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European Commission

France

2022 Country Report



ECONOMIC AND EMPLOYMENT SNAPSHOT

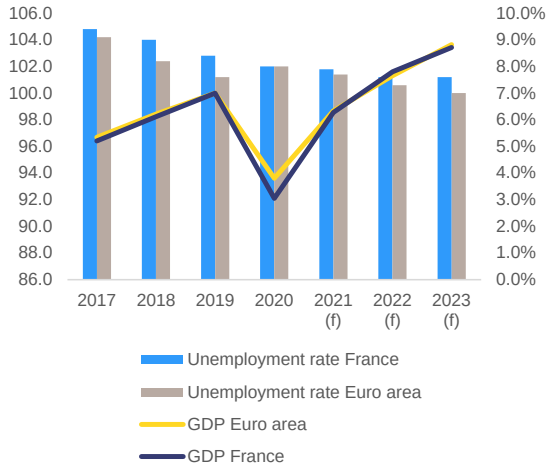
The French economy bounced back thanks to an effective crisis response…

France's economy was experiencing a significant upturn before the COVID-19 crisis. After several years of moderate growth, GDP accelerated in 2017-2019 and grew by more than 2% on an annual average, thus reaching the euro area average. The labour market situation had improved rapidly, with the unemployment rate falling from 10.1% in 2016 to 8.4% in 2019.

The COVID-19 crisis abruptly interrupted this dynamic, causing GDP to fall by 7.9% in 2020. The impact was especially severe for high contact services, notably tourism, but also for transport and construction. While all demand components declined, exports were the most affected, due in particular to the magnitude of the shock to the flagship aeronautics industry.

However, large public support schemes significantly cushioned the shock to the private sector, and activity bounced back strongly in 2021. Real GDP growth reached 7% in 2021 and economic activity surpassed its pre-crisis level already in the fourth quarter of 2021, exceeding the level of the end of 2019 by 1%. Apart from external trade, all demand components returned to pre-crisis levels.

Graph 1.1: **GDP growth and unemployment rate for France and the euro area**



Left axis: GDP growth (100=2019)
Right axis: Unemployment rate (%)
(f)=forecast
Source: European Commission

Several factors are still weighing on growth, but are not expected to stop the sustained economic recovery. France is facing supply constraints in industry and high inflation but the relatively small share of its industry in total GDP and the regulated retail energy prices should help limit the impact of these negative factors. Activity is thus forecast to increase by 3.1% and by 1.8% in 2022 and 2023 respectively. In particular, foreign trade is set to recover as a result of the rebound in tourism and aeronautical deliveries.

Labour market developments are also positive, leading to higher employment. Employment surpassed its pre-crisis level in the second half of 2021. The partial employment scheme helped mitigate the impact of the crisis. Job creation is set to continue as the economy grows, although much more slowly. The situation of young people on the labour market is improving, as the rate of young people not in education, employment or training (NEET) was lower than its pre-crisis level in Q4-2021.

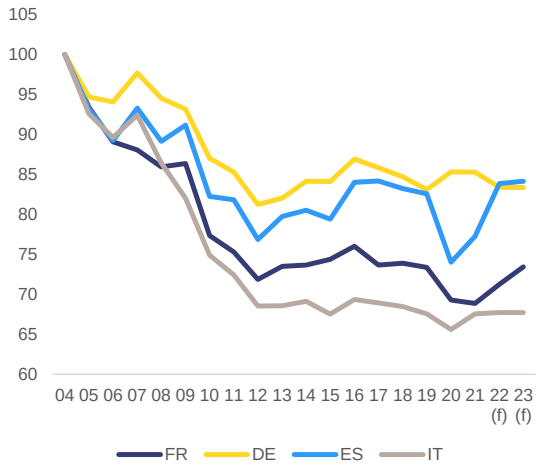
Labour shortages and skill mismatches remain important issues. Labour shortages, already high before the crisis, are on the rise again as the recovery takes hold. Employers are reporting the lack of adequately trained workers as one of the main barriers to recruitment, in particular in industry, construction, information and communication, energy, water and waste, education and health ([1]).

… but the COVID-19 crisis impacted trade and counter-measures further deteriorated public finances

Despite the overall economic recovery, exports remain subdued. Competitiveness showed signs of improvement before the COVID-19 crisis, notably because of fiscal measures to reduce labour costs (e.g. tax credit for competitiveness and employment, 'CICE'). But exports declined more than Europe's average, partly due to unfavourable sectoral exposure to the COVID-19 crisis, including for aviation and, to a lesser extent, tourism.

Public debt increased significantly due to the need to introduce support schemes to contain the effects of the COVID-19 pandemic. Before the pandemic, public debt in France was already high (97.4% of GDP in 2019), due to prolonged high structural deficits and a lack of sufficient fiscal consolidation in previous years. The sharp fall in economic activity following the pandemic led to a decrease in tax revenues. In combination with the significant fiscal measures deployed by the government, it pushed the general government deficit to 8.9% of GDP, while public debt rose by almost 20 percentage points (pps), to 114.6% of GDP in 2020. Fiscal emergency measures, however, proved to be very effective to help buffer the impact of the crisis. These measures were mainly aimed at sustaining employment and wage income via partial unemployment schemes and subsidies to businesses, especially small and medium-sized enterprises (SMEs), and independent workers under a dedicated fund.

Graph 1.2: **Export market shares since 2004**



(1) 2004 = 100, (f) = forecast
Source: European Commission

Despite improvements in 2021 and in the short term, general government debt will remain high in the medium term. The sound economic rebound in 2021 and the dynamism of tax revenues resulted in the general government balance improving to 6.5% of GDP in 2021, and public debt falling to 112.9% of GDP. However, at 59.2% in 2021, the public expenditure-to-GDP ratio is the highest in the EU. Medium projections by the Commission show that public debt is set to remain around 110% of GDP by 2030. According to the Commission's methodology, these projections confirm that the country faces high fiscal sustainability challenges in the medium term, mainly due to the projected high structural deficits and the high level of public debt.

The coexistence of high public and private debt is a source of vulnerability. The existing upward trend in private debt was accentuated by the crisis. Private debt was above 174% of GDP in 2020, with both household and non-financial corporation debt exceeding their prudential thresholds. While

([1]) Source: Enquête Acemo March 2022 Direction de l'animation de la recherche, des études et des statistiques (Dares), European Commission and Eurostat (consumer and business surveys and indicators on job vacancies)

there is no visible risk of a wave of corporate bankruptcies, high private debt represents a source of vulnerability. The financial sector remains resilient and financing conditions continue to be favourable. Overall, the banking sector's solvency has remained sound over 2021 (see Annex 16), but risks stemming from high public debt are compounded by high private leverage since they limit the ability to respond to possible negative shocks.

Macroeconomic imbalances are occurring against the background of a slow productivity growth trend. Over 2012-2019, the average annual growth of the total factor productivity stood at 0.4%, against 0.6% in the euro area. Safeguarding investment in R&D expenditure to reverse a decline in labour productivity following COVID-19 restrictions imposed in 2020 and 2021 will be key to improving competitiveness and sustainability of private and public debts.

France has limited exposure to the fallout of the Russian invasion of Ukraine

France's imports of fossil fuels from Russia are limited. With a sizeable share of nuclear energy, the French energy mix is less reliant on fossil fuels than other EU Member States. Most of its gas imports come from Norway, Russia and Algeria, where Russia represented 17% of all gas imports in 2020 ([2]).

France is also relatively protected against a shock to non-energy trade with Russia, despite some sectoral vulnerabilities. The French value added embodied in total exports to Russia represents only 0.3% of GDP. However, some industrial sectors could be significantly impacted in case of supply disruptions of key components from Russia and to a lesser extent Ukraine. It is in particular the case of aeronautics (dependent on titanium from Russia), the automotive sector (palladium) and the aluminium industry (alumina). Indirect negative impacts could also stem from spill-overs from the EU economies and deteriorated confidence.

On 16 March 2022, the government presented a resilience plan to mitigate the economic effects in France of Russia's invasion of Ukraine. The plan aims to support the industrial sectors and businesses most exposed to supply disruptions and increases in energy prices, as well as sectors and businesses particularly impacted by trade restrictions to Russia. Beyond several measures with no direct budgetary impact, the plan includes direct subsidies to energy-intensive enterprises for about EUR 3 billion, depending on price assumptions, to cover part of the extra spending on electricity and gas. Other specific measures undertaken or planned concern sectors such as agriculture, fishery, construction, transport and exporting companies. The plan also includes a temporary rebate on fuel prices at petrol stations benefitting all households, in addition to businesses in general. These measures complement those already adopted in autumn 2021 to counter the impact of high energy price inflation, such as the cap on gas and electricity prices until the end of 2022 and energy cheques handed out to low income households. In total, measures to mitigate the impact of soaring energy prices are estimated at around EUR 26 billion.

A recovery committed to competitive sustainability

France is committed to fighting climate change and making its economy sustainable, but implementation is lagging behind. France has developed governance structures and legislative tools to steer its green transition such as the national low carbon strategy and the multiannual energy programme. It aims to achieve carbon neutrality by 2050, in line with the EU's

([2]) Eurostat (2020), share of Russian imports over total imports of natural gas. Total imports include intra-EU trade.

commitments ([3]). The climate and resilience law, partly based on proposals by citizens, provides for measures for climate adaptation and to reduce emissions by 2030. However, France is not on track to meet its 2030 renewable energy objective, with the share of renewable energy sources in gross final energy consumption almost 4 pps below target in 2020. Nor is it on track to meet its 2030 target for greenhouse gases emissions reductions in sectors not covered by the EU Emissions Trading System (ETS) ([4]), such as transport, buildings or agriculture.

France is engaged in robust long-term investment strategies. The investment share of GDP reached 23% in 2020, 11th in the EU and above Germany, Spain, and Italy. The post-pandemic recovery is supported by the 'France Relance' plan of EUR 100 billion (of which EUR 40 billion is funded by the Recovery and Resilience Facility) and a long-term investment strategy, 'France 2030', worth EUR 34 billion, including EUR 4 billion in equity.

France leads in expenditures on social policies even if some inequalities persist, as evidenced under the European Pillar of Social Rights. France is second in the EU for expenditure on social protection and first for public spending on healthcare. Nevertheless, France still faces socio-economic inequalities in the education system. The COVID-19 crisis exacerbated the difficulties of some vulnerable groups in finding work (see Annex 12). The pension system is relatively expensive and remains complex (more than 40 different regimes) raising questions on its fairness (see 'Further priorities ahead').

Regional disparities have increased in France over the last decade. In terms of GDP per head, 20 out of 27 regions are drifting away from the EU average. Major disparities between metropolitan France and outermost regions persist, especially in poverty and health (see Annex 15).

Productivity is relatively high but productivity growth is low. The National Productivity Board has highlighted productivity challenges such as a comparatively low-skilled workforce, low uptake of information and communication technologies and suboptimal innovation performances. Stagnating R&D investment from the business sector coupled with low efficiency of public support schemes, continue to hamper the performance of the French research and innovation system (see Annex 9). The regulatory environment in the retail sector and the restrictiveness of professional services weigh on competition, with negative consequences for prices and productivity.

Overall, France performs very well in achieving the UN's Sustainable Development Goals. The country made progress towards a majority of the goals (11 out of 16) with a better performance than the EU average in social and climate goals (see Annex 1). However, a deviation from the goals and lower performance than the EU average can be observed in particular for SDG 11 - Sustainable cities and communities and SDG 10 - Reduced inequalities. Although France outperforms the EU on inequality indicators, the depth of poverty worsened and severe material and social deprivation increased recently.

([3]) The strategy would have to be updated to reflect the Fit for 55 package if it is adopted.

([4]) European Commission, Speeding up European climate action towards a green, fair and prosperous future (EU Climate Action Progress Report), 2021.

THE RECOVERY AND RESILIENCE PLAN IS UNDERWAY

The French recovery and resilience plan (RRP) aims to accelerate the green and digital transitions, increase growth potential, and strengthen cohesion. The plan consists of 22 reforms and 70 investments that will be supported by EUR 39.4 billion in grants (1.6% of GDP). The first payment request submitted in November 2021 led to the disbursement of EUR 7.4 billion (see Annex 2).

France's RRP unlocked large investments for the energy renovation of buildings over 2020-2021. The French plan contains major investments (EUR 5.8 billion) in the renovation of buildings aiming to achieve 30% of energy savings on average. These investments will be supported by major reforms such as the climate and resilience Law, which aims to reduce energy consumption in many ways (e.g. by providing for bonuses for electric bicycles and creating low-emission zones in metropolitan areas), and the revision of the thermal regulation of new buildings. The achievements in 2021 show France's ambition to move forward rapidly in this area, by deploying the subsidy mechanism for the renovation of private housing ('MaPrimeRenov'), with a special focus on low-income households, and by selecting mature projects for the renovation of public buildings and social housing. Over the next 2 years, the RRP will continue to support the thermal renovation of buildings. Despite France lagging behind on renewable energy, the RRP did not include investments dedicated to increasing renewable electricity capacity. However, the RRP includes investments in renewable energy in heating systems, with renovations supported by the MaPrimeRenov' scheme frequently including the roll-out of heat pumps and biomass boilers, and partial and indirect support for renewable energy through measures supporting the decarbonisation of industry and the production of renewable hydrogen, including a planned Important Project of Common European Interest.

The RRP provides for major investment in sustainable transport. One of the largest measures will finance the reconstruction and modernisation of the railway network. The projects already implemented in 2021 indicated that the plan will accelerate the modal shift towards cleaner transportation modes in freight and passenger transport, and such investments will be scaled up in 2022 and 2023. The electrification of vehicles and road infrastructure was accelerated with financial support for the purchase of clean vehicles and the construction of new charging stations on motorways. In the coming years, this will be complemented by investments to increase clean mobility in urban areas. The French plan will also support the greening of the aeronautics sector. Overall, the RRP dedicates 46.0% of its allocation to the green transition.

The RRP will also support the digital transition. Digitalisation of health is a priority, including support for digital medical records, interoperability, secure exchange of data, and training of health professionals. The French plan invests in research and deployment of key digital technologies such as quantum, cloud and cybersecurity, including via the participation in multi-country projects. Measures to support the digital skills of pupils and the workforce and the digitalisation of the public administration are also included. Furthermore, the high-speed broadband plan will be accelerated to reach 100% fibre-to-the-home coverage by 2025. The RRP dedicates 21.3% of its allocation to the digital transition in total.

Reforms of public finances management and quality of public expenditure were delivered in 2021. The RRP includes measures to support the consolidation of public finances in the medium and long term. The most important reform is the entry into force as of 2022 of an organic law on the modernisation of public finances management. The law introduces a multiannual expenditure rule applicable to total public spending, aimed at strengthening the multiannual dimension of budgetary decisions. This is further strengthened by the extension of the prerogatives of the national fiscal council (High Council of Public Finances) to assess the consistency of the main annual fiscal targets with such new multiannual expenditure objectives, and to assess the plausibility of revenue and expenditure forecasts in the annual budgetary laws. The reform also calls for the adoption of the multiannual programming law by the first quarter of 2023, where the multiannual expenditure targets will be set out. Its ultimate contribution to public debt reduction will crucially depend on the stringency of such multiannual expenditure targets and future compliance with them. Preliminary steps were also taken to pave the way for the evaluation of public spending that will be carried out after the crisis, with the aim of identifying the most efficient expenditures favouring growth, social inclusion and the twin transition. As of 2023, financial laws should consistently factor in the results of these public expenditure evaluations so that they translate into expenditure savings and efficiency gains. The publication of a green budget should also provide transparency on the environmental impact of the State budget.

A significant share of the plan supports measures relating to employment, skills, and young people, contributing to the implementation of the European Pillar of Social Rights. A number of measures aim to upskill and re-skill workers with a special focus on digital skills. Hiring subsidies for employers recruiting people with disabilities, young people under 26 and those on apprenticeships and work-study contracts are expected to help these groups find jobs. Support for apprenticeships boosted the number of new contracts by 37% in 2021; the measure has been extended until June 2022. The French plan supports a significant share of the '1 young person, 1 solution' programme with EUR 4.6 billion, which has already proven to have a significant short-term impact on young people. Its efficiency, however, could be improved ([5]) and its effects still need to be consolidated in the medium term, according to the first evaluation report of 'France Relance' ([6]). While the plan includes some education measures (aimed at preventing

Box 1: **Key deliverables under the recovery and resilience plan in 2022-2023**

- Continuation of building renovation
- Promulgation of the Climate and Resilience law
- Investments in railway infrastructure
- Launch of calls for projects for R&D in the green transition
- Renewable hydrogen production and kick off of the Important Project of Common European Interest
- Selection of R&D projects on low carbon aircraft
- Stregthening of public employment services and continued support to employment and training of young people
- 1 700 000 additional buildings connected to fibre

([5]) Cours des Comptes, 'Le plan #1jeune1solution en faveur de l'emploi des jeunes', Rapport public annuel, 2022

([6]) France Stratégie, Comité d'évaluation du plan France Relance – Premier rapport, 2021

early school leaving and creating places in higher education and vocational education), there is scope for additional measures to further address the marked inequalities and lack of inclusiveness in the education system.

The unemployment benefit reform was implemented in 2021. It aims to strengthen incentives to work and discourage the excessive use of short-term contracts. The reform sets stricter eligibility rules for unemployment benefits and changes the calculating method for the daily reference wage used to determine unemployment benefits. A disincentive to the use of very short-term contracts by employers (*bonus-malus*, increasing or decreasing the contribution of the employer) will start to apply to employers in September 2022, after an observation period.

Investments and reforms in health care and long-term care will also be supported. With the support of the Facility, the government increased public investment in health infrastructure and in the digitalisation of the health sector. Healthcare investments under the plan amount to almost EUR 4.5 billion. In addition, the plan includes EUR 1.5 billion investments targeting long-term care. Two reforms included in the plan have already been implemented in 2021: (i) a law reforming hospital governance, which will allow for more flexibility in the organisation of hospitals and (ii) a law on social debt and autonomy, which supports the independence of the elderly and people with disabilities.

Mobilising investment in research and innovation is a major priority of the RRP. The plan contains several measures aimed at boosting investment and employment in research and innovation. In particular EUR 4.25 billion is allocated to the Investments for the Future programme ('Programme d'Investissement d'Avenir'). In 2021, 13 strategies were validated for research and innovation in the green transition and in key digital technologies. They will lead to the publication of calls for projects in 2022 and 2023. Calls for projects were already launched in 2021 concerning support for teaching, research, promotion and innovation ecosystems.

FURTHER PRIORITIES AHEAD

Beyond the challenges addressed by the RRP, as outlined above, France faces additional challenges not sufficiently covered in the plan. High public deficits and debt pose high sustainability risks in the medium term. The complexity of the pension system is casting doubt on its fairness and impacts labour mobility. Significant socio-economic inequalities persist in the education system and undermine the effectiveness of investments in skills. In the green transition, the deployment of renewable energies is slow resulting in France missing its Europe 2020 target. In addition, further support to key energy interconnectors (in development or planned) with some neighbouring Member States could significantly contribute to the resilience of Europe's energy systems. The competition in the service sector could be increased with potential beneficial effects on the competitiveness of French businesses. Addressing these challenges will also help to make further progress in achieving the SDGs related to macroeconomic stability, fairness, and environmental sustainability.

Ensuring the sustainability of public finances

France's high public deficit and debt pose high sustainability challenges over the medium term. In 2019, France's public expenditure was the highest in the EU, well above the EU average of 46.9% of GDP. This gap narrowed somewhat in 2021. Public debt rose by almost 20 pps during the COVID-19 crisis and is projected to remain around 110% over the medium term. Public debt sustainability challenges are assessed as high over the medium term, whereas in the long term they are considered as medium, mainly due to the projected decline in age-related expenditure over this horizon ([7]).

A thorough assessment of the efficiency of public expenditure and a progressive reduction thereof are key to mitigating public debt sustainability challenges. The high level of public expenditure raises efficiency concerns and requires a high overall tax burden ([8]), which can weigh on economic efficiency and raise acceptability concerns. This justifies the need for the control and quality assessment of public spending which, under strengthened medium-term planning, should build on the outcome of systematic spending reviews in order to identify priority areas for intervention. Reviewing the efficiency and effectiveness of public policies should aim to strengthen France's growth potential by channelling public resources to growth-enhancing investment in R&D, innovation, industry and knowledge and should boost the green and digital transitions together with social and economic resilience. In this regard, as suggested by the Court of Auditors, five strategic areas show significant room for savings and efficiency improvement, namely healthcare spending, employment policy, social benefits, social housing and the pension system.

Reducing the complexity of the pension system and making it fairer

The French pension system is complex and costly when compared with other advanced economies. The current pension

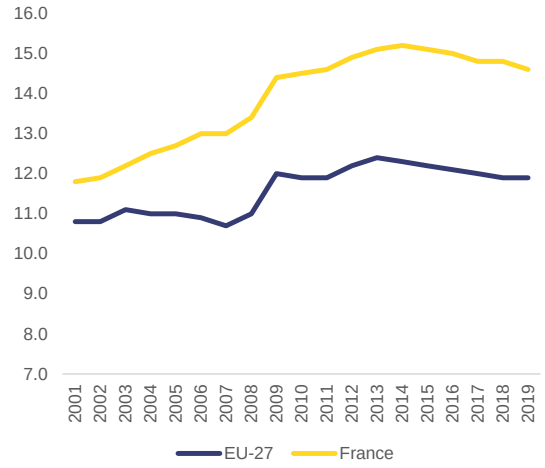
([7]) See Annex 20.

([8]) The tax burden in France, at 47.5% of GDP in 2020, is the second highest in the EU after Denmark (47.6% of GDP), well above the EU average of 41.3% of GDP.

system is a pay-as-you-go one, consisting of more than 40 different schemes including basic and mandatory complementary schemes ([9]) that apply to different professional sectors and occupational statuses and follow different rules in terms of financing, benefits paid and management. At 14.6% of GDP in 2019 according to Eurostat, public pension expenditure was the third highest in the EU and well above the EU average of 11.9%. The system is characterised by a relatively low effective retirement age (around 62 years) compared to the EU average of 63.8 years, and life expectancy at the age of retirement is the highest in the EU.

The French pension system is relatively generous. The replacement ratio ([10]) with a 40-year career at average wage, was 0.65 in 2019 (similar for men and women), compared to 0.57 in the EU, while the benefit ratio ([11]), at 40.8% in 2019, is in line with the EU average (unweighted average of 42% in 2019).

Graph 3.1: **Government expenditure on pensions (%GDP)**



Source: European Commission

Public pension expenditure is projected to increase further in this decade but to decline in the long term. Both the European Commission (Ageing Report 2021) and the French pension advisory council (Conseil d'Orientation des Retraites) project public pension expenditure to increase moderately until around 2030. However, pension expenditure would enter a clear downward trend from the early 2030's until 2070, which would more than offset the projected increases in long-term care and healthcare expenditure. This projected long-term decline in pension expenditure as a share of GDP is mainly due to the indexation of pension benefits only to inflation, which offsets the effect of the increase in the dependency ratio due to ageing.

The complexity of the current pension system is an obstacle for labour mobility and raises questions about its fairness. The reason for the complexity is the high number of different schemes, leading to risks of inefficiencies and to an overall lack of transparency about management costs. The calculation of contributions and pensions follows different rules across schemes, which entails considerable equity concerns. The same amount of contribution does not ensure the same pension. This is also due to the wide range of scheme-specific benefits not linked to contributions and to the financing of most schemes through general taxation. Moreover,

([9]) All workers are affiliated, according to their profession, to both a basic scheme and a mandatory complementary scheme. They can belong to several basic schemes during their career from which they receive several pensions on retirement. Over their career, more than 60% of workers are affiliated to 3 or more schemes (see GIP union Retraite, *Annuaire droits à l'information*, 2017).

([10]) The indicator is defined as the ratio of the median individual gross pensions of the 65-74 age category relative to the median individual gross earnings of the 50-59 age category, excluding other social benefits.

([11]) The benefit ratio is defined as the average pension as a share of the economy-wide average wage.

the differences between the many schemes hamper workers' mobility and a more efficient allocation of the labour force ([12]). Following the outbreak of the pandemic in 2020, the government put on hold its pension reform proposal, aimed at unifying the different schemes.

Accelerating the deployment of renewable energy and improving interconnections

Greenhouse gas emissions are steadily decreasing. Since 2018, total emissions have fallen, with figures for 2019 and 2020 representing the lowest levels recorded since 1990. However, these emissions must continue to fall significantly if France is to meet the nationally-set emissions ceilings for 2019-2023.

The current geopolitical context calls for a European security of supply and a reduced dependence on fossil fuels. France has relatively limited exposure to imports of fossil fuels from Russia compared to other EU Member States as the French energy mix relies chiefly on nuclear energy (40.6% of its gross inland consumption in 2020). In addition, France has 4 liquefied natural gas (LNG) terminals, allowing for a more diversified source of gas imports. France's energy mix is also characterised by (i) very low dependency on coal (around 2% of gross inland consumption against 11% EU average); (ii) average dependency on oil (29% against 33% EU average); and (iii) lower-than-average gas dependency (15% against 25% EU average).

Dependence on Russian fossil fuel imports is also limited compared to the EU. Most French gas imports come from Norway, Russia and Algeria. Russia represented 17% of all gas imports in 2020. In 2020, France imported 29.4 bcm of natural gas by pipeline (of which 14% from Russia) and 17 bcm by LNG (of which 21% from Russia). The LNG potential in France is the second largest in the EU, with 113.9 mcm/day send-out capacity. Most of the capacity is currently used. France imported 9% of its crude oil from Russia in 2020, and 17% of its refined oil products. About 34% of its coal imports in 2020 came from Russia ([13]).

France could help reduce dependence on Russian gas by frontloading future-proof investments in domestic and cross-border energy infrastructures. This would help increase security of supply of gas at EU level. Stronger interconnections capacity would also foster the single energy market and increase its resilience.

Further support for energy interconnectors remains crucial. Cross-border interconnectors (under development or planned), will foster the integration of large shares of renewables, strengthening grid infrastructure and promoting market integration in the region. Interconnections are the cornerstones of an efficient internal electricity market and are key to increasing overall energy security in the Union and reducing the EU's dependence on fossil fuels.

France is not on track to meet its 2030 emissions reduction target for non-ETS sectors such as agriculture, transport or buildings. The French RRP makes substantial efforts in the fields of thermal renovation of buildings and sustainable mobility. In the context of its new national Resilience Plan, France is reinforcing the support mechanisms for renewable heating in buildings, e.g. by increasing the "heat fund" by EUR 150 million and the subsidy for installing renewables-based heating by EUR 1000. Moreover, to no longer use fuel oil for heating and domestic hot water by 2030, the installation of oil-fired boilers will be prohibited from 1 July 2022 in all new and existing buildings. While financing under the rural development policy and other instruments developed in a previous national investment plan pre-existed, investments in

([12]) Jean-Paul Delevoye, Haut-Commissaire à la réforme des retraites, *Pour un système universel de retraite*, 2019

([13]) Eurostat (2020), share of Russian imports over total imports of natural gas, crude oil and hard coal. Total imports include intra-EU trade.

the agricultural sector under the RRP were limited despite an increased prevalence of emissions ([14]). The more widespread use of anaerobic digestion ('méthanisation') and other technologies linked to the conversion of agricultural waste into energy could reduce emissions from agriculture and produce sustainable biomethane and other sustainable biogases to decarbonise industrial processes and the heating of buildings. This should be done in accordance with sustainability requirements to avoid negative impacts on biodiversity, competition for soil, or other harms to the climate and environment. Additional and cost-effective public support, such as investments in district heating networks at the territorial level, would support the deployment of sustainable biogases and accelerate the adoption of these technologies. Solar and wind production on farmland and agroforestry are also promising avenues for climate mitigation in the agricultural sector.

Energy efficiency can also help reduce emissions and the dependence on fossil fuels. The efforts on building renovation included in the RRP could be deepened. For instance, a majority of projects benefitting under 'Ma Prime Rénov' have focussed on single measures, leading to shallow renovations. Deep renovation of buildings should be encouraged to reduce energy consumption sizeably.

The current pace of renewable energy deployment is not sufficient to meet France's 2020 and 2030 targets. The share of renewable energy sources in gross final energy consumption reached 19.1% in 2020, below its target of 23%. France's proposed objective for 2030 is to reach 33%. Urgent corrective measures are required to get back on this trajectory, especially as this target will need to be revised upwards to be in line with the 'Fit for 55' objectives.

Increasing land access and reducing regulatory and administrative barriers would support the development of renewables. Onshore wind farms cannot be built within a radius of 5-30 km from surrounding meteorological, military and civil aviation radars. This results in around 45% of new projects struggling to find suitable locations. Despite the enhancement of public debates on offshore projects, the maritime planning exercise to identify suitable sites for offshore wind projects should be strengthened. Procedures should be improved to avoid obstructions at a very late stage of a project's development. A more decentralised framework for approving renewable energy projects offering a one-stop-shop to project developers can reduce administrative burdens involved in dealing with national, regional and local administrations. More resources for the competent administrations and authorities would speed up tendering and permit application procedures, which remain burdensome for project developers.

Higher public investment in energy infrastructure could support the integration of renewables. Upgrading the electricity grids could reduce delays in grid connection which at the moment can last several months. Increased support for geothermal energy could accelerate the production of renewable heat.

Public acceptance of and third-party complaints regarding wind and solar power on the ground are critical issues. They are responsible for major delays in commissioning new projects. Spatial planning for renewables should be prepared in closer coordination and dialogue with the regions in order to solve land use conflicts, and increase local acceptance. France has recently put in place a number of solutions, notably to shorten the treatment of legal actions, and created a 'local bonus' awarded to support the financing of a renewables projects when local authorities and natural persons become shareholders. Robust participatory mechanisms are essential to increase public ownership of the energy transition.

([14]) Between 2003 and 2019, while total agricultural emissions decreased by 5.3%, the share of the agricultural sector's emissions of France's total has steadily increased, from around 16% to around 20%. Source: EU greenhouse gas inventory 1990-2019, European Environment Agency and Eurostat.

Accelerating the phase-out of fossil fuel subsidies would improve the competitiveness of renewable alternatives and stimulate private investment. Certain sectors are subject to reductions in the rates of the energy consumption tax calculated in proportion to CO_2 emissions. In its national energy and climate plan, France identified EUR 4.8 billion of annual tax expenditures on fossil fuels in 2018, consisting mainly of reduced rates for road freight transport, non-road diesel, heavy fuel oil, natural gas and agricultural liquefied petroleum gas. Since then, the country has implemented measures to normalise tax rates notably for road freight transport and non-road diesel, but other tax expenditures remain. Moreover, the true figure for these tax expenditures may be significantly higher ([15]), and they have externalities other than carbon emissions as they also contribute to air pollution and traffic congestion.

Tackle inequalities in the education system and in access to employment

High socio-economic inequalities in the education system impact the level of basic skills. Despite good performance with regard to early school leaving, tertiary education and adult participation in learning, the impact of socio-economic inequalities and migrant background on educational outcomes is significant (see Annexes 12 and 13). According to the 2018 PISA report, 20% of 15-year-olds in France lacked basic skills in reading, mathematics or science and over a third of 15-year-olds with disadvantaged backgrounds lacked basic skills in reading (35.3%). According to the 2019 Trends in International Mathematics and Science Study, French pupils in the 4th grade had the lowest performance in maths across the 22 participating EU countries with disadvantaged pupils scoring significantly lower than advantaged ones. According to PISA 2015 ([16]), science teachers working in disadvantaged areas tend to have lower levels of certification to a larger extent than in other EU countries (see Annex 13). In 2017, France introduced a pilot reform consisting of 'halving class sizes' in early years of education for students in priority areas, to enable pupils to benefit from more personalised support in an atmosphere conducive to learning (see Annex 13). The French Court of Auditors ([17]) highlighted shortcomings of the school system, especially impacting the learning outcomes of disadvantaged pupils, and called for greater autonomy and evaluation of schools. Participation in continuous training is low despite the high level of need declared by teachers. According to TALIS 2018 ([18]), 50% of lower secondary education teachers in France participated in professional development in the form of courses or seminars attended in person, against an OECD average of 76%. The 2018 reform and significant incentives for employers boosted the number of apprentices, with a positive impact on the employment rate of graduates. However, this effort needs to be consolidated in the longer term, in terms of both financing and attractiveness for all (see Annex 13).

Despite recent improvements, vulnerable groups continue to face barriers to employment and training. Workers that were already facing significant labour market challenges before the crisis were particularly affected by the economic consequences of the pandemic (see Annex 12). The low-skilled were overly represented in the sectors most affected by the sanitary restrictions. Despite the broad coverage of the short time work scheme, their employment rate dropped to 52.3% in the fourth quarter of 2021 compared to 53.7% in the fourth quarter of 2019. On the other hand, the employment gap between

([15]) The Commission has estimated that France granted fossil fuel subsidies of EUR 11 billion in 2018. (European Commission, Directorate-General for Energy, Badouard, T., Altman, M., *Energy subsidies : energy costs, taxes and the impact of government interventions on investments : final report*, Publications Office, 2020)

([16]) PISA 2015 results Volume 2 Table II.2.9

([17]) Cour des Comptes, Une école plus efficacement organisée au services des élèves, 2021

([18]) TALIS - The OECD Teaching and Learning International Survey (2018)

non-EU born residents and their peers born in France has decreased compared to its pre-crisis level (from 15.3 pps in the fourth quarter of 2019 to 14.2 pps in the fourth quarter of 2021). The employment gap of people with disabilities rose by 3.9 pps to 22.8% in 2020. The labour market situation of young people remains a matter of concern in the outermost regions (around 40% youth unemployment), also considering the high NEET rate (24.8% vs. 11.4% for the overall French population in 2020). Nevertheless, the employment rate of young people in the overall population (15-24-years-olds) has increased, from 29.9% in the fourth quarter of 2019 to 33.8% in the fourth quarter of 2021. Recent evaluations point also to the lack of support and guidance given to minimum income beneficiaries. ([19])

Labour shortages are on the rise as skills shortages abound ([20]). Recruitment difficulties are greatest in jobs requiring technical skills, notably in sectors that are key for the green transition (industry, construction) ([21]). This calls for evaluating and improving the quality and labour market relevance of upskilling and re-skilling measures, such as the skills investment plan, the revamped individual learning account, and the '1 young person, 1 solution' plan ([22]), while ensuring complementarity with efforts to modernise the training offer in the context of France 2030. Evaluations also point to the specific challenges of the low-qualified, who could benefit from strengthened guidance and better access to trainings leading to qualification. The insufficient performance and labour market relevance of the initial education system also undermine the effectiveness of investments in upskilling and re-skilling. Poor working conditions and lack of attractiveness of jobs also explain difficulties in recruiting and retaining workers in some sectors. Youth-targeted measures have been implemented, including the set-up of a revamped youth guarantee instrument: since March 2022, young people under 26 or under 30 with disabilities, facing difficulties to access the labour market, can benefit from reinforced employment support during a maximum of 12 months, with an allowance to secure them during this period.

Poor labour market outcomes of vulnerable groups translate to higher exposure to poverty. Despite a stabilisation of the at-risk of poverty rate in 2020, INSEE ([23]) reports an 11% increase in the food aid distributed, and a deterioration of the income situation of the poorest among the poor. Vulnerable groups, including non-EU-born, low-skilled and low work intensity households with children face much higher risks of poverty than the overall population, to a larger extent than in other EU countries. Rising energy prices may aggravate the increase of housing cost overburden and constrained expenditures, while access to affordable and social housing is insufficient. Tackling all these challenges is key for France to contribute to reaching the 2030 EU headline targets on employment, skills and poverty reduction.

Improve the business environment to increase competitiveness

The regulatory restrictiveness of professional services remains high in France. According to a Commission report, regulatory restrictiveness is higher than the EU average for accountants/tax advisers, architects, real estate agents and patent agents ([24]). Within France, among the

([19]) Cour des Comptes, Le revenu de solidarité active, 2022

([20]) Dares identifies two main causes of recruitment difficulties: skills mismatches and poor working conditions. Dares, *Quelle relation entre difficultés de recrutement et taux de chômage ?*, 2021

([21]) Occupations most affected by skills mismatches in: Dares, *Les tensions sur le marché du travail en 2020*, 2021

([22]) Cour des Comptes, 'Le plan #1jeune1solution en faveur de l'emploi des jeunes', *Rapport public annuel 2022*, 2022

([23]) INSEE, Aide alimentaire : une hausse prononcée des volumes distribués par les associations en 2020, press release, 2021

([24]) For example, legal persons that are not architectural firms may not hold more than 25% of the share capital and voting rights of architectural firms, and the majority of the members of the board of directors, including the chairman, must be architects. Accountants may

professions analysed by the Commission, accountants/tax advisers and lawyers are the most regulated ([25]). Excessive regulation can undermine the efficient operation of services markets and delay innovations such as the digital automation of repetitive tasks. It can also limit sources of financing and management skills as well as raise barriers to entry and reduce competition. Engineering, architectural, legal and accounting services together account for 3.8% of GDP in France. Loosening regulatory restrictions in these four services (mainly in architectural, legal and accounting services) would boost GDP by 0.15% within 2 years, driven by increased productivity, lower prices and higher final consumption ([26]).

France's regulatory environment in the retail sector is weighing on competition. Reforms adopted since 2018 have made the regulatory environment of retail more restrictive by introducing new rules on the opening of large shops and limiting retailers' ability to offer promotions ([27]). The regulatory framework relating to the sale of medicines in particular is significantly more restrictive than the OECD average ([28]). Reducing or removing restrictions in the retail sector, in particular opening up sales of non-prescription medicines to a wider variety of retailers, would improve accessibility and could reduce prices.

cooperate only with a limited number of other professions, with other forms of joint exercise being banned. Real estate agents need to hold a professional card to carry out their activities, which can be obtained, among other means, through a specialised two-year post-secondary education or a general higher education diploma of at least three years.

Some reforms have been adopted to reduce the restrictiveness of regulated professions. For example, the law for growth, activity and equality of economic chances adopted in 2015 (Law 2015-990) provided for an increase in the number of notaries and created more competition in that profession.

([25]) Staff Working Document (EC) 2021/185 final accompanying the Communication from the Commission on taking stock of and updating the reform recommendations for regulation in professional services of 2017

([26]) European Commission, The impact of regulatory environment on digital automation in professional services, 2021

([27]) PACTE (Plan d'Action pour la Croissance et la Transformation des Entreprises), ELAN (Evolution du logement, de l'aménagement et du numérique) and EGalim (Etats généraux d'alimentation Etats généraux d'alimentation) laws.

([28]) OECD product market regulation (PMR) indicators, 2018. See: https://www.oecd.org/economy/reform/indicators-of-product-market-regulation/.

KEY FINDINGS

France's recovery and resilience plan includes measures to address a series of its structural challenges through:

- large investments in the green transition (building renovation, clean transports, industry decarbonisation, hydrogen, etc);
- supporting the recovery of the labour market, focusing on young people;
- initiating reforms on public finances;
- the digitalisation of administration, education (including better digital skills), the health system and the deployment of fibre;
- orienting research towards the twin transition.

Beyond the reforms and investments in the RRP, France would benefit from:

- ensuring an effective control of current primary expenditure so as to put public debt on a sustained downward trend;
- reducing the complexity of the pension system while enhancing its fairness and ensuring the sustainability of public finances;
- accelerating the deployment of renewable energies and supporting investment, including by simplifying permit procedures for renewable energy projects;
- improving energy efficiency by promoting deep renovation of buildings;
- developing energy interconnections with neighbouring countries;
- improving learning outcomes and addressing inequalities in education;
- improving the business environment to increase competitiveness.

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ANNEX 1: SUSTAINABLE DEVELOPMENT GOALS

This Annex assesses France's progress on the Sustainable Development Goals (SDGs) along the four dimensions of competitive sustainability. The 17 SDGs and their related indicators provide a policy framework under the UN's 2030 Agenda for Sustainable Development. The aim is to end all forms of poverty, fight inequalities and tackle climate change while ensuring that no one is left behind. The EU and its Member States are committed to this historic global framework agreement and to playing an active role in maximising progress on the SDGs. The graph below is based on the EU SDG indicator set developed to monitor progress on SDGs in an EU context.

While France performs very well or well on most SDG indicators relating to *environmental sustainability* (SDGs 2, 6, 7, 12, 13 and 15) and is improving on others (SDG 9), it still needs to catch up in some respects (SDG 11). France has progressed well towards SDG 7 on affordable and clean energy, having decreased greenhouse gas emissions from energy consumption by 20.3% in 2019 compared to 2000 levels. Increasing the share of buses and trains in total passenger transport would help address 'Sustainable cities and communities' (SDG 11). While in 2014 France was noticeably above average (a share of total inland passenger-km of 18.4% compared to an EU average of 16.8%), in 2020 France was only slightly above average, leaving room for improvement. Measures on green infrastructure and sustainable mobility in component 3 of the recovery and resilience plan aim to further increase performance.

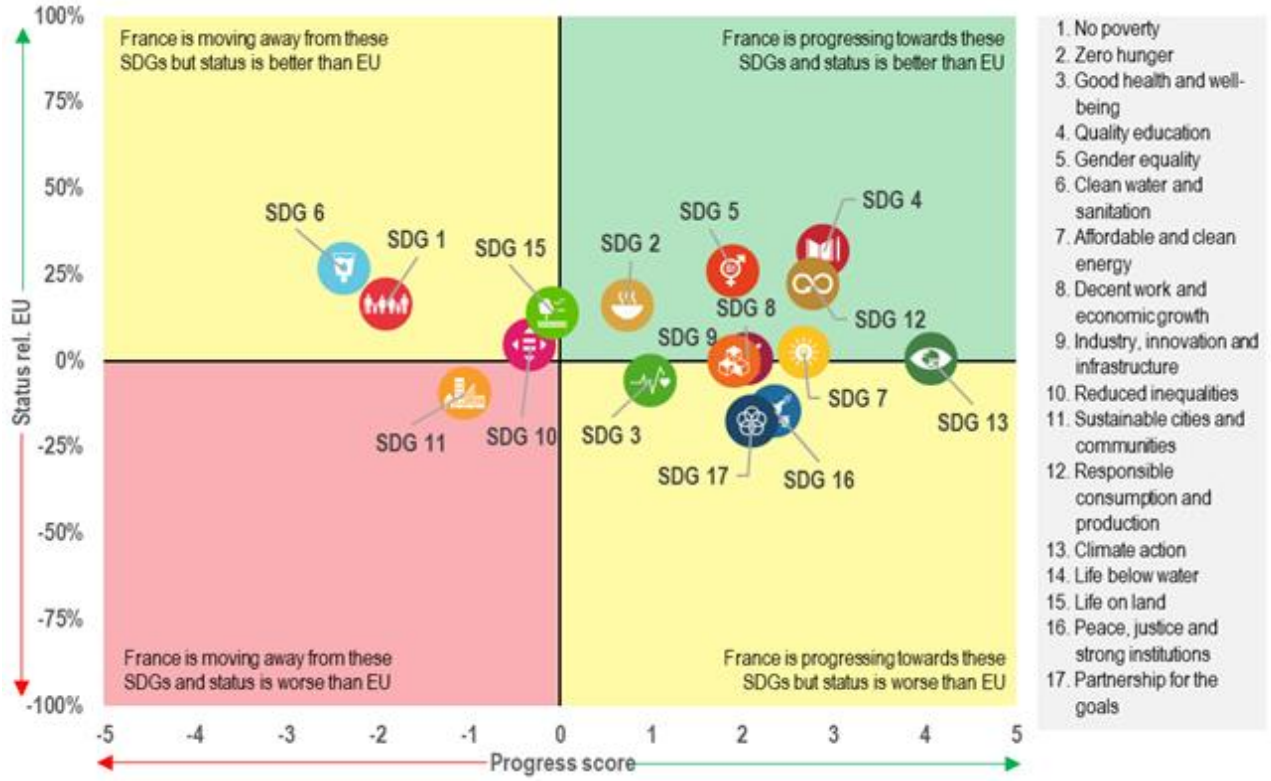
France performs very well or well on some SDG indicators relating to *fairness* (SDGs 1, 2, 4 and 5) and is improving on a few (SGD 3 and 8), but it needs to catch up on others (SDG 10). France outperforms the EU average in most indicators relating to zero hunger, quality education ([29]) and gender equality (SDGs 2, 4 and 5). However, the housing costs rose recently between 2018 and 2020 and should be monitored, especially in the context of rising energy costs. The RRP includes measures to further tackle renovation of buildings in component 1, notably by investing in energy efficiency of public buildings, private residential buildings, social housing, and small and medium sized enterprises. The measures also include reforms on housing policy. Although France outperforms the EU in relation to inequality indicators, the gap between the income of the poorest and the poverty line increased from 15.7% in 2015 to 21.5% in 2020. The urban-rural gap also increased sharply. Access to social and affordable housing in some areas is a challenge, in particular for the poorest households.

France performs very well on one SDG indicator relating to *productivity* (SDG 4) and is improving on others (SDGs 8 and 9). In France, participation in early childhood education is particularly high. The country was able to increase the participation rate for children from 3 years old to the starting age of compulsory primary education from 99.3% in 2014 to 100% in 2019. Adult participation in learning decreased from 18.6% of people aged 25 and over in 2015 to 13.0% in 2020, although it continues to be higher than average in the EU, where it also declined, from 10.1% in 2015 to 9.2% in 2020, possibly due to the impact of the pandemic. France's performance in at least basic digital skills is above the EU average (62% compared to 54% in 2021). A large share of investments in components 7 and 8 of the RRP focuses on increasing digital infrastructure and equipment to improve digital skills at all levels of the education system.

France is improving on SDG indicators relating to *macroeconomic stability* and *institutional quality* (SGD 8 and 16). France has further improved on the quality of its justice institutions, including trust in institutions (SDG 16). The percentage of the population in France with confidence in the EU Parliament increased from 34% in 2016 to 38% in 2021 (EU: 50% in 2021). France has also continued to see progress on indicators relating to 'Decent work and economic growth' (SDG 8). The percentage of young people neither in employment nor in education or training decreased from 14.7% in 2015 to 14% in 2020, with more efforts required to reach the EU average (13.7% in 2020). For this reason, France has committed to investments in component 8 of the RRP to support the employment of the young people.

([29]) Despite these positive results, France remains one of the EU countries where the impact of students' socio-economic and migrant background on their educational outcomes is the strongest.

Graph A1.1: **Progress towards SDGs in France in the last five years**



(1) For detailed datasets on the various SDGs, see the annual ESTAT report 'Sustainable development in the European Union', https://ec.europa.eu/eurostat/web/products-statistical-books/-/KS-03-21-096; Extensive country specific data on the short-term progress of Member States can be found here: Key findings - Sustainable development indicators - Eurostat (europa.eu).
Source: Eurostat, latest update of 28 April 2022. Data mainly refer to 2015-2020 and 2016-2021.

The Recovery and Resilience Facility (RRF) is the centrepiece of the EU's efforts to support its recovery from the COVID-19 pandemic, fast forward the twin transition and strengthen resilience against future shocks. France submitted its recovery and resilience plan (RRP) on 28 April 2021. The Commission's positive assessment on 23 June 2021 and Council's approval on 13 July 2021 paved the way for disbursing EUR 39.4 billion in grants in several annual instalments under the RRF over the period 2021-2026. The financing agreement and operational arrangement were signed on 1 August 2021 and 25 November 2021 respectively. The key elements of the French RRP are set out in the Table A2.1.

Implementation of the French plan is well underway. The Commission disbursed EUR 5.1 billion to France in pre-financing in September 2021, equivalent to 13% of the financial allocation, to support the implementation of crucial investments and reforms. France's first payment request was positively assessed by the Commission, taking into account the opinion of the Economic and Financial Committee, leading to a disbursement of EUR 7.4 billion in financial support (net of pre-financing) on 4 March 2022.

Table A2.1:**Key elements of the French RRP**

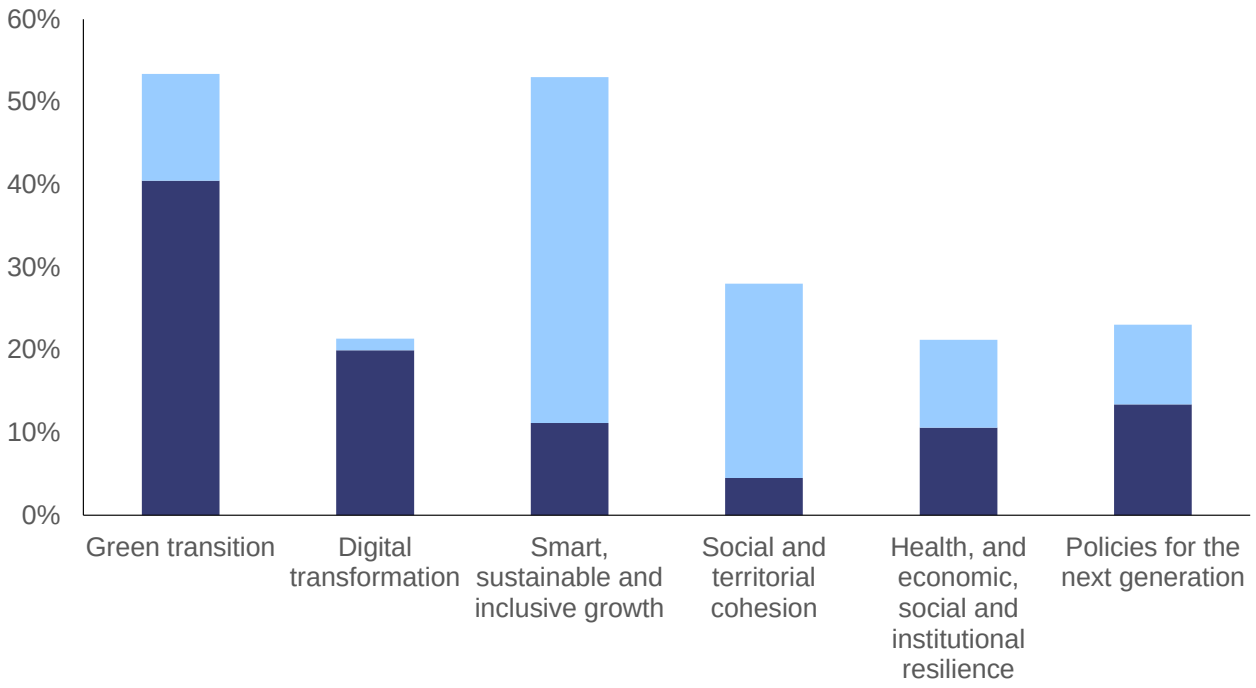
Total allocation	EUR 39.4 billion in grants (1.6% of 2019 GDP)
Investments and Reforms	70 investments and 22 reforms
Total number of Milestones and Targets	175
Estimated macroeconomic impact (1)	Raise GDP by 1% by 2024 (0.4% in spillover effects)
Pre-financing disbursed	EUR 5.1 billion (August 2021)
First instalment	EUR 7.4 billion (March 2022)

(1) See Pfeiffer P., Varga J. and in 't Veld J. *'Quantifying spillovers of NGEU investment'*, European Economy Discussion Papers, No. 144, 2021 and Afman et al. , *'An overview of the economics of the Recovery and Resilience Facility'*, Quarterly report on the euro area (QREA), 2021, Vol. 20, No. 3 pp. 7-16

Source: European Commission 2022

The related 38 milestones and targets cover reforms in the areas of public finance, the labour market, health and long-term care, while investments have been made in the energy efficiency of buildings, sustainable transport, decarbonisation of industry, youth employment and education. Satisfactory fulfilment of the milestones and targets contributes to addressing the related country-specific recommendations given to France in 2019 and 2020 (see Annex 4). Overall, France reports timely implementation of the milestones and targets due by the end of Q1-2022, which however does not prejudge the timing of the submission of subsequent payment

Graph A2.1: **Share of RRF funds contributing to each policy pillar**



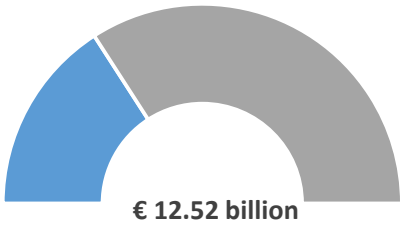
(1) Each measure contributes towards two policy areas of the six pillars, therefore the total contribution to all pillars displayed on this chart amounts to 200% of the estimated cost of the French RRP. The bottom part represents the amount of the primary pillar, the top part the amount of the secondary pillar

Source: Recovery and Resilience Scoreboard

requests nor of the formal assessment of the fulfilment of the relevant milestones and targets.

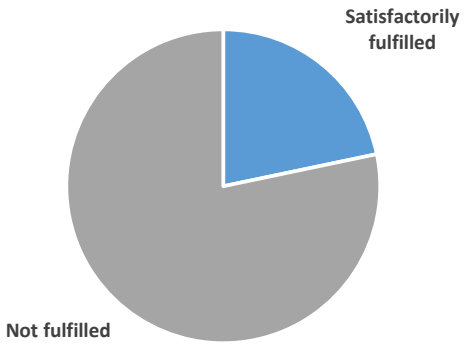
France's progress in implementing its plan is published on the Recovery and Resilience Scoreboard. The Scoreboard also gives a clear overview of the progress made in implementing the RRF as a whole. The graphs below show the current state of play of the milestones and targets met, as completed by France and subsequently assessed as satisfactorily fulfilled by the Commission.

Graph A2.2: **Total grants disbursed under the RRF**



(1) This graph displays the amount of grants disbursed so far under the RRF. Grants are non-repayable financial contributions. The total amount of grants given to each Member State is determined by an allocation key and total estimated cost of the respective recovery and resilience plan.
Source: Recovery and Resilience Scoreboard

Graph A2.3: **Fulfilment status of milestones and targets**



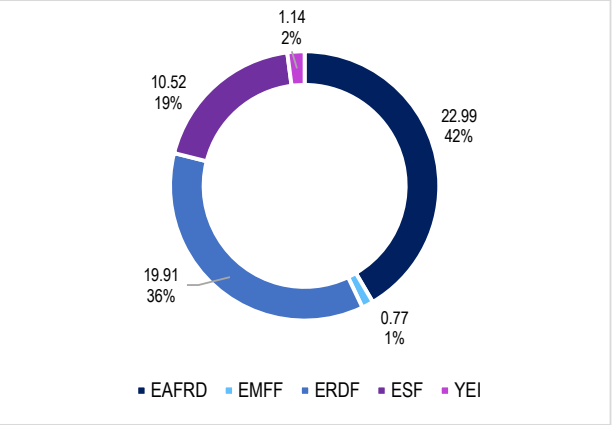
This graph displays the share of satisfactorily fulfilled milestones and targets. A milestone or target is met once a Member State has provided evidence to the Commission that it has completed the milestone or target and the Commission has assessed it positively in an implementing decision.
Source: Recovery and Resilience Scoreboard

The EU's budget of more than EUR 1.2 trillion for 2021-2027 is the investment lever to help implement EU priorities. Underpinned by an additional amount of about EUR 800 billion through NextGenerationEU and its largest instrument, the Recovery and Resilience Facility, it represents significant firepower to support the recovery and sustainable growth.

In 2021-2027, EU cohesion policy funds ([30]) will support long-term development objectives in France by investing EUR 17.88 billion ([31]), including EUR 1.0 billion from the Just Transition Fund to alleviate the socio-economic impacts of the green transition in the most vulnerable regions. The 2021-2027 cohesion policy funds partnership agreements and programmes to take into account the 2019-2020 country-specific recommendations and investment guidance provided as part of the European Semester, ensuring synergies and complementarities with other EU funding. In addition, France will benefit from EUR 45.7 billion support for the 2023-2027 period from the Common Agricultural Policy, which supports social, environmental, and economic sustainability and innovation in agriculture and rural areas, contributing to the European Green Deal, and ensuring long-term food security.

In 2014-2020, the European Structural and Investment Funds (ESIF) for France are set to invest EUR 35.04 billion ([32]) from the EU budget. The total investment including national financing amounts to EUR 55.32 billion, representing around 0.34% of GDP for 2014-2020 and 8.88% of public investment ([33]).

Graph A3.1: **2014-2020 European Structural and Investment Funds - total budget by fund (EUR billion, % of total)**



(1) The data for the EAFRD and REACT-EU refer to the period 2014-2022

Source: European Commission

By 31 December 2021, 104% of the total was allocated to specific projects and 64% was reported as spent, leaving EUR 19.80 billion to be spent by the end of 2023 ([34]) (by the end of 2025 for EAFRD). Among the 11 objectives at EU level, the most relevant ones for cohesion policy funding in France are fostering crisis repair and resilience, low carbon economy, research and innovation and sustainable and quality employment and educational and vocational training (EUR 30 billion in EU funding). By the end of 2020, cohesion policy investments supported 78 641 businesses, helped decrease CO_2 emissions by 418 215 teq and financed 1524 full-time equivalent new researchers. In addition, cohesion policy investments supported more than 4.8 million participants in trainings, of which 4.1 million were unemployed or inactive. Among those participants, more than 500 000 gained a qualification, and more than 850 000 moved to employment. Among the young people participating in a Youth Guarantee project, more than 240 000 received an offer of employment or education upon leaving the scheme and more than 210 000 were in employment 6 months later.

Cohesion policy funds already substantially contribute to the Sustainable Development Goals (SDGs) objectives. In France, cohesion policy funds support 11 of the 17 SDGs with up to 96% of the expenditure contributing to the attainment of the goals.

([30]) European Regional Development Fund (ERDF), European Social Fund+ (ESF+), Cohesion Fund (CF), Just Transition Fund (JTF), Interreg.

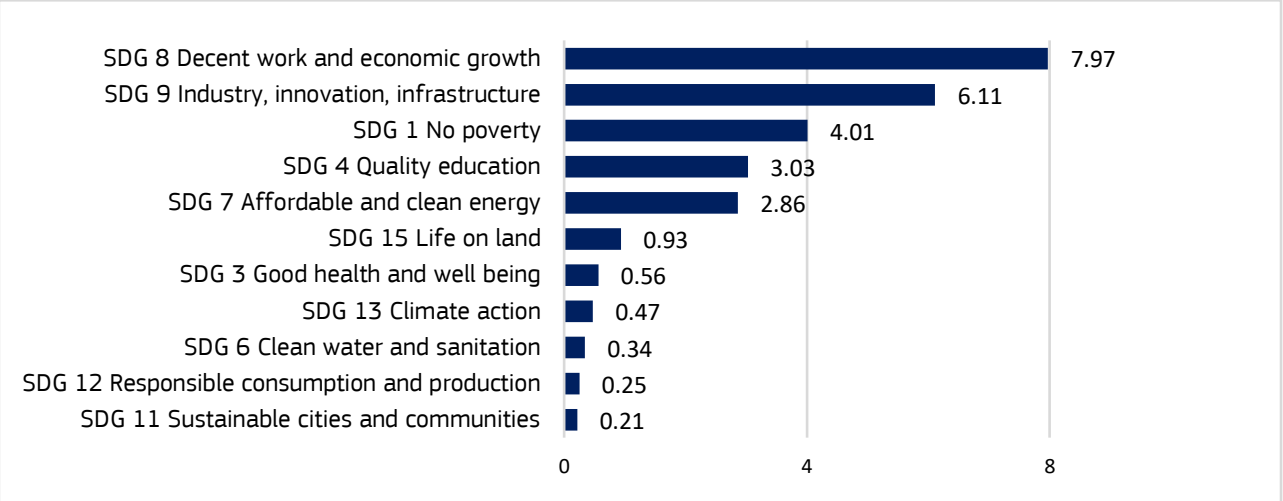
([31]) Current prices, source: Cohesion Open Data

([32]) ESIF includes cohesion policy funds (ERDF, ESF+, CF, Interreg) and European Agricultural Fund for Rural Development (EAFRD) and European Maritime and Fisheries Fund (EMFF). According to the 'N+3 rule', the funds committed for the years 2014-2020 must be spent by 2023 at latest (by 2025 for EAFRD). Data source: Cohesion Open data, cut-off date 31.12.2021 for ERDF, ESF+, CF, Interreg; cut-off date 31.12.2020 for EAFRD and EMFF.

([33]) Public investment is gross fixed capital formation plus capital transfers, general government.

([34]) Including REACT-EU. ESIF data on https://cohesiondata.ec.europa.eu/countries/FR

Graph A3.2: **Cohesion policy contribution to the SDGs (EUR billion)**



Source: European Commission

Under the ESIF, the agricultural rural development fund (EAFRD) extended France's 2014-2020 Rural Development Programmes until 2022 by making available a further EUR 3 241 million for 2021 and 2022. These funds will be used primarily to restore, preserve and enhance ecosystems related to agriculture and forestry (60%) and enhance farm viability and competitiveness of all types of agriculture (20%). By the end of 2020, the Rural development policy supported investments in 50 000 agricultural holdings and 30 000 young farmers, risk management for 85% of the French farms, 800 basic services projects in rural areas, improving biodiversity on 3 million ha of agricultural land and organic farming activities on 2 million ha. At the same time, EUR 300 million were invested in energy efficiency and renewable energy, EUR 40 million in rural economy actions, and EUR 18 million in forestry infrastructure.

In 2021, REACT-EU instrument (Recovery Assistance for Cohesion and the Territories of Europe) under NextGenerationEU provided EUR 3.1 billion of additional funding to the 2014-2020 cohesion policy allocations for France to ensure a balanced recovery, boost convergence and provide vital support for regions following the coronavirus outbreak.

REACT-EU provided support in France to strengthen the working capital for SMEs, strengthen the healthcare system, help digitalise educational and training structures, and contribute to the transition towards a green economy. REACT-EU also provided EUR 617.4 million for the national European Social Fund (ESF) in France for 2021 to support measures for social inclusion and access to the labour market of those most affected by the health crisis, in particular inactive people, young people and long-term jobseekers.

The EURI under NextGenerationEU provided EUR 867 million of additional funding to France's 2014-2022 Rural development programmes to support the recovery in the aftermath of the COVID-19 crisis. These funds targeted ecosystems related to agriculture and forestry as well as farm viability and competitiveness.

The Coronavirus Response Investment Initiative ([35]) provided the first EU emergency support for France to address the COVID-19 pandemic. It introduced extraordinary flexibility enabling France to re-allocate resources for immediate public health needs (177 million) and support for enterprises (96 million). For instance, France shifted resources to purchase protective equipment and healthcare equipment and to support working capital for SMEs. France was also able to benefit from the temporary 100% EU financing of measures in cohesion policy, with approximately EUR 136 million in 2021 effected through 100% co-financing.

([35]) Re-allocating ESIF resources according to Regulation (EU) 2020/460 of the European Parliament and of the Council of 30 March 2020, and Regulation (EU) 2020/558 of the European Parliament and of the Council of 23 April 2020.

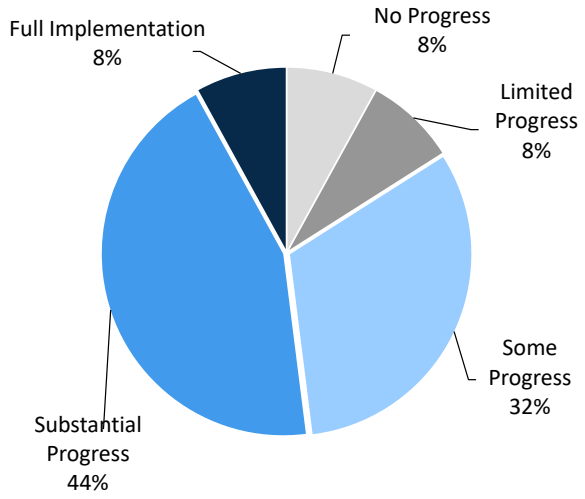
The Commission provides tailor-made expertise via the Technical Support Instrument to help France design and implement growth-enhancing reforms, including for the implementation of its RRP. Since 2017, France has received assistance through 29 technical support projects. Projects delivered in 2021 aimed for example to support the implementation of the 5-year plan on 'Housing First' and combat homelessness (2018-2022) or improve the availability of 'off-patent' (generic) antibiotics. In 2022, new projects will start to support, among others, the overall RRP monitoring, audit and control frameworks.

France also benefits from other EU programmes, such as the Connecting Europe Facility, which allocated EU funding of EUR 2 billion to specific projects on strategic transport networks, and Horizon 2020, which allocated EU funding of EUR 7.34 billion.

ANNEX 4: PROGRESS IN THE IMPLEMENTATION OF COUNTRY-SPECIFIC RECOMMANDATIONS

The Commission assessed the 2019-2021 country-specific recommendations (CSRs) ([36]) addressed to France in the context of the European Semester. The assessment takes into account the policy action taken by France to date ([37]), as well as the commitments in the Recovery and Resilience Plan (RRP) ([38]). At this early stage of the RRP implementation, overall 84% of the CSRs focusing on structural issues in 2019 and 2020 have recorded at least 'some progress', while 16% recorded 'limited' or 'no progress'. Considerable additional progress in addressing structural CSRs is expected in the years to come with the further implementation of the RRP.

Graph A4.1: **France's progress on the 2019-2020 CSRs (2022 European Semester cycle)**



Source: European Commission

([36]) 2021 CSRs: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32021H0729%2810%29&qid=1627675454457

2020 CSRs: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32020H0826%2810%29&qid=1526385017799

2019 CSRs: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32019H0905%2810%29&qid=1526385017799

([37]) Incl. policy action reported in the National Reform Programme, as well as in the RRF reporting (bi-annual reporting on the progress with implementation of milestones and targets and resulting from the payment request assessment).

([38]) Member States were asked to effectively address all or a significant subset of the relevant country-specific recommendations issued by the Council in 2019 and 2020 in their RRPs. The CSR assessment presented here takes into account the degree of implementation of the measures included in the RRP and of those done outside of the RRP at the time of assessment. Measures foreseen in the annex of the adopted Council Implementing Decision on the approval of the assessment of the RRP which are not yet adopted nor implemented but considered as credibly announced, in line with the CSR assessment methodology, warrant 'limited progress'. Once implemented, these measures can lead to 'some/substantial progress' or 'full implementation', depending on their relevance.

Table A4.1:**Summary table on 2019, 2020 and 2021 CSRs**

France	Assessment in May 2022*	RRP coverage of CSRs until 2026**
2019 CSR1	**No Progress**	
Ensure that the nominal growth rate of net primary expenditure does not exceed 1,2 % in 2020, corresponding to an annual structural adjustment of 0,6 % of GDP.	Not relevant anymore	Not applicable
Use windfalls gains to accelerate the reduction of the general government debt ratio.	Not relevant anymore	Not applicable
Achieve expenditure savings and efficiency gains across all sub-sectors of the government, including by fully specifying and monitoring the implementation of the concrete measures needed in the context of Public Action 2022.	No Progress	Relevant RRP measures being planned as of 2022 and 2023
Reform the pension system to progressively unify the rules of the different pension regimes, with the view to enhance their fairness and sustainability.	No Progress	
2019 CSR 2	**Some Progress**	
Foster labour market integration for all job seekers, ensure equal opportunities with a particular focus on vulnerable groups including people with a migrant background	Some Progress	Relevant RRP measures being implemented as of 2021 Relevant RRP measures being planned as of 2022
and address skills shortages and mismatches.	Some Progress	Relevant RRP measures being implemented as of 2021 Relevant RRP measures being planned as of 2022
2019 CSR 3	**Some Progress**	
Focus investment-related economic policy on research and innovation (while improving the efficiency of public support schemes, including knowledge transfer schemes),	Some Progress	Relevant RRP measures being implemented as of 2021 Relevant RRP measures being planned as of 2022 and 2023
renewable energy, energy efficiency and interconnections with the rest of the Union,	Some Progress	Relevant RRP measures being implemented as of 2021 Relevant RRP measures being planned as of 2022
and on digital infrastructure, taking into account territorial disparities.	Substantial Progress	Relevant RRP measures being planned as of 2022
2019 CSR4	**Substantial Progress**	
Continue to simplify the tax system, in particular by limiting the use of tax expenditures, further removing inefficient taxes and reducing taxes on production.	Substantial Progress	
Reduce regulatory restrictions, in particular in the services sector,	Limited Progress	
and fully implement the measures to foster the growth of firms.	Full Implementation	
2020 CSR1	**Substantial Progress**	
In line with the general escape clause, take all necessary measures to effectively address the pandemic, sustain the economy and support the ensuing recovery. When economic conditions allow, pursue fiscal policies aimed at achieving prudent medium-term fiscal positions and ensuring debt sustainability, while enhancing investment.	Not relevant anymore	Not applicable
Strengthen the resilience of the health system by ensuring adequate supplies of critical medical products and a balanced distribution of health workers, and by investing in e-Health.	Substantial Progress	Relevant RRP measures being planned as of 2022, 2023 and 2024
2020 CSR2	**Substantial Progress**	
Mitigate the employment and social impact of the crisis,	Substantial Progress	Relevant RRP measures being implemented as of 2021 Relevant RRP measures being planned as of 2022
including by promoting skills	Substantial Progress	Relevant RRP measures being implemented as of 2021 Relevant RRP measures being planned as of 2022
and active support for all jobseekers.	Some Progress	Relevant RRP measures being planned as of 2022
2020 CSR 3	**Substantial Progress**	

(Continued on the next page)

Table (continued)

Front-load mature public investment projects	Substantial Progress	Relevant RRP measures being implemented as of 2021 Relevant RRP measures being planned as of 2022
and promote private investment to foster the economic recovery.	Substantial Progress	Relevant RRP measures being implemented as of 2021 Relevant RRP measures being planned as of 2022 and 2023
Focus investment on the green and digital transition, in particular on sustainable transport,	Substantial Progress	Relevant RRP measures being implemented as of 2021 Relevant RRP measures being planned as of 2022
clean and efficient production and use of energy,	Some Progress	Relevant RRP measures being implemented as of 2021 Relevant RRP measures being planned as of 2022
energy (infrastructures)	Some Progress	Relevant RRP measures being implemented as of 2021 Relevant RRP measures being planned as of 2023
and digital infrastructures	Substantial Progress	Relevant RRP measures being planned as of 2022
as well as research and innovation.	Substantial Progress	Relevant RRP measures being implemented as of 2021 Relevant RRP measures being planned as of 2022
2020 CSR 4	**Some Progress**	
Continue to improve the regulatory environment,	Limited Progress	
reduce administrative burdens for firms	Some Progress	Relevant RRP measures being planned as of 2022
and simplify the tax system.	Substantial Progress	
2021 CSR1	**Some Progress**	
In 2022, use the Recovery and Resilience Facility to finance additional investment in support of the recovery while pursuing a prudent fiscal policy. Preserve nationally financed investment.	Full Implementation	Not applicable
When economic conditions allow, pursue a fiscal policy aimed at achieving prudent medium-term fiscal positions and ensuring fiscal sustainability in the medium term.	Some Progress	Not applicable
At the same time, enhance investment to boost growth potential. Pay particular attention to the composition of public finances, on both the revenue and expenditure sides of the budget, and to the quality of budgetary measures in order to ensure a sustainable and inclusive recovery. Prioritise sustainable and growth-enhancing investment, in particular investment supporting the green and digital transition.	Some Progress	Not applicable
Give priority to fiscal structural reforms that will help provide financing for public policy priorities and contribute to the long-term sustainability of public finances, including, where relevant, by strengthening the coverage, adequacy and sustainability of health and social protection systems for all.	Some Progress	Not applicable

* See footnote ([38])

** Measures indicated as "being implemented as of 2021" are only those included in the first RRF payment request submitted by France and positively assessed by the European Commission.

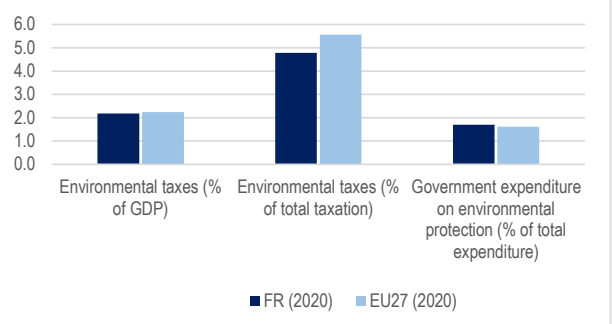
Source: European Commission

The European Green Deal intends to transform the EU into a fair and prosperous society, with a modern, resource-efficient and competitive economy where there are no net emissions of greenhouse gases in 2050 and where economic growth is decoupled from resource use. This annex offers a snapshot of the most significant and economically relevant developments in France in the respective building blocks of the European Green Deal. It is complemented by Annex 6 on the employment and social impact of the green transition and Annex 7 for circular economy aspects of the Green Deal.

Greenhouse gas emissions keep decreasing but further efforts will be needed to match the increased ambition of the European Green Deal and the 2050 climate neutrality target set at national and EU level. Total greenhouse gas emissions in France have been decreasing over time and in 2020 they were 27% lower than in 1990. However, among the three largest emitting sectors (transport, energy use and agriculture), emissions linked to energy use are decreasing the fastest, while emissions from agriculture are decreasing at a slower pace. GHG emissions are decreasing faster in sectors covered by the EU Emissions Trading System (ETS) (-46% in 2020 compared to 2005) than in the non-ETS sectors (buildings, road and domestic maritime transport, agriculture, waste and small industries) where emissions decreased by -22% in the same period. In the non-ETS sectors, France overachieved its 2020 GHG emissions reduction target. France is putting in place additional climate mitigation and adaptation measures but these do not appear to be sufficient to reach the current 2030 target (-37%) nor the proposed target (-48%) under the 'Fit for 55' package for sectors not covered by the ETS. The integrated national energy and climate plan (NECP), complemented by the 2021 Climate and Resilience law, develops the approach for mitigating GHG emissions and adapting to a changing climate. In its recovery and resilience plan (RRP) France allocates 46% of the plan to climate objectives and outlines crucial investments to further the green transition.

France's revenues from environmental taxes (in terms of percentage of GDP as well as share of total taxation) are broadly stable over time, with some upward tendencies. Up until 2019, revenues from energy taxation recorded slight increases, while they were counteracted by slightly decreasing taxes on pollution, resources and transport.

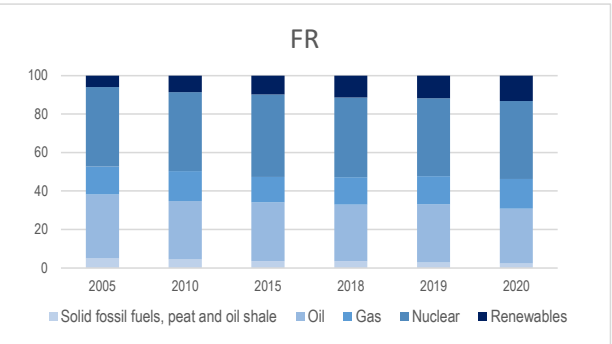
Graph A5.1: **Taxation and government expenditure on environmental protection**



Source: Eurostat

France's energy mix is characterised by the high share of nuclear. It accounted for 41% of gross inland energy consumption in 2020, followed by imported oil (29%), natural gas (15%) and renewables (13%, of which 4% solid biomass). France consumes very little coal (only 2% of gross inland energy consumption). France aims to increase the share of renewable energy to 33% of gross final energy consumption by 2030, but getting on this trajectory will require urgent corrective measures, especially as the target will need to be revised upwards to be in line with the 'Fit for 55' objectives.

Graph A5.2: **Share in energy mix**



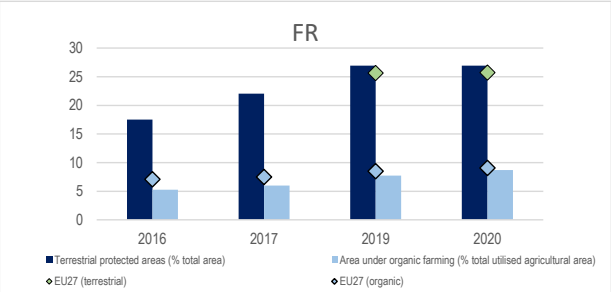
(1) The energy mix is based on gross inland consumption, and excludes heat and electricity. The share of renewables includes biofuels and non-renewable waste.
Source: Eurostat

On biodiversity and ecosystem health, France presents a mixed picture. With 8.7% of its utilised agricultural area under organic farming in 2020, France stands close to the EU average.

Forests still have an unfavourable conservation status. More than 75% of assessments reveal a bad to poor status. Degradation has been noted in the area of soil that is sealed or artificialised. Over recent years, there has been a reduction in change of use of soils and land take. The climate and resilience law of August 2021 has a goal of zero net land take for 2050 through safeguards in spatial planning and city planning documents. For the 2021-2031 period, the law sets an intermediate objective of halving the rate of consumption of natural, agricultural and forest areas compared to the ten years preceding the promulgation of the law. Despite progress with the new designation of large areas by 2020, the latest assessment of the Sites of Community Importance (part of the Natura 2000 network) shows that there are insufficiencies in designations for cetaceans and reefs at sea, and for 21 habitats and species on land (e.g. cork oak, for one crayfish, one butterfly, one fish) and bats.

In terms of air pollution, air quality in France continues to be a cause of concern with well over 30 000 premature deaths attributable to air pollution in 2019. Air quality limit values for nitrogen dioxide (NO_2) and particulate matter (PM10) were consistently exceeded over 2015-2019. For 2020, despite a general reduction in economic activity following the COVID crisis, above-limit values were reported for nitrogen dioxide (NO_2) and for sulphur dioxide (SO_2) in some zones. The situation on nitrate concentrations in surface water is quite good and is stable, and some improvement was recorded in the reduction of eutrophication of surface water.

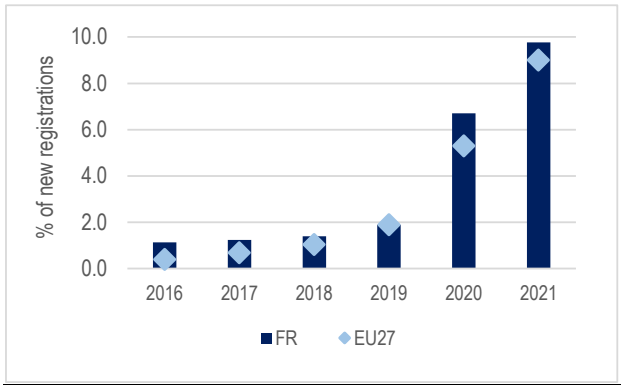
Graph A5.3: **Biodiversity**



(1) For terrestrial protected areas data for 2018, and data for the EU average (2016, 2017) is lacking.
Source: European Environment Agency (terrestrial protected areas) and Eurostat (organic farming)

As regards reducing CO_2 emissions from transport, France is performing relatively well. In particular, zero-emission vehicle registrations are growing fast in France. The electrification of the railway network is close to the EU average.

Graph A5.4: **Share of zero emissions vehicles (% of new registrations)**



(1) Zero emission vehicles (passenger cars) include battery and fuel cell electric vehicles (BEV, FCEV).
Source: European Alternative Fuels Observatory

Table A5.1:**Indicators underpinning progress in the European Green Deal from a macroeconomic prospective**

						Target	Distance		'Fit for 55' Target	'Fit for 55' Distance	
			2005	2019	2020	2030	WEM	WAM	2030	WEM	WAM
Progress to policy targets	Non-ETS GHG emission reduction target [1]	MTCO2 eq; %; pp [2]	401.1	-16%	-22%	-37%	-7	-7	-48%	-17	-17

			2005	2016	2017	2018	2019	2020	National contribution to 2030 EU target
Progress to policy targets	Share of energy from renewable sources in gross final consumption of energy [1]	%	9%	15%	16%	16%	17%	19%	33%
	Energy efficiency: primary energy consumption [1]	Mtoe	261.0	240.0	239.3	238.7	235.2	208.4	202.2
	Energy efficiency: final energy consumption [1]	Mtoe	160.1	150.3	149.3	146.8	145.4	130.1	120.9

			FRANCE						EU		
			2015	2016	2017	2018	2019	2020	2018	2019	2020
Fiscal and financial indicators	Environmental taxes (% of GDP)	% of GDP	2.2	2.2	2.3	2.4	2.3	2.2	2.4	2.4	2.2
	Environmental taxes (% of total taxation)	% of taxation [3]	4.7	4.9	5.0	5.1	5.1	4.8	6.0	5.9	5.6
	Government expenditure on environmental protection	% of total exp.	1.77	1.67	1.65	1.73	1.80	1.70	1.66	1.70	1.61
	Investment in environmental protection	% of GDP [4]	0.43	0.42	0.43	0.44	-	-	0.42	0.38	0.41
	Fossil fuel subsidies	EUR 2020bn	8.32	8.37	8.89	11.07	11.54	-	56.87	55.70	-
	Climate protection gap [5]	score 1-4	0.5 out of 4 (decrease from historical level of 1.3). This is a low risk category (4 being a high risk).								
Climate	Net GHG emissions	1990 = 100	84	84	87	84	82	73	79	76	69
	GHG emissions intensity of the economy	kg/EUR'10	0.22	0.22	0.22	0.21	0.20	0.20	0.32	0.31	0.30
	Energy intensity of the economy	kgoe/EUR'10	0.12	0.12	0.12	0.11	0.11	0.11	0.12	0.11	0.11
Energy	Final energy consumption (FEC)	2015=100	100.0	101.3	100.6	98.9	98.0	87.7	103.5	102.9	94.6
	FEC in residential building sector	2015=100	100.0	104.8	103.0	99.6	99.3	97.0	101.9	101.3	101.3
	FEC in services building sector	2015=100	100.0	100.6	102.1	100.2	98.3	91.3	102.4	100.1	94.4
Pollution	Smog-precursor emission intensity (to GDP) [4]	tonne/EUR'10 [6]	0.63	0.60	0.57	0.54	0.51	-	0.99	0.93	-
	Years of life lost caused due to air pollution by PM2.5	per 100.000 inh.	624	543	578	659	544	-	863	762	-
	Years of life lost due to air pollution by NO2	per 100.000 inh.	169	122	130	119	91	-	120	99	-
	Nitrate in ground water	mg NO3/litre	18.2	18.1	18.0	19.9	18.2	-	21.7	20.7	-
Biodiversity	Terrestrial protected areas	% of total	-	17.5	22.0	-	26.9	26.9	-	25.7	25.7
	Marine protected areas	% of total	-	15.0	-	-	37.7	-	-	10.7	-
	Organic farming	% of total utilised agricultural area	4.5	5.3	6.0	7.0	7.7	8.7	8.0	8.5	9.1

			2000-2006	2006-2012	2012-2018	00-06	06-12	12-18
Biodiversity	Net land take	per 10,000 km2	14.9	15.0	7.7	13.0	11.0	5.0

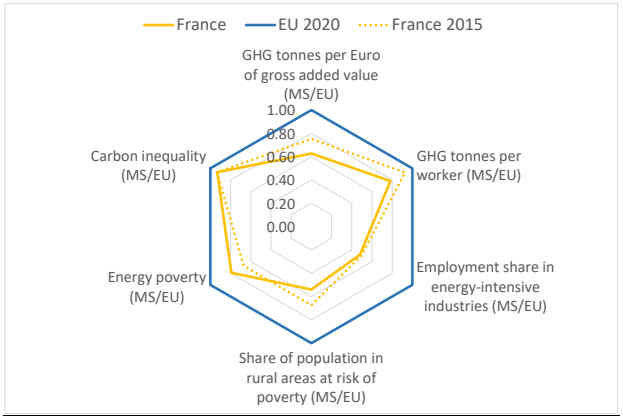
			2015	2016	2017	2018	2019	2020	2018	2019	2020
Mobility	GHG emissions intensity of transport (to GVA) [7]	kg/EUR'10	0.60	0.57	0.56	0.57	0.55	0.53	0.89	0.87	0.83
	Share of zero emission vehicles [8]	% in new registrations	0.9	1.1	1.2	1.4	1.9	6.7	1.0	1.9	5.4
	Number of plug-in electric vehicles per charging point		8	8	7	9	11	18	8	8	12
	Share of electrified railways	%	55.5	56.8	57.1	58.2	58.5	-	55.6	56.0	-
	Congestion (average number of hours spent in road congestion per year by a representative commuting driver)		29.3	29.9	30.1	30.1	30.8	-	28.9	28.8	-

			Year	FR	EU
Digital	Share of smart meters in total metering points [9] - electricity	% of total	2018	22.2	35.8
	Share of smart meters in total metering points [9] - gas	% of total	2018	7.5	13.1
	ICT used for environmental sustainability [10]	%	2021	54.6	65.9

(1) The 2030 non-ETS GHG target is based on the Effort Sharing Regulation. The FF55 targets are based on the COM proposal to increase EU's climate ambition by 2030. Renewables and Energy Efficiency targets and national contributions under the Governance Regulation (Regulation (EU) 2018/1999). (2) Distance to target is the gap between Member States' 2030 target under the Effort Sharing Regulation and projected emissions, with existing measures (WEM) and with additional measures (WAM) respectively, as a percentage of 2005 base year emissions. (3) Percentage of total revenues from taxes and social contributions (excluding imputed social contributions). Revenues from the ETS are included in environmental tax revenues (in 2017 they amounted to 1.5% of total environmental tax revenues at the EU level). (4) Covers expenditure on gross fixed capital formation to be used for the production of environmental protection services (i.e. abatement and prevention of pollution) covering all sectors, i.e. government, industry and specialised providers. (5) The climate protection gap indicator is part of the European adaptation strategy (February 2021), and is defined as the share of non-insured economic losses caused by climate-related disasters.
(6) Sulphur oxides (SO2 equivalent), Ammonia, Particulates < 10µm, Nitrogen oxides in total economy (divided by GDP).
(7) Transportation and storage (NACE Section H). (8) Zero emission vehicles include battery electric vehicles (BEV) and fuel cell electric vehicles (FCEV). (9) European Commission Report (2019) 'Benchmarking smart metering deployment in the EU-28'.
(10) European Commission (2021). Each year the DESI is re-calculated for all countries for previous years to reflect any possible change in the choice of indicators and corrections to the underlying data. Country scores and rankings may thus differ compared with previous publications.
Source: Eurostat, European Commission, EEA, EAFO

The green transition not only encompasses improvements to environmental sustainability, but also includes a significant social dimension. While measures here include the opportunity for sustainable growth and job creation, it must also be ensured that no one is left behind and all groups in society benefit from the transition. France benefits from a relatively large share of its economy contributing to the green transition, positive trends and recent promising policy measures; at the same time, energy-intensive sectors are sizeable and lower-income groups are likely to face challenges.

Graph A6.1: **Fair green transition challenges**



Source: Eurostat, World Inequality Database

France's recovery and resilience plan (RRP) puts a significant focus on the green transition and its fairness. It covers the energy renovation of public and private buildings, including social housing, investments in green infrastructures and sustainable mobility, and in research and development linked to green technologies. The Climate and Resilience law gives responsibility to skills operators (who are the key players in access to training for workers) to analyse and identify skills needs relating to the green transition. In synergy with the RRP, the European Social Fund+ will support the development of green skills in France, and the Just Transition Fund (EUR 1.03 billion, current prices) will help mitigate the social impact of the transition in the most impacted French regions. The integrated national energy and climate plan (NECP) of March 2020 analyses the impacts on energy poverty and skills, although it could be developed further in this regard. The report describes measures to support households experiencing energy poverty and to invest in the upskilling and re-skilling of the population, but it does not include a quantitative objective for the reduction of energy poverty.

The economy has slightly reduced its carbon footprint. While key energy-intensive sectors remain sizeable, the green economy is relatively large and provides a strong potential for quality job creation. The greenhouse gas emissions intensity of the French economy decreased slightly between 2015 and 2020 (in terms of gross value added) and stands 30% below the EU average, with the average carbon footprint per worker at 10.65 tonnes of greenhouse gas emissions (against 13.61 in the EU) (see Graph A6.1). Several declining sectors have been identified essentially due to labour shortage and supply chain difficulties according to INSEE ([39]), such as manufacturing, construction and food related services ([40]). France's energy-intensive industry (EII), including energy, chemicals and steel ([41]), provides jobs for almost 1 million workers, for whom upskilling and re-skilling is particularly important (see Annex 15). The environmental goods and services sector already provides jobs to a relatively large share of the employed population (2.1% versus 2.2% in the EU) ([42]), and wind and solar energy potential as well as energy efficiency improvements offer further opportunities for green jobs ([43]).

As for the social dimension of the green transition, ensuring access to essential transport and energy services remains a challenge for France, but to a lesser extent than in other EU countries. A relatively low and stable share of the rural population is at risk of poverty (10.1% vs 18.7% in the EU) ([44]). While still

([39]) Institut National de la statistique et des études économiques, *Economic Outlook* , 2022. https://www.insee.fr/en/statistiques/6050487

([40]) SWD(2021) 275 final.

([41]) European Commission, European Semester: Overview of Investment Guidance on the Just Transition Fund 2021-2027 per Member State (Annex D).

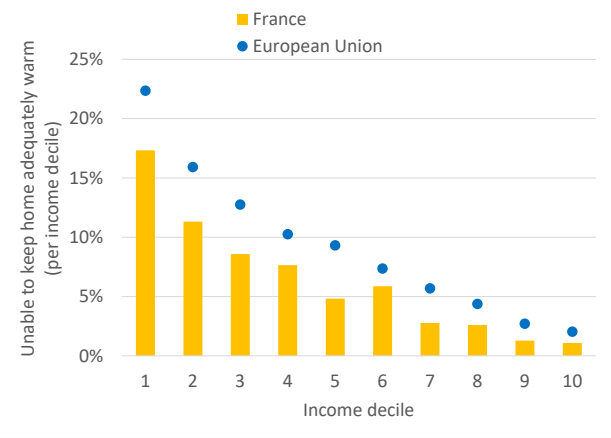
([42]) There is currently no common EU-wide definition of green jobs. The environmental goods and services sector (EGSS) accounts only report on an economic sector that generates environmental products, i.e. goods and services produced for environmental protection or resource management.

([43]) Asikainen, T., Bitat, A., Bol, E., Czako, V., Marmier, A., Muench, S., Murauskaite-Bull, I., Scapolo, F. and Stoermer, E., *The future of jobs is green*, EUR 30867 EN, Publications Office of the European Union, Luxembourg, 2021

([44]) As a proxy for potential transport challenges in the context of the green transition (see COM(2021) 568 final).

below the EU average (at 8.2%), the share of the population unable to heat their homes sufficiently increased from 5.6% in 2015 to 6.5% in 2020. Lower-income groups are affected the most (see Graph A6.2). Consumption patterns vary across the population: the average carbon footprint of the top 10% of emitters is about 5 times higher than that of the bottom 50% of the population (5.3 times in the EU). The RRP provides support measures for the renovation of private houses (with a bonus for the poorest and middle-income households) and social housing to improve energy savings.

Graph A6.2: **Energy poverty by income decile**



Source: Eurostat

Tax systems are key to ensuring a fair transition towards climate neutrality ([45]). France's revenues from total environmental taxes increased slightly from 2.16% of GDP in 2015 to 2.31% in 2019, but declined to 2.18% in 2020 (against 2.24% in the EU). In parallel, the labour tax wedge for low-income earners ([46]) decreased significantly from 31.4% to 21.7% from 2015 to 2019 and to 20.1% in 2021, compared to 31.9% in the EU (see Annex 18). Redistributive measures accompanying environmental taxation can have the potential to foster progressivity and to have a positive impact on the disposable income of households in the lowest segments of the income distribution ([47]).

([45]) COM(2021) 801 final.

([46]) Tax wedge for a single earner at 50% of the national average wage (Tax and benefits database, European Commission/OECD).

([47]) SWD(2021) 641 final PART 3/3, on distributional effects of energy taxation revision, based on the European Commission Joint Research Centre GEM-E3 and Euromod models.

ANNEX 7: RESSOURCE EFFICIENCY AND PRODUCTIVITY

The efficient use of resources is key to ensuring competitiveness and open strategic autonomy, while minimising the environmental impact. The green transition presents a major opportunity for European industry by creating markets for clean technologies and products. It will have an impact across the entire value chains in sectors such as energy and transport, construction and renovation, food and electronics, helping create sustainable, local and well-paid jobs across Europe.

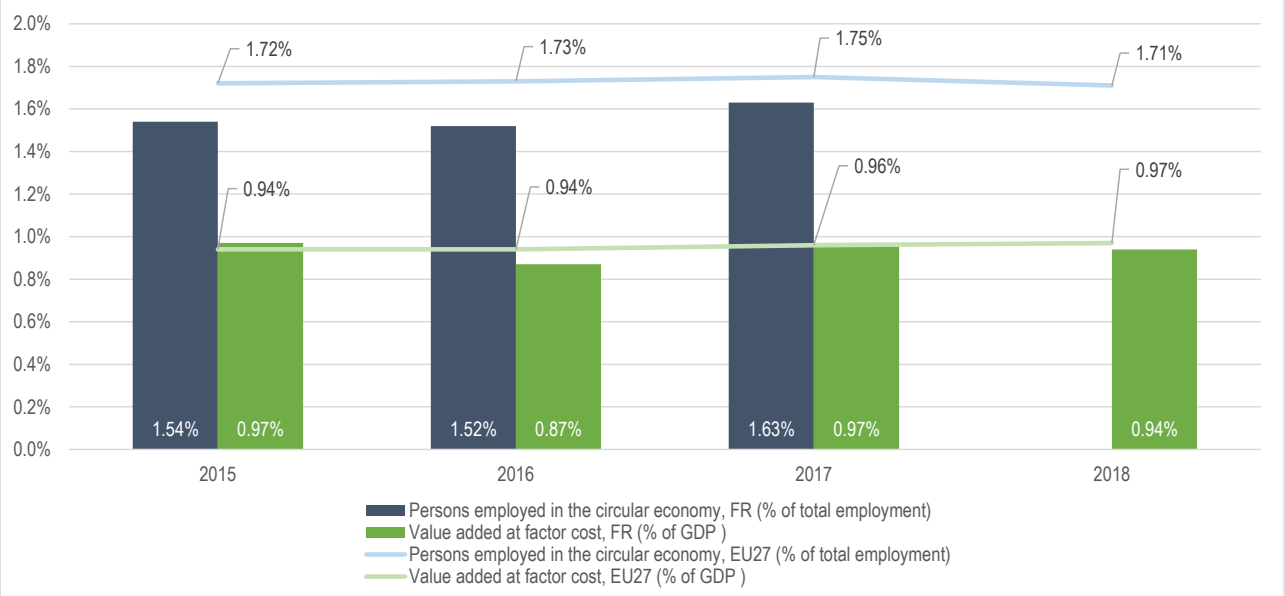
France has made some progress in circular (secondary) material usage. The circular material use rate has increased since 2016 and showed fast improvement when compared to the EU average. The French recovery and resilience plan includes investments and reforms supporting recycling, reuse, repair and better waste management, with notably the publication of decrees to implement the law on the circular economy (e.g. the extension of the producer responsibility scheme).

Resource productivity in France has remained well above the EU average since 2010 and has shown an upward trend since 2017. Resource productivity expresses how efficiently the economy uses material resources to produce wealth (Table A7.1). Improving resource productivity can help to minimise negative impacts on the environment and reduce dependency on volatile raw material markets. The variable 'Material Intensity' shows how many additional kilograms of material consumption would be associated with an increase in GDP, at the current resource productivity rates. France performs better than the EU average.

France's economic growth is not yet decoupled from the generation of waste. After seeing a downward trend, municipal waste generation per capita has started to increase in recent years. The recent increase shown from 2016 can be attributed to an increase in the population and in household expenditures. France has made some progress since 2015 on increasing its recycling rate to 42.2% and diverting municipal waste from landfilling.

A successful transition to a circular economy requires social and technological innovation as the full potential of circular economy can only be reached when implemented across all value chains. Therefore, eco-innovation is an important enabling factor for the circular economy. Product design approaches and new business models can help to produce systemic circularity innovations, creating new business opportunities. France ranked 7th among EU countries in the Eco-Innovation Scoreboard of 2021, with a total score of 127 out of a maximum of 200, and it performs as an eco-innovation leader. France performs above the EU average for eco-innovation inputs, activities and

Graph A7.1: **Employment and value added in the circular economy sectors**



Source: European Commission

Table A7.1:**Selected resource efficiency indicators**

Key indicators - France

SUB-POLICY AREA	2015	2016	2017	2018	2019	2020	EU27
Circularity							
Resource Productivity (Purchasing power standard (PPS) per kilogram)	2.6	2.7	2.6	2.8	2.9	3.0	2.2
Material Intensity (kg/EUR)	0.4	0.4	0.4	0.4	0.3	0.3	0.4
Circular Material Use Rate (%)	18.7	19.4	18.8	19.7	20.0	22.2	12.8
Material footprint (Tones/capita)	12.8	12.6	14.0	13.9	13.7	-	14.6
Waste							
Waste generation (kg/capita, total waste)	-	4836	-	5116	-	-	5234
Landfilling (% of total waste treated)	-	27.3	-	26.8	-	-	38.5
Recycling rate (% of municipal waste)	40.7	42.9	44.1	45.1	43.9	42.2	47.8
Hazardous waste (% of municipal waste)	-	3.4	-	3.5	-	-	4.3
Competitiveness							
Gross value added in environmental goods and services sector (% of GDP)	1.7	1.7	1.8	1.9	1.8	-	2.3
Private investment in circular economy (% of GDP)	0.1	-	-	-	-	-	0.1

Source: Eurostat

resource efficiency outcomes, and below the EU average for eco-innovation outputs and socio-economic outcomes.

The Digital Economy and Society Index (DESI) monitors EU Member States' digital progress. The areas of human capital, digital connectivity, the integration of digital technologies by businesses and digital public services reflect the Digital Decade's four cardinal points ([48]). This Annex describes France's DESI performance. The French RRP will contribute to the digital transition for 21% of France's total allocation under the RRF ([49]). The RRP measures are complemented by national ones as part of the France Relance plan and France 2030. Significant resources are devoted to supporting the digitalisation of the health sector, improving the sharing of medical records and setting up a digital health platform, as well as developing and deploying key digital technologies such as cybersecurity, quantum and cloud.

France is in line with the EU average in terms of digital skills, but it is still far from the EU frontrunners. It ranks above the EU average for basic digital skills and at EU average for ICT specialists. However, severe skills shortages persist for specific profiles (engineers and technicians in ICT), with an estimated demand for 170 000 to 212 000 jobs in digital areas in 2022 ([50]).

France has improved its performance in terms of connectivity, but the urban-rural divide persists. Fixed very high capacity network (VHCN) coverage increased strongly by 10 pps from 2020 to 2021, reaching 63%. Fast broadband networks (NGA) coverage grew by 5 pps over the same period to reach 74%. However, both values are still below the EU average and the coverage in rural areas remains low, with a coverage of fibre to the premises at 28.8% against an EU average of 33.8%.

Overall, French enterprises have increased their use of digital technologies in business operations, but SMEs are lagging behind. The RRP has earmarked EUR 385 million to help finance companies' digitalisation strategies between now and 2022. This includes an additional allocation to 'France Num' and a plan to help retailers digitalise their operations. In 2020, 22% of enterprises used big data against an EU average of 14%, and 45% used electronic information sharing. But the share of small and medium-sized enterprises (SMEs) with at least basic digital intensity levels is below the EU average. In particular, only 12% of French SMEs are selling online, against an EU average of 18%. Public investments – including RRF funds – are earmarked for the acceleration of the deployment of fibre to achieve coverage in rural and remote areas by 2025.

France performs relatively well in the digital public service dimension, in particular for open data. France's performance for digital public services for citizens is slightly below the EU average, while its score for open data almost reaches the maximum. However, France is not performing well in the number of pre-filled forms, as the score is significantly lower than the EU average (47 and 64 respectively).

([48]) 2030 Digital Compass: the European Way for the Digital Decade Communication, COM (2021) 118 final

([49]) The share of financial allocation contributing to digital objectives has been calculated using Annex VII of the RRF Regulation.

([50]) France Stratégie, Les métiers en 2022 – résultats et enseignements, 2014

Table A8.1:**Key Digital Economy and Society Index indicators**

Human capital	France DESI 2020	France DESI 2021	France DESI 2022	EU DESI 2022	EU top-performance DESI 2022
At least basic digital skills	**NA**	**NA**	**62%**	**54%**	**79%**
% individuals			2021	2021	2021
ICT specialists	**4.2%**	**4.5%**	**4.5%**	**4.5%**	**8.0%**
% individuals in employment aged 15-74	2019	2020	2021	2021	2021
Female ICT specialists	**20%**	**20%**	**21%**	**19%**	**28%**
% ICT specialists	2019	2020	2021	2021	2021
Connectivity					
Fixed Very High Capacity Network (VHCN) coverage	**44%**	**53%**	**63%**	**70%**	**100%**
% households	2019	2020	2021	2021	2021
5G coverage (*)	**NA**	**0%**	**74%**	**66%**	**99.7%**
% populated areas		2020	2021	2021	2021
Integration of digital technology					
SMEs with at least a basic level of digital intensity	**NA**	**NA**	**47%**	**55%**	**86%**
% SMEs			2021	2021	2021
Big data	**16%**	**22%**	**22%**	**14%**	**31%**
% enterprises	2018	2020	2020	2020	2020
Cloud	**NA**	**NA**	**25%**	**34%**	**69%**
% enterprises			2021	2021	2021
Artificial Intelligence	**NA**	**NA**	**7%**	**8%**	**24%**
% enterprises			2021	2021	2021
Digital public services					
Digital public services for citizens	**NA**	**NA**	**69**	**75**	**100**
Score (0 to 100)			2021	2021	2021
Digital public services for businesses	**NA**	**NA**	**80**	**82**	**100**
Score (0 to 100)			2021	2021	2021

(*) The 5G coverage indicator does not measure users' experience, which may be affected by a variety of factors such as the type of device used, environmental conditions, number of concurrent users and network capacity. 5G coverage refers to the percentage of populated areas as reported by operators and national regulatory authorities.
Source: European Commission

This Annex provides a general overview of the performance of France's research and innovation system. France is a strong innovation performer according to the 2021 European Innovation Scoreboard ([51]) but still has to reduce its gap with the EU innovation leaders. Total research and development (R&D) intensity reached 2.35% in 2020, still below the target of 3% initially set for 2020 and with no clear upward trend.

Over the last decade, France has not been able to raise the performance of its public research system and the low degree of science-business cooperation remains a challenge. Between 2009 and 2019, there was a slight but steady decline in public R&D intensity (0.71% in 2019 compared to 0.82% in 2009), which appears to have been accompanied by a small decrease in scientific performance. Notably, the share of the country's scientific publications among the top 10% most cited scientific publications worldwide has been on a slightly declining trend since 2013 (9.0% in 2018, below the EU average of 9.9%, compared to 10.3% in 2013). Moreover, the share of public-private co-publications has not significantly increased over the last decade and France continues to score below the EU average for public R&D financed by businesses, which reflects a relatively low propensity of businesses to cooperate and contract with public research labs. To tackle these key challenges, France has introduced in its recovery and resilience plan a wide-ranging reform, the multiannual programming law on research (2021-2030), aimed at gradually increasing public research and innovation (R&I) funding and promoting science-business linkages. The plan contains several other measures aimed at boosting investment and employment in research and innovation. In particular, EUR 4.25 billion is allocated to the investments for the future programme ('Programme d'Investissement d'Avenir') to invest in key green and digital technologies and in teaching, research and innovation ecosystems.

Despite a very high level of public support for business innovation (the highest in the EU), including the most generous R&D tax incentive scheme in the EU, France's business R&D intensity is stagnating. So far the large amount of public support seems to have had a limited impact on innovation output, as reflected for example by France's patenting activity, which has slightly declined over the last decade, and on fostering employment in fast-growing enterprises in the most innovative sectors. The extensive evaluation process of the *Crédit Impôt Recherche* conducted by the National Commission for the Evaluation of Innovation Policies (CNEPI) led to the conclusion that, while the scheme had positive effects for SMEs (both in terms of R&D activity and economic performance), it did not have a significant effect on larger firms.

([51]) 2021 European Innovation Scoreboard, Country profile: France https://ec.europa.eu/docsroom/documents/45914/attachments/1/translations/en/renditions/native

Table A9.1:**Key research, development and innovation indicators**

France	2010	2015	2018	2019	2020	Compound annual growth 2010-20	EU average
Key indicators							
R&D Intensity (GERD as % of GDP)	2.18	2.23	2.2	2.19	*2.35*	0.8	*2.32*
Public expenditure on R&D as % of GDP	0.78	0.75	0.72	0.71	*0.76*	-0.3	*0.78*
Business enterprise expenditure on R&D (BERD) as % of GDP	1.38	1.44	1.44	1.44	*1.56*	1.3	*1.53*
Quality of the R&I system							
Scientific publications of the country within the top 10% most cited publications worldwide as % of total publications of the country	10.1	9.7	9	:	:	-1.4	9.9
PCT patent applications per billion GDP (in PPS)	4	4.2	3.7	:	:	-0,7	3.5
Academia-business cooperation							
Public-private scientific co-publications as % of total publications	8.3	9.3	9.8	9.7	9.1	0.8	9.05
Public expenditure on R&D financed by business enterprise (national) as % of GDP	0.034	:	0.034	0.032	:	-0.7	0.054
Human capital and skills availability							
New graduates in science & engineering per thousand pop. aged 25-34	:	20.9	21.9	22.6	:	1.7	16.3
Public support for business enterprise expenditure on R&D (BERD)							
Total public sector support for BERD as % of GDP	0.421	:	0.406	0.408	:	-0.3	0.196
R&D tax incentives: foregone revenues as % of GDP	0.274	0.282	0.287	0.284	:	0.4	0.1
Green innovation							
Share of environment-related patents in total patent applications filed under PCT (%)	14.6	14.3	13.5	:	:	-1.0	12.8
Finance for innovation and Economic renewal							
Venture Capital (market statistics) as % of	0.03	0.03	0.05	0.07	0.08	10.1	0.054
Employment in fast-growing enterprises in 50% most innovative sectors	5.1	4.1	4.2	4.1	:	-2.3	5.5

Source: European Commission

Productivity growth is a critical driver of economic prosperity, well-being and convergence over the long run. A major source of productivity for the EU economy is a well-functioning single market, where fair and effective competition and a business friendly environment are ensured, in which small and medium enterprises (SMEs) can operate and innovate without difficulty. Businesses and industry rely heavily on robust supply chains and are facing bottlenecks that bear a negative impact on firms' productivity levels, employment, turnover and entry/exit rates. This may impact the Member States' capacity to deliver on Europe's green and digital transformation.

France's labour productivity is high (see Annex 19), but it is growing more slowly than the EU average. Several weaknesses of the French economy harm productivity growth, in particular the insufficient digitalisation of French SMEs (see Annex 8), skills shortages and skills mismatches (see Annex 13) and a stagnating business R&D intensity in the past years (see Annex 9). The decline in economic activity and labour productivity due to the COVID-19 crisis and the restrictions imposed in 2020 and 2021 is expected to be temporary, provided the main growth drivers, such as R&D expenditure, are safeguarded ([52]). The French recovery and resilience plan (RRP) includes large investments and some reforms supporting the development of skills, innovation and digitalisation, which will boost productivity. France is a leading country in terms of intangible investment intensity (investment over value added). This is particularly true for the manufacturing sector and for information and communication services. The combination of high intangible investment intensity and slow productivity growth suggests that there is potential to increase the productive efficiency of investments into intangible assets, such as software and R&D, in France ([53]).

The business environment could be improved in certain areas. To reduce regulatory barriers and administrative burden, France has adopted several reforms, including in its RRP. Nevertheless, some weaknesses remain. For instance, France has lengthy insolvency procedures. ([54]) Permit application procedures are often long and may hamper investment. While public procurement is very important for SMEs, they are less likely to be chosen as a contractor in France than in other Member States ([55]). Access to loans is easier in France than in the rest of the EU, and access to equity capital, if more difficult, has significantly improved. The number of venture capital deals very slightly decreased in 2021 compared to 2018-2020, though the amount per deal has increased by roughly 50% ([56]).

Barriers to competition in services harm France's integration into the single market. Several professions (accountants/tax advisers, architects, real estate agents and patent agents) face higher regulatory restrictions than the EU average ([57]). In retail, France had the highest level of operations restrictions in the EU in 2018 while being around the EU average for establishment restrictions ([58]). Since then, France has adopted new laws that have added restrictions on retail's operations and establishment ([59]). Regulatory barriers in services in France have led to low competition and high profit margins and prices, harming the competitiveness of the whole economy. The RRP does not address these barriers.

The French economy has been affected by global supply chain disruptions, although to a slightly lower extent than other EU Member States. According to a survey carried out by the European Commission, 23% of firms were facing material shortages in 2021, slightly below the EU average (26%) but a sharp increase compared to 2017 (+7 pps). The supply chain disruptions have particularly affected some industries like the automotive industry.

([52]) National Productivity Board, Les effets de la crise Covid-19 sur la productivité et la compétitivité, 2021

([53]) European Commission, *JRC Country Factsheet on Productivity – France*, internal communication, 2022.

([54]) OECD, Les études économiques de l'OCDE – France, 2021.

([55]) In 2020, 42% of contractors were SMEs in France, against 63% in the EU.

([56]) Amaral-Garcia, S., Compano, R., Domnick, C., Fako, P., Gavigan J and Testa, G., *High Growth Enterprises Demographics & Finance with a focus on venture capital: Factsheet – France*, European Commission, Joint Research Centre, JRC128693, 2022.

([57]) 2021 updated Commission's restrictiveness indicator for regulated professions

([58]) 2018 Commission's retail restrictiveness indicator

([59]) PACTE (Plan d'Action pour la Croissance et la Transformation des Entreprises), ELAN (Evolution du logement, de l'aménagement et du numérique) and EGalim (Etats généraux d'alimentation Etats généraux d'alimentation) laws.

Table A10.1:**Key Single Market and Industry Indicators**

POLICY AREA	INDICATOR NAME	DESCRIPTION	2021	2020	2019	2018	2017	Growth rates	EU27 average*
HEADLINE INDICATORS									
Economic structure	Value added by source (domestic)	VA that depends on domestic intermediate inputs, % [source: OECD (TiVA), 2018]				64.83			**62.6%**
	Value added by source (EU)	VA imported from the rest of the EU, % [source: OECD (TiVA), 2018]				22.74			**19.7%**
	Value added by source (extra-EU)	% VA imported from the rest of the world, % [source: OECD (TiVA), 2018]				12.4			**17.6%**
Cost competitiveness	Producer energy price (industry)	Index (2015=100) [source: Eurostat, sts_inppd_a]	122.6	95.2	102.8	101.7	94.8	**29.3%**	**127.3**
RESILIENCE									
Shortages/supply chain disruptions	Material Shortage using survey data	Average (across sectors) of firms facing constraints, % [source: ECFIN CBS]	15	9	5	8	11	**36%**	**26%**
	Labour Shortage using survey data	Average (across sectors) of firms facing constraints, % [source: ECFIN CBS]	19	15	34	30	25	**-24%**	**14%**
	Sectoral producer prices	Average (across sectors), 2021 compared to 2020 and 2019, index [source:Eurostat]						**2.4%**	**5.4%**
Strategic dependencies	Concentration in selected raw materials	Import concentration a basket of critical raw materials, index [source: COMEXT]	0.14	0.15	0.13	0.12	0.13	**8%**	**17%**
	Installed renewables electricity capacity	Share of renewable electricity to total capacity, % [source:Eurostat, nrg_inf_epc]		69.30	64.60	59.10	58.80	**18%**	**47.8%**
Investment dynamics	Net Private investments	Change in private capital stock, net of depreciation, % GDP [source: Ameco]		1.6	3.9	4	4.2	**-61.9%**	**2.6%**
	Net Public investments	Change in public capital stock, net of depreciation, % GDP [source: Ameco]		1.8	1.1	0.2	-0.6	**-400%**	**0.4%**

(Continued on the next page)

Table (continued)

SINGLE MARKET									
Single Market integration	Intra-EU trade	Ratio of Intra-EU trade to Extra-EU trade, index [source: Ameco]	3.05	2.74	2.84	2.65	2.45	**24%**	**1.59**
Professional services restrictiveness	Regulatory restrictiveness indicator	Restrictiveness of access to and exercise of regulated professions (professions with above median restrictiveness, out of the 7 professions analysed in SWD (2021)185 [source: SWD (2021)185; SWD(2016)436 final])	6				6	**0%**	**3.37**
Professional qualifications recognition	Recognition decisions w/o compensation	Professionals qualified in another EU MS applying to host MS, % over total decisions taken by host MS [source: Regulated professions database]	57						**45%**
Compliance - cooperation EC and MS	Transposition - overall	5 sub-indicators, sum of scores [source: Single Market Scoreboard]		Below average	Above average	Above average	Below average		
	Infringements - overall	4 sub-indicators, sum of scores [source: Single Market Scoreboard]		Above	On average	On average	On average		
Investment protection	Confidence in investment protection	Companies confident that their investment is protected by the law and courts of MS if something goes wrong, % of all firms surveyed [source: Flash Eurobarometer 504]	49						**56%**
BUSINESS ENVIRONMENT - SMEs									
Business demography	Bankruptcies	Index (2015=100) [source: Eurostat, sts_rb_a]	n.a.	n.a.	n.a.	n.a.	n.a.	**n.a.**	**70.1**
	Business registrations	Index (2015=100) [source: Eurostat, sts_rb_a]		110.4	151.2	140.6	125	**-11.7%**	**105.6**
Access to finance	Late payments	Share of SMEs experiencing late payments in past 6 months, % [source: SAFE]	48	50.7	50.2	n.a.	n.a.	**-4%**	**45%**
	EIF Access to finance index - Loan	Composite: SME external financing over last 6 months, index from 0 to 1 (the higher the better) [source: EIF SME Access to Finance Index]		0.65	0.71	0.54	0.28	**130.6%**	**0.56**
	EIF Access to finance index - Equity	Composite: VC/GDP, IPO/GDP, SMEs using equity, index from 0 to 1 (the higher the better) [source: EIF SME Access to Finance Index]		0.06	0.09	0.08	0.05	**19.4%**	**0.18**
	% of rejected or refused loans	SMEs whose bank loans' applications were refused or rejected, % [source: SAFE]	2.7	9.9	6.3	5	0	**n.a.**	**12.4%**
Public procurement	SME contractors	Contractors which are SMEs, % of total [source: Single Market Scoreboard]	51	51	47	48	48	**6.3%**	**63%**
	SME bids	Bids from SMEs, % of total [source: Single Market Scoreboard]	41	41	37	50	53	**-23%**	**70.8%**

Source: See above in the table the respective source for each indicator in the column "description"

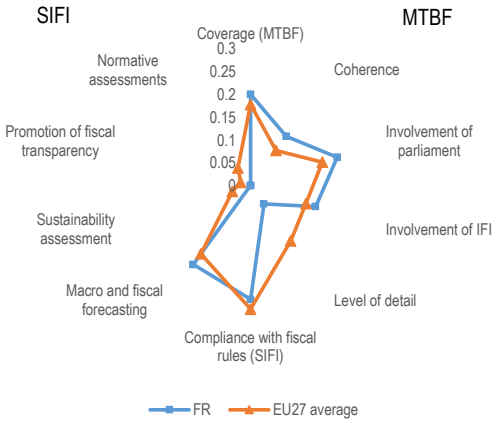
Good administrative capacity enables economic prosperity, social progress and fairness. Public administrations at all government levels deliver crisis response, ensure the provision of public services and contribute to building resilience for the sustainable development of the EU economy.

Overall, public administration in France is among the more effective in the EU ([60]). Its strong coordination capacity and its systemic use of evidence-based instruments helps to improve the quality of public policies. The share of e-government users in France is well beyond the EU average (87.0% vs 70.8%). France's performance in public procurement is also satisfactory ([61]). Perception-based surveys find, however, that regulatory obstacles and administrative burden are one of the three areas that pose the biggest problems for their business (69% versus an EU average of 55%) ([62]).

The French recovery and resilience plan aims to further modernise the public sector. It includes measures for green budgeting and for the acceleration and simplification of administrative procedures. Planned reforms aim to strengthen the decentralisation and transfer of competences to the local authorities, with the aim of ensuring that each territory is able to provide responses tailored to its specific features, using appropriate tools and resources.

Gender equality for civil servants is an issue, particularly among senior civil servants. Cross-cutting reforms of the public service (including the senior civil service) under the recovery and resilience plan are expected to contribute to stronger social cohesion, through revised recruitment procedures and the reinforcement of equal treatment and opportunities, including gender equality.

Graph A11.1: **Scope Index of Independent Fiscal Institutions (SIFI) and Medium-Term Budgetary Framework (MTBF) indices**



Source: European Commission, data from 2020

The justice system faces resources and efficiency challenges. The estimated time needed to resolve civil and commercial cases has been increasing significantly over recent years at all levels, in particular at first and last instances. The quality of the justice system is good overall, although digital tools are only used in some courts. As regards judicial independence, no systemic deficiencies have been reported. ([63])

Selected indicators point to room for improvement in France's fiscal framework. The scope of activities of its independent fiscal institution is narrower than that of the average EU country (this observation was made before the entry into force of the public finance governance measures included in the RRP). While France records slightly above average results on the Commission´s Medium-term budgetary framework (MTBF) index, there is room for improvement in the level of detail of the medium term plans (Graph A11.1).

([60]) Worldwide Governance Indicators, 2020.

([61]) European Commission: Single market scoreboard- public procurement.

([62]) Flash Eurobarometer 486, France, February-April 2020

([63]) For more detailed analysis of the performance of the justice system in France, see the 2022 EU Justice Scoreboard (forthcoming) and the country chapter for France of the Commission's 2022 Rule of Law Report (forthcoming).

Table A11.1:**Public administration indicators - France**

FR	Indicator (1)	2017	2018	2019	2020	2021	EU27
E-government							
1	Share of individuals who used internet within the last year to interact with public authorities (%)	77.0	79.0	82.0	na	87.0	70.8
2	2021 e-government benchmark 's overall score (2)	na	na	na	na	69.7	70.9
Open government and independent fiscal institutions							
3	2021 open data maturity index	na	na	na	na	97.5	81.1
4	Scope Index of Fiscal Institutions	46.4	46.4	46.4	46.4	na	56.8
Educational attainment level, adult learning, gender parity and ageing							
5	Share of public administration employees with tertiary education, levels 5-8 (3)	39.7	40.0	41.1	42.2	45.1	55.3
6	Participation rate of public administration employees in adult learning (3)	25.0	24.7	26.2	16.1	14.7	18.6
7	Gender parity in senior civil service positions (4)	37.0	40.4	42.8	38.6	37.8	21.8
8	Share of public sector workers between 55 and 74 years (3)	22.7	21.9	23.5	22.1	23.2	21.3
Public Financial Management							
9	Medium term budgetary framework index	0.73	0.73	0.73	0.73	na	0.72
10	Strength of fiscal rules index	0.9	1.0	1.0	1.0	na	1.5
11	Public procurement composite indicator	3.0	3.3	3.0	6.7	na	-0.7
Evidence-based policy making							
12	Index of regulatory policy and governance practices in the areas of stakeholder engagement, Regulatory Impact Assessment (RIA) and ex post evaluation of legislation	1.88	na	na	1.89	na	1.7

(1) High values stand for good performance barring indicators # 7 and 8.
(2) Measures the user centricity (including for cross-border services) and transparency of digital public services as well as the existence of key enablers for the provision of those services.
(3) Break in the series in 2021.
(4) Defined as the absolute value of the difference between the share of men and women in senior civil service positions.
Source: ICT use survey, Eurostat (# 1); E-government benchmark report (# 2); Open data maturity report (# 3); Fiscal Governance Database (# 4, 9, 10); Labour Force Survey, Eurostat (# 5, 6, 8), European Institute for Gender Equality (# 7), Single Market Scoreboard public procurement composite indicator (# 11); OECD Indicators of Regulatory Policy and Governance (# 12).

ANNEX 12: EMPLOYMENT, SKILLS AND SOCIAL POLICY CHALLENGES IN LIGHT OF THE EUROPEAN PILLAR OF SOCIAL RIGHTS

The European Pillar of Social Rights provides the compass for upward convergence towards better working and living conditions in the EU. The implementation of its 20 principles on equal opportunities and access to the labour market, fair working conditions, social protection and inclusion, supported by the 2030 EU headline targets on employment, skills and poverty reduction, will strengthen the EU's drive towards a digital, green and fair transition. This Annex provides an overview of France's progress in achieving the goals under the European Pillar of Social Rights.

While labour market conditions have recently been improving, vulnerable groups continue to face difficulties in their integration into the labour market. Overall, France is performing well on the indicators of the social scoreboard. The employment rate of the overall population (20-64 years) returned to its pre-crisis level, close to the EU average (in Q4-2021, 73.6% vs 74% at EU level), and the gender employment gap in 2020 (6.2%) is below the EU average (10.8%). Despite these positive developments, significant challenges remain for some vulnerable groups. The employment rate of the low skilled has not yet returned to its pre-crisis level (52.3% in Q4-2021 vs 53.7% in Q4-2019) and the employment gap remains high for people with disabilities (22.8 pps in 2020) and people with a migrant background, in particular non-EU-born (20.2 pps in 2020).

Rising job vacancies in a context of skills shortages underline the need for targeted active labour market policies, reinforced access to upskilling and re-skilling opportunities and a better alignment of the initial education system with labour market needs. The policy measures already implemented to address existing skills mismatches, such as the revamped individual learning account and the skills investment plan, are not sufficient. Employers report the lack of skilled workers as the main barrier to recruitment

Table A12.1:**Social Scoreboard for France**

Social Scoreboard for FRANCE		
Equal opportunities and access to the labour market	Early leavers from education and training (% of population aged 18-24) (2021)	7.8
	Individuals' level of digital skills (% of population 16-74) (2021)	62.0
	Youth NEET (% of total population aged 15-29) (2021)	12.8
	Gender employment gap (percentage points) (2021)	6.2
	Income quintile ratio (S80/S20) (2020)	4.5
Dynamic labour markets and fair working conditions	Employment rate (% population aged 20-64) (2021)	73.2
	Unemployment rate (% population aged 15-74) (2021)	7.9
	Long term unemployment (% population aged 15-74) (2021)	2.3
	GDHI per capita growth (2008=100) (2020)	106.5
Social protection and inclusion	At risk of poverty or social exclusion (in %) (2020)	18.9
	At risk of poverty or social exclusion for children (in %) (2020)	22.6
	Impact of social transfers (other than pensions) on poverty reduction (% reduction of AROP) (2020)	46.9
	Disability employment gap (ratio) (2020)	22.8
	Housing cost overburden (% of population) (2020)	5.9
	Children aged less than 3 years in formal childcare (% of under 3-years-olds) (2020)	57.2
	Self-reported unmet need for medical care (% of population 16+) (2020)	2.6

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

(1) Update of 29 April 2022. 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 2022. Due to changes in the definition of the individuals' level of digital skills in 2021, exceptionally only levels are used in the assessment of this indicator; NEET: neither in employment nor in education and training; GDHI: gross disposable household income.
Source: European Commission

Tackling these challenges is key for France to contribute to reaching the 2030 EU headline target on employment. The recovery and resilience plan (RRP) includes a range of measures such as hiring subsidies for employers recruiting people with disabilities and young people under 26, and for apprenticeships and work-study contracts. In the period 2021-2027, the European Social Fund Plus (ESF+) will strongly support employment and skills, through access to training courses, career transitions, and promotion of lifelong learning.

Despite a relatively good performance with regard to early school leaving, tertiary education and adult participation in learning, France has strong inequalities in its

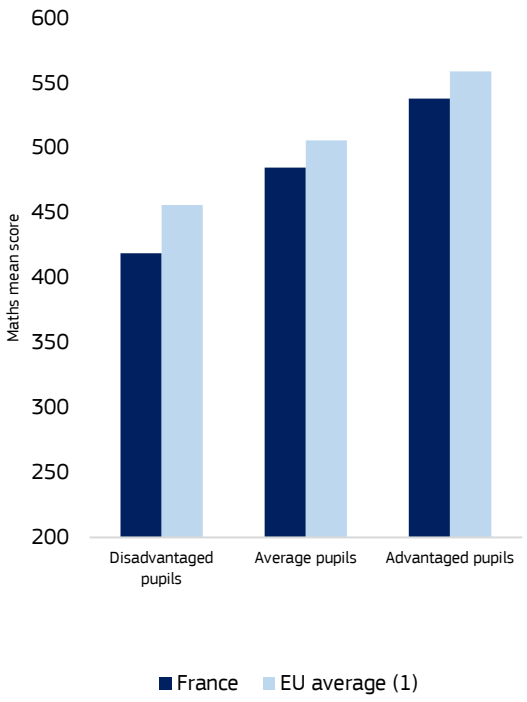
education system. The impact of socio-economic inequalities on educational outcomes in France is significant, with basic skills particularly lacking among vulnerable groups. According to the 2018 PISA report, around one fifth of 15-year-olds lacked basic skills in reading, mathematics or science, even though these shares are slightly below the EU average. France is the third worst performer in the EU in terms of the impact of socio-economic inequalities on outcomes in sciences. These inequalities are confirmed by the results of studies conducted annually by the French authorities. The lack of access to adequate training for teachers exacerbates the issue. According to TALIS 2018, only 50% of lower secondary education teachers in France participated in professional development in the form of courses or seminars attended in person (vs. 75.6% on average in the OECD). Compared to the OECD average, French teachers have one of the highest student/teacher ratios. The French early school leaving rate is below the EU average (7.8% versus 9.7% in 2020) with, however, strong regional and social disparities (see Annex 13). Equal access to education services for people with disabilities remains a challenge, calling for inclusion measures also in the context of a broader deinstitutionalisation process. Access to training for the low skilled remains comparatively lower (4.6% for ISCED 0-2 vs 14.9% for ISCED 3-8) although it is higher than the EU average and the impact of the adult learning measures already adopted should be monitored. Improving learning outcomes and equity in education and access to lifelong learning remains key for France, also to contribute to reaching the 2030 EU headline targets on skills and employment.

The situation of vulnerable groups on the labour market translates into a higher exposure to poverty risks, fuelled by the COVID-19 crisis. France performs relatively well with regard to the indicators of the Social Scoreboard, with notably a positive impact of social transfers on poverty reduction. However, some vulnerable groups, including non-EU born, low skilled, and low-work intensity households with dependent children, are significantly more exposed to poverty than the overall population. In 2020, the at-risk of poverty or social exclusion (AROPE) gap between people born in France and outside of the EU is of 24.1 pps in France vs 21.3 pps at EU level. Their employment gap in Q4-2021 is of 14.2 pps in France versus 9.8 pps at EU level. Against the background of a growing level of housing cost overburden, access to affordable and social housing is lacking. While the at-risk-of-poverty rate is expected to remain stable for the overall population, some indicators at national level, such as the number of applications to minimum income or the number of food aid beneficiaries, point at a further deterioration of the situation of people already exposed to poverty during the COVID-19 crisis. Tackling these challenges is key for France to help reach the 2030 EU headline target on poverty reduction. The national RRP targets vulnerable groups (other than young people) specifically only to a very limited extent. Under the ESF+, investments are planned for social inclusion, such as on reducing material deprivation and improving access to healthcare.

This Annex outlines the main challenges for France's education and training system in light of the EU-level targets of the European Education Area strategic framework and other contextual indicators, based on the analysis from the 2021 Education and Training Monitor. The French education system, despite overall good outcomes, faces persisting socioeconomic and territorial inequalities affecting the level of basic skills. The vocational training of teachers remains an issue.

The link between socio-economic status and performance remained among the strongest in the EU. France ranks fourth in the EU on how strongly socioeconomic status predicts performance in reading, as shown by PISA. 35.3% of disadvantaged 15-year-olds and 44.5% of first-generation migrant pupils do not have sufficient basic skills in reading, compared to 20.9% of all 15-year-old students. Inequalities are also reflected in a large rural-urban divide, where the differences in reading performance were equivalent to 2 years of schooling ([64]). According to the 2019 Trends in International Mathematics and Science Study, French pupils in the 4th grade had the lowest performance in maths across the 22 participating EU countries; with less advantaged pupils scoring significantly lower. Standardised national tests in secondary education confirm the significant performance differences according to schools' socio-economic profiles in 2020 and 2021, even though some of the pandemic-related learning losses seem to have been offset ([65]). The French Court of Auditors has questioned the efficiency of public spending on education as educational performance has deteriorated, whereas spending has increased in recent decades ([66]). In 2017, France introduced a pilot reform consisting of 'halving class sizes' in early years of education for students in priority areas, to enable pupils to benefit from more personalised support in an atmosphere conducive to learning. Halving the classes provided positive results, with better outcomes for mathematics than for French, and better results in the first grade than in the second grade. Pupils also showed more positive learning attitudes, enjoyed more personalised support and a better class climate. However, about 70% of disadvantaged children are not enrolled in disadvantaged schools 'éducation prioritaire' ([67]). The French recovery and resilience plan includes measures to address these inequalities, but they remain limited in scope and budget allocation. Raising the level of basic skills for all will remain key, but in particular for the disadvantaged groups.

Graph A13.1: **French pupils' mathematics achievement**



(1) EU averages based on availability of data: 22 Member States for advantaged and average pupils, 9 Member States for disadvantaged pupils.
Source: Trends in International Mathematics and Science Study 2019

Teacher education and career development continue to face challenges. Teachers in disadvantaged schools tend to have fewer qualifications than their counterparts in advantaged schools. For science teachers, this certification gap was the second widest in the EU, with only 62.7% of science teachers in schools in the bottom socio-economic profile quarter being certified, against 93.3% in the top quarter (PISA 2015). However, the qualification gap is less pronounced, with 81.2% of teachers in the lower quarter holding a university degree and majoring

([64]) PISA 2018, Table III.A5.4

([65]) Direction de l'évaluation, de la prospective et de la performance (DEPP), 2022, Note d'Information n°22-04 Évaluations de début de sixième en 2021

([66]) Cour des Comptes, "Une école plus efficacement organisée au service des élèves. Les Enjeux Structurels de la France", Décembre 2021

([67]) Direction de l'évaluation, de la prospective et de la performance (DEPP), 2022, Note d'Information n°18-02 L'éducation prioritaire

Table A13.1:**EU-level targets and other contextual indicators under the European Education Area strategic framework**

				2015		2021	
Indicator			**Target**	**France**	**EU27**	**France**	**EU27**
Participation in early childhood education (age 3+)			**96%**	**100.0%**	**91.9%**	**100.0%** [2019, p]	**92.8%** [2019]
Low achieving 15-year-olds in:		**Reading**	**< 15%**	**21.5%**	**20.4%**	**20.9%** [2018]	**22.5%** [2018]
		Mathematics	**< 15%**	**23.5%**	**22.2%**	**21.3%** [2018]	**22.9%** [2018]
		Science	**< 15%**	**22.1%**	**21.1%**	**20.5%** [2018]	**22.3%** [2018]
Early leavers from education and training (age 18-24)	**Total**		**< 9 %**	**9.2%**	**11.0%**	**7.8%**	**9.7%**
	By gender	*Men*		10.0%	12.5%	9.6%	11.4%
		Women		8.4%	9.4%	6.1%	7.9%
	By degree of urbanisation	*Cities*		8.7%	9.6%	6.8%	8.7%
		Rural areas		7.7%	12.2%	8.3%	10.0%
	By country of birth	*Native*		8.7%	10.0%	7.5%	8.5%
		EU-born		16.3% [u]	20.7%	12.8% [u]	21.4%
		Non EU-born		16.4%	23.4%	12.2%	21.6%
Tertiary educational attainment (age 25-34)	**Total**		**45%**	**44.8%**	**36.5%**	**50.3%**	**41.2%**
	By gender	*Men*		40.6%	31.2%	46.0%	35.7%
		Women		48.8%	41.8%	54.2%	46.8%
	By degree of urbanisation	*Cities*		52.4%	46.2%	59.0%	51.4%
		Rural areas		36.2%	26.9%	36.8%	29.6%
	By country of birth	*Native*		45.7%	37.7%	50.7%	42.1%
		EU-born		41.3%	32.7%	45.1%	40.7%
		Non EU-born		38.1%	27.0%	47.5%	34.7%
Share of school teachers (ISCED 1-3) who are 50 years or over				27.1%	38.3%	29.5% [2019]	38.9% [2019]

(1) The 2018 EU average on PISA reading performance does not include Spain; p = provisional, u = low reliability; Data is not yet available for the remaining EU-level targets under the European Education Area strategic framework, covering underachievement in digital skills, exposure of vocational education and training (VET) graduates to work based learning and participation of adults in learning.

Source: Eurostat (UOE, LFS); OECD (PISA)

in science, versus 89.8% in the top quarter, an 8.5 point gap which is well within the OECD average (8.4). Lower secondary education teachers have reported a high level of need for professional development for teaching students with special needs and teaching in a multicultural or multilingual setting. The action plan 'Grenelle de l'éducation' contains measures to address these challenges.

The labour market relevance of education and training still requires improvements. The lack of skilled workers is one of the main barriers to recruitment in France. In 2019, the share of tertiary education graduates in science, technology, engineering and mathematics (STEM) was at the level of the EU average (25.8% vs 26.1%) as was the share of ICT graduates in the total number of graduates (3.6% of graduates vs 3.9% in the EU). The share of upper secondary students enrolled in vocational and general programmes was below the EU average (39.3% vs 48.4%). The number of apprentices has increased in recent years, including thanks to the hiring subsidies funded by the recovery and resilience plan. Improving the attractiveness and labour market relevance of the vocational education and training (VET) system and improving STEM and digital skills of learners is key to reducing the skills mismatch.

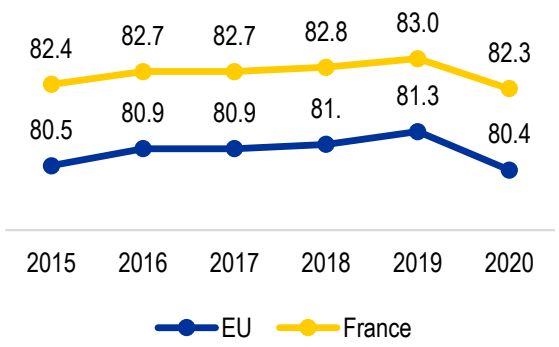
Early school leaving rates are good overall but hide strong social disparities. As in most other EU countries, rates for boys are higher than for girls. Among young people with a disability, the rate was even higher, at 19.7% ([68]). Equal access to education for people with disabilities remains a challenge and should be addressed through a deinstitutionalisation process. Extending the age of compulsory education and training from 3-18 years is one of the measures to curb early leaving and reduce inequalities and its effectiveness still needs to be evaluated.

([68]) European Semester 2020-2021 country fiche on disability equality (p36)

Especially relevant in light of the ongoing COVID-19 pandemic, resilient healthcare is a prerequisite for a sustainable economy and society. This Annex provides a snapshot of the healthcare sector in France.

Life expectancy in France is higher than in the EU as a whole, but fell in 2020 by more than 8 months due to COVID-19. As of 17 April 2022, 2.35 cumulative COVID-19 deaths per 1 000 inhabitants were reported and 412 confirmed cumulative COVID-19 cases per 1 000 inhabitants. France fares comparatively well in avoiding deaths from treatable causes, also reflected in low cancer mortality.

Graph A14.1: **Life expectancy at birth, years**



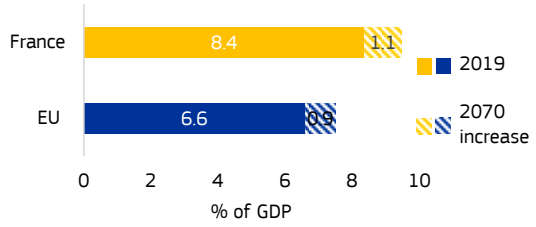
Source: Eurostat database

Health spending relative to GDP in France was well above the EU average in 2019. The public share of health expenditure is high and the French health system provides good access to care, with low out-of-pocket payments. Public expenditure on health is projected to increase by 1.1 pps of GDP by 2070 (compared to 0.9 pps for the EU) ([69]).

France continues to focus on increasing access to health services. Low numbers of general practitioners practising in underserved areas ('medical deserts') have been a concern over the past decade. The creation of territorial communities of health professionals is expected to help improve access to care, notably by fostering teamwork and task-shifting between doctors and other health professionals.

Through its recovery and resilience plan, France plans to invest EUR 4.5 billion (11.4 % of the total RRP) to strengthen its health system through the construction and refurbishment of facilities and the further digitalisation of health services. In addition, investments in long-term care in nursing homes (EUR 1.5 billion) are also expected to improve the delivery of health services.

Graph A14.2: **Projected increase in public expenditure on health care over 2019-2070 (AWG reference scenario)**



Source: European Commission/EPC (2021)

([69]) The 2021 Ageing Report: Economic and Budgetary Projections for the EU Member States (2019-2070), European Commission (ECFIN) and Ageing Working Group (EPC)

Table A14.1:**Key health indicators**

	2016	2017	2018	2019	2020	EU average (latest year)
Treatable mortality per 100 000 population (mortality avoidable through optimal quality healthcare)	62.5	62.1				92.1 (2017)
Cancer mortality per 100 000 population	243.5	238.9				252.5 (2017)
Current expenditure on health, % GDP	11.5	11.3	11.2	11.1		9.9 (2019)
Public share of health expenditure, % of current health expenditure	83.0	83.2	83.5	83.7		79.5 (2018)
Spending on prevention, % of current health expenditure	1.9	1.9	1.9	1.9		2.8 (2018)
Acute care beds per 100 000 population	314.8	309.0	304.1	300.3		387.4 (2019)
Doctors per 1 000 population *	3.1	3.1	3.1	3.2		3.8 (2018)
Nurses per 1 000 population *	10.2	10.5	10.8	11.1		8.2 (2018)
Consumption of antibacterials for systemic use in the community, daily defined dose per 1 000 inhabitants per day **	23.9	23.0	23.6	23.3	18.7	14.5 (2020)

(1) Notes: Doctors' density data refer to practising doctors in all countries except FI, EL, PT (licensed to practice) and SK (professionally active). Nurses' density data refer to practising nurses in all countries (imputation from year 2014 for FI) except IE, FR, PT, SK (professionally active) and EL (nurses working in hospitals only). More information: https://ec.europa.eu/health/state-health-eu/country-health-profiles_en

Source: Data sources: Eurostat Database; except: * Eurostat Database and OECD, ** ECDC.

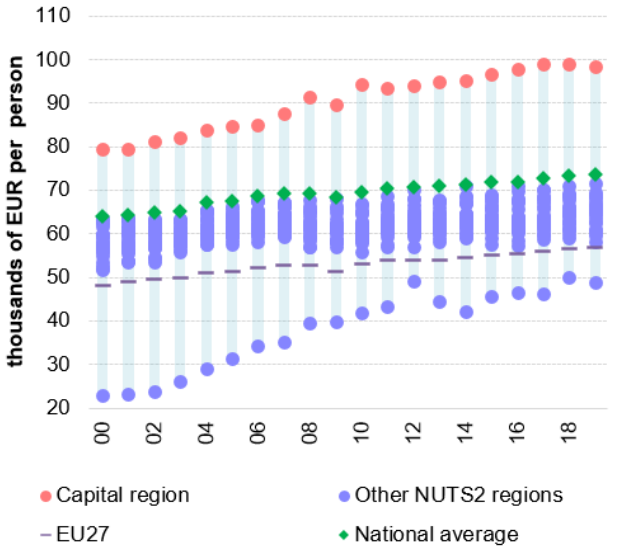
The regional dimension is an important factor when assessing economic and social developments in Member States. Taking into account this dimension enables a well-calibrated and targeted policy response that fosters cohesion and ensures sustainable and resilient economic development across all regions.

Regional disparities have increased in France during the last decade. GDP per head has lost ground relative to the EU average in most French NUTS 2 regions. Out of 27 regions, 20 are drifting away from the EU average in terms of GDP per head, which dropped from a level already below the EU average in 2010. Only two regions have a GDP above the EU average: Île-de-France at 177% of the EU average and Rhône-Alpes at 109%. At the other end of the spectrum, Limousin is at 73% of the EU average in metropolitan France while the French outermost regions have generally low GDP such as Mayotte at 32%, the EU's lowest GDP. Growth in GDP per head (average annual % change over 2010-2019) in France (0.94%) is below the EU average (1.39%). The regional disparity of this indicator is also very high, varying from 1.40% in Midi-Pyrénées to -0.08% in Limousin.

In general, labour productivity is much lower in the less developed regions of the country. In 2019, productivity in Île-de-France was 1.6 times as high as in Languedoc-Roussillon, Brittany, 1.7 times as high as in Limousin and twice as high as in Mayotte (Graph A15.1). Largely, disparities in terms of GDP per head are linked to wide variations in labour productivity.

The regional competitiveness index is also very different across the regions. In 2019, most of the metropolitan regions were below the national level (67%), with only four regions (Île-de-France, Rhône-Alpes, Alsace and Midi-Pyrénées) above it. Here again the outermost regions are very low in this ranking, even below 6% for French Guiana and Mayotte. Innovation and technology-related activities are concentrated in a limited number of regions. R&D expenditure corresponds to around 4.8% of GDP in Midi-Pyrénées, 2.9% in Île-de-France and 2.8% in Rhône-Alpes, but to only 0.3% in Corsica. Most of the outermost regions have a level of R&D expenditure below 1% of GDP.

Graph A15.1: **Labour productivity, EU-27, France NUTS 2 regions, 2000-2019**



(1) Unit: real GVA in MM EUR (2015 prices) by employment in thousands of persons
Source: European Commission

Deep disparities persist between continental France and its outermost regions where basic needs are concerned. For example in Mayotte, one third of households have no access to running water, whereas 53% of people in French Guiana live in overcrowded accommodation (8% in mainland France). There is widespread poverty: for example, the poverty rate in Guadeloupe (34%) is more than the double of mainland France (14%); in Réunion's rural communities, 1 in 2 people lives below the poverty threshold. All outermost regions have infant mortality rates that are either double or triple the EU average and they have few medical doctors (in Mayotte as few as one fifth of the EU average). There are also significant regional differences in terms of access to social housing, as there are variations in demand as well as in the extent to which cities and regions achieve the goals set by the law in terms of social housing construction. Access to affordable and social housing, especially for the poorest households, is a concern in particular in the outermost regions.

There are also regional disparities in greenhouse gas emissions. The presence of a large city in the region (Île-de-France, Rhône-Alpes, Provence-Alpes-Côte d'Azur) or of significant residual industrial activities (Nord-Pas de Calais, Lorraine) partly explains these disparities. The territories with the highest greenhouse gas emission intensities from industrial installations and with higher employment in the industries concerned are the most affected by the climate

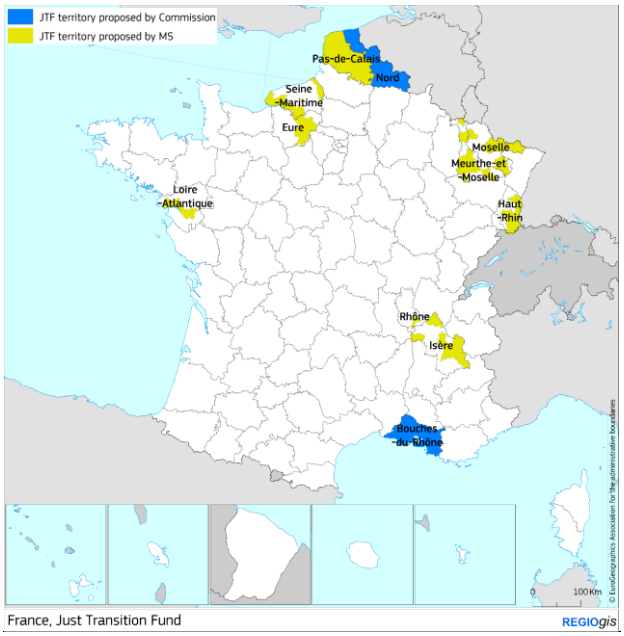
transition. The regions proposed to benefit from the Just Transition Fund are shown in Graph A15.2.

The uptake of ICT technologies also shows wide regional variations. While close to 80% of the population used internet for interaction with public authorities in the last 12 months in Île-de-France, Pays de la Loire, Aquitaine, Poitou-Charentes and Rhône-Alpes, this share is less than 70% in 10 regions, bottoming at 54% in Corse and 45% in French Guiana.

All regions in France were affected by the social-economic consequences of the COVID pandemic, but there are large regional variations. For instance, while the unemployment rate in Champagne-Ardenne significantly decreased during the last 5 years, it increased by 2.6 pps from 2019 to 2020. In other regions, like Franche-Comté, it decreased by almost 2.7 pps. It continued to drop in the outermost regions, by between 2.3 pps in Mayotte and 3.9 pps in Réunion.

The unemployment rate is generally higher in French regions than the EU average of 7.1% in 2020. In metropolitan France, the unemployment rate is the highest in Champagne-Ardenne at almost 12%, but it peaks in outermost regions, at more than 17% in Guadeloupe and Réunion and at 28% in Mayotte. It is the lowest in Franche-Comté, Midi-Pyrénées and Auvergne at around 6%. The employment rate remains very low in the outermost regions where it ranges between 62% in Martinique and 40% in Mayotte. The employment situation in French regions was particularly affected by sanitary measures taken at the heart of the crisis in 2020. However, these employment rates do not reflect the marked differences observed between vulnerable groups and the overall population. Such groups are over-represented in outermost regions.

Graph A15.2: **Territories most affected by climate transition in France**



Source: European Commission

Table A15.1:**Selected indicators at regional level**

NUTS 2 Region	GDP per head (PPS)	Productivity (GVA (PPS) per person employed)	Real productivity growth	GDP growth	GDP per head growth	R&D expenditure	R&D expenditure in the business enterprise sector	Employment in high-technology sectors	Employment in knowledge-intensive services	Internet use: interaction with public authorities	Regional Competitiveness Index	CO_2 emissions from fossil fuels per head	Innovation performance
	EU27=100, 2019	EU27=100, 2018	Avg % change on preceding year, 2010-2019	Avg % change on preceding year, 2010-2019	Avg % change on preceding year, 2010-2019	% of GDP, 2013	% of GDP, 2013	% of total employment, 2020	% of total employment, 2020	% of individuals in the last 12 months, 2019	Range 0-100, 2019	tCO_2 equivalent, 2018	RIS regional performance group
European Union	100	100	1.00	1.57	1.39	2.19	1.5	4.5	40.01	56	57.3	7.2	
France	106	115	0.76	1.36	0.94	2.21	1.4	4.5	47.74	75	67.0		
Ile-de-France	177	154	0.91	1.74	1.30	2.90	2.0	8.5	55.58	78	91.1	3.3	
Centre - Val de Loire	86	102	0.81	0.79	0.58	1.63	1.2	3.9	43.10	68	63.5	6.0	
Bourgogne	87	101	0.79	0.62	0.63	0.99	0.7	2.9	44.98	77	57.5	5.8	
Franche-Comté	80	97	0.18	0.08	-0.07	2.72	2.3	3.8	43.10	73	58.9	5.0	
Basse-Normandie	81	94	0.37	0.48	0.41	1.27	0.8	2.8	41.55	65	55.9	5.5	
Haute-Normandie	88	108	0.82	0.67	0.46	1.43	1.2	3.1	43.20	71	62.0	7.6	
Nord-Pas de Calais	86	103	0.66	0.98	0.83	0.91	0.4	2.6	48.24	69	59.6	7.6	
Picardie	76	105	0.72	0.48	0.32	1.41	1.2	2.2	46.58	76	59.2	5.7	
Alsace	99	108	0.62	1.03	0.73	1.71	0.9	4.3	39.25	72	69.2	5.1	
Champagne-Ardenne	88	103	0.68	0.41	0.44	0.76	0.5	1.2	42.34	62	51.9	6.3	
Lorraine	76	100	0.37	0.02	0.05	1.25	0.5	2.6	42.67	72	60.7	12.2	
Pays de la Loire	95	100	0.59	1.52	0.83	1.45	0.9	3.7	41.79	78			Moderate innovator +
Bretagne	90	99	0.64	1.39	0.88	1.45	0.9	4.0	43.96	74			Strong innovator
Aquitaine	95	101	0.59	1.63	0.90	1.60	1.0	2.8	47.01	80	64.2	4.6	
Limousin	73	94	0.21	-0.13	-0.08	1.00	0.6		48.63	74	56.3	7.2	
Poitou-Charentes	86	99	0.94	1.30	0.96	0.93	0.5	1.7	45.49	80	55.5	5.3	
Languedoc-Roussillon	80	99	0.37	1.22	0.40	2.39	0.7	3.8	52.17	74	56.4	4.6	
Midi-Pyrénées	100	105	1.08	2.07	1.40	4.75	3.4	6.1	51.13	76	68.1	4.8	
Auvergne	88	97	1.10	1.15	0.95	2.24	1.7	1.8	41.37	69	59.8	6.5	
Rhône-Alpes	109	111	0.77	1.76	1.00	2.77	1.8	4.6	43.98	80	73.5	4.5	
Provence-Alpes-Côte d'Azur	99	107	0.60	1.33	0.95	2.38	1.2	4.6	50.97	74			Strong innovator -
Corse	86	99	0.09	1.50	0.51	2.38	1.2		50.38	54			Emerging innovator
Guadeloupe	64	109	0.78	1.49	1.64			2.2	47.95	65	28.5	8.8	
Martinique	70	96	0.45	0.67	1.28				48.93	68	37.7	6.7	
Guyane	48	103	-0.21	2.08	-0.30				57.21	45	5.6	3.0	
La Réunion	67	96	-0.12	2.06	1.46			1.9	51.38	60	32.9	3.4	
Mayotte	32	78	2.05	6.04	3.42				51.82		5.8	0.1	

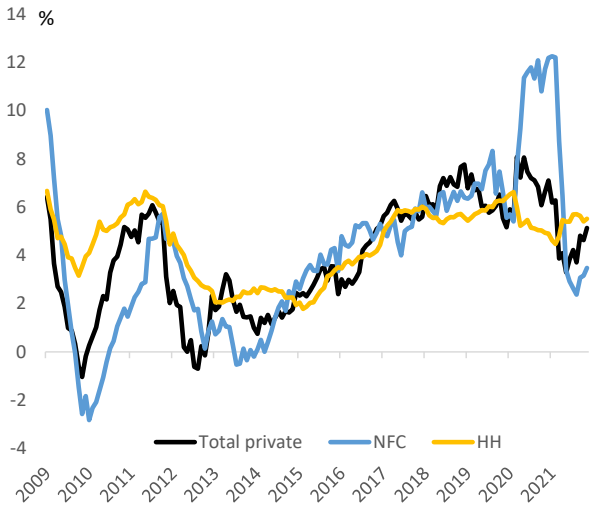
(1) French Guiana Life expectancy reference year: 2017
France (country level) R&D expenditure reference year: 2017
Source: Eurostat

ANNEX 16: KEY FINANCIAL SECTOR DEVELOPMENTS

This Annex provides an overview of key developments in France's financial sector. Despite the pandemic, the banking sector's solvency has remained quite solid. With an annualised return-on-equity of 7.3% in Q3 2021 (vs 7.1% in the EU), its profitability has improved since 2019 and especially 2020. The capital adequacy ratio has slowly increased over the years to reach 19.3% in Q3 2021 (same level as the EU average) and the non-performing loan ratio reached a new all-time low at 2.0% (vs 2.1% in the EU). These good results may be partly due to temporary support measures by the ECB and the French government, such as the sizeable public guarantee scheme. Banks have ample liquidity, both from ECB operations and depositors. Funding from the ECB reached a record high of 5.6% of banks' total liabilities in December 2021 (vs 7.2% in the euro area), much higher than during the financial and sovereign crisis of 2008 and 2012. Thanks to the strong increase in customers' deposits, the loan-to-deposit ratio fell further to 89.8% in December 2021 (vs 86.5% in the EU).

The residential real estate market exhibits medium vulnerabilities that are mitigated by appropriate and sufficient macroprudential policy measures. The European Systemic Risk Board (2022) has identified several key vulnerabilities: high household debt, high housing lending growth, loose lending standards (albeit improved since 2019), signs of house price overvaluation in some large cities. Since 2017, households lending growth has been strong and reached 5.4% in December 2021 (vs 4.2% in the euro area). The current policy mix is considered to be appropriate and sufficient and has been instrumental in mitigating risks. The introduction of debt-service-to-income (DSTI) and maturity limits in January 2021 led to a significant decrease in the share of new mortgages with risky characteristics. On 14

Graph A16.1: **Credit growth for non-financial corporations and households**



(1) Loans adjusted for sales and securitisation (y-o-y change)
Source: European Central Bank

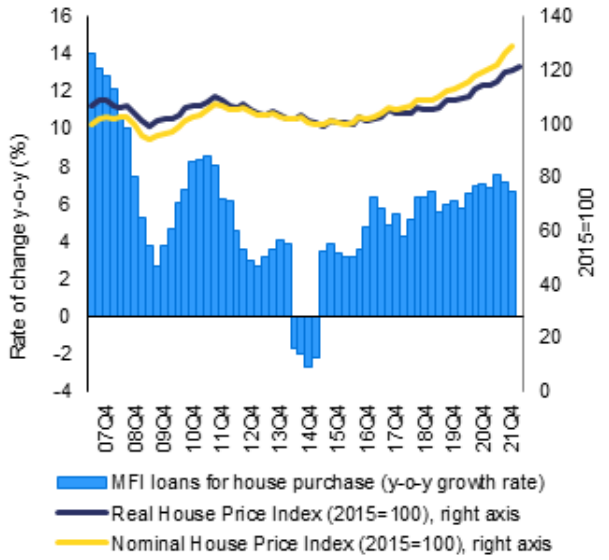
Table A16.1: **Financial soundness indicators**

	2017	2018	2019	2020	2021
Total assets of the banking sector (% of GDP)	368.0	372.8	382.4	455.6	446.8
Share (total assets) of the five largest bank (%)	45.4	47.7	48.7	49.2	-
Share (total assets) of domestic credit institutions (%)[1]	95.2	95.3	95.2	95.8	96.2
Financial soundness indicators:[1]					
- non-performing loans (% of total loans)	3.1	2.7	2.5	2.2	2.0
- capital adequacy ratio (%)	17.8	18.0	18.6	19.5	19.3
- return on equity (%)	6.4	6.5	6.0	4.1	7.3
NFC credit growth (year-on-year % change)	6.6	6.4	5.6	12.2	4.3
HH credit growth (year-on-year % change)	6.0	5.6	6.4	4.9	5.4
Cost-to-income ratio (%)[1]	71.6	74.1	72.3	70.4	64.9
Loan-to-deposit ratio (%)[1]	105.1	109.1	107.3	95.4	89.8
Central bank liquidity as % of liabilities	2.3	1.9	1.6	5.1	5.4
Private sector debt (% of GDP)	145.0	148.3	152.5	173.7	-
Long-term interest rate spread versus Bund (basis points)	49.2	38.8	38.3	36.3	38.0
Market funding ratio (%)	59.0	58.1	57.8	56.2	-
Green bond issuance (bn EUR)	42.9	7.2	27.5	26.0	41.3

(1) Last data: Q3 2021
Source: ECB, Eurostat, Refinitiv

September 2021, the High Council for Financial Stability converted the recommendation into a legally binding measure. Given that the internal ratings-based risk weights for mortgage exposures are among the lowest in the EU, increasing these risk weights should be envisaged if the associated vulnerabilities were to increase further, along with rebuilding the countercyclical capital buffer or replacing it with a sectoral systemic risk buffer.

Graph A16.2: **House price and mortgage growth**



Source: Eurostat, European Central Bank

The Macroeconomic Imbalance Procedure matrix presents the main elements of the in-depth review undertaken for France in accordance with Article 5 of Regulation (EU) No 1176/2011 on the prevention and correction of macroeconomic imbalances, as summarized in the Staff Working Document (SWD (2022)632 final). ([70]) For Member States selected in the 2022 Alert Mechanism Report it presents, separately for each source of imbalance and adjustment issue, the main findings regarding the gravity and the evolution of the identified challenges, as well as policy response and gaps.

France's economy is facing vulnerabilities relating to high public debt, as well as competitiveness challenges related to low productivity growth. The outbreak of the pandemic brought about a sizeable increase in the already high general government debt, but with the return to growth in 2021, government debt edged down. Household and non-financial corporation debt are high and exceeding prudential thresholds, although risks relating to increased corporate indebtedness are mitigated by the build-up of liquidity buffers. Exports market shares had been subject to fluctuations during the pandemic amid lockdowns and supply chain disruptions, but are likely to recover in real terms.

Going forward, vulnerabilities are forecast to reduce somewhat in the coming years. The public indebtedness is forecast to keep falling over the forecast horizon. Private debt is set to remain high, fuelled by dynamic credit flows. The recent rise in unit labour costs – which is driven by the pandemic effect - is forecast to largely reverse in the coming years, and cost competitiveness, as well as productivity, are set to benefit from recent and upcoming reforms.

Recent policy measures are dampening the risks associated with competitiveness and indebtedness. The substitution of a cut in social contributions for a tax credit, the adoption of the Responsibility Pact, a EUR 10 billion cut in taxes on production and changes to labour market legislation are expected to give a boost to productivity and address the structural competitiveness challenges in the medium term. Several macroprudential measures address the growing vulnerabilities of household balance sheets and the residential real estate market. A reform of public finances management entered into force in 2022, and an evaluation of public spending is planned, to identify the most efficient expenditures favouring growth, social inclusion and the ecological and digital transition. The pension reform, aimed at unifying the currently existing 42 different regimes, was put on hold. Despite recent announcements of a pension reform, neither details, nor timeline has been provided.

For those reasons, and more generally on the basis of the elements of the in-depth review undertaken for France under Regulation (EU) No 1176/2011 on the prevention and correction of macroeconomic imbalances as summarised in the Staff Working Document (SWD (2022)632 final), **the Commission has considered in its Communication "European Semester – 2022 Spring Package" (COM(2022)600 final) that France continues to experience macroeconomic imbalances**.

([70]) European Commission (2022), COMMISSION STAFF WORKING DOCUMENT In-Depth Review for France in accordance with Article 5 of Regulation (EU) No 1176/2011 on the prevention and correction of macroeconomic imbalances.

Table A17.1:**Assessment of Macroeconomic Imbalances matrix**

	Gravity of the challenge	Evolution and prospects	Policy response
	Imbalances (unsustainable trends, vulnerabilities and associated risks)		
Competitiveness	Low productivity growth continues to be a challenge for the competitiveness of the French economy. Labour hoarding during the COVID-19 crisis briefly amplified this trend, by contributing to a sharp increase of unit labour costs in 2020. More recently, unit labour costs have grown more moderately than in other euro area and EU countries as wage developments remain contained. The current account balance, had been slightly negative for several years before the crisis, and had worsened to -2.6% of GDP in 2020. Along with important asset price effects, this contributed to deteriorate the net international investment position towards -34% of GDP in 2021, which is considerably below what fundamentals would suggest for the French economy.	Both cost and non-cost competitiveness are expected to improve over the medium term, when the effects of the recent policy actions will fully materialise. However, there are export sectors facing downward risks linked to a possible long-term impact of the COVID-19 crisis, the developments of the war in Ukraine and environmental policies (e.g. aircraft and tourism industry). In the medium term, labour productivity growth is expected to remain subdued, which still represents some risks to achieving a durable improvement in cost competitiveness. Demand for French exports is forecast to recover by 2023, assuming above mentioned downside risks subside. Along with a limited terms-of-trade impact from commodity prices, this is forecast to help stabilizing external balances.	The 'France Relance' plan aims at fostering France's competitiveness by encouraging the digitalization of the economy, the entry of the youth into the labour market and by diminishing taxes on production by EUR 10 billion. It also entails a specific support plan for the aviation sector. A range of measures had been taken before the pandemic to address the weak competitiveness, such as an additional a reduction of employers' social contributions for employees earning below 1.6 times the minimum wage. Several measures address the issue of sluggish productivity. The PACTE Law, adopted in May 2019, aims at fostering firms' growth by reforming firm-size thresholds, improving the restructuring procedure and encouraging target-based compensation. Action has been taken to make the labour market more efficient by improving social dialogue and strengthening collective bargaining within firms. The unemployment benefit reform, implemented in October 2021, aims at reducing excessive reliance on temporary jobs in some sectors, and changed the eligibility criteria and compensation rules to make them more conducive to employment.
Public debt	General government debt rose sharply, to 114.6% of GDP in 2020 as a result of the COVID-19 crisis. Despite its decline to almost 113% in 2021 due to the strong economic rebound, public debt remains very high. This constitutes a vulnerability for the economy as it reduces the fiscal space available to respond to future shocks and weighs on growth prospects, by crowding out productive public expenditure and requiring a high tax burden. Refinancing risks have been mitigated by the lengthening of the average debt maturity. The investor base remains diverse, both by type and geographically. The government sector is a significant contributor to France's negative total Net International Investment Position (NIIP). Risks stemming from the high public debt are compounded by the high private debt. After rising sharply by 21 pps. to 174% of GDP in 2020, private indebtedness remained stable in 2021 in spite of the strong economic rebound. Fundamentals-based and prudential benchmarks point to significant deleveraging needs for households and non-financial corporations.	The government deficit ratio declined by 2.4 pps. to 6.5% in 2021, mainly due to the economic rebound. The deficit ratio is projected to keep falling in 2022 and 2023, while remaining above 3% of GDP. Public debt ratio is expected to keep falling in 2022 and 2023, while remaining at high levels over the medium term. Medium-term sustainability risks are assessed as high. The increase in corporate indebtedness during the crisis coincided with the build-up of corporate liquidity buffers. Sizeable State loan guarantees has prevented a spike in corporate bankruptcies, and there are no signs at this stage about a future surge of bankruptcies or a wave of insolvencies. However, the possibility that these guarantees could be called on implies a downward risk to public finances. Non-performing loans are low but a possible increase when support measures are phased out represents a risk to the financial system.	Between 2015 and 2019, there has been no structural consolidation of public finances, and the sharp deterioration in 2020 aggravated medium-term sustainability challenges. A reform of an organic law on the modernisation of public finances management entered into force in 2022. It includes a multiannual expenditure rule applicable to total public spending and the extension of the prerogatives of the national fiscal council (High Council of Public Finances, HCFP). In addition, an evaluation of public spending is planned, to identify the most efficient expenditures favouring growth, social inclusion and the ecological and digital transition. The contribution of these measures to consolidating public finances in the medium and long term and to ensuring a sustained reduction of public debt will depend on its implementation, which will warrant close monitoring. The pension reform, aimed at unifying the currently existing 42 different regimes, was put on hold and the timeline for the next steps has so far not been announced. Significant fiscal efforts are needed to put France's public debt on a sustained downward trajectory.

Source: European Commission

This Annex provides an indicator-based overview of France's tax system. It includes information on the tax structure, i.e. the types of tax that France derives most revenue from, the tax burden for workers, and the progressivity and redistributive effect of the tax system. It also provides information on tax collection and compliance and on the risks of aggressive tax planning.

France's tax revenues are high in relation to GDP across all tax types. Total tax revenue was 45.6% of GDP in 2020 (among the highest in the EU) compared to the EU average of 40.1%. Tax revenues were above the EU average across major tax types including taxes on labour, consumption and capital. Tax revenues have also increased since 2010, while a slight decrease is observable since 2018, in particular in labour and consumption taxation. Recurrent property taxation, a relatively growth-friendly tax source, generates 3% of GDP in revenue, the highest in the EU, while the revenue from environmental taxation (at 2.2% of GDP) is at the EU average.

France's labour tax burden is very high except for workers earning low wages. A series of tax reforms have reduced the tax wedge (a measure of the difference between the wage cost for employers and the net wage for workers) in particular for low-wage earners. Between 2010 and 2021, the tax wedge for workers earning 50% of the average wage was cut from close to the EU average to significantly below that level (at 20.1% in 2021 compared to an EU average of 31.9%). These cuts in social contributions and income taxes have been very targeted, leaving the tax wedge at comparatively high levels for workers earning the average wage or above. The tax wedge remains high also for second earners (see Graph A18.1). All in all, the reforms increased the ability of the tax and benefits system to reduce income inequality (as measured by the effect of taxes and benefits on the GINI coefficient which is now above the EU average).

France is doing moderately well on digitalisation of the tax administration. Digitalisation can help reduce tax arrears and cut compliance costs. Outstanding tax arrears have declined slightly by 0.2 pp. to 6.4% of total net revenue. This is significantly below the EU27 average of 31.8%, though that average is inflated by very large values in a few Member States. The VAT gap (an indicator of the effectiveness of VAT enforcement and compliance) has decreased by 0.5 pp and it stands at 7.4%, below the EU-wide gap of 10.5%. Furthermore, the average forward-looking effective corporate income tax rates were considerably above the EU average in 2020.

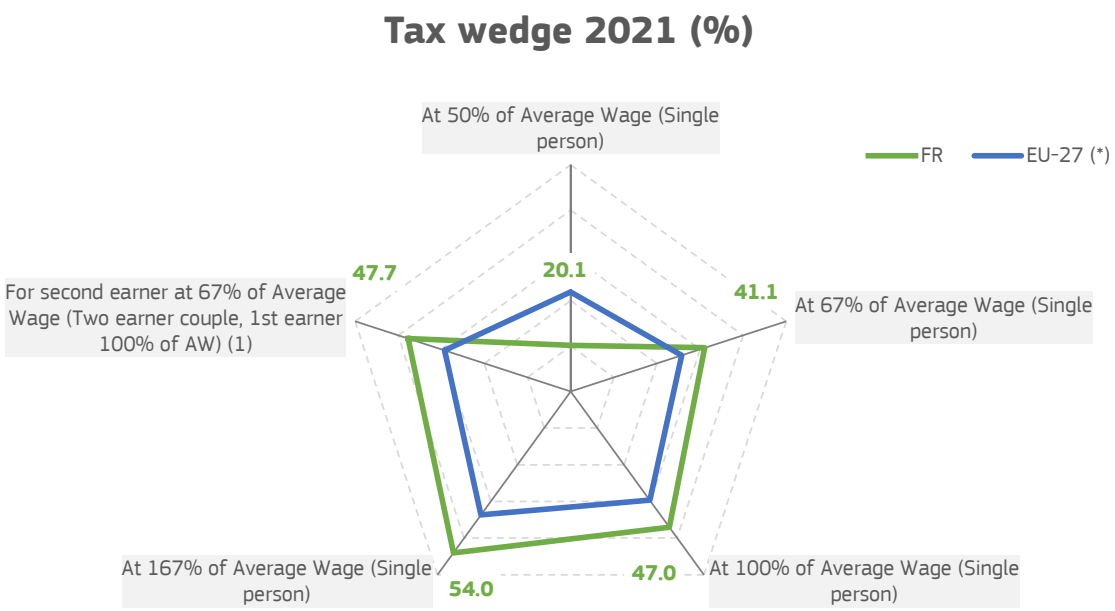
Table A18.1:**Taxation indicators**

		France					EU-27				
		2010	2018	2019	2020	2021	2010	2018	2019	2020	2021
Tax structure	Total taxes (including compulsory actual social contributions) (% of GDP)	42.3	46.3	45.3	45.6		37.9	40.1	39.9	40.1	
	Labour taxes (as % of GDP)	22.2	24.1	23.1	23.5		20.0	20.7	20.7	21.5	
	Consumption taxes (as % of GDP)	10.7	11.7	11.6	11.4		10.8	11.1	11.1	10.8	
	Capital taxes (as % of GDP)	9.4	10.4	10.6	10.7		7.1	8.2	8.1	7.9	
	Total property taxes (as % of GDP)	4.0	4.6	4.5	4.6		1.9	2.2	2.2	2.3	
	Recurrent taxes on immovable property (as % of GDP)	2.9	3.1	3.0	3.0		1.1	1.2	1.2	1.2	
	Environmental taxes as % of GDP	1.9	2.4	2.3	2.2		2.4	2.4	2.4	2.2	
Progressivity & fairness	Tax wedge at 50% of Average Wage (Single person) (*)	34.1	27.2	21.4	15.8	20.1	33.9	32.4	32.0	31.5	31.9
	Tax wedge at 100% of Average Wage (Single person) (*)	49.9	47.4	47.2	46.6	47.0	41.0	40.2	40.1	39.9	39.7
	Corporate Income Tax - Effective Average Tax rates (1) (*)		31.7	31.7	29.4			19.8	19.5	19.3	
	Difference in GINI coefficient before and after taxes and cash social transfers (pensions excluded from social transfers)	7.9	8.2	8.5	11.9		8.4	7.9	7.4	8.3	
Tax administration & compliance	Outstanding tax arrears: Total year-end tax debt (including debt considered not collectable) / total revenue (in %) (*)		6.6	6.4				31.9	31.8		
	VAT Gap (% of VTTL)		7.9	7.4				11.2	10.5		
Financial Activity Risk	Dividends, Interests and Royalties (paid and received) as a share of GDP (%)		4.5	4.8	3.6			10.7	10.5		
	FDI flows through SPEs (Special Purpose Entities), % of total FDI flows (in and out)		0.0	0.0				47.8	46.2	36.7	

(1) Forward-looking effective tax rate (OECD).
(*) EU-27 simple average as there is no aggregated EU-27 value.

Source: European Commission and OECD

Graph A18.1: **Tax wedge indicators**



The tax wedge is defined as the sum of personal income taxes and employee and employer social security contributions net of family allowances, expressed as a percentage of total labour costs (the sum of the gross wage and social security contributions paid by the employer). It is calculated for specific types of tax payers in terms of household composition and income level expressed as % of average wage. Data on tax wedges can be consulted in the 'Tax and benefit database' by ECFIN https://europa.eu/economy_finance/db_indicators/tab/

(1) The second earner average tax wedge measures how much extra personal income tax (PIT) plus employee and employer social security contributions (SSCs) the family will have to pay as a result of the second earner entering employment, as a proportion of the second earner's gross earnings plus the employer SSCs due on the second earner's income. For a more detailed discussion see OECD (2016), "Taxing Wages 2016", OECD Publishing, Paris. http://dx.doi.org/10.1787/tax_wages-2016-en

(*) EU-27 simple average as there is no aggregated EU-27 value.

Source: European Commission

Table A19.1:**Key economic and financial indicators**

	2004-07	2008-12	2013-18	2019	2020	2021	forecast 2022	forecast 2023
Real GDP (y-o-y)	2.3	0.4	1.3	1.8	-7.9	7.0	3.1	1.8
Potential growth (y-o-y)	1.8	1.2	0.9	0.9	0.9	1.2	1.4	1.4
Private consumption (y-o-y)	2.3	0.6	1.2	1.8	-7.1	4.7	3.4	2.0
Public consumption (y-o-y)	1.7	1.5	1.2	1.0	-3.2	6.3	1.7	0.5
Gross fixed capital formation (y-o-y)	3.9	-0.9	1.8	4.0	-8.6	11.6	2.0	2.9
Exports of goods and services (y-o-y)	4.5	1.2	3.5	1.6	-15.8	9.3	8.3	7.5
Imports of goods and services (y-o-y)	6.0	1.2	3.9	2.3	-11.9	8.0	6.7	6.0
Contribution to GDP growth:								
Domestic demand (y-o-y)	2.5	0.5	1.3	2.1	-6.5	6.7	2.7	1.9
Inventories (y-o-y)	0.2	-0.1	0.2	0.0	-0.2	0.0	0.1	-0.4
Net exports (y-o-y)	-0.4	0.0	-0.2	-0.3	-1.1	0.2	0.3	0.3
Contribution to potential GDP growth:								
Total Labour (hours) (y-o-y)	0.5	0.4	0.2	0.2	0.4	0.5	0.6	0.6
Capital accumulation (y-o-y)	0.8	0.6	0.5	0.6	0.3	0.6	0.6	0.6
Total factor productivity (y-o-y)	0.6	0.3	0.2	0.2	0.1	0.1	0.2	0.2
Output gap	1.8	-1.1	-1.0	1.9	-7.0	-1.7	0.0	0.4
Unemployment rate	8.7	9.0	9.9	8.4	8.0	7.9	7.6	7.6
GDP deflator (y-o-y)	2.1	1.1	0.8	1.3	2.5	0.8	2.2	3.0
Harmonised index of consumer prices (HICP, y-o-y)	1.9	1.9	0.9	1.3	0.5	2.1	4.9	3.1
Nominal compensation per employee (y-o-y)	3.0	2.3	1.5	0.0	-2.9	4.9	3.8	3.3
Labour productivity (real, hours worked, y-o-y)	1.0	0.2	1.0	0.4	0.4	-0.8	-1.2	1.0
Unit labour costs (ULC, whole economy, y-o-y)	1.5	2.1	0.8	-0.7	4.4	-0.2	1.8	1.9
Real unit labour costs (y-o-y)	-0.5	0.9	0.0	-1.9	1.8	-1.0	-0.4	-1.1
Real effective exchange rate (ULC, y-o-y)	0.6	-0.3	0.2	-4.6	.	.	.	.
Real effective exchange rate (HICP, y-o-y)	0.0	-1.2	0.3	-1.4	1.5	-0.4	.	.
Net savings rate of households (net saving as percentage of net disposable income)	9.2	10.0	8.5	9.2	15.7	.	.	.
Private credit flow, consolidated (% of GDP)	8.6	5.6	5.2	7.9	12.9	6.5	.	.
Private sector debt, consolidated (% of GDP)	110.9	131.7	143.0	152.6	173.6	167.9	.	.
of which household debt, consolidated (% of GDP)	42.9	53.0	57.2	62.2	68.7	67.0	.	.
of which non-financial corporate debt, consolidated (% of	68.0	78.8	85.8	90.4	105.0	100.9	.	.
Gross non-performing debt (% of total debt instruments and total loans and advances) (2)	2.6	4.2	3.4	2.2	2.0	.	.	.
Corporations, net lending (+) or net borrowing (-) (% of GDP)	0.9	0.9	-0.1	-0.4	-1.4	-0.2	-0.8	-0.8
Corporations, gross operating surplus (% of GDP)	18.0	17.4	17.4	18.4	16.9	19.0	18.6	18.8
Households, net lending (+) or net borrowing (-) (% of GDP)	2.3	3.7	2.8	2.8	8.0	5.6	3.7	3.1
Deflated house price index (y-o-y)	9.7	-0.3	-0.3	2.5	4.4	.	.	.
Residential investment (% of GDP)	6.3	6.4	6.1	6.5	6.1	6.8	.	.
Current account balance (% of GDP), balance of payments	0.2	-0.7	-0.7	-0.3	-1.9	-0.6	-1.1	-0.1
Trade balance (% of GDP), balance of payments	0.1	-1.3	-0.7	-0.9	-1.9	-1.2	.	.
Terms of trade of goods and services (y-o-y)	-0.7	-0.4	0.7	0.9	0.6	-0.9	-3.6	0.9
Capital account balance (% of GDP)	0.0	0.0	0.0	0.1	0.1	0.5	.	.
Net international investment position (% of GDP)	-4.8	-11.9	-16.2	-25.3	-30.2	-34.5	.	.
NENDI - NIIP excluding non-defaultable instruments (% of GDP)	-6.7	-23.8	-30.9	-34.8	-41.9	-40.6	.	.
IIP liabilities excluding non-defaultable instruments (% of GDP)	175.3	239.1	237.8	258.0	298.6	287.9	.	.
Export performance vs. advanced countries (% change over 5	-4.3	-9.3	-4.1	-2.1	-6.4	.	.	.
Export market share, goods and services (y-o-y)	-4.4	-4.0	0.5	-0.7	-5.6	-0.6	3.5	3.1
Net FDI flows (% of GDP)	1.7	1.5	1.0	0.2	1.6	-0.6	.	.
General government balance (% of GDP)	-3.0	-5.5	-3.4	-3.1	-8.9	-6.5	-4.6	-3.2
Structural budget balance (% of GDP)	.	.	-2.8	-3.3	-4.4	-5.3	-4.5	-3.3
General government gross debt (% of GDP)	65.6	83.1	96.3	97.4	114.6	112.9	111.2	109.1

(1) NIIP excluding direct investment and portfolio equity shares

(2) Domestic banking groups and stand-alone banks, EU and non-EU foreign-controlled subsidiaries and EU and non-EU foreign-controlled branches.

Source: Eurostat and ECB, as of 02-05-2022, where available; European Commission for forecast figures (Spring forecast 2022)

This annex assesses fiscal sustainability risks for France over the short, medium and long term. It follows the same multi-dimensional approach as the 2021 Fiscal Sustainability Report, updated on the basis of the Commission 2022 spring forecast.

Table 1 presents the baseline debt projections. It shows the projected government debt and its breakdown into the primary balance, the snowball effect (the combined impact of interest payments and nominal GDP growth on the debt dynamics) and the stock-flow adjustment. These projections assume that no new fiscal policy measures are taken after 2023, and include the expected positive impact of investments under Next Generation EU.

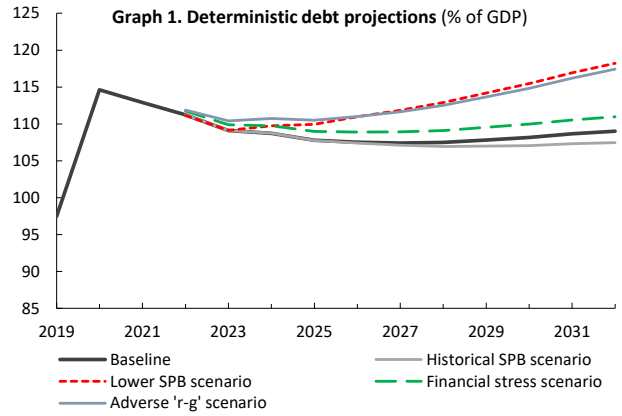
Graph 1 shows four alternative scenarios around the baseline, to illustrate the impact of changes in assumptions. The 'historical SPB' scenario assumes that the structural primary balance (SPB) gradually returns to its past average level. In the 'lower SPB' scenario, the SPB is permanently weaker than in the baseline. The 'adverse interest-growth rate' scenario assumes a less favourable snowball effect than in the baseline. In the 'financial stress' scenario, the country temporarily faces higher market interest rates in 2022.

Graph 2 shows the outcome of the stochastic projections. These projections show the impact on debt of 2 000 different shocks affecting the government's budgetary position, economic growth, interest rates and exchange rates. The cone covers 80% of all the simulated debt paths, therefore excluding tail events.

Table 2 shows the S1 and S2 fiscal sustainability indicators and their main drivers. S1 measures the consolidation effort needed to bring debt to 60% of GDP in 15 years. S2 measures the consolidation effort required to stabilise debt over an infinite horizon. The *initial budgetary position* measures the effort required to cover future interest payments, the *ageing costs* component accounts for the need to absorb the projected change in ageing-related public expenditure such as pensions, health care and

Table A20.1:**Debt sustainability for France**

Table 1. Baseline debt projections	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Gross debt ratio (% of GDP)	**97.4**	**114.6**	**112.9**	**111.2**	**109.1**	**108.7**	**107.8**	**107.5**	**107.4**	**107.5**	**107.8**	**108.2**	**108.7**	**109.0**
Change in debt	-0.4	17.2	-1.7	-1.7	-2.1	-0.4	-0.9	-0.3	-0.1	0.1	0.3	0.3	0.5	0.4
of which														
Primary deficit	*1.6*	*7.6*	*5.1*	*3.2*	*1.7*	*1.8*	*1.8*	*1.9*	*2.1*	*2.2*	*2.2*	*2.2*	*2.2*	*2.3*
Snowball effect	*-1.5*	*7.0*	*-7.0*	*-4.3*	*-3.6*	*-2.2*	*-2.7*	*-2.2*	*-2.2*	*-2.1*	*-1.9*	*-1.8*	*-1.7*	*-1.9*
Stock-flow adjustment	*-0.4*	*2.9*	*0.2*	*-0.5*	*-0.2*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Gross financing needs (% of GDP)	16.6	27.8	22.0	19.4	18.5	18.8	18.7	18.9	19.1	19.3	19.5	19.7	20.0	20.1



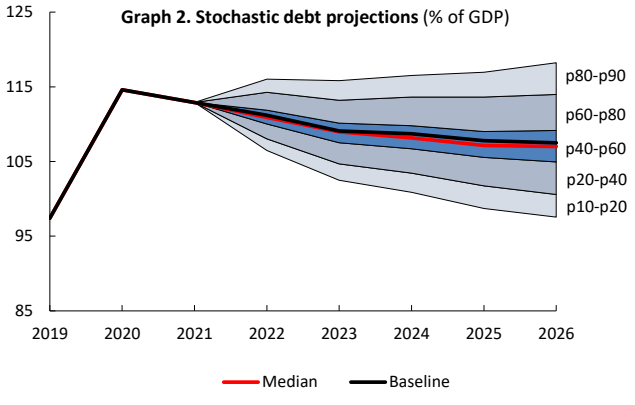


Table 2. Breakdown of the S1 and S2 sustainability gap indicators

		S1	S2
Overall index (pps. of GDP)		**4.6**	**0.7**
of which			
Initial budgetary position		0.5	2.0
Debt requirement		3.8	
Ageing costs		0.4	-1.3
of which	*Pensions*	*0.2*	*-2.1*
	Health care	*0.2*	*0.6*
	Long-term care	*0.2*	*0.7*
	Others	*-0.2*	*-0.5*

Source: European Commission

long-term care, and the *debt requirement* measures the additional adjustment needed to reach the 60% of GDP debt target.

Finally, the heat map presents the overall fiscal sustainability risk classification. The *short-term risk category* is based on the S0 indicator, an early-detection indicator of fiscal stress in the upcoming year. *The medium-term risk category* is derived from the debt sustainability analysis (DSA) and the S1 indicator. The DSA assesses risks to sustainability based on several criteria: the projected debt level in 10 years' time, the debt trajectory ('peak year'), the plausibility of fiscal assumptions and room for tighter positions if needed ('fiscal consolidation space'), the probability of debt not stabilising in the next 5 years and the size of uncertainty. The *long-term risk category* is based on the S2 indicator and the DSA.

Overall, short-term risks to fiscal sustainability are low. The Commission's early-detection indicator (S0) does not signal major short-term fiscal risks.

Medium-term risks to fiscal sustainability are high. The two elements of the Commission's medium-term analysis lead to this conclusion. First, the debt sustainability analysis (DSA) shows that government debt is projected to broadly stabilise at the high level of around 110% of GDP in 2032 in the baseline (Table 1). This debt path is also sensitive to possible shocks to fiscal, macroeconomic and financial variables, as illustrated by alternative scenarios (some of which pointing to high risks) and stochastic simulations. Moreover, the sustainability gap indicator S1 signals that an adjustment of 4.6 pps. of GDP of the structural primary balance would be needed to reduce debt to 60% of GDP in 15 years' time (Table 2). Overall, the high risks reflect vulnerabilities due to the high debt level and sensitivity to adverse shocks.

Long-term risks to fiscal sustainability are medium. Over the long term, the sustainability gap indicator S2 (at 0.7 pp. of GDP) points to low risks, while the DSA points to substantial vulnerabilities, leading to the overall medium risk assessment. The S2 indicator suggests that the projected decline in public pension expenditure relative to GDP will help stabilise debt over the long term, despite budgetary pressures stemming from health care and long-term care (table 2).

Table A20.2:**Heat map of fiscal sustainability risks for France**

Short term	Medium term										Long term	
				Debt sustainability analysis (DSA)								
					Deterministic scenarios							
Overall (S0)	Overall (S1+DSA)	S1	Overall		Baseline	Historical SPB	Lower SPB	Adverse 'r-g'	Financial stress	Stochastic projections	S2	Overall (S2+DSA)
LOW	HIGH	HIGH	HIGH	Overall	MEDIUM	MEDIUM	HIGH	HIGH	MEDIUM	LOW	LOW	MEDIUM
				Debt level (2032), % GDP	109	107	118	117	111			
				Debt peak year	2021	2021	2032	2032	2021			
				Fiscal consolidation space	83%	82%	95%	83%	83%			
				Probability of debt ratio exceeding in 2026 its 2021 level						23%		
				Difference between 90th and 10th percentiles (pps. GDP)						21		

(1) *Debt level* in 2032: green: below 60% of GDP, yellow: between 60% and 90%, red: above 90%. (2) The *debt peak year* indicates whether debt is projected to increase overall over the next decade. Green: debt peaks early; yellow: peak towards the middle of the projection period; red: late peak. (3) *Fiscal consolidation space* measures the share of past fiscal positions in the country that were more stringent than the one assumed in the baseline. Green: high value, i.e. the assumed fiscal position is plausible by historical standards and leaves room for corrective measures if needed; yellow: intermediate; red: low. (4) *Probability of the debt ratio exceeding in 2026 its 2021 level*: green: low probability, yellow: intermediate, red: high (also reflecting the initial debt level). (5) The *difference between the 90th and 10th percentiles* measures uncertainty, based on the debt distribution under 2000 different shocks. Green, yellow and red cells indicate increasing uncertainty.

Source: European Commission (for further details on the Commission's multi-dimensional approach, see the 2021 Fiscal Sustainability Report)