for water reuse as set out in Regulation (EU) 2020/741. This includes replacing surface or groundwater with reclaimed water, and modernising the irrigation system to reduce energy consumption, integrate renewable energy sources and digitalise the network. Where desalinated water is being used, it will be ensured that only the best available technology with the lowest environmental impacts in the sector is being used. Additionally, an environmental impact assessment is expected to be carried out for each investment in accordance with Directives 2011/92/EU [[48]] and 92/43/EEC [[49]]. Therefore, DNSH compliance is ensured by the design of the measure, which is documented as part of the component description and the DNSH assessment.

The plan also comprises several broad measures spanning across sectors and activities, which are designed to ensure DNSH compliance. The plan contains several broad measures, including to support R&D&I as well as SMEs. The selection criteria for the measures comprise an exclusion list that excludes fossil fuels, activities with projected GHG emissions that are not at least below the ETS benchmarks for free allocation, incinerators, landfills, among others. Spain seeks to ensure that the activities supported comply with

[[47]] Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy, http://data.europa.eu/eli/dir/2000/60/2014-11-20.
[[48]] Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment, http://data.europa.eu/eli/dir/2011/92/2014-05-15.
[[49]] Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora, http://data.europa.eu/eli/dir/1992/43/2013-07-01.

DNSH also by committing to the application of all relevant EU and national environmental legislation. For financial instruments, Spain proposes to apply the aforementioned exclusion list or compliance with the DNSH Technical Guidance as part of the contractual agreement with the executing entity or financial intermediary. For instance, Component 13 (Support to SMEs) sets out a digitalisation and innovation measure for which the implementing entity will be expected to ensure DNSH compliance as part of the selection of projects. Through this approach, Spain ensures that the broad measures included in the plan are designed to comply with the DNSH principle.

Conclusion on the assessment of criterion 2.4 of Annex V to the RRF Regulation

Taking into account the assessment of all the measures envisaged, no measure for the implementation of reforms and investments projects included in Spain's recovery and resilience plan is expected to do significant harm to environmental objectives within the meaning of Article 17 of the Taxonomy Regulation (EU) No 2020/852 (the principle of 'do no significant harm'). This would warrant a rating of A under the assessment criterion 2.4 of Annex V to the Recovery and Resilience Facility Regulation.

4.5. Green transition

Climate target

The plan includes measures supporting climate change objectives for an amount which represents 39,7% of the plan's total allocation in the form of non-repayable financial contribution (EUR 27,6 billion out of EUR 69,5 billion), based on the methodology for climate tracking set out in Annex VI of the Recovery and Resilience Facility Regulation (the table in Annex 6.1 presents the detailed application of the climate tracking methodology). This exceeds the minimum climate target of 37% as set out in the Regulation. The climate change contribution of each of the components of the plan is set out in Table 4.5.1 below. Ten components make up almost 94% of the total climate contribution of the recovery and resilience plan. The largest contributions come from the components on renovation (20% of overall climate contribution), mobility (18% for long-distance mobility and 17,5% for urban mobility) and renewable energy (12% from renewables and 6% from renewable hydrogen).

The RRP of Spain correctly follows the methodology for climate tracking as set out in Annex VI to the RRF regulation. The plan identifies intervention fields and corresponding climate coefficients to calculate the contribution of the plan to the climate objectives. This approach is applied for each measure of the plan with a relevant climate contribution. Specific safeguards were introduced via selection criteria for the investments and specific provision in milestones and targets, to ensure that the characteristics of the measures funded through the Facility are in line with the condition set out in Annex VI. This is particularly the case for energy renovation investments under Components 1 (Sustainable urban mobility), 2 (Renovation), 6 (Sustainable long-distance mobility), 11 (Public Administration), and industrial projects under Component 12 (Industrial Policy).

A few general observations can made on the application of the climate tracking methodology in the plan. (a) The measures of the plan often consist of several sub-measures. For measures where that is the case, the plan indicates an intervention field for each relevant sub-measure, and the climate contribution is therefore computed at sub-measure level. (b) The choice of intervention fields for the climate objectives is well justified, reflecting the main nature, focus, objective, or expected outcome of the reforms and investments. (c) The final computation of the climate contribution is a conservative calculation. The plan submitted by Spain is a complex and large plan in which climate related measures appear under several components and a large number of measures and sub-measures. To capture all these contributions with the climate tracking methodology set out in the RRF Regulation would have required to single out systematically all these sub-elements. This would have further fragmented the plan, increasing its level of complexity. Therefore, the plan also includes some sub-measures related to climate that are not fully accounted for in the figure of the overall climate contribution of the plan. (e) The plan does not propose to increase climate coefficients of the selected intervention fields for any measure.

Table 4.5.1: Climate contribution by component (only for components with a contribution)

Component	Estimated costs (EUR m)	Climate contribution (EUR m)	Climate contribution as percentage of component costs	Climate contribution as percentage of the plan's total allocation*	Cumulative climate contribution as percentage of the plan's total allocation*
02. Renovation	6 820	5 591	82,0%	8,0%	8,0%
06. Sustainable long-distance mobility	6 667	4 937	74,1%	7,1%	15,1%
01. Sustainable urban mobility	6 536	4 737	72,5%	6,8%	22,0%
07. Renewables	3 165	3 165	100,0%	4,6%	26,5%
09. Hydrogen	1 555	1 555	100,0%	2,2%	28,8%
12. Industrial policy	3 782	1 398	37,0%	2,0%	30,8%
08. Electricity infrastructure	1 365	1 365	100,0%	2,0%	32,7%
05. Coast and water resources	2 091	1 226	58,6%	1,8%	34,5%
11. Public administration	4 239	1 071	25,3%	1,5%	36,0%
04. Ecosystems and biodiversity	1 642	759	46,2%	1,1%	37,1%
14. Tourism	3 400	655	19,3%	0,9%	38,1%
03. Agri-food and fisheries	1 051	418	39,7%	0,6%	38,7%
23. Labour market	2 363	222	9,4%	0,3%	39,0%
20. Vocational training	2 076	158	7,6%	0,2%	39,2%
10. Just transition	300	150	50,0%	0,2%	39,4%
26. Sports	300	134	44,7%	0,2%	39,6%
17. Science, technology and innovation	3 457	49	1,4%	0,1%	39,7%
All components with a climate contribution		**27 589**	**39,7%**	**39,7%**	**39,7%**

* The plan's total allocation in the form of non-repayable financial contribution equals EUR 69 513 million.

Energy efficiency

The plan includes significant investment in energy renovation of buildings, in line with the Renovation Wave. The construction and use of buildings represent 25% of all GHG emissions in Spain, and the investments in the renovation of buildings are expected to yield significant energy savings, resource efficiency gains and reductions in GHG emissions. In the plan, EUR 7,8 billion will be devoted to the renovation of residential dwellings, public buildings and urban rehabilitation in Component 2 (Renovation), for public buildings in Component 11 (Public Administration), and for sports facilities in Component 26 (Sports). These measures are in line and support the ambitions of the Spanish Long Term Building Renovation Strategy [[50]]. The investments will generate employment in the short term, and for most measures will result in an average primary energy demand reduction of at least 30% compared to the situation prior to the renovation.

Despite the significant investment, additional public funding will be needed to deliver on the energy savings objectives of the NECP. Component 2 (Renovation) foresees EUR 6,8 billion to renovate (i) at least 355 000 unique residential dwellings as part of at least 510 000 renovation actions, (ii) at least 600 hectares of urban areas, (iii) an equivalent of at least 40 000 residential buildings and 690 000 m^2 of non-residential buildings, (iv) at least 26 000 residential buildings in municipalities and urban areas with fewer than 5 000 inhabitants, and (v) at least 1 230 000 m^2 of public buildings by 2026. The underlying investments in residential building renovations amount to an important share of the public support foreseen in the NECP, and are expected to contribute to the energy saving target by 2030 and to the objective set in the NECP in terms of number of dwellings to be renovated (albeit to a more limited extent). This will need to be addressed with additional investments to achieve the NECP objectives, in particular by ensuring a relatively higher leverage factor for private investments. The NECP plans to leverage private funds equivalent to three times the volume of public funds, which is higher than what the component is likely to achieve. In this context, a regulatory reform is foreseen in the component to foster private investments, notably by facilitating communities of owners to borrow and by providing *Instituto de Crédito Oficial* (ICO) guarantees to banks for lending for this purpose.

Effort sharing

The RRP is expected to contribute to Spain achieving its existing 2030 target of 26% GHG emissions reduction compared to 2005 for sectors under the Effort Sharing Regulation ('ESR'), including transport, agriculture, waste and buildings. Components 1 (Sustainable urban mobility) and 6 (Sustainable long-distance mobility) focus on reducing GHG emissions from transport, which will contribute significantly to achieving the ESR target, as it is the sector in which GHG emissions continue to grow most. By helping Spain to reach its existing 2030 target for GHG emissions reduction, the RRP will also support Spain

[[50]] Castellazzi et al., 2019

in its contribution to meeting the EU's increased climate ambition to reduce net greenhouse gas emissions by at least 55% by 2030 compared to 1990, as agreed by the European Parliament and the Council within the Climate Law.

Spain earmarks a substantial financial envelope to sustainable regional and urban mobility (EUR 13,2 billion). The plan will contribute to achieving internationally agreed decarbonisation and air quality objectives through a transformation of urban environments. Spain will favour active modes of transport (walking and cycling), entice the use of public transport (investing in availability and quality) and increase the penetration of electric mobility. Investments in recharging and boosting electric vehicle infrastructure should lead to the installation of 80 000 to 110 000 recharging points, and achieve a fleet of at least 250 000 plug-in electric vehicles by 2030 (EUR 2 billion). It will also create low-emission zones in municipalities with more than 50 000 inhabitants and provinces' capitals, with the goal of reducing private traffic by 35% (EUR 2,9 billion). This will also contribute to reducing air pollution. Spain will also improve the quality and reliability of the *Cercanías* (light rail) service (EUR 1,6 billion). The plan will disincentivise the use of road transport by charging tariffs for the use of roads. As regards inter-regional sustainable mobility, Spain plans to prioritise investments in the rail network, including European Corridors (EUR 3,2 billion) and Trans-European Network for Transport Program (EUR 1,8 billion). The envisaged solutions take advantage of the opportunities offered by the digitalisation of transport (EUR 800 million). Inter-modality will also be promoted, with a particular focus on enhancing rail transport (EUR 840 million). These support the Recharge and Refuel European Flagship.

Renewable energy

The plan includes investments in renewable energy generation and a flexible, decentralised and dynamic electricity system (EUR 4,5 billion). The plan focuses on further developing energy from renewable sources (offshore wind), renewable hydrogen and the sectorial integration of renewable energy. The recently adopted Law on Climate Change and Energy Transition has established the renewable targets for 2030 and the objective of climate neutrality by 2050 (including a 100% renewable electricity system) [[51]]. Spain will invest considerably in the integrated renewable generation in buildings, industrial and transport sectors, promote renewable thermal energy and in reducing consumer energy bills. Spain will foster citizens' participation via renewable self-consumption and renewable/citizen energy communities. The most represented renewable technologies are solar, for thermal needs for residential, service and industrial sector, bioenergy for electricity and thermal applications, offshore wind and other marine energy. Furthermore, investments will promote smart electricity grids and deploy storage capacities, with an investment of EUR 700 million to address the transition to clean energy in the Balearic and Canary islands.

[[51]] Ley 7/2021, de 20 de mayo, de cambio climático y transición energética, BOE 121, 21 May 2021, https://www.boe.es/eli/es/l/2021/05/20/7.

Renewable Hydrogen

Spain also plans investment in the renewable hydrogen value chain (EUR 1,6 billion). Component 9 (Hydrogen) envisages strengthening the existing value chain, based on SMEs and technology centres, to build a cluster of large-scale renewable hydrogen production and sectoral integration. Ultimately, the national value chain and knowledge centres should be integrated into EU value chains through participation in planned EU initiatives such as the Important Project of Common European Interest (IPCEI) on Hydrogen.

Circular economy and waste management

Spain is taking advantage of the RRF to address the existing challenges on waste management and to foster the circular economy. The measures aiming at improving waste management are included in Component 12 (Industrial Policy) as part of the revamped industrial policy. This component includes a reform of the waste management legislation and the implementation of the recently adopted Spanish Strategy on Circular Economy, in line with the requirements under EU environmental law and the EU Circular Economy Action Plan that is part of the European Green Deal. This reform is accompanied by investments (EUR 850 million) supporting the implementation of the waste legislation and the promotion of the circular economy. The actions supported are in the upper echelons of the waste hierarchy, as detailed in Section 4.4. The transition towards the circular economy is boosted in a wide range of areas, with a special focus on the business sector, and mainstreamed across the plan.

Water and land management

Improving water management is one of the main environmental challenges that Spain is facing and the plan is expected to address existing investment needs in Component 5 (Coast and water resources). The component (EUR 2,1 billion) seeks to support the preservation of the coastline and of water resources through three main objectives: (i) the improvement of the water management policy, though hydrological planning, legal and policy reforms, and water investments, (ii) the implementation of a policy to protect the coastline in the context of climate change adaptation, (iii) the protection of the marine environment, improving the implementation of the marine strategies and the maritime spatial planning. This scope is pertinent, since Spain has a long coastline, suffering high environmental pressures, and it is amongst the most vulnerable EU countries to climate change. Spain is also likely to fall short of the full implementation of the Marine Strategy Framework Directive [[52]], where the achievement of good environmental status by 2020 requires further efforts. The plan will support the preservation of coastline and water resources by investing in the digitalisation of the sector, monitoring, use of new technologies,

[[52]] Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy, http://data.europa.eu/eli/dir/2008/56/2017-06-07.

restoring rivers ecosystems and promoting nature-based solutions. The plan also aims to close the gap on water investments (wastewater, leakages reduction, water reuse, floods prevention, etc.) that will contribute to climate change adaptation. It also promotes rivers restoration and aquifers recovery. It includes relevant reforms, including improving groundwater quality and reducing nitrates pollution, although it could be more ambitious addressing water demand management.

The plan includes a component dedicated to the sustainability and competitiveness of the agri-food and fisheries sector (Component 3), which is particularly relevant for the Spanish economy (EUR 1 billion). The measures aim to improve the quality of the final products, modernise animal and plant health laboratories, improve capacity building and biosecurity systems in livestock farming, strengthen prevention and protection against pests of plants, develop the circular economy of the sector, promote precision agriculture and further organic production (Spain is one of the most advanced Member States in the sector), promote seasonal and local consumption, promote precision agriculture and reduce food waste. There are investments aimed at rural areas, to curb depopulation, and significant investments in irrigation systems and investments to digitalise the sector. Furthermore, there are investments to strengthen the network of marine reserves of fishing interest, to boost fisheries and oceanographic research and to have an impact on the fight against illegal fishing. Component 3 (Agri-food and fisheries) will also contribute to reducing GHG emissions from agriculture by developing a general register of Best Available Techniques on farms and as support for the calculation, monitoring and reporting of emissions in livestock farming. In addition, Spain will review the legislation on livestock sectors to establish individual sectoral emissions reduction commitments.

Climate change adaptation and mitigation through biodiversity actions

Component 4 (Ecosystems and biodiversity) is a good example of the use of the RRF for the protection and restoration of biodiversity and ecosystems (EUR 1,6 billion). It aims at increasing the scientific and technical knowledge in this domain, as well as boosting digitalisation. Spain will invest in measures that contribute to climate change mitigation and adaptation, including a sustainable forest management and fire prevention policy, and measures to address soil erosion and desertification. The plan also includes reforms and investments related to the protection, conservation and restauration of marine and terrestrial ecosystems and their biodiversity, conservation of protected habitats and species, the fight against invasive alien species, etc., in line with the new EU Biodiversity Strategy [53] included in the European Green Deal. Actions also ensure ecological connectivity based on nature-based solutions and promote green infrastructure. The investments also cover an urban greening programme, with the aim of promoting green infrastructure to increase biodiversity,

[53] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, EU Biodiversity Strategy for 2030 Bringing nature back into our lives, COM (2020)380 final,

soil permeability and natural connectivity in urban areas. In preserving and restoring natural capital, the component supports the objective of Component 14 (Tourism) to further promote sustainable tourism.

A fair green transition

The plan takes measures to ensure that the green transition is done fairly, notably by enhancing greener taxation in Component 28 (Tax system reform) and ensuring a Just Transition in Component 10 (EUR 300 million). Measures include a reform on taxes that should contribute to reducing GHG emissions, through the reduction of the production of non-reusable plastic packaging, more effective taxation on fluorinated gases, and new waste taxes on landfilling and incineration to promote the circular economy. Additionally, the alignment of tax rates on mineral oils used as fuel to their polluting power, and taxes encouraging more sustainable mobility, such as for the registration and use of vehicles, are included in the plan. The plan aims to address the economic and social impact in the geographical areas affected by the green transition. Investments seek to support upskilling and reskilling, diversification and job creation, as well as upgrades to the environment and infrastructure in those areas to improving their attractiveness. Investments also aim at the environmental restoration and upgrading of the targeted areas, as well as at supporting R&D and innovation (hydrogen energy storage).

Conclusion on the assessment of criterion 2.5 of Annex V

Taking into consideration the assessment of all the measures envisaged, the recovery and resilience plan is expected, to a large extent, to make a significant contribution to the green transition or to address the challenges resulting from it and ensures that at least 37% of its total allocation contribute to the climate target. This would warrant a rating of A under criterion 2.5 of Annex V to the RRF Regulation.

4.6. Digital transition

Digital tagging

The RRP of Spain correctly follows the methodology for digital tagging set out in Annex VII to the RRF regulation, by identifying intervention fields, and corresponding coefficients for the calculation of support to the digital objectives, for each measure (the table in Annex 6.1 presents the detailed application of the digital tagging methodology). It should be noted that:

a) only two of the reform measures relevant for the digital objective (the two first reforms in Component 15 (Digital Connectivity)) have a cost associated and can be tagged. The other reforms related to the digital objective do not have any associated cost within the RRP and can thus not contribute to reaching the digital target, in line with the methodology set out in the RRF. However, they would still have a positive impact in addressing the challenges of the digital transition
b) the measures of the plan often consist of several sub-measures. For measures where that is the case, the plan indicates an intervention field for each sub-measure, and digital tagging is computed at sub-measure level

c) the choice of intervention fields for the digital transition is well justified and it reflects the nature, focus, objective, or expected outcome of the investments included in the component
d) the final computation of the digital contribution is a conservative calculation. The plan submitted by Spain is complex and large. Digital related measures appear under several components and a large number of measures and sub-measures. Capturing all these contributions with the digital tagging methodology set-out in the RRF regulation would have required to single out systematically all these sub-parts. This would have fragmented further the plan increasing its level of complexity. Therefore, the plan also includes digital related investments that are not accounted in the digital tagging methodology but nevertheless are expected to contribute to the digital transition
e) the plan does not propose to increase the digital coefficients of the selected intervention fields for any measure.

Overall, the recovery and resilience plan's contribution to the digital objectives amounts to EUR 19,6 billion that is 28,2% of the plan's total allocation in the form of non-repayable financial contribution of EUR 69,5 billion. This is significantly above the 20% minimum requirement for the digital target.

Table 4.6.1: Digital contribution by component (only for components with a contribution)

Component	Estimated costs (EUR m)	Digital contribution (EUR m)	Digital contribution as percentage of component estimated costs	Digital contribution as percentage of the total plan's total allocation *	Cumulative digital contribution as percentage of the plan's total allocation to *
15. Digital connectivity	3 999	3 999	100,0%	5,8%	5,8%
13. Support to SMEs	4 894	3 680	75,2%	5,3%	11,0%
19. Digital skills	3 593	3 593	100,0%	5,2%	16,2%
11. Public administration	4 239	3 165	74,7%	4,6%	20,8%
12. Industrial policy	3 782	952	25,2%	1,4%	22,1%
08. Electricity infrastructure	1 365	546	40,0%	0,8%	22,9%
14. Tourism	3 400	523	15,4%	0,8%	23,7%
22. Care economy, equality and inclusion	2 492	501	21,0%	0,7%	24,4%
16. Artificial Intelligence	500	500	100,0%	0,7%	25,1%
06. Sustainable long-distance mobility	6 667	445	6,7%	0,6%	25,8%
05. Coast and water resources	2 091	380	18,2%	0,5%	26,3%
23. Labour market	2 363	222	9,4%	0,3%	26,6%
20. Vocational training	2 076	194	9,4%	0,3%	26,9%

25. Audiovisual	200	155	77,5%	0,2%	27,1%
21. Education	1 648	147	8,9%	0,2%	27,3%
04. Ecosystems and biodiversity	1 642	138	8,4%	0,2%	27,5%
01. Sustainable urban mobility	6 536	119	1,8%	0,2%	27,7%
18. Reform of health system	1 069	100	9,4%	0,1%	27,8%
24. Cultural industry	325	96	29,5%	0,1%	28,0%
26. Sports	300	76	25,2%	0,1%	28,1%
03. Agri-food and fisheries	1 051	62	5,9%	0,1%	28,2%
All components with a digital contribution		**19 591**	**28,2%**	**28,2%**	**28,2%**

* The plan's total allocation in the form of non-repayable financial contribution equals EUR 69 513 million.

As seen in Table 4.6.2, 21 out of 30 components have a digital contribution that has been tagged accordingly to the methodology set out in Annex VII to the RRF regulation. This reflects a broad cross-cutting approach followed by the plan in which digital related investments are included in the majority of the targeted policy areas and specific components. Some digital related investments have a horizontal and general focus, with measures, such as in connectivity or general measures for SMEs, that would benefit large groups of the population and of the business sector. Other measures are sector specific with targeted actions in several sectors such as tourism, agri-food, culture. industry and transport.

The digital related expenditure is nevertheless concentrated in four main components that alone account for 20,8% of the plan's total allocation. These are Component 15 (Digital Connectivity)) whose budget fully contributes to the digital target, Component 13 (Support to SMEs), Component 19 (Digital Skills) whose budget also fully contributes to the digital target, and Component 11 (Public administration).

Digital transition

Spain is a medium performer in terms of digital indicators in the EU as it achieves high scores in terms of connectivity and digital public services, but it slightly underperforms the EU average in digital skills, and reaches average values for the integration of digital technologies in the business sector. The strengths and weaknesses of Spain in this area became more apparent during the COVID-19 crisis. Urgent action to address the digital transition and its challenges was required to ensure accessibility to digital technology for the society as a whole, boosting the digitalisation of companies — especially SMEs and start-ups — and industry, the R&D&I sector, and the digital empowerment of the population.

The plan contains a set of investments and reforms that are expected to have a long-lasting impact in the digital transformation of the country and significantly contribute to address the challenges resulting from the digital transition. Out of 30 components, digital investments are present in 21 of them, some of which are 100% focused on digital objectives. Horizontal actions that benefit the entire economy and population (e.g. connectivity) are complemented by specific actions on specific sectors (agriculture, tourism, SMEs, transport, culture, media) or specific segments of population (e.g. students, civil servants, unemployed).

The plan foresees the roll-out of the seven strategic plans unfolding the 2025 Digital Spain Agenda, in alignment with EU initiatives. The seven strategies (Connectivity Plan, the 5G Promotion Strategy, the National Artificial Intelligence Strategy, the National Digital Skills Plan, the Digitalisation Plan for Public Administrations, the Plan for Digitalisation of SMEs and the Spanish Audiovisual Hub Plan) and the measures included in the plan are also aligned with a number of European initiatives like the EU Digital Strategy, the European Industrial Strategy, the EU Skills Agenda, the European Pillar of Social Rights and its Action Plan endorsed by the Porto Summit, the European Education Area and the Digital Education Action Plan. Measures in the plan are also aligned with the four digitally related flagships included in the Commission's Annual Sustainable Growth Strategy. [54] These are the flagship: *modernise*, that concerns the digitalisation of the public administration; *connect,* that concerns investment in fixed and mobile connectivity, *scale-up;* on the investments in data infrastructure of the future like cloud capacity, edge computing and advanced and sustainable microprocessors; *reskill-upskill*¸ focused on education and training to support digital skills.

The Plan includes significant investments that are designed to close the digital divide between urban and rural areas and to enable the full potential of 5G connectivity in its Component 15 (Digital Connectivity). Spain is among the top performer in the EU in terms of Very High-Capacity Network. However, differences between rural and urban area are persistent and the deployment of 5G is slower than expected. Component 15 is fully devoted to connectivity, with a budget of almost EUR 4 billion. It foresees investments to bring coverage of ultra-fast fixed networks to more than 100 Mbps/s in certain areas of Spain, particularly in rural areas (EUR 812 million). Specific actions to strengthen connectivity for industrial centres and logistic centres are foreseen (EUR 480 million). Component 15 includes action to deploy the 5G network along the cross-border sections with France and Portugal and along the main national transport corridors. Further, 5G will also be deployed in certain areas that will not be covered by mobile operators in the next five years. [55] Gigabit level fixed connectivity and 5G will also be deployed in critical hotspots like business parks, industrial areas and around focal public services. The Plan will support the connectivity of SMEs and vulnerable groups through digital-connectivity-vouchers (EUR 80 million) and actions to strengthen cybersecurity capabilities of citizens, professionals and SMEs (EUR 524 million). As explained in Section 3.2, there are cross-border projects in connectivity foreseen in combination with the Connecting Europe Facility (submarine cables), as well as planned

---

[54] COM(2020)575.

[55] Spain has not detailed the specificity of the plan and the market failures present in the areas it wishes to cover. On this basis, there is a degree of uncertainty on the final delivery of this project. However, even if this investment were to be scaled down it would not affect the positive assessment on the contribution of Component 15 (Digital Connectivity) to contribute to the digital transition.

IPCEIs in next generation cloud and edge computing, microprocessors and secure satellite communications (for a total of EUR 500 million). The roll-out of networks and 5G coverage in national and cross-border corridors aims to achieve 75 % population coverage by 2025 in the 5G preference bands. There will also be substantial investment in R&D innovation actions in 5G (a total of EUR 1,4 billion allocated to 5G).

While Spain has a leading position in connectivity, the country faces shortcomings as regards digital skills and the plan includes significant investments to address them (EUR 3,5 billion). Spain's plan points to a situation with over 43% of the population lacking basic digital skills (DESI 2020) and a low share of ICT specialists, in contrast with a high demand on both fronts. Spain also shows above average offer of masters' programs in high-performance computing and data science, but below average offer in artificial intelligence and cybersecurity [[56]]. These shortcomings in basic and advanced digital skills in Spain could slow down the digital transformation. Component 19 (Digital Skills) therefore aims at raising the level of digital skills of the population, with a specific focus on SMEs employees. It also foresees increasing the number of ICT professionals including actions to develop talents in cybersecurity and artificial intelligence respectively in Component 15 (Digital Connectivity) and 16 (Artificial Intelligence). However, a specific plan to enhance digital and artificial intelligence skills of the population in collaboration with universities, research centres and companies is not included in the Plan. The Plan includes investments to complete the digitalisation of the Spanish education system, mostly through the deployment of digital systems in schools in Component 21 (Education), but also by providing digital skills for teachers and through the promotion of digital vocations (Components 19, and 20 (Vocational Training) and 21). Other complementary actions on digital skills seek to enhance employability for the employed and unemployed in Component 23 (Labour market).

Measures enhancing digital skills are also expected to contribute significantly to the challenges faced by Spain in the use of internet services. The improvement of digital skills in the population, combined with the action on connectivity included in Component 15 (Digital Connectivity), that also includes specific connectivity vouchers for the more vulnerable groups, and also combined with the actions on digitalisation of businesses and of the public administration (including the health system) are also expected to increase the overall use of internet services. These effects are expected to be complemented by the reforms, in Component 15 and 16 that will increase the trust and security around the use of digital technologies. This set of complementary actions is expected to contribute to the digital transition and to address the challenges related to the lack of skills and trust on digital technologies with a lasting impact. The use of internet services will also benefit from the

[[56]] Righi, R., López-Cobo, M., Alaveras, G., Samoili, S., Cardona, M.., Vázquez-Prada Baillet, M., Ziemba, L.W., and De Prato, G., Academic offer of advanced digital skills in 2019-20. International comparison. Focus on Artificial Intelligence, High Performance Computing, Cybersecurity and Data Science, EUR 30351 EN, Publications Office of the European Union, Luxembourg, 2020, ISBN 978-92-76-21541-9, doi:10.2760/225355, JRC121680.

regulatory reforms envisaged in the plan like the reforms on cybersecurity and on the security and connectivity toolbox included in Component 15 (Digital Connectivity) and the reform on the regulatory framework for Artificial Intelligence in Component 16 (Artificial Intelligence). These reforms are expected to increase the trust on digital services and technologies boosting their use and adoption on a lasting basis.

Several measures in the plan are expected to improve the integration of digital technologies in businesses, especially SMEs, and are expected to unlock the full potential of digital technologies and to contribute to the digital transition with a lasting impact. Several components in the plan contribute to address these challenges. Component 13 (Support to SMEs) includes digital investment for EUR 3,7 billion. Among its measures, the main one is the mass-provision of a "Digital toolkit" to enable the digital transition of SMEs and self-employed by supporting the digitalisation of their business model and the digitalisation of their processes with the final aim to increase their resilience and competitiveness. This broad measure is complemented by more focused measure to support SMEs and start-up to adopt digital and advanced technologies to support their growth and to expand their, national and international, sales channels (notably using online markets). Several other measures included in the plan will also support the digitalisation of business. Component 4 (Tourism) has significant dedicated investments for the tourism sector that aim to develop specific tools (platforms, portal and data spaces) to make it more efficient, attractive and competitive. Other actions target the culture sector (Component 24 (Cultural Industry)), supporting the digitalisation of entrepreneurs and firms active in this sector and the digitalisation of the cultural endowment. Specific investments also target the audio-visual sector (Component 25 (Audiovisual)) and of organisations in the sports sector (Component 26 (Sports)). Other digitalisation investments for businesses are foreseen in the area of agri-food, forestry and fisheries (Component 3 (Agri-food and fisheries)).

In what concerns the adoption of advanced digital technologies, the plan also includes specific measures that are expected to contribute significantly to the digital transition on a lasting basis. There are investments targeting the adoption of advanced digital technologies by SMEs (EUR 500 million), the tourism sector (EUR 223 million), industry (EUR 400 million) and the audiovisual sectors (EUR 200 million). Component 16 (Artificial Intelligence) is focused on measures to support firms in adopting artificial intelligence processes in their business activity. Component 15 (Digital Connectivity) includes a measure to support possible IPCEIs on cloud and edge computing and microprocessors, that as well would significantly benefit the business sector in the adoption of advanced technologies. Component 12 (Industrial Policy) includes a measure to develop data spaces for key sectors. Component 14 (Tourism) includes a measure to create ad-hoc data infrastructure for the tourism sector. Both Components 12 and 15 include measures for the participation in a possible IPCEIs on microprocessors. Overall, it is assessed that the plan includes significant investments in the area of integration of digital technologies that will have a lasting impact and will contribute to the digital transition.

Spain is a top performer in the area of digital public services, and the plan is expected to further reinforce this excellent performance with a comprehensive package of investments. These investments clearly contribute to the digital transition and a long-lasting impact on the concerned public services is expected in terms of future-readiness, territorial and social cohesion, resilience, growth and efficiency. In the public administration, the plan includes investments to digitize all levels of government in Component 11 (Public administration), and many public services, such as for instance the national health system, the justice system and the public procurement system, schools, VET and the universities, and sports federation (EUR 2,3 billion). Digital related investment in the health sector are also included in Component 18 (Reform of Health system). The plan will also modernise and strengthen social services with measures to promote innovation and the use of new technologies included in Component 22 (Care Economy, equality and inclusion).

Other significant digital investments relate to transport, natural endowment and the electricity network. These are investments in the local urban transport under Component 1 (Sustainable urban mobility) and on the national network under Component 6 (Sustainable long-distance mobility), involving all modes of transports rail, road, air and ports with the aim of making transport more interconnected, secure and sustainable. Investment in digitalisation included in Component 4 (Ecosystems and biodiversity) for the conservation and restoration of ecosystem and biodiversity, and those included in Component 5 (Coast and water resources) on coastal space and water management also have a public sector dimension. Investments are also foreseen in the digitalisation and modernisation of the electricity networks in Component 8 (Electricity infrastructure). Overall, all these measures in the area of public services are expected to significantly contribute to the digital transition and to have a lasting impact.

Finally, the plan contains some specific digital investment in R&D&I in Artificial Intelligence, 5G and cybersecurity included under Component 16 (Artificial Intelligence) and Component 15 (Digital Connectivity). Further, Component 17 (Science, Technology and Innovation), includes sub-measures with a minor digital contribution included as part of the wider R&D&I efforts.

Conclusion on the assessment of criterion 2.6 of Annex V to the RRF Regulation

Taking into consideration the assessment of all the measures envisaged, the Recovery and Resilience plan is expected, to a large extent, to make a significant contribution to the digital transition and to address the challenges resulting from it. It ensures that at least 20% of its total allocation contribute to support digital objectives. This would warrant a rating of A under criterion 2.6 of Annex V to the RRF Regulation.

4.7. Lasting impact of the plan

Structural change in the administration and institutions

Reforms and investments in the plan are expected to bring a lasting impact to the functioning of the public administration in Spain. This may be the case for the support to its digitalisation contained in Components 11 (Public Administration), 18 (Reform of the Health System), 20 (Vocational Training) and 21 (Education). Other measures that may bring a positive lasting impact are those ensuring that public policies are subject to ex ante impact assessments and public spending evaluations to ensure their effectiveness, envisaged in Components 11 and 29. Measures to improve the functioning of the public administration also touch upon public procurement, which is highly relevant to effectively deliver EU funds. Finally, measures will be taken under Component 11 to improve the merit and competence-based recruitment system for the civil service, and to ensure that access to senior posts is based on merit and competition. These measures are expected to reinforce the impartiality of civil servants in the performance of their duties. Evaluations of staff on the basis of performance and the reduction of the high number of temporary contracts in the administration could also help enhance the effectiveness of public administrations. To this, the plan adds measures to improve the organisational and procedural efficiency of the national justice system in Component 13 (Support to SMEs).

Structural change in policies

The plan is also expected to bring a lasting impact to productivity and social cohesion in Spain. On the one hand, measures to increase the level of skills, including digital, with a focus on the offer of those that are most labour market relevant should contribute very positively to the employability of the workforce. Reducing labour market segmentation effectively would also significantly contribute to raise quality employment, and reinforce social cohesion in a sustainable manner. Measures to address the gender gap and to facilitate female labour market participation are also contained in the plan to support this goal. Efforts to modernise and improve the effectiveness of social protection, including social services, can increase social and economic resilience, by supporting higher labour market participation, stabilising income over the economic cycle, improving the social and economic integration of all, and reducing inequalities.

Measures to boost competitiveness and to enhance innovation in the country that can bring a lasting impact to the Spanish industry and services. The full implementation of a number of reforms and investments has the potential to help Spanish firms better cooperate and compete in the markets that will emerge from the digital and green transition. Investments and reforms in Component 12 (Industrial Policy), but also in Components 19 (Digital Skills) and 20 (Vocational Training) are expected to help the industry embrace more swiftly the twin transition. Measures that boost renewable production and integration and the decarbonisation of urban mobility will contribute to the energy transition of Spain and reduce dependency on energy imports. Through the successful implementation of measures to transform the tourism sector into more sustainable patterns, and of measures seeking to conserve and restore the natural capital of the country, many regions in Spain may also reduce their dependency from this sector, diversify their offer and open up to new possibilities to participate further and differently in global value chains. Once successfully implemented, measures may help protecting natural capital and ecosystems, decarbonise traditional industry and boost a new efficient and sustainable green and blue economy.

Lasting impact

While the plan as a whole has the potential to tackle some of the root problems underlying labour market and competitiveness challenges in the country, some risks exist as regards its long-lasting impact. A few measures in the plan may create permanent budgetary entitlements (early childhood education and care, vocational education and training, universities, health). Reassurances by the Spanish authorities on the sustainability of these measures have taken the form of commitments to rely on financing by the European Social Fund + (ESF+) after the RRF, to engage in adjustments in some areas of the budget as envisaged in Components 27 and 28 of the plan and through a reorientation of public expenditure to be agreed with the regions. More generally, the long-term sustainability of the measures in the plan will depend on the final design of a number of reforms that have been left open for discussion in the plan, such as the new mechanism for stability and flexibility in the labour market that is based on the experience with short-time work schemes and the pension reform, as well as on the expenditure reviews that are to be implemented.

A broader ownership of the content of the plan would secure the lasting impact of its measures. Ensuring a buy-in of the plan by actors involved in the implementation of reforms and investments, such as regional and local authorities in Spain, is key. These authorities are competent in areas such as health, education and vocational education and training. Ensuring a broader ownership during the implementation of the plan of Spain would enhance its lasting impact.

Conclusion on the assessment of criterion 2.7 of Annex V to the RRF Regulation

Taking into consideration all reforms and investments envisaged by Spain in its recovery and resilience plan, their implementation is expected, to a large extent, to bring a positive lasting impact on administration, institutions, human, environmental and economic capital. This would warrant a rating of A under criterion 2.7 of Annex V to the RRF Regulation.

4.8. Milestones, targets, monitoring and implementation

Adequacy of the structure tasked with the implementation of the plan, monitoring of progress and reporting

At Plan level, the new Secretariat-General for European Funds of the Ministry of Finance will be the authority responsible for the recovery and resilience plan vis-a-vis the European Commission and will act as a contact point (coordinator). As explained in Section 3.2, the new Secretariat-General will encompass two Directorates-General: the existing European Funds Directorate General, and a new Directorate General for the Recovery and Resilience Plan. The latter will coordinate with the Ministries, Public Procurement Offices, autonomous communities and local authorities and other national and Community entities involved in the Recovery Plan. The national arrangements for the monitoring of the plan have been described in detail in Section 3.2.

At component level, the line Ministries will be responsible for the implementation of the investments and reforms in their respective components. Responsibility and the monitoring of progress on milestones and targets are clearly defined for each component, investment and reform. The implementation of the plan will be included in the general budget of the central government and will be subject to the control of the Comptroller General of the central government *(Intervención General de la Administración del Estado* – IGAE). The necessary flows of information to other public administrations or private entities will be set up to be able to assess compliance with the budgets and to generate the documentation for monitoring purposes. The verification of the milestones and targets will be audited by IGAE before the submission of a payment request.

The RRP includes an investment to adapt the functioning of the public administration with a view to facing the challenges posed by the implementation and monitoring of the plan. Component 11 (Public Administration) aims at simplifying the procedures to implement the plan and facilitating the sharing of information across levels of government, including by setting up an IT tool that will document the progress and fulfilment of the milestones and targets. This will be accompanied by targeted trainings for the general public administration staff estimated to reach up to 3 150 individuals throughout the implementation of the plan.

Milestones, targets and indicators

The plan has 416 milestones and targets, the majority of which (75%) relate to the period 2020-2023. The milestones and targets include measures that started from 1 February 2020, in line with Article 17 of the Regulation. Part of the milestones and targets concerning investments will only be met after 2023. This is notably the case for bigger investments in infrastructure and equipment, which often have long implementation times.

The proposed milestones and targets are clear and seem realistic and the proposed indicators are relevant, acceptable and robust. Milestones consist of the publication and entry into force of legal acts in the Official Journal by a specific year and quarter. In few cases, milestones consist of the adoption by the Government of strategies or plans launching a reform. In these cases, the milestones relate to the official publication in the Official Journal or, as appropriate, on a web platform. Targets are quantified and the appropriate indicators are defined. The targets of the plan refer to concrete outputs such as number of pieces of equipment installed, number of people trained, or the number of projects. Most of the final targets in the plan do not relate to budgetary targets and focus on outputs. Milestones and targets are broadly realistic and in line with the costing estimates provided by Spain.

Overall organisational arrangements

The overall organisational arrangements for the implementation of the plan are clear and credible. Section 3.2 explained the coordination mechanisms that have been established to monitor and implement the plan. IGAE will be key for both ex-ante and ex-post audits. The interaction with the control system is described in Section 4.10.

Conclusion on the assessment of criterion 2.8 of Annex V to the RRF Regulation

The arrangements proposed by Spain in its recovery and resilience plan are expected to be adequate to ensure effective monitoring and implementation of the recovery and resilience plan, including the envisaged timetable, milestones and targets, and the related indicators. This would warrant a rating of A under the assessment criterion 2.8 of Annex V to the RRF Regulation.

4.9. Costing

Spain has provided individual cost estimates for all the investments in its recovery and resilience plan. As regards reforms, Spain has also provided estimates for those whose associated cost has been specified in the plan. Spain has provided sufficient information and evidence to consider that costs are overall reasonable and plausible. In addition, the majority of costs are backed by appropriate justification and explanations that the amounts do not include costs covered by existing or planned Union financing. Finally, costs are also commensurate to the expected economic and social impact of the envisaged measures.

Spain has relied on a number of sources to justify the costs of investments and reforms. Estimates of costs included in the plan are generally detailed, well-substantiated and based on a variety of sources. These include nineteen calls of interest specifically launched for the purposes of the plan during its preparation phase, including calls addressed to public authorities (3) and private agents (16) (see Table 4.8.1 below). In addition, Spain has relied on estimates and data provided by international organisations (Component 9 (Hydrogen)) or procurement contracts referred to similar services or past investments of similar nature (Component 14 (Tourism), Component 16 (Artificial Intelligence), and Component 17 (Science, Technology and Innovation)). For each component, Spain has provided specific documents describing the costing methodology utilised and identifying the underlying costing information submitted.

Table 4.8.1 Calls for expressions of interest made by Spain

Addressed to firms		
Name	*Ministry*	*Date closed*
Renewable hydrogen value chain	ETDC	19/12/2020
Demographic challenge and the fight against depopulation	ETDC	23/12/2020
Modernise Spanish industry	ICT	20/01/2021
Electric mobility: infrastructure to recharge, innovate and electrify vehicles	ETDC	29/01/2021
Digital connectivity, promotion of cybersecurity and 5G deployment	EADT	15/02/2021
Local energy communities of owners	ETDC	23/02/2021
Sustainable energy in the islands	ETDC	23/02/2021
Circular economy within firms	ETDC	26/02/2021
Deployment of renewables, integration in productive sectors or building, innovation and value chain	ETDC	26/02/2021
Electrical infrastructure, smart grids and energy storage	ETDC	26/02/2021
Sustainable and Digital Transport	TMUA	03/03/2021
Microelectronics	ICT & S	18/03/2021
Integration of Artificial Intelligence in value chains	EADT	02/04/2021
Strengthen the cybersecurity capacities of SMEs and boost the sector	EADT	21/04/2021
Digitalisation of SMEs and the self-employed: DIGITAL TOOLKIT Program	EADT	07/05/2021
Audiovisual sector (Spain Audiovisual Hub)	EADT	28/05/2021
Addressed to regional and local governments		
Name	*Ministry*	
Low-emission zones and support for public transport	TMUA	
Rehabilitation of public buildings	TMUA	
Rehabilitation for economic and social recovery of residential environments	TMUA	

Acronyms refer to the following ministries: ETDC (Ecological transition and Demographic Challenge), EADT (Economic Affairs and Digital Transformation), ICT (Industry, Commerce, and Tourism), S (Science), and TMUA (Transport, Mobility and Urban Agenda).

Reasonable costs

Cost estimates for most of the measures in the plan are deemed reasonable. Spain has provided detailed evidence backing the eligibility of measures. Firstly, all costs are incurred after 1 February 2020. Secondly, in accordance with Article 5 of the RRF Regulation, costs do not substitute recurring national budgetary expenditure, with a number of duly justified exceptions. In particular, the plan contains recurrent costs in investments that cover wages of teachers for VET (Component 20) and early childhood education in Component 21 (Education). However, in all cases the share of these costs in the overall plan is limited (less than 3%). In addition, these recurrent investments are expected to have a demonstrable long-term positive impact on the economic and social resilience of Spain. Reassurance has been given by Spain about their limited fiscal impact over time. As explained in Section 4.7, reassurances have taken the form of commitments to rely on financing by ESF+ beyond the timeframe of the plan, to undertake adjustments in budget areas as foreseen in

Components 27 (Prevention of Tax Fraud) and 28 (Tax System Reform) of the plan, and through a commitment to reorient public expenditure in agreement with the regions. Finally, VAT has not been included in the costs estimates as a general rule. However, for a relatively low share of the costs, the methodology used is not sufficiently well explained and the link between the justification and estimated costs is not sufficiently clear to deem that the costs are reasonable.

Spain has availed itself of the option to use simplified cost options with respect to both flat rates and unit costs. Recital 18 of the Recovery and Resilience Facility Regulation provides for Member States to use simplified cost options, in line with Article 181 of the Financial Regulation. [57] Simplified costs can be based on lump sum costs, unit costs or flat rates. In this regard, Spain has focused on both flat rates and unit cost options. For instance, the former is behind the costing of actions necessary for the effective administration and use of funds at the level of individual investments (these are costs for technical assistance to support the implementation of specific reforms or investments). Spain has used different flat rates (mostly 4%). In addition, Spain has resorted to use unit costs in specific measures. The use of the latter is related to whether a specific technology permits establishing costs per unit, on whether the information is available and is relatively standardised, homogenous and available to be used.

An independent validation with regards to the reasonability of a significant share of the cost estimates in the plan has been provided by the Controller General of the central government (*Intervención General del Estado - IGAE).* In particular, the IGAE has issued seven reports fully validating the reasonability of 31 measures and approximately EUR 32,5 billion or 47% of the total budget of the RRP. The reports validate whether Spain has provided sufficient information and evidence that the amount of the estimated total costs of the RRP is reasonable.

Plausible costs

The amount of the estimated total costs of the recover and resilience plan of Spain is in line with the nature and type of the envisaged reforms and investments. Spain has submitted more than 2 200 files covering approximately 25 000 pages of additional costing evidence underpinning the claims presented in the plan. These documents broadly substantiate the cost estimates.

Cost estimates have been deemed overall plausible. The amounts proposed for financing have been deemed appropriate for most of the measures, whilst taking into account the limits of an ex-ante based assessment of cost estimates. In particular, Spain has provided evidence that costs are in line with previous projects and initiatives undertaken in the country. In this regard, the output targets provided in the plan for investment are commensurate with the

---

[57] Regulation (EU, Euratom) 2018/1046 of the European Parliament and of the Council of 18 July 2018 on the financial rules applicable to the general budget of the Union, http://data.europa.eu/eli/reg/2018/1046/oj.

costing justifications and assumptions provided. However, for a relatively low share of the costs, there are not sufficient historical or comparative data for key cost drivers to deem that the costs are plausible.

No double Union financing

As a rule, individual measures do not consider the support of additional financing from other Union programmes. Spain has confirmed that the same cost will not be covered at the same time by the recovery and resilience plan and by existing or planned Union financing, in line with the provisions of Article 9 of the RRF Regulation. Spain has identified a limited number of cases where investments are planned to be financed by both the RRP and other EU funding. In those limited cases, Spain has provided information on the costs planned to be funded by each source of funding. As mentioned in Section 3.2, the planning documents for the implementation of the European Structural and Investment Funds (ESIF) are still at preliminary stages of preparation. Spain has confirmed that specific arrangements have been put in place to avoid double funding, including from ESI funds, during the implementation phase (see further details on the arrangements to prevent double-funding under Section 4.10 Controls and Audits).

Conclusion on the assessment of criterion 2.9 of Annex V to the RRF Regulation

The justifications provided by Spain on the amount of the estimated total costs of the recovery and resilience plan are to a medium extent reasonable, plausible, in line with the principle of cost efficiency and commensurate to the expected national economic and social impact on the economy. Spain has provided sufficient information and evidence that the amount of the estimated cost of the reforms and investments of the recovery and resilience plan to be financed under the Facility is not covered by existing or planned Union financing. This would warrant a rating of B under the assessment criterion 2.9 in Annex V to the RRF Regulation.

4.10. Controls and audit

Robustness of internal control system and distribution of roles and responsibilities

At plan level, the national set-up for the control of the plan is designed along the same lines and involves same main players as for implementation of the European Structural and Investment Funds. Spain expects that the governance structure of the plan will ensure: (i) a participatory process integrating proposals from the main economic, social and political actors; (ii) cooperation and coordination between different levels of government and administration; and (iii) the designation of a coordinator in accordance with the regulatory requirements of the Recovery and Resilience Facility Regulation. The Royal Decree 36/2020 entrusts the Secretariat-General of European Funds of the Ministry of Finance – which is also in charge of European funds – with the responsibility for the overall coordination of the plan, including the contacts with the European Commission, the monitoring of progress on milestones and targets and the submission of requests for payments and management declarations to the Commission. The Secretariat-General of European Funds will not carry out audits or controls, so the segregation of duties is ensured. The General Comptroller of the Central Government (Intervención General de la Administración del Estado - IGAE) is the Control Authority of the Spanish plan. A specific working group is to be set up between IGAE, as Audit Authority, and the regional bodies to coordinate the actions to be carried out. The IGAE's audit strategy is globally described in the plan including its scope, frequency, sampling method, risk-assessment, types of audits and the actions to be carried out on each payment request. It will be approved and updated at least once a year.

As regards the implementing structure described in the plan, it is foreseen that line ministries are responsible for the verification and monitoring of progress on milestones and targets. Within each body responsible for implementation, Spain's control systems are in line with what has been developed for the Structural Funds. The authorities have also committed to strengthen the system, where necessary, by integrating recent and future requirements and guidance in the area, including the European Commission's Notice on Guidance on the avoidance and management of conflicts of interest under the Financial Regulation. [[58]] Concerning the prevention, detection and correction of serious irregularities, the plan describes the national procedures and organisational structure covering actors performing internal control tasks, their roles and responsibilities and how they should prevent, detect and correct fraud, corruption and conflicts of interest wherever they occur. The internal control bodies have to produce mandatory reports, whose content should include verifications that there are no aspects potentially leading to such serious irregularities.

The National Anti-Fraud Coordination Service will be an essential part of the model, responsible for coordinating actions to protect the financial interests of the European Union against fraud in cooperation with the European Anti-Fraud Office (OLAF). It will rely on the national systems already operating such as the National Subsidy Database or the Procurement Platform to prevent serious irregularities. There are commitments to inform and train staff, whistle-blowing measures, account taken of lessons learned and coordination meetings highlighted.

Adequacy of control systems and other relevant arrangements

Control actors are clearly identified across all levels. The second level of control related to management is entrusted to independent internal control bodies in the various administrations involved which act with complete autonomy and independence from the bodies responsible for managing the actions and operations covered by each component. Within each component, there is also a description of the implementing arrangements per measure, i.e. how and by whom they will be implemented.

A comprehensive IT system will facilitate the implementation of the recovery and resilience plan. To collect, store and report data on milestones and targets, Spain will use an IT system that includes both the milestones and the targets set for each component, their allocation to each of operation and action needed to achieve them, the level of success of those actions, as well as the associated indicators. This same system will document the progress and fulfilment of the milestones and targets. It will collect and store data on final beneficiaries. However, to provide assurance that in addition to the data on final

---

[[58]] (2021/C 121/01), https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021XC0409(01)&from=EN

beneficiaries, data on contractors, subcontractors and beneficial owners will also be collected and stored in accordance with Article 22(2), point (d), of the Regulation, this obligation has been introduced through a milestone. The system should provide easy access to this data and checks are to be done using it. It should also articulate with ARACHNE. The adoption of the Order of the Ministry of Finance setting out the procedure and format of the information to be provided by the entities of the State, autonomous communities and local entities for the monitoring of projects and the accounting execution of expenditure charged to projects under the plan is planned to be approved soon. A milestone has been introduced to confirm its entry into force by the time of the first payment request.

The IT system is designed to provide an audit trail and document all underlying transactions. IGAE will carry out these audits through the National Audit Office via a specific division for audits on the Recovery and Resilience Facility, assisted by other units of IGAE and bodies of the autonomous communities and the two autonomous cities where necessary. The results of these audits carried out will also be included in the summary of audits carried out under Article 22(2), point (c)(ii) of the Regulation. Those checks are supposed to provide information about the actual functioning of the systems that will feed the audit activity of the audit bodies and this activity will result in reports that are assessed by the audit body in order to identify weaknesses and, where appropriate, make recommendations for improvement and focus thematic audits where appropriate. Using these mechanisms, implementing bodies will report regularly on both the budgetary implementation and the progress of indicators.

The IT system is not in place yet. A milestone has been introduced to give full assurance that the basic functionalities of the IT system will be operational and audited by the time of the first payment request.

Adequacy of arrangements to avoid double EU funding

The Spanish authorities recognize that there are risks in respect of funding from several EU and national sources. The Spanish have confirmed that the implementing bodies will have access to sufficient sources to identify double funding, if it occurs (i.e. National Subsidy Database and the Public Sector Procurement Platform). In addition, projects will have a unique code that will allow for the projects included in the respective systems to be cross-checked.

The fact that the implementing bodies for the RRF are also involved in implementing structural funds gives additional assurance that for cross-checking the data with traditional structural funds management systems and avoid double funding. Additionally, IGAE will carry out system audits which will specifically check double funding of projects.

Legal empowerment and administrative capacity of control function

Royal Decree 36/2020 establishes the duties of every entity involved in implementing the Spanish recovery and resilience plan. The staff structure of National Anti-Fraud Coordination Service has doubled. IGAE unit structures have also increased to be able to meet increased activity due to the implementation of the plan. The technical expertise of existing staff is confirmed, as is the possibility of contracting external auditors for carrying out RRF audit related work. Administrative capacity of the coordinator has also been confirmed and assessed in comparison with the allocation in the area of structural funds. Their experience and expertise is equally confirmed.

Conclusion on the assessment of criterion 2.10 of Annex V to the RRF Regulation

The arrangements proposed by Spain in the plan to prevent, detect and correct corruption, fraud and conflicts of interest when using the funds provided under the Facility, including the arrangements aimed to avoid double funding from the Facility and other Union programmes, are assessed to be adequate. This would warrant a rating of A under the assessment criterion 2.10 of Annex V to the RRF Regulation.

4.11. Coherence

The Spanish recovery and resilience plan displays a coherent set of reforms and investments, which together set out a strategic vision for the transformation of the economy of Spain. The four cross-cutting lines of action in the plan – green transition, digital transformation, social and territorial cohesion and gender equality – ensure the coherence of the 30 components of the plan and the individual measures within them.

All components include a set of well-balanced reforms and investments, and measures within components are mutually reinforcing. Each component includes a set of reforms that accompany the investments, making them plausible and increasing their impact. This Section highlights a limited number of examples that show the mutual reinforcement of measures within a given component. For instance, Component 1 (Sustainable urban mobility) includes two reforms: the setting up of a regulatory framework facilitating the deployment of recharging infrastructure to boost the use of electric vehicles, and a law on mobility and financing. The first reform is complementary to an investment envisaged in the Component which creates an incentive scheme for the installation of recharging points, the purchase of electric and fuel cell vehicles and innovation in electro-mobility, recharging and renewable hydrogen (EUR 2 billion). It is expected that the measures together lead to the installation of 80 000 to 110 000 new recharging points by the end of 2023. Likewise, the law on mobility and financing includes the creation of a regulatory sandbox that will facilitate innovations in the mobility and transport sector. This regulatory sandbox will facilitate the implementation of an investment in the Component on low-emission areas and transformation of urban and metropolitan transport (EUR 2,9 billion). Both measures together will contribute to foster the sustainable and digital transformation of transport services through innovative solutions. Another illustrative example of mutually reinforcing measures within a component can be found in Component 13 (Support to SMEs). A new start-up law envisaged should create a favourable framework for the creation and growth of highly innovative start-ups, and in doing so reinforce the envisaged set up of a NEXT-TECH public-private fund to scale up start-ups. At the same time the component envisages a substantial investment in support to entrepreneurship (EUR 368 million), which will amplify the impact of the revised legal framework for start-ups.

Many measures also support measures contained in other components related to the same policy area. For instance, Component 7 (Renewables) seeks to increase the use of renewable energy with considerable investments (EUR 3,2 billion). It envisages a reform of the regulatory framework for the promotion of renewable generation, also through the new Law on Climate Change and Energy Transition. This law includes elements that are relevant to other components in the plan, such as the reduction of administrative barriers and requirements for the installation of public recharging points in service (relevant to investment in recharging points under Component 1 (Sustainable urban mobility)). Component 8

(Electricity infrastructure) complements Component 7 by supporting necessary investments in grid digitalisation, storage and demand management to carer for the increased renewable energy. As renewable energy sources are intermittent and partially predictable, energy storage is key for the flexibility of the system and for the stability of the grid. Investments in Component 8 (Electricity infrastructure) will render the energy system capable of efficiently and safely absorbing higher levels of renewable generation. Similarly, Component 9 (Hydrogen) will foster more extensive electrification (e.g. of transport and industry) and further boost a large- scale deployment of renewable power.

Coherence is embedded transversally in the plan through reforms to be carried out in the first two years that should facilitate the implementation of all investments. The frontloading of these reforms during the first two years of the plan (2021-2022) will require a significant effort, but fruits will be reaped through a more effective delivery of investments.

A good example of reforms that mutually reinforce investments across the whole Plan are those that aim at strengthening public institutions. A number of reforms in the plan seek to enhance the capacity of the public administration to deliver public services, as well as to facilitate the implementation of investments (reforms related to public expenditure and financial management in Components 11 (Public Administration), 28 (Tax System Reform), 29 (Effective public spending) and 30 (Pension reform system). Reforms for the establishment of an open government plan to better interact with citizens and the private sector, an enhancement of ex ante public policy evaluation system foreseen in Component 11 will make public policies more open and accountable to civil society. Strong public sector institutions and systems are essential for fiscal sustainability. Reforms related to the tax system (Component 27 (Prevention of tax fraud) and 28 (Tax system reform)) will improve revenue performance, build a more equitable and efficient tax system, reduce tax evasion and shape a tax administration that is more open to feedback by citizens and companies. SMEs and companies should also benefit from a digital tax administration that can lower the administrative burden of tax compliance.

The interplay between the public sector and the private sector should notably benefit from a public procurement framework that is more effective, transparent and predictable. The enhanced public procurement framework foreseen in Component 11 (Public Administration) may contribute to a more effective use of RRF funds. It will also foster the digitalisation of procurement, improve SMEs access to tenders and facilitate that an effective use of money is made in these procedures. By doing this, the public procurement reform under Component 11 will reinforce the investments dedicated to the support SMEs under Component 13 (Support to SMEs).

Coordination between the different levels of government has often been identified as a challenge in Spain, and efforts to improve it could support and complement many other measures in the plan. A stronger and sustained coordination is a long-standing challenge to ensure the effectiveness of policies in areas that fall under the responsibility of regions, such as those related to urban mobility (Component 1 (Sustainable urban mobility)), health (Component 18 (Reform of the Health System)), research and development (Component 17 (Science, Technology and Innovation)), education (Components 20 (Vocational Training) and 21 (Education)), long-term care (Component 22 (Care Economy, equality and inclusion)) and active labour market policies (Component 23 (Labour market)). The implementation of many investments included in the green components, in fields such as biodiversity, water or waste, also falls, at least partially, under the remit of the regional and even local authorities. The reform foreseen in Component 11 seeks to improve this coordination across all sectors.

Plans to improve coordination of all government levels foreseen in Component 11 could in particular translate into better regulation. Component 13 (Support to SMEs) envisages amendments to the Law on Market Unity, including improvements to the mechanisms foreseen for market operators to be able to effectively challenge barriers. It also proposes the establishment of a new Sectoral Conference for regulatory improvement and business climate. The Conference is expected to contribute to reducing the regulatory burden faced by SMEs and firms at large when operating across different regions. This would benefit investment measures to support SMEs under Component 13 (Support to SMEs), but also other investment measures where the good functioning of the internal market plays a role in allowing firms to grow and expand their activity throughout the country, such as Component 12 (Industrial Policy) or Component 14 (Tourism). The impact of these measures on the business climate will be reinforced by other measures in Component 13, such as new regulatory provisions supporting business creation and growth, a measure to combat late payment in commercial transactions, the proportionality test for regulation on access to and exercise of professions, and a reform seeking to render the insolvency framework more effective. Effective investments will also be achieved thanks to a more effective justice system, to which measures envisaged in Component 11 to promote procedural efficiency, including investments in digitalisation, and to foster organisational efficiency in the justice system.

Finally, the labour market reforms are expected to be mutually reinforced by the numerous measures foreseen to increase the level of skills and ensure that vocational training responds to labour market needs, which in turn should translate into enhanced social cohesion, and will also support the sustainability of the pension reform. The labour market reforms seek to address important structural weaknesses of the Spanish labour market, notably the high rates of structural unemployment and youth unemployment and the widespread use of temporary contracts. Measures foreseen in Components 19, 20 and 21 should allow people to gain skills that would enhance their employability. Higher employment rates and better quality jobs will in turn result in more inclusive growth and a reinforced social cohesion, and thus complement measures currently envisaged in Component 22 (Care Economy, Equality and Inclusion). Reforms and investments targeted at children will mutually reinforce each other and contribute to durably strengthen human capital. Longer working lives and a higher participation of older workers will also contribute to future adequacy and mitigate the risks for sustainability related to the reforms of the pension system envisaged in Component 30 (Pension system reform). Reforms aimed at reducing child poverty in Components 22 (Care Economy, Equality and Inclusion) and 28 (Taxation), together with investments in early childhood education and care in Component 21 (Education), will support investments aimed at reducing early school living and at improving educational outcomes for vulnerable children in that component.

To conclude this Section, the plan does not present inconsistencies or contradictions between the content of the different components. Due care was given to ensure that implementation timelines and reforms and investments were aligned to ensure successful delivery of the measures. Finally, and in order to promote wider coherence across instruments, notably with the European cohesion policy funds, a balanced territorial allocation of resources is encouraged.

Conclusion on the assessment of criteria 2.11 of Annex V to the RRF Regulation

Taking into consideration the qualitative assessment of all components of Spain's recovery and resilience plan, their individual weight (importance, relevance, financial allocation) and their interactions, the plan contains measures for the implementation of reforms and public investments which, to a high extent, represent coherent actions. This would warrant a rating of A under the assessment criterion 2.11 of Annex V to the RRF Regulation.

5. References

Almeida, V., Barrios, S., Christl, M., De Poli, S., Tumino, A., Van der Wielen, W. (2020): "Households´ income and the cushioning effect of fiscal policy measures during the Great Lockdown", JRC Working Paper on Taxation and Structural Reforms, 06/2020.

Bank of Spain (2021), *Los efectos en el empleo del SMI: nueva evidencia para España,* Documentos Ocasionales N.º 2113,

Bauer, P., Fedotenkov, I., Genty, A., Hallak, I., Harasztosi, P., Martínez Turégano, D., Nguyen, D., Preziosi, N., Rincon-Aznar, A. and Sánchez-Martínez, M., Productivity in Europe: Trends and drivers in a service-based economy, JRC, 2020.

Benedetti Fasil, C., Del Rio, J.C., Domnick, C., Fako, P., Flachenecker, F., Gavigan, J., Janiri, M., Stamenov, B. and Testa, G., High Growth Enterprises in the COVID-19 Crisis Context, EUR 30686 EN, Publications Office of the European Union, Luxembourg, 2021, ISBN 978-92-76-37269-1, doi:10.2760/63402, JRC124469.

Castellazzi L. et al., Assessment of second long-term renovation strategies under the Energy Efficiency Directive, EUR 29605 EN, Publications Office of the European Union, Luxembourg, 2019, ISBN 978-92-79-98727-4, doi:10.2760/973672, JRC114200.

Christl, M., De Poli, S., Figari, F., Hufkens, T., Leventi, C., Papini, A. and Tumino, A. (2021) "The cushioning effect of fiscal policy in the EU during the COVID-19 pandemic" JRC Working Papers on Taxation and Structural Reforms, 02/2021 (forthcoming).

European Investment Bank (2020), Investment Survey Spain. https://www.eib.org/attachments/efs/eibis_2020_spain_en.pdf

European Innovation Scoreboard 2020. https://ec.europa.eu/docsroom/documents/42981

Martinez Turégano, D., "Sectoral productivity vis-à-vis the US and heterogeneity within the EU27: the role of firm size distribution and firm demographics", EUR 30460 EN, Publications Office of the European Union, Luxembourg, 2020, ISBN 978-92-76- 25439-3, doi: 10.2760/891199, JRC122059.

OECD (2021), Economic Surveys: Spain, OECD Publishing, Paris.

Righi, R., López-Cobo, M., Alaveras, G., Samoili, S., Cardona, M.., Vázquez-Prada Baillet, M., Ziemba, L.W., and De Prato, G., Academic offer of advanced digital skills in 2019-20. International comparison. Focus on Artificial Intelligence, High Performance Computing, Cybersecurity and Data Science, EUR 30351 EN, Publications Office of the European Union, Luxembourg, 2020, ISBN 978-92-76-21541-9, doi:10.2760/225355, JRC121680.

Zangheri, P., Armani, R., Kakoulaki, G., Bavetta, M., Martirano, G., Pignatelli, F., Baranzelli, C. Building energy renovation for decarbonisation and Covid-19 recovery. A snapshot at regional level, EUR 30433 EN, Publications Office of the European Union, Luxembourg, 2020, ISBN 978-92-76-24766-1, doi:10.2760/08629, JRC122143

6. ANNEX

6.1. Climate tracking and digital tagging table

			Climate		Digital	
Measure/ Sub-Measure ID	**Measure/Sub-Measure Name**	**Estimated Costs (EUR m), excluding VAT**	**Int. Field**	**Coeff. %**	**Int. Field**	**Coeff. %**
C1.I1a	Low-emission zones and transformation of urban and metropolitan transport (Autonomous Community actions): line of action 1	900	048	40%		
C1.I1b.i	Development of low-emission zones and projects for the sustainable transformation of urban and metropolitan transport (municipal actions): lines of action 2a and 2b (except for cycling infrastructure), and digitalisation (municipal actions) line of action 2d	1 190	048	40%		
C1.I1b.ii	Development of low emission zones and sustainable transformation projects for urban and metropolitan transport (municipal actions): lines of action 2a and 2b (cycling infrastructure), and fleet transformation to zero emissions vehicles and recharging points (municipalities) line of action 2c	310	077[59]	100%		

[59] This measure also includes investment in zero emission vehicles. For that part the 'Methodology for climate tracking' annexed to the Recovery and Resilience Facility Regulation does not set out intervention fields that would allow for climate or environmental tracking of electric vehicles or plug-in hybrid vehicles, except for vehicles for urban transport falling under intervention field 074. According to Article 18(4)(e) of the Regulation, the methodology should however 'be used accordingly for measures that cannot be directly assigned to an intervention field listed in Annex VI'. In this context, the Commission has applied a 100% climate contribution coefficient for the zero-emission vehicles of all categories (this includes battery electric and fuel cell/hydrogen-powered vehicles) included in this measure. This measure also includes investments in cycling infrastructure (075) as well with a 100% climate coefficient.

			Climate		Digital	
Measure/ Sub-Measure ID	**Measure/Sub-Measure Name**	**Estimated Costs (EUR m), excluding VAT**	**Int. Field**	**Coeff. %**	**Int. Field**	**Coeff. %**
C1.I1d	Improvement actions in urban environments (crossings) on the State Road Network to promote the mobility of pedestrians and cyclists, and other new forms of mobility (scooters), with the aim at reducing car spaces, reducing vehicle speed, reducing both air emissions and noise pollution: line of action 4	105	048	40%		
C1.I2	Scheme of incentives for the installation of recharging points, the purchase of electric and fuel cell vehicles and innovation in electro-mobility, recharging and renewable hydrogen	2 000	n/a[60]	100%		
C1.I3a	Investments in railway infrastructure	1 502	069bis	100%		
C1.I3b	Digitalisation of security, information and access control systems at railway stations providing PSO services	119	070	40%	070	100%
C2.I1.a.i	Energy rehabilitation of buildings with on average primary energy savings of at least 30%	856	025bis	100%		
C2.I1b.i	Energy rehabilitation of buildings with on average primary energy savings of at least 30%	1 716	025bis	100%		

[60] The main part of this measure concerns incentive for the purchase of zero emission vehicles or for the development on innovative projects in zero emission vehicles/mobility The ‘Methodology for climate tracking’ annexed to the Recovery and Resilience Facility Regulation does not set out intervention fields that would allow for climate or environmental tracking of electric vehicles or plug-in hybrid vehicles, except for vehicles for urban transport falling under intervention field 074. According to Article 18(4)(e) of the Regulation, the methodology should however ‘be used accordingly for measures that cannot be directly assigned to an intervention field listed in Annex VI’. In this context, the Commission has applied a 100% climate contribution coefficient for the zero-emission vehicles of all categories (this includes battery electric and fuel cell/hydrogen-powered vehicles) included in this measure. This measure also includes investment in alternative fuel infrastructure (077) that would also have a 100% climate coefficient.

			Climate		Digital	
Measure/ Sub-Measure ID	**Measure/Sub-Measure Name**	**Estimated Costs (EUR m), excluding VAT**	**Int. Field**	**Coeff. %**	**Int. Field**	**Coeff. %**
C2.I1b.ii	Existing building book/Rehabilitation projects to improve energy efficiency	278	025	40%		
C2.I1c	Favourable environment to rehabilitation activity (tax incentives): line of action 3	450	025bis	100%		
C2.I2	New programme to promote affordable rented housing, which are energy efficient (at least 20% lower primary energy demand compared to the NZEB requirements)	1 000	025ter	40%		
C2.I3	Energy Rehabilitation of Buildings Programme (PREE), aligned with energy efficiency criteria with on average primary energy savings of at least 30%	300	025bis	100%		
C2.I4	Energy transition programme and demographic challenge with on average primary energy savings of at least 30%	1 000	025bis	100%		
C2.I5a	Energy rehabilitation of public buildings with on average primary energy savings of at least 30%	758	026bis	100%		
C3.I1	Plan for improving efficiency and sustainability in irrigation	563	040	40%		
C3.I3	Plan to promote the sustainability and competitiveness of agriculture and livestock farming (II): Strengthen capacity building and biosecurity systems in nurseries and livestock farms	38	027	100%		
C3.I4	Plan to promote the sustainability and competitiveness of agriculture and livestock farming (III): Investments in precision agriculture, energy efficiency and circular economy and in the use of renewable energy and gases in the agriculture and livestock sector	307	047	40%		
C3.I5.a	Strategy for the digitalisation of the agri-food and forestry sector and the rural environment. Technology-based entrepreneurship line	30			010	100%

			Climate		Digital	
Measure/ Sub-Measure ID	Measure/Sub-Measure Name	Estimated Costs (EUR m), excluding VAT	Int. Field	Coeff. %	Int. Field	Coeff. %
C3.I5b	Strategy for the digitalisation of the agri-food and forestry sector and the rural environment. Creation of a Digital Innovation Hub for businesses in the agri-food sector	4			010	100%
C3.I5c	Strategy for the digitalisation of the agri-food and forestry sector and the rural environment. Establishment of an observatory for the digitalisation of the agricultural sector	1			010	100%
C3.I5d	Strategy for the Digitisation of the Agri-Food and Forestry Sector and the Rural Environment. Creation of a platform of AKIS advisors	3			010	100%
C3.I6a	Plan to boost the sustainability, research, innovation and digitalisation of the fisheries sector (I): Purchase of ICT for marine reservoirs (radiolink Faro de Alborán, night vision equipment and drones)	3	049	40%	011	100%
C3.I6b	Plan to boost the sustainability, research, innovation and digitalisation of the fisheries sector (I): Other actions	7	049	40%		
C3.I7	Plan to boost the sustainability, research, innovation and digitalisation of the fisheries sector (II): Boosting fisheries and aquaculture research and supporting training to improve the monitoring of fish stocks	14	050	40%	021	40%
C3.I8	Plan to boost the sustainability, research, innovation and digitalisation of the fisheries sector (III): Technological development and innovation in the fisheries and aquaculture sector	11	023	40%	021	40%
C3.I9	Plan to boost the sustainability, research, innovation and digitalisation of the fisheries sector (IV): Digitalisation and use of ICTs in the fisheries sector	11			011	100%

			Climate		Digital	
Measure/ Sub-Measure ID	**Measure/Sub-Measure Name**	**Estimated Costs (EUR m), excluding VAT**	**Int. Field**	**Coeff. %**	**Int. Field**	**Coeff. %**
C3.I10	Plan to boost the sustainability, research, innovation and digitalisation of the fisheries sector (V): Supporting the fight against illegal, unreported and unregulated fishing	44	050	40%		
C4.I1a	Digitalisation of natural heritage knowledge	61	050	40%	011	100%
C4.I1b	Digitalisation of natural heritage knowledge: Other actions	77	050	40%	011	100%
C4.I2	Conservation of terrestrial marine biodiversity	552	050	40%		
C4.I3a	Recovery of areas affected by mining with efficiency criteria	131	046bis	40%		
C4.I3b	Other ecosystem restoration actions to protect nature and biodiversity, natural heritage and resources, and develop green and blue infrastructure	421	050	40%		
C4.I4a	Sustainable forest management for the prevention and management of climate related risks: fire extinguishing	170	036	100%		
C4.I4b	Other actions of sustainable forest management	231	050	40%		
C5.I1a	Materialisation of purification, sanitation and reuse actions for water collection and treatment compliant with energy efficiency criteria	475	041bis	40%		
C5.I1b	Improving efficiency and reducing losses in water use	100	040	40%		
C5.I1c	Investments to improve the safety of dams and reservoirs	67	040	40%		
C5.I2a	Monitoring and restoration actions in river ecosystems	225	040	40%		
C5.I2b	Actions to mitigate flood risk	225	035	100%		
C5.I2c	Measures to reduce groundwater abstraction	350	040	40%		
C5.I3a	Improving knowledge and use of water resources	225	040	40%	011	100%

			Climate		Digital	
Measure/ Sub-Measure ID	**Measure/Sub-Measure Name**	**Estimated Costs (EUR m), excluding VAT**	**Int. Field**	**Coeff. %**	**Int. Field**	**Coeff. %**
C5.I3b	Action to monitor rainfall in river basins and coastlines[61]	55	035	100%	011	100%
C5.I3c	Improving meteorological observation and monitoring and prevention of climate risks[62]	100	035	100%	011	100%
C5.I4	Adaptation of the coast to climate change and implementation of Marine Strategies and Maritime Spatial Planning Plans	269	037	100%		
C6.I1	National rail transport network:Rail investment on the core European Corridors	2 988	064	100%		
C6.I2a	Construction and modernisation of new rail infrastructure (TEN-T comprehensive network)	1 010	065	100%		
C6.I2b	Digitalisation of the State Road Network	35			063	100%
C6.I2c	Noise Reduction Action Plans on the State Road Network	302	048	40%		
C6.I2f	Single European Sky: Digitalisation	107			084	100%
C6.I2g	Digital transformation of MITMA	50			011	100%
C6.I3a	Development of strategic intermodal and logistic terminals on TEN-T network	217	078	40%		
C6.I3b	Inland accessibility to Spanish ports and terminals (rail investments)	408	064	100%		

[61] This is a digital investment that is also 100% contributing to the adaptation to climate change, and prevention and management of climate related risks. For this reasons, the measure receives a 100% coefficient for both the climate change and digital objectives.
[62] This is a digital investment that is also 100% contributing to the adaptation to climate change, and prevention and management of climate related risks. For this reasons, the measure receives a 100% coefficient for both the climate change and digital objectives.

			Climate		Digital	
Measure/ Sub-Measure ID	**Measure/Sub-Measure Name**	**Estimated Costs (EUR m), excluding VAT**	**Int. Field**	**Coeff. %**	**Int. Field**	**Coeff. %**
C6.I3d	Improving the internal rail accessibility of ports	177	064	100%		
C6.I4a	ERTMS on-board traffic management systems	12	071	40%	071	100%
C6.I4d	Construction, adaptation or upgrading of cargoes and intermodal rail-road terminals and their connections	75	079	40%		
C6.I4e	Support to multimodal sustainable freight transport (rail and maritime) based on ECO-INCENTIVES to supply and demand	120	079	40%		
C6.I4g	Actions to support the renovation or adaptation of railway tractor equipment with other material using alternative fuels such as hydrogen or electricity	64	072bis	100%		
C6.I4i	Intelligent transport services for the road sector (ITS)	20			063	100%
C6.I4k	Actions supporting the renovation or upgrading of means and machinery for the deployment of sustainable road pavement with reduced carbon footprint and noise reduction	3	048	40%		
C6.I4	Projects for the digitalisation of passenger and freight transport services at regional and local level	220			010	100%
C7.R3	Development of energy communities contributing to the low carbon economy and to resilience to climate change	100	027	100%		
C7.I1	Development of innovative renewables, integrated into buildings and production processes	2 365	029	100%		
C7.I2	Sustainable energy on islands	700	029	100%		
C8.I1	Deployment of energy storage, with contribution to green and digital transitions	684	033	100%	033	40%

			Climate		Digital	
Measure/ Sub-Measure ID	**Measure/Sub-Measure Name**	**Estimated Costs (EUR m), excluding VAT**	**Int. Field**	**Coeff. %**	**Int. Field**	**Coeff. %**
C8.I2	Digitalisation of distribution networks to align them with the energy transition	525	033	100%	033	40%
C8.I3	New business models in the energy transition, with contribution to green and digital transitions	156	027	100%	033	40%
C9.I1	Renewable hydrogen: a country project	1 555	022	100%		
C10.I1a	Environmental restoration plan for closed or abandoned mining sites and deteriorated land adjacent to thermal or nuclear power stations, compliant with efficiency criteria	150	046bis	40%		
C10.I1b	Digital, social and environmental infrastructure plan in just transition territories	100	050	40%		
C10.I1c	Projects of R & D & I in energy storage and energy efficiency	30	022	100%		
C10.I1d	Plan to support the re-skilling and employability of workers and people affected by the energy transition	20	01	100%		
C11.I1	Digital transformation and modernisation of the General State Administration	960			011	100%
C11.I2	Projects for the digitalisation of the General State Administration	1 205			011	100%
C11.I3	Digital transformation and modernisation of the Ministry of Territorial Policy and the Civil Service and the administrations of the Autonomous Communities and the local authorities	1 000			011	100%
C11.I4	Energy Transition Plan in the General State Administration with on average primary energy savings of at least 30%	1 071	026bis	100%		
C12.I1	Sectoral data spaces (contribution to transformative projects for the digitalisation of strategic productive sectors)	400			021quat er	100%

			Climate		Digital	
Measure/ Sub-Measure ID	**Measure/Sub-Measure Name**	**Estimated Costs (EUR m), excluding VAT**	**Int. Field**	**Coeff. %**	**Int. Field**	**Coeff. %**
C12.I2.a.i	Processes of research, technology transfer and innovation and for business-to-business cooperation with a focus on the low-carbon economy and climate change adaptation of the Spanish industrial sector	457	022	100%		
C12.I2.a.ii	Processes of research, technology transfer and innovation and for cooperation between enterprises, with a focus on the circular economy and the Spanish industrial sector	457	023	40%		
C12.I2.a.iii	Projects to improve energy efficiency in the industrial sector (SMEs and large enterprises)	914	024	40%		
C12.I2.a.iv	Digitalisation of the industrial sector (SMEs and large enterprises)	457			010	100%
C12.I2b	Support to process and organisational innovation projects in key areas for the industrial transition: line of action 2	118	024	40%		
C12.I2c	Support to smaller scale projects for the implementation of digitisation in processes and the organisation of industrial companies: line of action 3	95			010bis	100%
C12.I2e	Support to sustainable industrial infrastructure: line of action 5	13	026	40%		
C12.I3	Plan to support the implementation of waste legislation and the promotion of the circular economy	850	042	40%		
C13.I1	Support to entrepreneurship including digital transition action	329			100	40%
C13.I3	Digitalisation and Innovation of SMEs	3 548			010	100%
C14.I1.a.i	Actions in the field of green and sustainable transition (100% coefficient) Adaptation to climate change of destination and its infrastructure: development of	139	035	100%		

			Climate		Digital	
Measure/ Sub-Measure ID	**Measure/Sub-Measure Name**	**Estimated Costs (EUR m), excluding VAT**	**Int. Field**	**Coeff. %**	**Int. Field**	**Coeff. %**
	knowledge and development of plans in relation to climate change adaptation and risk prevention, including early warning, monitoring and assessment systems, promotion of investment for the prevention and management of specific risks on the territory					
C14.I1.a.i i	Actions in the field of green and sustainable transition (40% coefficient) Circular economy, management of natural resources, protection and enhancement of natural ecosystem.	139	050	40%		
C14.I1b	Sustainable mobility and energy efficiency actions for tourism destinations	372	073	100%		
C14.I1c	Actions in the field of the digital transition	186			011	100%
C14.I2	Digitisation and intelligence programme for destinations and tourism sector	337			010	100%
C14.I4b	Energy efficiency and circular economy in tourism enterprises	220	024	40%		
C15.R1	Reforming the Telecoms Regulatory Framework: General Law, Regulatory Instruments and Implementation Instruments	8			011	100%
C15.R2	Roadmap 5G: Spectrum management and assignment, deployment burden reduction, Cybersecurity Act 5G and Support to Local Authorities	110			054bis	100%
C15.I1	Fostering territorial cohesion through network deployment: Ultra-fast broadband extension and mobility coverage of 30 Mbps	812			052	100%
C15.I2	Reinforcing Connectivity in Reference Centres, Socio-Economic Drivers and Sectoral Digitalisation Tracking Projects	480			053	100%
C15.I3	Connectivity vouchers for SMEs and vulnerable groups	80			012	100%

			Climate		Digital	
Measure/ Sub-Measure ID	**Measure/Sub-Measure Name**	**Estimated Costs (EUR m), excluding VAT**	**Int. Field**	**Coeff. %**	**Int. Field**	**Coeff. %**
C15.I4	Data infrastructure renewal and sustainability	80			052	100%
C15.I5	Deployment of cross-border digital infrastructure	500			055	100%
C15.I6	Deployment of 5G networks, and 5G innovations	1 405			054bis	100%
C15.I7	Cybersecurity: Strengthening the capacities of citizens, SMEs and professionals; Improving the sector's cybersecurity ecosystem	524			021quin quies	100%
C16.I1	National Artificial Intelligence Strategy, including R&I in AI and talent development	500			009bis	100%
C17.I7	R&D + R & I actions linked to environmental protection, the fight against climate change, new energy sources and key technologies and materials for the energy transition	82	023	40%		
C17.I8	R & D + R & I actions linked to sustainable automotive (PTAS)	40	024	40%		
C18.I6	Creation of a "Data Lake" for the Health sector	100			095	100%
C19.I1	Transversal digital skills	735			108	100%
C19.I2	Digital Transformation of Education	1 412			108	100%
C19.I3	Digital skills for employment	1 256			108	100%
C19.I4	Digital Professionals	190			108	100%
C20.I1b	Reskilling and upskilling of the labour force linked to professional qualifications: Digital modular offer for employed persons associated with competence units of the National Catalogue of Professional Qualifications	92			108	100%
C.20.I1d.i	Contribution reskilling and Upskilling to green transition	158	01	100%		
C20.I2	Digital transformation of vocational training	256			016	40%

			Climate		Digital	
Measure/ Sub-Measure ID	Measure/Sub-Measure Name	Estimated Costs (EUR m), excluding VAT	Int. Field	Coeff. %	Int. Field	Coeff. %
C21.I5	Improvement of digital infrastructure, equipment, technologies, teaching and university assessment	147			108	100%
C22.I1b	E-Health services and applications: teleassistance for long-term care and support	240			013	100%
C22.I2b	Technological transformation of social services	216			011	100%
C22.I3b	Improving accessibility of AGE websites and mobile applications	12			020	40%
C22.I4b	Improving comprehensive improvement of control device services	26			011	100%
C22.I5b	Digital investment host system	14			011	100%
C23.I1b.i	JOVEN-TánDEM EMPLOYMENT Programme with allocation for green skills	30	01	100%		
C23.I1b.ii	JOVEN-TánDEM EMPLOYMENT Programme with allocation for digital skills	30			108	100%
C23.I1c.i	Programme First professional experience in public administrations with allocation for green skills	37	01	100%		
C23.I1c.ii	Programme First professional experience in public administrations with allocation for digital skills	37			108	100%
C23.I2b.i	Support line for women in rural and urban areas with allocation for digital skills	26	01	100%		
C23.I2b.ii	Support line for women in rural and urban areas, with allocation for digital skills	26			108	100%
C23.I3b.i	Training for workers in ERTE with allocation for green skills	107	01	100%		
C23.I3b.ii	Training for workers in ERTE with allocation for digital skills	107			108	100%

			Climate		Digital	
Measure/ Sub-Measure ID	**Measure/Sub-Measure Name**	**Estimated Costs (EUR m), excluding VAT**	**Int. Field**	**Coeff. %**	**Int. Field**	**Coeff. %**
C23.I4b	Entrepreneurship and micro-enterprises: New territorial projects addressing the demographic challenge and facilitating productive transformation, in particular towards a green and digital economy	55	047	40%	016	40%
C.24.I1c	Strengthening the competitiveness of cultural industries / Competitiveness and professionalisation and support for cultural accelerators including boosting the transformation to digital culture and the incorporation of new technologies into cultural and creative industries	25			018	40%
C.24.I1d	Strengthening the competitiveness of cultural industries supporting projects to digitise intellectual property rights management operators	15			010	100%
C.24.I1e	Strengthening the competitiveness of cultural industries / Digitalisation of intellectual property management systems / Digital transformation of administrative units with intellectual property competence	1			011	100%
C.24.I1f	Strengthening the competitiveness of cultural industries (promotion and digitisation of the book sector)	25			010	100%
C24.I2d	Promoting culture along territorials (purchase of licences for digital books)	13			021bis	40%[63]
C24.I3c	Digitalisation of major cultural services: National Library of Spain	7			011	100%

[63] A coefficient of 40% is applied because the measure is not fully dedicated to digital books but also includes paper books.

			Climate		Digital	
Measure/ Sub-Measure ID	**Measure/Sub-Measure Name**	**Estimated Costs (EUR m), excluding VAT**	**Int. Field**	**Coeff. %**	**Int. Field**	**Coeff. %**
C24.I3d	Digitalisation and boosting major cultural services: Plan for digital access to bibliographic heritage	3			011	100%
C24.I3e	Digitalisation and boosting major cultural services: Digitalisation, capacity building and interoperability of archiving systems	18			011	100%
C24.I3f	Digitalisation and boosting major cultural services: Measures to modernise public management tools and put in place an integrated system for digitisation and cataloguing of INAEM's resources, assets, structures and infrastructure	11			011	100%
C25.I1a	Programme for the promotion, modernisation and digitisation of the audiovisual sector	155			021bis	100%
C26.I1	Digitisation of the sport sector	76			011	100%
C26.I2a	Modernisation of sport facilities to improve their energy performance according to energy efficiency criteria	34	026bis	100%		
C26.I2b	Modernisation of high performance sport centres to improve their energy performance according to energy efficiency criteria	73	026bis	100%		
C26.I3a	Modernisation of sports installations to improve energy efficiency according to energy efficiency criteria	28	026bis	100%		

Int. Field = intervention field
Coeff. = Coefficient for the calculation of support to climate change objectives and to digital transition, on the basis of Annex VI and Annex VII to the RRF Regulation