

Brussels, 23.5.2022 SWD(2022) 604 final

COMMISSION STAFF WORKING DOCUMENT

2022 Country Report - Cyprus

Accompanying the document

Recommendation for a COUNCIL RECOMMENDATION

on the 2022 National Reform Programme of Cyprus and delivering a Council opinion on the 2022 Stability Programme of Cyprus

{COM(2022) 604 final} - {SWD(2022) 640 final}

EN EN



Cyprus

2022 Country Report



ECONOMIC AND EMPLOYMENT SNAPSHOT

Cyprus weathered the pandemic well but vulnerabilities remain

Cyprus went into the COVID-19 crisis with robust growth, showing a swift recovery from the 2013 financial crisis. At the same time, the catching up process was still ongoing when COVID-19 struck, with GDP per head (in purchasing power standards) at 90% of the EU average in 2019 compared to 91.3% before the financial crisis.

Cyprus is a comparatively small, open and service-oriented economy. Services accounted for almost 84% of GDP and employed more than 70% of the labour force in 2020. Tourism, professional and financial services and real estate are among the biggest contributors to GDP (see Annex 19). Tourism remains a key economic driver as it has significant spillover effects into other sectors, such as transport and trade.

The COVID-19 pandemic interrupted the dynamic growth of previous years only temporarily and the economy bounced back strongly in 2021. Real GDP contracted by 5% in 2020, which was less pronounced than the EU average in 2020 and the 6.6% contraction in the 2013 financial crisis of 2013. The economy recovered quickly, and GDP grew by 5.5% in 2021. This good performance was also due to support measures, which cushioned the drop in income and consumer spending and helped exposed sectors like tourism to weather the crisis. Measures included temporary and short-term work schemes, also benefiting from the European instrument for temporary Support to mitigate Unemployment Risks in an Emergency (SURE, EUR 603 million disbursed), banks' moratoria on loan repayments, as well as schemes to provide subsidised interest rates for loans and quarantees on loans. The

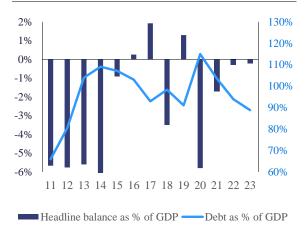
tourism sector was severely hit by a decline in tourist arrivals of 84% in 2020, which it has not yet fully recovered from. Going forward, economic activity is expected to slow down in 2022, 2.3%, negatively affected by Russia's invasion of Ukraine, before it resumes its strong growth momentum in 2023, 3.5%. Significant uncertainty and downside risks to the growth outlook remain, mainly related to the economic impact of the aggression of Russia against Ukraine.

Inflation has been increasing. The high global prices of raw materials in general and oil in particular pushed inflation up to 2.3% in 2021, following many years of low inflation. Inflation is forecast to peak in 2022 at 5.2%, before moderating to 2.7% in 2023. Cyprus depends heavily on imported oil products for energy consumption, putting further pressure on vulnerable households. Energy poverty is already prevalent, with over 20.9% of the total population unable to keep their homes adequately warm, compared to 8.2% in the EU in 2020 (see Annex 6). The government has rolled out measures to support the population by reducing VAT and excise duties and providing special discounts for vulnerable groups.

Government finances have been improving on the back of the economic recovery. Cyprus' prudent fiscal policy put it in a strong fiscal position following the financial crisis. As a result, the general government balance reached a surplus position since 2016 and public debt decreased from 109.1% of GDP in 2014 to 91.1% in 2019. In 2020, the general government balance turned to a deficit of 5.8% of GDP due to the recession and the government's measures to support the economy and the labour market. However, the deficit narrowed to 1.7% in 2021 on the back of the strong economic recovery and is expected to improve further this year. Likewise, after peaking in

2020, the public debt-to-GDP ratio is expected to fall significantly to 93.9% in 2022, gradually returning to pre-financial crisis levels. There are moderate medium- and longterm fiscal sustainability risks due to the high current level of government debt, the debt path's sensitivity to macro-fiscal shocks and projected age-related public spending. Between 2019 and 2070, total ageing costs are estimated to increase by 2.0 percentage points (pps) of GDP, among which public pensions by 2.1 pps of GDP. (1) Also, the risk of climate change is substantial for Cyprus in particular due to risks related to wildfires.

Graph 1.1: Key fiscal indicators



Source: European Commission

Despite the banking sector's resilience during the COVID-19 crisis, risks remain.

The banking sector's total consolidated assets are 3.1 times the size of the economy, which largely enabled it to absorb the economic shock from the pandemic. The banks' average capital and liquidity ratios remained well above regulatory minimums and the sector had already returned to profitability in 2021. Throughout the crisis, banks have continued building up additional buffers while reducing their non-performing loans (2) through organic reductions and portfolio sales. Overall, loans

that have exited the payment moratoria have performed encouragingly but Cyprus still has the second-highest level of non-performing loans in the EU.

A significant amount of troubled assets remains in the economy. These assets are managed outside the banking sector by credit acquiring and credit-servicing companies. While the supervision of credit acquiring companies has been strengthened, there are still challenges related to their operating environment. Therefore, the recovery and resilience plan contains a proposal for a legislative framework to allow both credit acquiring companies and their credit-servicers to access data on debtors' creditworthiness and property.

The current account deficit widened, mainly due to pandemic and the collapse of revenues from tourism. Despite a noticeable improvement in 2021, it is well above the level required to stabilise the net international investment position. Further developing export-oriented sectors and lower import dependence in particular on oil are essential to ensure that levels of external debt remain sustainable in the future. The large current account deficit is mirrored by the fact that savings are falling short of investment, household particularly in the sector. Households in Cyprus have been net borrowers since at least as far back as 2000 and Cyprus' savings rate, 8% is one of the lowest in the EU compared to the EU average of 18.3% in 2020 (see Annex 17).

Achieving environmentally sustainable economic growth is still a key challenge.

Cyprus is among the Member States with the highest greenhouse gas emissions per person. With its existing measures, it will fall 15 pps short of its effort sharing reduction target of -24% compared to its 2005 base year emissions. At the same time, it would have to step up its efforts significantly to achieve the proposed new effort sharing reduction target based on the higher ambitions of the Fit for 55 Directive (see Annex 5). High dependence on imported oil, which makes up around 85.6% of the country's energy mix, is the main cause of higher emissions and exposes Cyprus to

⁽¹) See the Ageing Report 2021. However, this does not take into account legislated future increases to the General Social Insurance Scheme contribution rate over the period until 2039.

⁽²) The NPLs figures referred to in this report are based on ECBs' data and thus they differ from the figures referred to in the Post-Programme Surveillance Report Cyprus, Spring 2022, where data are based on Central Bank of Cyprus' data.

price fluctuations on the international oil market. With renewable energy accounting for 16.88% of gross final energy consumption (3) in 2020, Cyprus overshot its intermediate target, but showed a lack of ambition in relation to its very large potential. Due to its location in the eastern Mediterranean region, Cyprus faces particularly high risks from dramatic temperature increases and climate change. The transition towards a circular economy has just begun, and increasing municipal waste generation, the low recycling rate (16.4% compared to 47.8% in EU average) (see Annex 7) and high transport emissions due to the wide use of private cars remain major challenges.

Cyprus is lagging behind in the digital transition. Cyprus ranks among the lowest in the Commission's Digital Economy and Society Index (DESI) Report for 2022. Notably, while Cyprus is performing better in digital public services than in the other DESI dimensions, it is lagging behind in the categories 'fixed very high capacity network coverage', 'basic digital skills', 'shortages of information communications technology specialists' and 'relatively high broadband price' (see Annex 8).

The labour market is improving, but challenges remain especially with regard to young people and women. Both employment and hours worked increased in 2021. Although unemployment increased slightly during the pandemic, it fell again in 2021. However, the already high levels of unemployment among youth (15-24 years old) and young people not in employment, education or training increased during the pandemic to 17.1% and 15.4%, respectively in 2021. The gender employment gap remains relatively wide, reaching 12.2 pps in 2021 compared to the EU average of 10.8 pps, owing partly to the low number of children below the age of 3 enrolled in childcare services (see Annex 12). Following a decrease in 2020, wages recovered in 2021. Cyprus

intends to introduce a national statutory minimum wage, which is expected to help reduce the risk of poverty and to benefit mostly young people and female employees.

Cyprus recently introduced a new national health insurance system. It has already made Cyprus more resilient to the pandemic and made access to healthcare services more equitable. The recovery and resilience plan is expected to help consolidate these gains.

Low productivity, skills shortages and mismatches in the labour market still pose challenges. In 2021, Cyprus' labour productivity per hour worked was around 75.5% of the EU average, having slightly increased since 2020, after stagnating for almost a decade (see Annex 10). Low productivity also characterises commercial state-owned entities. GDP potential growth is mainly driven by employment and investments rather than technology improvements and innovation (see Annex 9).

Cyprus performs well in implementing most principles of the European Pillar of Social Rights, but challenges remain. Despite high numbers of students completing tertiary education, Cyprus has one of the lowest proportions of graduates in science, technology, engineering and mathematics in the EU. The proportion of upper secondary students participating in vocational education and training was comparatively low too (17% against an EU average of 49% in 2019), as was the proportion of those with at least basic digital skills (50% against EU average of 54% in 2021) (see Annex 12). As a result, there are skills shortages in professions related to information communications technology, science. technology. engineering mathematics. There are also shortages of nurses in the healthcare sector and unskilled professions in the catering industry. There are significant skills mismatches among the working age population as a considerable share (33.2% in 2020, above the EU average of 21.5%) of tertiary graduates aged 20-64 are overqualified for their current job (4). The level of basic skills among pupils in Cyprus

⁽³⁾ Gross final energy consumption is the energy consumed by end-users and deducts energy losses during energy transformation from the gross inland energy consumption. The share of renewables in the latter stands at 13.8%. Coal accounts for the remaining 0.6% of gross final energy consumption.

⁽⁴⁾ Skills - Eurostat (europa.eu)

remains a concern and highlights socioeconomic disparities (see Annex 13).

The low corporate tax rate remains a challenge. Standing at 10.8% in 2020, the average effective tax rate on corporate income is well below the EU average of 19.3% (see Annex 18). While measures are being taken to address the issue of aggressive tax planning, the corporate tax rate remains very low. This leads to spillover effects for other EU countries, while not adding much to the real economy, since many businesses attracted have a weak link to the Cypriot economy.

In terms of competitiveness, Cyprus' performance is below the EU average.

Based on international competitiveness rankings (Global Competitiveness Report or the World Competitiveness Rankings), Cyprus performs below the EU average. According to these reports the tax regime and the high educational level boost competitiveness, whereas the small market size, weaknesses in the financial system, relatively digitalisation and research and innovation capacity are a drag on competitiveness.

Overall, Cyprus is performing well and further making progress towards reaching the UN's Sustainable Development Goals (SDGs). Cvprus performs very well (SDG 15) or is improving on several SDG indicators related environmental sustainability (SDG 2, 7, 9, 11). Further, it performs very well or well on poverty and health SDG indicators (SDG 1, 3, 10) and is improving on several SDG indicators assessing the fairness of society and the economy (SDG 2, 4, 5). Cyprus is also improving on SDG indicators related to decent work and economic growth (SDG 8), macroeconomic stability (SDG 16) as well as productivity (SDG 4, 9). However, important challenges remain (see Annex 1).

Russia's invasion of Ukraine weighs on the growth of the economy

invasion Russia's of Ukraine disrupted the tourism sector's recovery. Russia is Cyprus' second most important tourist market after the UK. Its share of total tourist arrivals and revenues hovered around 20% in 2016-2019. Currently, one fifth of the tourist arrivals expected in 2022 are at risk owing to travel restrictions and the impact of sanctions on Russian purchasing power. Moreover, rising inflation is expected to erode disposable income in Cyprus' other tourist markets, thereby reducing demand for holidays.

Russia's invasion of Ukraine is also expected to have a negative impact on exports of services other than tourism. Cyprus' exports to Russia include information technology. communication accounting. consulting, as well as shipping and transport services, which accounted for 17.5% of total exports of services in 2020. The disconnection of several Russian Banks from the Society for Worldwide Interbank Financial Telecommunications (SWIFT), as well as the negative impact of sanctions on Russian companies are expected to negatively affect these sectors.

The already high current account deficit is set to widen further. The expected loss in exports of tourism and other services in combination with expensive imports of oil and raw material, for which domestic demand is inelastic, are expected to push the current account deficit to a high level, around 8.8% of GDP in 2022.

Russia has the biggest proportion of Foreign Direct Investments (FDI) stocks in Cyprus. FDI stocks concern mainly financial special purpose entities (SPEs) that reportedly do not have strong links with the domestic economy, with Cyprus being used as a pass-through destination. Real estate accounts for 4.4% of total FDI stocks vis-à-vis Russia. (See

Post-Programme Surveillance Report, Spring 2022).

The links between Russia and the Cypriot banking sector have been significantly reduced since the banking crisis of 2013, but risks remain. Russian residents' deposits make up around 4% of total deposits in Cypriot banks and the exposure of Cypriot banks in Russia appears limited. In the meantime, following the Russian invasion of Ukraine, RCB Bank Ltd took a decision to voluntarily phase out its banking operations after weighting the impact of geopolitical risks on its operations (5).

(5

⁽⁵⁾ RCB Bank Ltd announced its plans and committed to repay fully all depositors. In the meantime, the ECB restricted RCB's business and the bank cannot take new deposits, grant new loans, or make new investments anymore. In addition, a temporary administrator was appointed to work with the current management, ensuring the smooth conclusion of the deposit relationships while monitoring bank's liquidity and capital.

THE RECOVERY AND RESILIENCE PLAN IS UNDERWAY

The Cypriot recovery and resilience plan is ambitious and addresses the majority of long-standing challenges. It amounts to EUR 1.2 billion (at current prices, equivalent to 5.4 % of GDP in 2019) in grants and loans for the period 2021-2026 (see Annex 2). This comes on top of EU Cohesion policy, which provides EUR 968 million for the period 2021-2027 (see Annex 3). The plan consists of 133 measures that jointly cover the six pillars of the Recovery and Resilience Facility (6). Those measures target structural challenges in the areas of energy efficiency and production. digitalisation, transport, waste and water management, health. labour market. education, research and innovation, business environment and competitiveness.

The Cypriot recovery and resilience plan will play a key role in accelerating the fair green and digital transition. It puts forward several reforms and investments to underpin the fair green transition. The centrepiece is the EuroAsia Interconnector project, a Project of Common Interest, which is expected to connect Cyprus' electricity network to the Greek network in Crete and to the Israeli network, ending Cyprus' energy isolation and facilitating renewable energy development. Furthermore, green taxation, liberalisation of the electricity market and energy efficiency of buildings are among the measures that will contribute substantially to the greening of the economy and to the country's transition to climate neutrality. On digital transition, the recovery and resilience plan supports the deployment of very high-capacity broadband networks, including in areas with no private sector interest. It fosters digitalisation measures in areas such as e-government, ehealth, e-justice services and education and training. Moreover, the digitalisation of companies, in particular small and mediumsized enterprises, is facilitated by measures that aim to increase businesses' productivity and competitiveness.

The Cypriot recovery and resilience plan will improve urban sustainable mobility transport and promote circular economy waste management. Several measures provide the impetus for cleaner, smarter, safer and fairer urban mobility by incentivising the shift to sustainable and smart modes of transport, the creation of e-mobility infrastructure and the integration of smart and digital systems in the transport sector. A number of measures will help to improve the circular economy, especially in tourism, and manufacturing, agriculture notably addressing the key issue of coordination between different levels of government. The plan also includes initiatives in the area of waste management that aim to increase sustainable waste management practices, including recycling. Furthermore, there are measures targeting inefficient management practices. These include a water management reform as well as a set of interrelated and reinforcing investments aimed at reducing water losses by upgrading existing infrastructure.

Health care will become more efficient **and accessible.** Specifically, the plan includes not only reforms that will contribute to increase the efficiency, accessibility and overall resilience of the National Health System, but also investments to strengthen public health capacities and the hospital sector. The latter measures will also help improve working conditions for health workers. Notably, Cyprus intends to shift towards valuebased reimbursement of healthcare expenditure for disease management by Q1-2023, by stepping up the use of good clinical practice protocols. Digitalising the public health information systems and reporting on

⁽⁶⁾ Regulation (EU) 2021/241 of the European Parliament and of the Council of 12 February 2021 establishing the Recovery and Resilience Facility

antibiotics/antimicrobial resistance will substantially improve the resilience of Cyprus' healthcare and tackle some of the challenges identified (see Annex 14).

The recovery and resilience plan targets inefficiencies in education and training. the labour market and social policies, thereby helping to implement the European Pillar of Social Rights. The plan tackles challenges in social cohesion through a of reforms and investments in employment, education and training, which will also support the green and digital transition (see Annex 12). Projects include outreach for people measures voung employment, education or training (NEETs) using mobile units and the strengthening of the public employment services and the Department of Labour. At the same time, there are plans for legislation to protect flexible forms of employment including teleworking. Early childhood education and care is being extended to children starting from 4 years of age, and childcare centres are put in place, while for the first time a national strategy and accompanied action plan will be developed for early childhood education and care in Cyprus. Curriculum development, graduate trackingand guidance as well as the construction of modern vocational education and training schools will address mismatches between education and the labour market's needs. Social protection actions include reforms to extend the coverage of the social security system and to create care centres for children in need and for people in need of long-term care. Cyprus must tackle all these challenges in order to achieve the 2030 EU headline targets on employment, skills and poverty reduction.

The Cypriot recovery and resilience plan will foster a more diverse and resilient growth model, and improve the business environment. The plan includes measures to boost agricultural technology and practices, increase light manufacturing activities and upskill farmers to adapt to the needs of agritech. In the tourism sector, the plan will provide grants to enable small and mediumsized enterprises in mountainous areas to improve their infrastructure and services. It

also includes reforms and investments to promote export-oriented businesses and strengthen the links between research organisations and enterprises that commercialises research results. In relation to the business environment, there are measures to simplify the procedures for conducting business in Cyprus, and to improve access to small and finance for medium-sized enterprises.

The recovery and resilience plan includes measures that aim to safeguard fiscal and financial stability and make public administration more efficient. The plan includes a dedicated component for financial and fiscal stability that is expected to strengthen the soundness of the banking sector, improve the functioning of the insolvency framework and prevent high levels of private debt. As part of the plan, Cyprus also aims to implement tax reforms to increase the effectiveness, efficiency and fairness of the tax system by combating tax evasion and aggressive tax planning by multinational enterprises. The plan also includes measures to modernise the public sector including local authorities, by increasing the efficiency and digitalisation of the public administration and justice system enhancing anti-corruption and transparency measures (see also Annex 11).

Implementation is essential to reap the full benefits of the plan. Continuous dialogue with national authorities will allow the progress made on implementing the investments and reforms to be tracked over the next 4 years. Since the plan's key reforms verv ambitious. its successful implementation requires political commitment of the government and Parliament. The first payment request includes milestones that cover reforms of (i) the energy market, (ii) the efficiency of public administration, (iii) the fight against corruption and protection of whistle-blowers, (iv) the promotion of the circular economy, (v) the enhancement of digital skills and (vi) the strengthening of financial stability. Several milestones also concern major energy-efficient investments and investments in renewables and upgrading the infrastructure of courts.

Box 1:

Key deliverables under the recovery and resilience plan in 2022-23

- The reform of public administration, to simplify procedures and improve efficiency;
- **The establishment of the anti-corruption Framework**, to protect whistle-blowers and to make anti-corruption efforts more coherent;
- **The reform of the justice system**, by introducing an e-justice system to accelerate the administration of justice and reduce the backlog of cases;
- The Framework and Action Plan for addressing non-performing loans;
- A national research and innovation strategy and the launch of the central Knowledge
 Transfer Office, strengthening links between research organisations and enterprises, and
 supporting commercialisation of innovative solutions;
- **Reforms to improve small and medium-size enterprises' access to finance**, to increase the availability of alternative financing sources;
- The kick-off of the 'EuroAsia interconnector' project to end energy isolation;
- The adoption of the national e-skills action plan to support the digital transition;
- The entry into force of the revised Social Insurance Law, extending social security coverage to the self-employed and workers in non-standard forms of employment;
- **Green Taxation,** which shall aim at making a tangible contribution to reaching the 2030 target for reducing greenhouse gas emissions;
- **Design of and establishment of a National Promotional Agency**, to improve access to finance for Small Medium Enterprises (SMEs).

FURTHER PRIORITIES AHEAD

Beyond the challenges addressed by the recovery and resilience plan, as outlined above, Cyprus faces additional challenges not sufficiently covered in the plan. These include the need to improve the governance of state-owned entities, further strengthen the financial sector, make further efforts to foster resilient, sustainable and inclusive growth, as well as ensure energy security and the green transition. Addressing these challenges will also enable further progress to be made in achieving the Sustainable Development Goals related macroeconomic to stability. sustainability, fairness and environmental productivity.

Improving the governance of state-owned entities

The governance of state-owned entities falls short of international standards (7).

The existing state-owned entity management framework in Cyprus notably transparency, as Cyprus does not publish a comprehensive dataset on those entities' performance in meeting financial and, where relevant, public policy objectives. In addition, process for nominations management bodies of those companies is not transparent. According to the OECD product market regulation indicator, Cyprus' stateowned entities are subject to political interference, mainly because they are owned by the policy-oriented line ministries rather than by a dedicated central body. Moreover, state-owned entities are insulated to some extent from market discipline, as not all of them are subject to company law.

State-owned entities dominate certain important economic sectors and their profitability is supported by state transfers. While state ownership can be justified in public services, notably regulatory and educational areas, this is less the case for commercial state-owned entities. With total assets of 27% of GDP in 2020, commercial state-owned entities make up a sizeable proportion of Cyprus' economy, notably in the financial, energy, telecommunications, healthcare, water distribution and sewerage sectors. For instance, in the energy sector, Cyprus needs to ramp up renewable energy sources in electricity towards the EU average (12.0% vs. 37.5% in 2020). Therefore, through its ownership of the incumbent energy supplier (the Electricity Authority of Cyprus, with a market share of 86.8% in electricity generation and 98.7% in supply), the State could play a significant role in achieving the green transition. This would also help reduce country's high energy dependency on imports. Overall, the commercial state-owned entities are profitable, with net profits amounting to 0.7% of GDP in 2020, but their revenue is supported by government grants of 1.9% of GDP. Notably, the State Health Services Organisation receives significant transfers, although by law, it should become financially and operationally autonomous by June 2024.

While some progress was achieved in measures to improve governance of state-owned entities were included in the recovery resilience plan. Only some progress was achieved on the 2019 country-specific recommendation to 'adopt key legislative reforms to improve the governance of stateowned entities' (see Annex 4). Notably, in 2019, the Cypriot Council of Ministers adopted decisions, amongst others, to oblige the Board of Directors and key line ministers to prepare a risk report for each state-owned entity, and to link strategic plans and staffing levels of these

⁽⁷⁾ For example, OECD guidelines on corporate governance of state-owned enterprises, World Bank Toolkit for Corporate Governance of State-Owned Enterprises.

entities to the next annual budget. In 2019, the Treasury also issued a circular with a detailed procedure to follow for the state-owned entities to be eligible to receive the state grant (8). The recovery and resilience plan includes some measures to open the electricity market to competition, notably by making the Cyprus Transmission System Operator independent of the incumbent Electricity Authority of Cyprus (by the end of 2021). However, the broader issue of governance of state-owned entities was not addressed.

state-owned governance of entities would increase productivity and improve the business environment. Increased transparency and hiaher accountability with regard to financial performance and public objectives is expected to make State-owned entities more efficient. Moreover, opening up commercially viable markets where those entities currently have a dominant position (e.g. renewables) would make these markets more efficient, accelerate the green and digital transition, and help diversify the economy. This would, in turn, improve the entities' productivity and the quality and/or price of the services they provide (e.g. the electricity price). Overall, this would make governance more effective and the marketplace for local and foreign businesses fairer and more transparent, in line with the objectives of the long-term strategy for Cyprus and the action plan underpinning it (see the Initiative Area 'Modernise stateowned enterprises and create the right incentives for innovation and efficiency').

Effective oversight would also lower fiscal risks. The support given by the State takes various forms, including grants, debt financing, capital increase or guarantees. Notably, the state-owned entities in the

healthcare sector are currently at risk of needing additional support, in excess of previous estimates (for instance, illustrated by comparing the actual financial results to the 2020 draft budgetary plan). Furthermore, the State is exposed to its entities' ability to fulfil commitments for their large workforces. Increasing long-term growth and reducing fiscal risks would also contribute to correcting the vulnerabilities related to high public, private and external debt that were identified under the macroeconomic imbalances procedure (see Annex 17).

Consolidating the recovery of the financial sector

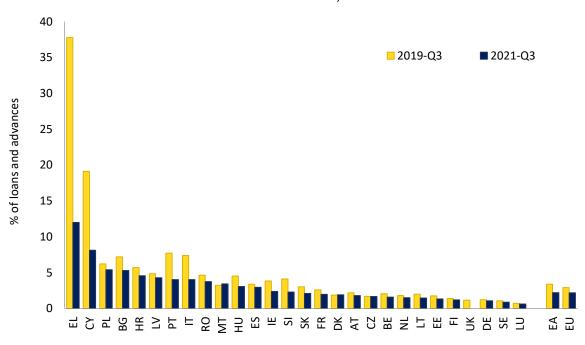
Cyprus has made considerable progress in reducing financial risks in recent years, but the stock of non-performing loans (NPLs) still remains a key challenge. Cypriot banks currently have the secondhighest NPL ratio in the EU and they are continuing to either work-out the remaining NPL portfolio or pursue additional loan portfolio sales in order to further reduce the stock of distressed assets weighing on their ability to carry out normal business. At the same time, the authorities continue working on their plan to transform KEDIPES (9) into a national asset management company. This initiative needs to be carefully designed with the necessary safeguards to ensure asset management on a par with private investor practices so as to minimise the risk to taxpayers and ensure the efficient recovery of assets (see Annex 16).

⁽⁸⁾ The procedure requires state-owned entities to provide information to the competent ministries/deputy ministries, concerning, audited financial statements, strategic plans, staff recruitment, public procurement procedures. In addition, the state-owned entities are required to submit affirmation by their Board of Directors signed by the Chairman regarding the implementation of good corporate governance practices, sound financial management principles, compliance with laws/rules, implementation of procedures and internal controls.

⁽⁹⁾ KEDIPES is the state-owned asset management company established in 2018 as the residual entity of the former state-owned Cyprus Cooperative Bank whose performing part was sold to Hellenic Bank.

Graph 3.1: NPL ratio in Cyprus vs EU Member States and EU average

Non-performing loans of domestic banks (incl foreign controlled subsidiaries and branches)



Source: Eurostat

Effective foreclosure and enforcement frameworks are important for payment discipline. The sale of loans has proven to be the most effective tool in dealing with the high level of NPLs. The recovery and resilience plan includes an action plan for NPLs, including a legislative package for credit acquirers and servicers that aims to improve their operational environment by facilitating their access to the credit and land registry and by ensuring regulatory supervision of credit servicers. However, an effective foreclosure framework is needed for a further structural reduction of NPLs. In 2021, political discussions on amending the foreclosure framework re-emerged, which could partially undo the strengthening achieved in 2018. This creates legal uncertainty that could jeopardise the disposals of NPLs to specialised investors. The adoption of the amended Civil Procedure Law, which is expected to facilitate the execution of court orders for the seizure of movable property, would improve the legal framework for the enforcement of court decisions and contractual claims. The adoption of this law by Parliament has been pending since March 2020. Moreover, challenges remain such as improving the operations of

the Department of Insolvency and of the bailiff system.

Diversification and resilience of the economy

The pandemic and Russia's invasion of Ukraine provided further proof that lack of diversification makes the economy **vulnerable to shocks.** The Cypriot economy remains dependent on tourism, albeit to a lesser extent over the past years, on professional services linked to companies under the special purpose entities regime, as well as on foreign-funded residential construction with a particular link to Russia. which however has diminished after the termination of the citizenship-by-investment scheme. Information communications technology, tertiary education, health and renewable energy are new emerging sectors, but still with a relatively low share. Investments in Cyprus are below the EU average, at 20% of GDP in 2020 (vs EU average of 22.3%) and they are concentrated

in construction, machinery and equipment. The latter mainly consists of transport equipment, which is effectively registration and deregistration of ships. By contrast, investments that could increase the economy's potential growth and productivity are still low.

So far, Cyprus' growth model has put a strain on its environment. The country hosts up to four and a half times its population in tourists every year. Although investment in construction, which has been buoyant for many years, contributes significantly to growth, it puts a significant strain on the country's environment and natural resources, and also puts the long-term sustainability of the tourism sector at risk. (10)

Diversifying the economy and ensuring its environmental and social sustainability is crucial. The new long-term strategy for the sustainable and inclusive growth of Cyprus is concluded, but pending adoption by the government. The strategy provides a good opportunity to further re-orient the country's economic development into higher value added sectors information such as communications technology. professional services, tertiary education, health, fintech, agritech and R&I. It is also crucial to ensure that future growth is inclusive and reaches all groups of society also through actions fostering social resilience. Moreover, reducing the economy's reliance on the competitive tax regime would be essential for its future resilience. In addition, making further progress on the green transition and on reducing reliance on energy imports is of utmost importance to ensuring the economy's longterm sustainability and protecting it from external shocks.

(https://ec.europa.eu/info/strategy/strategic-planning/strategic-foresight/2020-strategic-foresight-report/resilience-dashboards_en#heatmap).

Increased energy diversification and green transition

Cyprus' high dependency on oil makes it very vulnerable. Oil (all imported) account for 85.6% of its energy mix, exposing the economy to fluctuations of the oil price on international markets and creating dependency on imports (see Annex 5). Cyprus has one of the highest electricity prices in the EU due to this reliance on imported energy sources, its isolated island location and an uncompetitive electricity market. Energy consumption, including in transport, has increased by about 60% over the past three decades, while it has remained more or less constant in the EU during that period. Accelerating the creation of interconnections with neighbouring countries would help to achieve strategic autonomy, boost the green transition and reduce electricity prices. In particular, additional interconnectors would enable the grid to take on more renewables and end Cyprus' electricity isolation. Similarly, finishing the construction of facilities for importing liquefied natural gas, which was interrupted by the COVID-19 pandemic, would goals. those Proposed support interconnection pipeline projects should be hydrogen-compatible. At the same time, Cyprus would benefit from intensifying ongoing efforts to reduce energy consumption by increasing energy efficiency through the measures identified in the National Energy and Climate Plan (11).

Favourable conditions exist for accelerating the roll-out of renewables.

Greenhouse gas emissions, which are caused to a large extent by energy production and transport rank well above the EU-27 average, and Cyprus will struggle to reduce its greenhouse gas emissions in line with its EU obligations (see Annex 5). It is currently investing in renewable energy sources, in addition to the internal electricity grid and storage systems to accommodate a higher percentage of renewable energy. Furthermore,

⁽¹⁰⁾ The Resilience Dashboards confirm that Cyprus is one of the most vulnerable EU countries in the areas of 'climate change adaptation and mitigation', 'sustainable use of resources' as well as 'ecosystems, biodiversity, sustainable agriculture'

⁽¹¹⁾ https://meci.gov.cy/en/useful-information/strategic-planning/cyprus-integrated-national-energy-and-climate-plan-for-the-period-2021-2030

reforms in the recovery and resilience plan, such as liberalising the electricity market, introducing a carbon tax or amending the energy storage regulatory framework could help Cyprus to achieve the targets in the 2021-2030 National Energy and Climate Plan. However, Cyprus boasts enormous untapped potential, in particular in solar power generation. An accelerated deployment of renewables by a swift rollout of photovoltaics further streamlining of permitting procedures would increase competitiveness and productivity, make Cyprus less fossil fuel dependent, create green jobs (see Annex 6) and make the island's energy system more environmentally friendly.

Transport is responsible for a significant proportion of CO₂ emissions in Cyprus.

This is to a large extent due to the fact that almost all land transport is road-based and private. Passenger transport relies heavily on private cars with internal combustion engines, while public transport usage is very low (see Annex 5). Transport is the most energy-intensive sector in the economy, accounting for 40% of final energy demand. Cyprus is in the process of implementing reforms in order to shift towards sustainable mobility solutions. However, great effort will be needed to achieve the targets, and further steps should be taken through EU programmes and national financing.

Cyprus' weak performance in waste management is a concern, while the transition towards a circular economy barely begun. Cyprus recvcles significantly less than the EU average and its own 2025 target, and has not yet updated its waste management plan. Cyprus has a very low recycling rate and is still disposing most of its waste in landfills. Thus, the country could improve its waste performance through the broad use of economic instruments, such as the implementation of a meaningful landfill tax, pay-as-you-throw schemes and extended producer responsibility. Similarly, the circular use of materials is much lower than in the rest of the EU (see Annex 7). Measures in the recovery and resilience plan, such as the promotion of the circular economy in hotel establishments are certainly going in the right direction and some progress has been observed in recent years, although on a small scale compared to the EU average.

KEY FINDINGS

- Cyprus' Recovery and Resilience Plan includes measures to address a series of its structural challenges through:
- strengthening financial and fiscal stability to achieve a sounder banking sector, reducing risks related to private debt, improving supervision of the non-banking sector, and creating a more effective, efficient and fairer tax system;
- increasing the efficiency and digitalisation of the public sector, including the justice system, and improving digital connectivity as well as introducing further anticorruption measures;
- improving access to quality healthcare as well as enabling the digital health transition:
- increasing the quality of education and training at all levels, including digital skills, and fostering youth employment;
- enabling and increasing recycling, building new and upgrading existing infrastructure to deal with inefficient waste and water management.

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

- improving the governance of state-owned entities in line with international standards;
- reduce overall reliance on fossil fuel and further diversify energy supply accelerating the deployment of renewables, particular by further streamlining permitting procedures and expanding photovoltaics. Develop energy interconnections with neighbours, while extending and accelerating energy efficiency measures, including in the transport sector.

- strengthening the legal framework for the enforcement of court decisions and contractual claims;
- strengthening the supervision of the financial sector.
- making the country's economic growth model more diverse and environmentally sustainable, building on the support of the national recovery and resilience plan and by implementing a long-term strategy.

ANNEXES

LIST OF ANNEXES

Cross-cutting	progress indicators	21
Annex 1: Sustair	able Development Goals	21
Annex 2: Recove	ry and Resilience Plan implementation	23
Annex 3: Other E	U instruments for recovery and growth	24
Annex 4: Progres	ss in the implementation of country-specific recommendations	26
Environmenta	ll sustainability	29
Annex 5: Green I	Deal	29
Annex 6: Employ	ment and social impact of the green transition	32
Productivity		34
Annex 7: Resour	ce efficiency and productivity	34
Annex 8: Digital	transition	36
Annex 9: Innovat	tion	38
Annex 10: Indust	try and single market	40
Annex 11: Public	administration	43
Fairness		46
Annex 12: Emplo	oyment, skills and social policy challenges in light of the European Pillar of Social Rights	46
Annex 13: Educa	tion and skills	48
Annex 14: Health	n and health systems	50
Annex 15: Econo	mic and social performance at regional level	52
Macroeconom	nic stability	54
Annex 16: Key fi	nancial sector developments	54
Annex 17: Macro	economic Imbalance Procedure assessment matrix	56
Annex 18: Taxat	ion	59
Annex 19: Key e	conomic and financial indicators	61
Annex 20: Debt	sustainability analysis	62
LIST OF TA	ABLES	
Table A2.1:	Key elements of the Cypriot RRP	23
Table A4.1: Table A5.1:	Summary table on 2019,2020 and 2021 CSRs Indicators underpinning the progress on EU Green Deal from macroeconomic perspective	27 31
Table A7.1:	Selected resource efficiency indicators	34
Table A8.1:	Key Digital Economy and Society Index Indicators	37

Table A9.1:	Key research, development and innovation indicators	39
Table A10.1:	Key Single Market and Industry Indicators	41
Table A11.1:	Public administration indicators	45
Table A12.1:	Social Scoreboard	46
Table A13.1:	EU-level targets and other contextual indicators under the European Education Area strategic framework	48
Table A14.0:	Key health indicators	51
Table A15.1:	Selected indicators at regional level - Cyprus	52
Table A16.1:	Financial Soundness Indicators	54
Table A17.1:	Assessment of Macroeconomic Imbalances matrix	57
Table A18.1:	Indicators on taxation	59
Table A19.1:	Key economic and financial indicators	61
Table A20.1:	Debt sustainability analysis for Cyprus	62
Table A20.2:	Heat map of fiscal sustainability risks for Cyprus	63

LIST OF GRAPHS

Graph A1.1:	Progress towards SDGs in Cyprus in the last five years	22
Graph A2.1:	Share of RRF funds contributing to each policy pillar	23
Graph A3.1:	ESIF 2014-2020 Total budget by fund (EUR billion, %)	24
Graph A3.2:	Cohesion policy contribution to the SDGs (EUR billion)	25
Graph A4.1:	Cyprus' progress on the 2019-2020 CSRs (2022 European Semester cycle)	26
Graph A5.1:	Fiscal aspects of the green transition Taxation and government expenditure on environmental protection	29
Graph A5.2:	Thematic – Energy Share in energy mix (solids, oil, gas, nuclear, renewables)	29
Graph A5.3:	Thematic – Biodiversity Terrestrial protected areas and organic farming	30
Graph A5.4:	Thematic – Mobility Share of zero emission vehicles (% of new registrations)	30
Graph A6.1:	Fair green transition challenges	32
Graph A6.2:	Energy poverty by income decile	33
Graph A7.1:	Economic importance and expansion of the circular economy: Employment and value added in the Circular Economy	
	sectors	34
Graph A11.0:	E-government benchmark scores and (lhs) and e-government users (rhs)	43
Graph A11.1:	Performance on the single market public procurement indicators	44
Graph A13.1:	Low achievement in reading by socioeconomic status, PISA 2018	49
Graph A14.1:	Life expectancy at birth, in years	50
Graph A14.2:	Projected increase in public expenditure on health care over 2019-2070 (reference scenario)	50
Graph A15.1:	GVA per worker	53
Graph A18.1:	Indicators on tax wedge	60

ANNEX 1: SUSTAINABLE DEVELOPMENT GOALS

This annex assesses Cyprus' 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.

Cyprus performs very well (SDG 15) or is improving on several SDG indicators related to *environmental sustainability* (SDG 2, 7, 9,

11). Although overall energy consumption in Cyprus is below the EU average, renewable energy accounts for only 16.9%. While this represents an improvement, it is still significantly below the EU average in 2020 (22.1%). Furthermore, the high of concentration nitrate in groundwater (63.4mg/litre vs EU 21.2mg/litre in 2019) combined with a recycling rate of municipal waste that is only around a third of the EU average (16.4% vs EU 47.8% in 2020) pose considerable challenges. Various measures in the recovery and resilience plan (RRP), such as energy-efficiency renovations of public and private buildings and investments in sustainable water management and transport, will help to achieve further progress on these SDGs.

Cyprus performs very well (SDG 1, 3) or well (SDG 10) and is improving on several SDG indicators assessing the *fairness* of society and the economy (SDG 2, 4, 5). (12) Cyprus outperforms the EU average in most indicators related to poverty, health and inequality (SDGs 1, 3, 10). However, the still high rate of early school leavers (10.2% vs EU 9.7% in 2021) combined with low basic skills (in PISA 2018, 43.7% of 15-year-olds were low-achievers in reading literacy vs 22.5% at EU level) pose significant challenges. In addition, the gender employment gap remains above the EU average (12.2 pps vs EU 10.8 pps in

2021), after increasing from 9.7 pps in 2016. Reforms and investments under Policy Axis 5 of the recovery and resilience plan (RRP) aim to improve quality of education and training, and to enhance access to early childhood education and care and to flexible working arrangements, thereby providing equal opportunities for all children and facilitating women's participation in the labour market.

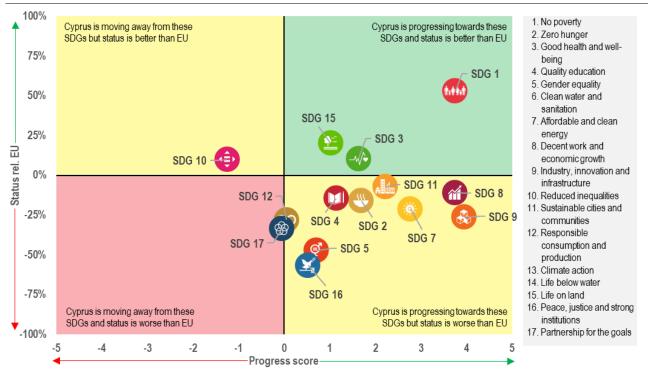
Cyprus is improving on SDG indicators related to productivity (SDG 4, 8, 9). However, strengthening digital skills remains a challenge. With only 50% of adults having at least basic digital skills in 2021, Cyprus' performance is below the EU average (54%). Cyprus is making progress in 'Decent work and economic growth' (SDG 8) as well as 'Industry, innovation, and infrastructure' (SDG 9). However, Cyprus spent only 0.82% of its GDP on R&D in 2020, which is one of the lowest R&D expenditures in the EU. In addition, the proportion of the active population working in R&D (0.5%) was much lower than the EU average in 2020 (1.43%). The RRP targets bottlenecks, especially in digitalisation and the diversification of the economy, to facilitate further progress on these SDGs.

Cyprus is improving on SDG indicators related to macroeconomic stability (SDG 8,

16). Notably, Cyprus' employment rate increased from 68.7 % in 2016 to 75.9% in 2021, which is higher than the EU average (73.1% in 2021). On the other hand, the proportion of young people aged 15-29 not in employment, education or training (NEETs) reached 15.4% in 2021 (vs the EU average of 13.2%), and the gender gap in the inactive population due to caring responsibilities (32 pps) remains considerably wider than the EU average (21.7 pps) in 2021. Cyprus improved its scores on indicators measuring 'Peace, justice, and strong institutions' (SDG 16), with 10.4% of the population reporting crime, violence or vandalism in their area in 2020 (compared to 12% in 2015 and the EU average of 10.9% in 2020). The RRP includes reforms to address several long-standing institutional challenges in the areas of justice and the fight against corruption.

⁽¹²⁾ See Annex 12 – 'Employment, skills and social policy challenges in light of the European Pillar of Social Rights' for further information.





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. Cyprus submitted its recovery and resilience plan (RRP) on 17 May 2021. The Commission's positive assessment on 8 July 2021 and the Council's approval on 28 July 2021 paved the way for disbursing EUR 1 billion in grants and EUR 0.2 billion in loans (out of EUR 1.5 billion total loan envelope) under the RRF over 2021-2026. The financing agreements were signed on 31 August 2021 and the operational arrangement was adopted by the Commission on 11 May. The key elements of the Cyprus RRP are set out in Table A2.1. The share of funds contributing to each of the RRF's six policy pillars is outlined in the graph below.

The progress made by Cyprus in the implementation of its plan is published in the Recovery and Resilience Scoreboard. The Scoreboard also gives an overview on the progress of the implementation of the RRF as a whole, in a transparent manner. The graphs below show the current state of play of the fulfilled milestones and targets, as completed by Cyprus and subsequently assessed as satisfactorily fulfilled by

the Commission.

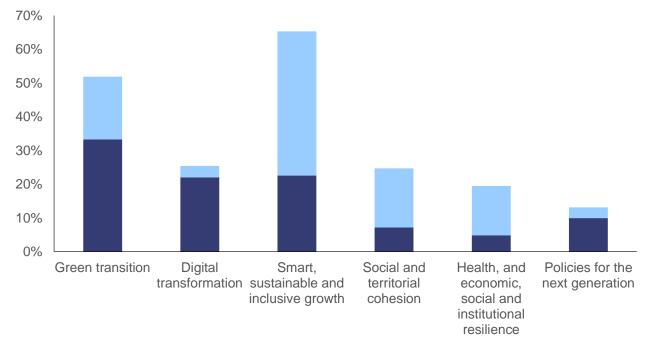
Table A2.1:Key elements of the Cypriot RRP

Total allocation	EUR 1 billion in grants (4.5% of 2019 GDP) and EUR 0.2 billion in loans (0.9% of 2019 GDP)
Investments and Reforms	75 investments and 58 reforms
Total number of Milestones and Targets	271
Estimated macroeconomic impact (1)	Raise GDP by 1.8% by 2026 (0.5% in spillover effects)
Pre-financing disbursed	EUR 0.2 billion (September 2021)
First instalment	Cyprus did not yet submit a first payment request

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

Source: European Commission, 2022

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

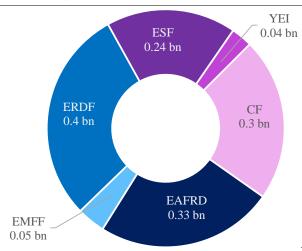


⁽¹⁾ Each measure contributes towards two policy areas of the six pillars, therefore the total contribution to all pillars is displayed on this chart amounts to 200% of the estimated cost of the Cypriot RRP. The bottom part represents the amount of the primary pillar, the top part the amount of the secondary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

Source: RRF 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 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.

Graph A3.1: ESIF 2014-2020 Total budget by fund (EUR billion, %)



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

Source: European Commission, Cohesion Open Data Note: bn EUR in current prices, % of total

In 2021-2027, EU Cohesion policy funds (13) will support long-term development objectives in Cyprus by investing EUR 968 million (14) including EUR 101.1 million from the Just Transition Fund directed to alleviate the socio-economic impacts of the green transition in the most vulnerable territories. The 2021-2027 Cohesion policy funds Partnership agreements and programmes are designed taking into account the 2019-2020 CSRs and investment guidance provided within the context of the European Semester, ensuring synergies and complementarities with other EU funding. In addition, Cyprus will benefit from EUR 380 million support for the 2023-27 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 Cyprus are set to invest EUR 1.09 billion (15) from the EU budget. The total investment including national financing amounts to EUR 1.37 **billion (Graph A3.1)**, representing around 0.99% of GDP for 2014-2020 and 28.22% of public investment (16). By 31 December 2021, 108% of the total was allocated to specific projects and 65% was reported as spent, leaving EUR 0.49 billion to be spent by the end of 2023 (17). Among the eleven objectives, the most relevant ones for cohesion policy funding in Cyprus competitiveness of SMEs, low carbon economy, environment protection and resource efficiency and active labour market policies including youth, education and training, and social inclusion. By end 2021, Cohesion Policy investments supported 737 enterprises, 2052 direct jobs, 1358 households with improved energy efficiency and 5000 population equivalent of waste water treatment and resulted in a reduction of GHG 24 986 Tonnes of CO2eq. Furthermore, investments resulted in 14 956 participants in education and training of which 13 103 unemployed, 3 586 long-term unemployed, and 7 083 young persons below 25 vears of age.

Cohesion policy funds are already substantially contributing to the Sustainable Development Goals (SDGs) objectives (Graph A3.2). In Cyprus, Cohesion policy funds are supporting 10 of the 17 SDGs with up to 90% of the expenditure contributing to the attainment of the goals.

⁽¹³⁾ European Regional Development Fund (ERDF), European Social Fund+ (ESF+), Cohesion Fund (CF), Just Transition Fund (JTF), Interreg.

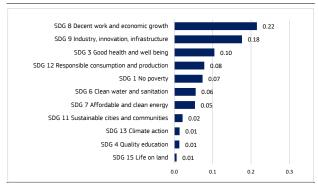
⁽¹⁴⁾ Current prices, source: Cohesion Open Data

⁽¹⁵⁾ 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 the 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.

⁽¹⁶⁾ Public investment is gross fixed capital formation plus capital transfers, general government.

⁽¹⁷⁾ Including REACT-EU. ESIF data on https://cohesiondata.ec.europa.eu/countries/CY

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



Source: European Commission, DG REGIO

The REACT-EU under NextGenerationEU provided EUR 111.4 million of additional funding to 2014-2020 cohesion policy allocations for Cyprus to ensure a balanced recovery, foster convergence and provide vital support to regions following the impact of the coronavirus outbreak. REACT-EU provided support in Cyprus to contribute to short-time work schemes in complementarity with the SURE instrument, to support some 6.200 SMEs affected by the COVID-19 pandemic and to support actions contributing to climate change objectives.

The Coronavirus Response Investment Initiative (18) provided the first EU emergency support to Cyprus in relation to the COVID-**19 pandemic.** It introduced extraordinary flexibility enabling Cyprus to re-allocate resources of around EUR 57 million to finance the reinforcement of the health sector. Investments aimed to strengthen hospitals and other health centres with appropriate equipment (masks, overalls, consumables). Furthermore, it supported the necessary human resources and financed employment support measures. Cyprus also benefited in 2021 from the temporary 100% EU financing of incurred measures in Cohesion policy in order to help beneficiaries overcome liquidity scarcity in the implementation of their projects.

Cyprus received support under the European instrument for temporary support to mitigate unemployment risks in an emergency (SURE) to finance short-time work schemes, similar measures and as an

health-related ancillary, measures. The Council granted financial assistance under SURE to Cyprus in September 2020 and top-up support in April 2021 for a maximum of EUR 603 million, which was disbursed by 25 May 2021. SURE is estimated to have supported approximately 40% of workers and 25% of firms for at least one month in 2020 and 20% of workers and 10% of firms in 2021, primarily in accommodation and food services, wholesale and retail trade and manufacturing. Cyprus is estimated to have saved a total of EUR 0.06 billion on interest payments as a result of SURE's lower interest rates.

The Commission is engaged in providing tailor-made expertise via the Technical **Support Instrument** to support Cyprus in designing and implementing growth-enhancing reforms, including for implementing its RRP. Since 2015, Cyprus has received assistance through more than 150 technical support projects. Projects delivered in 2021 aimed for example at building the capacity of the newly established General Secretariat for European Affairs, assisting the Supreme Court of Cyprus with the modernisation procedure rules, supporting development of a long-term strategy sustainable growth and a strategy for lifelong learning. The Commission also assisted Cyprus in implementing specific reforms and investments in the RRP, for instance the digitalisation of insolvency proceedings, the creation of specialised courts and for the green taxation reform. In 2022, new projects will start to support, amongst others, the set-up of an Examination Centre for the Cyprus Public Service Commission in the context of the public administration reform. Besides, the country will benefit from additional support for the implementation of the RRP, for which it will transfer resources in line with Article 7 of the TSI Regulation, to further enhance early childhood education and care.

Cyprus benefits also from **other EU programmes**, such as the **Connecting Europe Facility**, which allocated EU funding of EUR 84.0 million to specific projects on strategic transport networks, and **Horizon 2020**, which allocated EU funding of EUR 319.4 million.

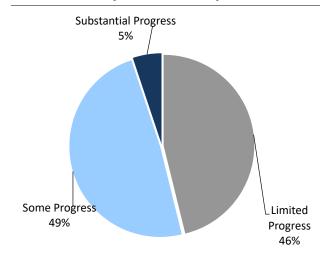
75

⁽¹⁸⁾ 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.

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

The Commission assessed the 2019-2021 country-specific recommendations (CSRs) (19) addressed to Cyprus in the context of the **European Semester**. The assessment takes into account the policy action taken by Cyprus to date (20), as well as the commitments in the Recovery and Resilience Plan (RRP) (21). At this early stage of the RRP implementation, overall 54% of the CSRs focusing on structural issues in 2019 and 2020 have recorded at least "some progress", while 46% recorded "limited" (see Graph A4.1). Considerable additional progress addressing structural CSRs is expected in the years to come with the further implementation of the RRP.

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



Source: European Commission

^{(19) 2021} CSRs: https://eur-lex.europa.eu/legalcontent/EN/TXT/?uri=CELEX%3A32021H0729%2813%29&qi d=1627675454457 2020 CSRs: https://eur-lex.europa.eu/legalcontent/EN/TXT/?uri=CELEX%3A32020H0826%2813%29&qi d=1526385017799 2019 CSRs: https://eur-lex.europa.eu/legalcontent/EN/TXT/?uri=CELEX%3A32019H0905%2813%29&qi d=1526385017799

⁽²⁰⁾ 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).

^(21)) 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

Cyprus	Assessment in May 2022*	RRP coverage of CSRs until 2026
2019 CSR1 Adopt key legislative reforms to improve efficiency in the public	Some Progress	
sector, in particular as regards the functioning of the public administration	Some Progress	Relevant RRP measures planned as of 2021, 2022, 2023, 2024 and 2025.
and the governance of State-owned entities	Some Progress	Relevant RRP measures planned as of 2024
and local governments. Address features of the tax system that may facilitate aggressive tax	Substantial Progress	Relevant RRP measures planned as of 2024 and 2025.
planning by individuals and multinationals, in particular by means of outbound payments by multinationals.	Limited Progress	Relevant RRP measures planned as of 2022.
2019 CSR2	Some Progress	
Facilitate the reduction of non-performing loans including by setting up an effective governance structure for the State-owned asset management company,	Some Progress	Relevant RRP measures planned as of 2021, 2022 and 2023.
taking steps to improve payment discipline	Limited Progress	Relevant RRP measures planned as of 2021, 2022 and 2023.
and strengthening the supervision of credit-acquiring companies.	Substantial Progress	
Strengthen supervision capacities in the non-bank financial sector, including by fully integrating the insurance and pension-fund supervisors.	Limited Progress	Relevant RRP measures planned as of 2022 and 2023.
2019 CSR3	Some Progress	
Complete reforms aimed at increasing the effectiveness of the public employment services and reinforce outreach and activation support for young people	Some Progress	Relevant RRP measures planned as of 2022.
Deliver on the reform of the education and training system, including teacher evaluation, and increase employers' engagement and learners' participation in vocational education and training,	Limited Progress	Relevant RRP measures planned as of 2021, 2022, 2023 and 2024.
and affordable childhood education and care.	Limited Progress	Relevant RRP measures planned as of 2022 and 2024.
Take measures to ensure that the National Health System becomes operational in 2020, as planned, while preserving its long-term sustainability.	Some Progress	Relevant RRP measures planned as of 2022, 2023 and 2024.
2019 CSR4	Limited Progress	
Focus investment-related economic policy on sustainable transport,	Limited Progress	Relevant RRP measures planned as of 2023 and 2024.
environment, in particular waste and water management,	Limited Progress	Relevant RRP measures planned as of 2021, 2022, 2023, 2024 and 2025.
energy efficiency and renewable energy,	Some Progress	Relevant RRP measures planned as of 2021, 2022, 2023 and 2024.
digitalisation, including digital skills,	Some Progress	Relevant RRP measures planned as of 2021, 2022, 2023, 2024 and 2025.
and research and innovation, taking into account territorial disparities within Cyprus.	Some Progress	Relevant RRP measures planned as of 2021, 2022, 2023 and 2024.
Adopt legislation to simplify the procedures for strategic investors to obtain necessary permits and licences.	Limited Progress	Relevant RRP measures planned as of 2022, 2023 and 2024.
Improve access to finance for SMEs,	Some Progress	Relevant RRP measures planned as of 2021, 2022, 2023 and 2024.
and resume the implementation of privatisation projects.	Limited Progress	Relevant RRP measures planned as of 2024.
2019 CSR5	Some Progress	
Step up efforts to improve the efficiency of the judicial system, including the functioning of administrative justice and revising civil procedures, increasing the specialisation of courts and setting up an operational e-justice system. Take measures to strengthen the legal enforcement of claims	Some Progress	Relevant RRP measures planned as of 2021, 2022, 2023 and 2025.
and ensure reliable and swift systems for the issuance and transfer of title deeds and immovable property rights.	Limited Progress	Relevant RRP measures planned as of 2022.
Accelerate anti-corruption reforms, safeguard the independence of the prosecution and strengthen the capacity of law enforcement.	Limited Progress	Relevant RRP measures planned as of 2021 and 2025.
2020 CSR1	Some 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 and capacity of the health system to ensure quality and affordable services, including by improving health workers' working conditions.	Some Progress	Relevant RRP measures planned as of 2022, 2023 and 2024.
2020 CSR2	Some Progress	
Provide adequate income replacement and access to social protection for all.	Some Progress	Relevant RRP measures planned as of 2023.
Strengthen public employment services,	Some Progress	Relevant RRP measures planned as of 2022.
promote flexible working arrangements and	Limited Progress	Relevant RRP measures planned as of 2023.

(Continued on the next page)

Table (continued)

? (continued)		
improve labour market relevance of education and training.	Limited Progress	Relevant RRP measures planned as of 2021, 2022, 2023 and 2024.
2020 CSR3	Some Progress	
Secure adequate access to finance and liquidity, especially for small and medium-sized enterprises.	Some Progress	Relevant RRP measures planned as of 2021, 2022, 2023 and 2024.
Front-load mature public investment projects	Limited Progress	Relevant RRP measures planned as of 2021, 2022, 2023, 2024 and 2025.
and promote private investment to foster the economic recovery.	Some Progress	Relevant RRP measures planned as of 2021, 2022, 2023 and 2024.
Focus investment on the green and digital transition, in particular on clean and efficient production and use of energy.	Some Progress	Relevant RRP measures planned as of 2021, 2022, 2023 and 2024.
waste and water management,	Limited Progress	Relevant RRP measures planned as of 2021, 2022, 2023, 2024 and 2025.
sustainable transport,	Limited Progress	Relevant RRP measures planned as of 2023 and 2024.
digitalisation,	Some Progress	Relevant RRP measures planned as of 2021, 2022, 2023, 2024 and 2025.
research and innovation.	Some Progress	Relevant RRP measures planned as of 2021, 2022, 2023 and 2024.
2020 CSR4	Limited Progress	
Step up action to address features of the tax system that facilitate aggressive tax planning by individuals and multinationals.	Limited Progress	Relevant RRP measures planned as of 2022.
Improve the efficiency and digitalisation of the judicial system	Limited Progress	Relevant RRP measures planned as of 2021, 2022, 2023 and 2025.
and the public sector.	Some Progress	Relevant RRP measures planned as of 2021, 2022, 2023, 2024 and 2025.
2021 CSR1	Some Progress	
In 2022, maintain a supportive fiscal stance, including the impulse provided by the Recovery and Resilience Facility, and preserve nationally financed investment.	Some Progress	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.	Substantial 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 national 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.	Limited 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.	Substantial Progress	Not applicable

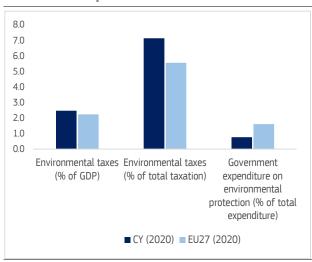
*See footnote 21

Source: European Commission

ANNEX 5: GREEN DEAL

European Green Deal intends 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 Cyprus 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.

Graph A5.1: Fiscal aspects of the green transition Taxation and government expenditure on environmental protection



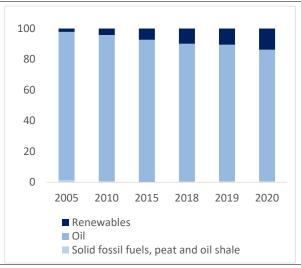
Source: Eurostat

Cyprus faces significant challenges to reduce its greenhouse gas emissions in line with its **EU obligations.** Total greenhouse gas emissions have increased substantially compared to 1990. and both its greenhouse gas intensity and its emissions per capita are above the EU average. In the sectors covered by the EU Effort Sharing Regulation (ESR), emissions have barely decreased over the period 2005–2019 (even though they fell significantly in 2020 due to the COVID-19 crisis). In its National Energy and Climate Plan (NECP), Cyprus announced measures to achieve reductions roughly in line with its current effort sharing reduction (ESR) target for 2030 of -24%. The proposed new ESR target for Cyprus is -32%. In its RRP, Cyprus allocates 41% of the plan to climate objectives and outlines crucial reforms and investments to facilitate the transition to a more

sustainable, low-carbon and climate-resilient economy.

Cyprus records high revenues from environmental taxation, both as a proportion of total taxation and compared to the GDP. Regarding the categories of environmental taxes, tax collections are lower than the EU average only in the categories 'resources' and 'pollution' (22). In contrast, government expenditure environmental protection accounts for a smaller proportion of total government expenditure in Cyprus than the EU average (Graph A5.1).

Graph A5.2: **Thematic – Energy Share in energy mix (solids, oil, gas, nuclear, renewables)**



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

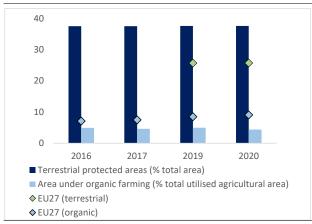
Source: Eurostat.

Cyprus is lagging behind in terms of renewable energy (Graph A5.1). In 2020, its share of fossil fuels in gross inland energy consumption was 85.6%, and its electricity mix is dominated by oil products, exposing the country's economy to fluctuations in international oil prices. Cyprus has neither nuclear power (no nuclear plant is planned) nor Hydro Power Plants while geothermal energy is limited; it consumes a small amount of coal in one cement factory. According to its NECP, Cyprus plans to reach its renewable energy contribution to the EU's 2030 target of 22.9% in gross final energy consumption in the scenario with planned policies and measures, and

⁽²²⁾ For more information on taxation see Annex 18

29.7% in the scenario with the EuroAsia Interconnector, which is in line to benefit from a EUR 657 million grant under the Connecting Europe Facility. Cyprus' stated RES objective lacks ambition in relation to its very large potential, especially for solar power.

Graph A5.3: Thematic - Biodiversity
Terrestrial protected areas and organic farming



For terrestrial protected areas data for 2018, and data for the EU average (2016, 2017) is lacking.

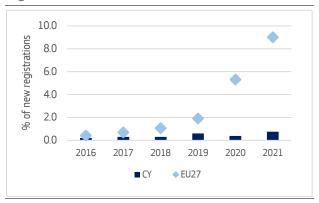
Source: EEA (terrestrial protected areas) and Eurostat (organic farming).

In terms of biodiversity and ecosystem health, Cyprus presents a mixed picture (Graph A5.3). By 2021, 29.1% of Cyprus' national land area of Cyprus was covered by Natura 2000 (EU average 18.1%), with Special Protection Areas (SPAs) classified under the Birds Directive covering 26.7% (EU average 12.3%) and Sites of Community Importance (SCIs) under the Habitats Directive covering 16.7% (EU average 13.8%) of Cypriot territory. Cyprus has designated 66 Natura 2000 sites to date, and a few more are planned to be designated within 2022. The latest assessment of the SCI part of the Natura 2000 Network reveals shortcomings in for the terrestrial part. The main insufficiencies concern the designation of marine SCIs and SPAs in the Cypriot offshore waters. It is noted that a new marine area "Oceanid" has been designated as a SAC and a SPA in 2021. Further marine areas are expected to be identified via on-going scientific studies and mapping which are expected to provide results in 2023. Therefore, Cyprus has yet to complete its Natura 2000 Network, in particular the marine network. An infringement case is open on the matter. Counting both Natura 2000 and other nationally designated protected areas, Cyprus legally protects 37.6% of its terrestrial areas (EU average 25.7%) and 8.58 % of marine areas (EU average 10.7%).

Air quality in Cyprus is generally good with **exceptions.** The latest available annual estimates (for 2019) from the European Environment Agency indicate that about 700 premature deaths were attributable to fine particulate matter concentrations, 40 to ozone concentration and 130 nitrogen dioxide concentrations (23). emission of key air pollutants has decreased significantly in Cyprus despite continued GDP growth. According to the latest projections submitted under Article 10(2) of the National Emission Reduction Commitments Directive. Cyprus projects that it will achieve emission reduction commitments for all air pollutants covered by the Directive from 2030 onwards. The projections do not, however, demonstrate how Cyprus will meet the emission reduction commitments for SO2 and NOx for the period 2020 to 2029.

Graph A5.4: Thematic — Mobility

Share of zero emission vehicles (% of new registrations)



Zero emission vehicles (passenger cars) include battery and fuel cell electric vehicles (BEV, FCEV).

Source: European Alternative Fuels Observatory.

In terms of mobility, Cyprus has a long way to go. Transport emissions, in particular, are steadily growing and constitute 21% of Cyprus' total greenhouse gas (GHG) emissions. The use of private cars is well above the EU average, while the use of public transport is low. The market for zero-emission passenger cars in Cyprus is still at an early stage in its development (Graph A5.4).

⁽²³⁾ Please note that these figures refer to the impacts of individual pollutants, and cannot be added up to derive a sum in order to avoid double-counting.

Table A5.1:Indicators underpinning the progress on EU Green Deal from macroeconomic perspective

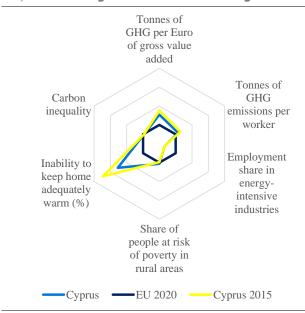
							'Fit for 55'				
						Target	Target Distance		Target Distar		ance
			2005	2019	2020	2030	WEM	WAM	2030	WEM	WAM
sts	Non-ETS GHG emission reduction target (1)	MTCO2 eq; %; pp (2)	4.3	5%	-3%	-24%	-15	-5	-32%	-23	-13
arge				-		-		-	National	contributio	n to 2030
icy t			2005	2016	2017	2018	2019	2020		EU target	
Progress to policy targets	Share of energy from renewable sources in gross final consumption of energy ⁽¹⁾	96	3%	10%	10%	14%	14%	17%		23%	
gres	Energy efficiency: primary energy consumption (1)	Mtoe	2.5	2.4	2.5	2.5	2.5	2.2		2.4	
Pro	Energy efficiency: final energy consumption (1)	Mtoe	1.8	1.8	1.9	1.9	1.9	1.6		2.0	
	chergy emiciency. That energy consumption	ļ	2.0	2.0			2.5	2.0			
			2015	2010		RUS	2010		2010	EU	2020
	Is	ov 6600	2015	2016	2017	2018	2019	2020	2018	2019	2020
_	Environmental taxes (% of GDP)	% of GDP	3.0	2.9	3.0	2.9	2.5	2.5	2.4	2.4	2.2
ncia	Environmental taxes (% of total taxation)	% of taxation (3)	9.2	9.1	9.1	8.8	7.4	7.2	6.0	5.9	5.6
Fiscal and financial indicators	Government expenditure on environmental protection	% of total exp.	0.87	0.65	0.75	0.60	0.70	0.77	1.66	1.70	1.61
al ar indi	Investment in environmental protection	% of GDP ⁽⁴⁾	0.43	0.31	0.30	0.18	-	-	0.42	0.38	0.41
isca.	Fossil fuel subsidies	EUR2020bn	0.08	0.11	0.16	0.16	0.15	-	56.87	55.70	-
_	Climate protection gap (5)	score 1-4			rom historica						a high risk).
te	Net GHG emissions	1990 = 100	150	157	158	157	157	135	79	76	69
Climate	GHG emissions intensity of the economy	kg/EUR'10	0.46	0.46	0.45	0.43	0.40	0.41	0.32	0.31	0.30
٥	Energy intensity of the economy	kgoe/EUR'10	0.13	0.13	0.13	0.12	0.12	0.11	0.12	0.11	0.11
λ	Final energy consumption (FEC)	2015=100	100.0	105.9	111.7	111.4	113.1	94.3	103.5	102.9	94.6
Energy	FEC in residential building sector	2015=100	100.0	102.7	105.7	103.2	111.0	111.6	101.9	101.3	101.3
	FEC in services building sector	2015=100	100.0	107.1	110.8	130.7	136.2	116.1	102.4	100.1	94.4
	Smog-precursor emission intensity (to GDP) (4)	tonne/EUR'10 (6)	1.27	1.28	1.24	1.23	1.09	-	0.99	0.93	-
Pollution	Years of life lost caused due to air pollution by PM2.5	per 100.000 inh.	631	473	544	576	595	-	863	762	-
Pol	Years of life lost due to air pollution by NO2	per 100.000 inh.	26	194	83	197	119	-	120	99	-
	Nitrate in ground water	mg NO3/litre	70.5	97.6	51.9	55.3	48.8	-	21.7	20.7	-
	Terrestrial protected areas	% of total	-	37.5	37.5	-	37.6	37.6	-	25.7	25.7
ίť	Marine protected areas	% of total	-	0.1	-	-	8.6	-	-	10.7	-
rersi	Organic farming	% of total utilised	3.7	4.9	4.6	4.6	5.0	4.4	8.0	8.5	9.1
Biodiversity		agricultural area									
•		ı		-2006	2006			-2018	00-06	06-12	12-18
	Net land take	per 10,000 km2	10	9.7	28	3.4	2:	3.8	13.0	11.0	5.0
			2015	2016	2017	2018	2019	2020	2018	2019	2020
	GHG emissions intensity of transport (to GVA) (7)	kg/EUR'10	0.18	0.23	0.33	0.45	0.26	0.23	0.89	0.87	0.83
	Share of zero emission vehicles (8)	% in new registrations	0.0	0.2	0.3	0.3	0.6	0.4	1.0	1.9	5.4
lity	Number of plug-in electric vehicles per charging point	1	0.0	2	6	9	13	9	8	8	12
Mobility	Share of electrified railways	%	-	-	-	-	13	9	55.6	56.0	12
2	Snare or electrified railways Congestion (average number of hours spent in road cong	,	-	-	-	-	-	-	55.6	5b.U	-
	representative commuting driver)	conorrper year by a	-	-	35.7	37.3	37.7	-	28.9	28.8	-
			Year	CY	EU						
Te Te	Share of smart meters in total metering points ⁽⁹⁾ - electricity	% of total	2018	0.0	35.8						
Digital	Share of smart meters in total metering points ⁽⁹⁾ - gas	% of total	2018	0.0	13.1						
	ICT used for environmental sustainability (10)	%	2021	-	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. The Cypriot NECP is currently under evaluation to set new targets and policy measures in order to adjust to the higher ambitions of the Fit for 55 targets. (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) Sulfur 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, JRC, European Commission, EEA, EAFO.

The green transition not only encompasses improvements to environmental sustainability, but also includes a significant social dimension. While measures in this regard 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. Cyprus' green transition can benefit from recent policy measures and provides strong potential for quality job creation. At the same time, the green transition raises important challenges, in particular in terms of energy poverty and for lower income households.

Graph A6.1: Fair green transition challenges



Source: Eurostat, World Inequality Database

Cyprus' recovery and resilience plan (RRP) includes key reforms and investments for a fair green transition. The RRP includes measures to support access to essential services, alleviate energy poverty (including via the reduction of energy and water bills), and make housing more affordable. The plan also includes targeted investments to improve the living conditions and energy efficiency of households for people living in poverty, as well as for persons with disabilities. Moreover, investments in reskilling and upskilling are expected to strengthen the green and digital skills of the population, particularly those of the unemployed, women and vulnerable groups. Cyprus' integrated National Energy and Climate Plan (NECP) of 22 January 2020 takes into consideration the employment impacts of the transition to a climate-neutral economy, which are expected by 2030 to raise economy-wide employment by 0.3%, provided that planned

policies and measures are fully implemented. The NECP does not address the skills needs of the transition. However, the recovery and resilience plan will invest EUR 15 million in training programmes to reskill and upskill workers in green skills. In synergy with the RRF, the Just Transition Fund will make sizeable contributions through training programmes (EUR 2 million) and the establishment of a Green Technical School (EUR 13 million). The NECP provides a detailed analysis of the issue of energy poverty and develops an approach for addressing it.

The Cypriot economy has reduced its carbon footprint, which nevertheless remains sizeable, while the green transition should create good quality jobs. The greenhouse gas (GHG) emission intensity of the Cypriot economy, in terms of tonnes of CO2 equivalent emission per unit of gross value added decreased by 10% between 2015 and 2020 (but is still more than 50% above the EU average). GHG emissions per worker in Cyprus, at 15.6 tonnes, is 15% higher than the EU average (13.6 tonnes) (see Graph A6.2). The fossil fuel based sector is the most heavily declining sector for the country (24). Cyprus counts cement among its transforming sectors and energy-intensive industries (EII), with a single cement plant in Vassilikos producing 16% of the total GHG emissions (25). At the same time, EII provide jobs for less than 1% of the total employed workforce, which is among the lowest in EU. For these workers, up- and reskilling will be particularly important (see Annex 15). While Cyprus does not have data on the environmental goods and services sector, its solar energy potential provides opportunities for green jobs (26). There are labour shortages in sectors linked to the transition to a climate-neutral economy, especially in construction, as well as in professional, scientific and technical activities (Eurofound, 2021).

As for the social dimension of the green transition, Cyprus experiences substantial challenges, notably concerning energy poverty and lower income households. A large proportion of the population at risk of poverty lives in rural areas (19.8% versus 18.7% in the EU), and

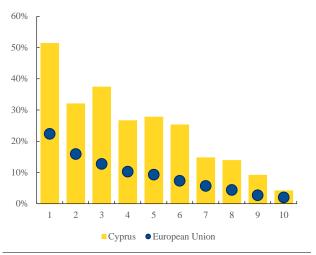
⁽²⁴⁾ SWD(2021) 275 final.

^{(25) 2020} European Semester: Overview of Investment Guidance on the Just Transition Fund 2021-2027 per Member State (Annex D)

⁽²⁶⁾ https://publications.jrc.ec.europa.eu/repository/handle/JRC126047

has increased by almost 4 pps since 2015 (27). The percentage of the population unable to keep their homes adequately warm is among the highest in the EU, and substantially above the EU average (8.2%), despite having decreased from 28.3% in 2015 to 20.9% in 2020. Lower-income groups are most affected (see Graph A6.1), and the country is among the worst performers in the EU for people in the lowest decile. Consumer spending patterns vary to a limited extent across the population, with the average carbon footprint of the top 10% of emitters being 5.1 times higher than that of the bottom 50% of the population (5.3 times in the EU).

Graph A6.2: Energy poverty by income decile



Source: Eurostat database

Tax systems are key to ensuring a fair transition towards climate neutrality (28). Cypriot revenues from total environmental taxes decreased from 3.04% of GDP in 2015 to 2.48% in 2019, and remained stable at 2.48% in 2020 (against 2.24% in the EU). The labour tax wedge for low-income earners (29) increased from 17.3% in 2014 to 18.1% in 2019, with no change in 2021, making the tax wedge in Cyprus one of the lowest in the EU (where the 2021 average is 31.9%; see Annex 18). The potential of transfers to address distributional impacts of energy

taxation would complement the tax system, particularly for the three lowest deciles (30).

⁽²⁷⁾ As a proxy for potential transport challenges in the context of the green transition (see COM(2021) 568 final).

⁽²⁸⁾ COM(2021) 801 final.

⁽²⁹⁾ Tax wedge for a single earner at 50% of the national average wage (Tax and benefits database, European Commission/OECD).

⁽³⁰⁾ 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: RESOURCE EFFICIENCY AND PRODUCTIVITY

The efficient use of resources is key to ensuring competitiveness and open strategic minimising autonomy. while environmental impact. The green transition presents a major opportunity for European by creating markets for industry 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.

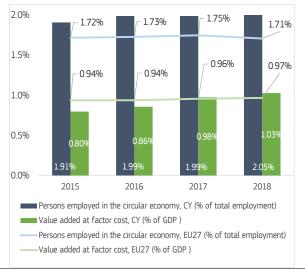
Cyprus' performance in weak waste management is concerning, while the transition towards a circular economy has **barely begun.** The latest available figures (2020) show that Cyprus recycled only 16.4% of its municipal waste, well below the EU-27 average for recycling (47.8%) and considerably lower than the 2025 target of 55.0%. The circular (secondary) use of materials in Cyprus was 2.4% in 2016 and 3.4% in 2020, compared to the EU average of 12.8% in 2020, showing that some progress of circular secondary material usage has been made in recent years, although on a small scale compared to the EU average.

Resource productivity in Cyprus is well below the EU average. Resource productivity expresses how efficiently the economy uses material

Source: Eurostat

resources to produce wealth. Improving resource productivity can help to minimise negative impacts on the environment and reduce dependency on volatile raw material markets. With 1.45 purchasing power standard (PPS) generated per kg of material consumed in 2020, Cyprus is well below the EU average of 2.23 PPS per kg and shows no signs of improving.

Graph A7.1: Economic importance and expansion of the circular economy: Employment and value added in the Circular Economy sectors



Source: Eurostat

how efficiently the economy uses material	Сурі	'us'	econo	mic	grow	th is	s no	t yet
Table A7.1: Selected resource efficiency indicators								
SUB-POLICY AREA	2015	2016	2017	2018	2019	2020	EU27	year EU 27
Circularity								
Resource Productivity (Purchasing power standard (PPS) per kilogram)	1.6	1.6	1.4	1.5	1.5	1.4	2.2	2020
Material Intensity (kg/EUR)	0.6	0.6	0.7	0.7	0.7	0.7	0.4	2020
Circular Material Use Rate (%)	2.4	2.4	2.4	2.8	2.9	3.4	12.8	2020
Material footprint (Tones/capita)	15.9	17.7	21.6	21.0	23.2	-	14.6	2019
Waste								
Waste generation (kg/capita, total waste)	-	2897	-	2646	-	-	5234	2018
Landfilling (% of total waste treated)	-	58.7	-	55.4	-	-	38.5	2018
Recycling rate (% of municipal waste)	16.6	16.1	16.2	16.5	16.3	16.4	47.8	2020
Hazardous waste (% of municipal waste)	-	6.4	-	9.7	-	-	4.3	2018
Competitiveness								
Gross value added in environmental goods and services sector (% of GDP)	_	_	_	_	_	_	2.32	2019
Private investment in circular economy (% of GDP)	0.1	0.1	0.1	0.1	-	-	0.12	2018

decoupled from its generation of waste. After a downward trend, municipal waste generation in Cyprus has started to increase again in recent years. The lack of progress in this area is expected to worsen the country's performance in key environmental indicators, such as the nitrate in groundwater and the soil sealing index, which are already below EU average levels.

A successful transition to a circular economy in Cyprus requires social and technological innovation. The circular economy will only be able to reach its full potential when it is 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 produce systemic circularity innovations, creating new business opportunities. In 2021, Cyprus ranked 23rd on the 2021 Eco-Innovation Scoreboard, indicating that the country needs to catch up with regard to its eco-innovation activities. In all five components of the 2021 Eco-Innovation Index, Cyprus performs below the EU average.

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 (31). This Annex describes Cyprus' DESI performance.

Cvprus' RRP has included significant investments in digitalisation exceeding the digital target of 20% by reaching 23% of the total budget (32). It invests in all digital areas: connectivity. digital public from services. integration of digital technology and human capital to e-health, e-justice, and smart infrastructures.

The performance of Cyprus in the DESI dimension human capital is rather poor. The basic digital skills of Cypriots and the share of ICT specialists in the workforce remain below the EU average. The share of female ICT specialists in Cyprus is at EU average. In December 2021, Cyprus adopted a National Action Plan for Digital Skills 2021-2025 ("e-skills Action Plan") to improve the digital skills of all, including for vulnerable groups.

Cyprus has a moderate performance in digital connectivity. Regarding the allocation of 5G spectrum scores above the EU average (67% compared to 56%) (³³) and its 5G performance in terms of coverage is 75% against the EU average of 66%. However, despite recent significant improvement in fixed very high capacity network coverage, Cyprus still ranks below the EU average.

Cyprus has a mixed performance in the integration of digital technology. The percentage of SMEs having at least a basic level of digital intensity is above the EU average. Cyprus is doing well on Cloud, being above the EU average (66% vs 55% in the EU). A main challenge is that Cypriot companies do not yet take full advantage of the use of all state-of-the-art digital technologies available, i.e., the use of Big data and Artificial Intelligence is below the EU average.

Digital public services is one among the DESI dimensions in which Cyprus performs well, yet it still has room for improvement. The country scores well above the EU average in digital public services for business (86 versus 82), but is still below the EU average in providing digital public services for citizens (56 versus 75) and slightly below in e-Government users (63% compared to 65%) (34). Therefore, more efforts are needed to improve the efficiency and digitalization of the public sector.

^{(31) 2030} Digital Compass: the European Way for the Digital Decade Communication, COM (2021) 118 final.

⁽³²⁾ The share of financial allocation contributing to digital objectives has been calculated using Annex VII of the RRF Regulation.

⁽³³⁾ Source Digital Economy and Society Index 2022 and European 5G Observatory.

⁽³⁴⁾ Source: <u>Data visualisation tool, key indicators</u> and Digital Economy and Society Index 2022.

Table A8.1:Key Digital Economy and Society Index Indicators

		Cyprus		EU	EU top- performance
Human capital	DESI 2020	DESI 2021	DESI 2022	DESI 2022	DESI 2022
At least basic digital skills	NA	NA	50%	54%	79%
% individuals			2021	2021	2021
ICT specialists	2.7%	3.1%	3.9%	4.5%	8.0%
% individuals in employment aged 15-74	2019	2020	2021	2021	2021
Female ICT specialists	19%	18%	19%	19%	28%
% ICT specialists	2019	2020	2021	2021	2021
Connectivity					
Fixed Very High Capacity Network (VHCN) coverage	10%	26%	41%	70%	100%
% households	2019	2020	2021	2021	2021
5G coverage(*)	NA	0%	75%	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	66%	55%	86%
% SMEs			2021	2021	2021
Big data	5%	6%	6%	14%	31%
% enterprises	2018	2020	2020	2020	2020
Cloud	NA	NA	42%	34%	69%
% enterprises			2021	2021	2021
Artificial Intelligence	NA	NA	3%	8%	24%
% enterprises			2021	2021	2021
<u>Digital public services</u>					
Digital public services for citizens	NA	NA	56	75	100
Score (0 to 100)			2021	2021	2021
Digital public services for businesses	NA	NA	86	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: Digital Economy and Society Index 2022.

This Annex provides a general overview of the performance of Cyprus' research and innovation system. Cyprus is a moderate innovation performer according to the 2021 edition of the European Innovation Scoreboard (35) and has difficulties to reduce its gap with the EU innovation leaders. The R&D intensity of the country for 2020 stands at 0.82% of GDP, which is well below the EU average of 2.32%.

In recent years, Cyprus has been moving in the right direction by providing a stable rise in R&D funding and creating new institutional structures to support research, innovation and digital policy. In the context of the formulation of the National Research and Innovation (R&I) Strategy, the Deputy Ministry of Research, Innovation and Digital Policy (DMRID) in cooperation with the National Statistical Service is in the process of setting a new ambitious R&D target for 2030, in the context of the new European Research Area (ERA) and the Pact for R&I in Europe. Achieving an ambitious R&D intensity target will require decisive actions by both the public sector and business enterprises, as both sides would need to increase considerably their spending. To address this, Cyprus has introduced in its RRP measures to strengthen the between research organisations enterprises, facilitate the commercialisation of research results, and support investments in R&D by both public and private organisations. Meanwhile, in December 2021 Cyprus adopted a 2021-2025 national action plan for digital skills to improve the digital skills of all population groups across all levels of society.

Despite a gradual increase in R&D funding, the links between academia and the productive sector are still weak. Academia-business cooperation is low, evidenced by the low level of private funding of publicly executed research. In fact, public expenditure on R&D financed by business enterprises as a percentage of GDP in 2019 is close to zero and thus just a fraction of the EU average. Total public sector support for private R&D investment as percentage of GDP is also significantly below the EU average. Also, Cyprus needs to catch up in human capital and skills

availability, as it has the lowest number of STEM (science, technology, engineering mathematics) graduates in the EU. While Cypriot academic structures perform roughly on a par with the EU average in terms of quality of the R&I system (illustrated by the percentage of scientific publications in the most cited publications worldwide), this does not appear to translate into productive uses, as demonstrated e.g. by the relatively low number of patents (0.6 patent applications per billion GDP compared to the EU average of 3.5). On a positive note, the volume of venture capital available in Cyprus has increased annually by an average of 18.4% over the period 2010-2020 and has more recently risen slightly above the EU average.

https://ec.europa.eu/docsroom/documents/45909

^{(35) 2021} European Innovation Scoreboard, Country profile: Cyprus

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

Cyprus	2010	2015	2018	2019	2020	Compound annual growth 2010-20	EU average
Key indicators							
R&D Intensity (GERD as % of GDP)	0.44	0. 48	0.62	0.71	0.82	6.4	2.32
Public expenditure on R&D as % of GDP	0.31	0.30	0.30	0.33	0.36	1.5	0.78
Business enterprise expenditure on R&D (BERD) as % of GDP	0.08	0.11	0.25	0.31	0.37	17.2	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	11.2	8.9	9.6	:	:	1.0	9.9
PCT patent applications per billion GDP (in PPS)	0.6	0.8	0.6	:	:		3.5
Academia-business cooperation							
Public-private scientific co-publications as % of total publications	8.9	7.4	7.5	8.1	8.1	-3.3	9.05
Public expenditure on R&D financed by business enterprise (national) as % of GDP	0.003	0.002	0.003	0.006	:	5.8	0.054
Human capital and skills availability							
New graduates in science & engineering per thousand pop. aged 25-34	10.9	13.4	14.5	14.4	:	3.6	16.3
Public support for business enterprise expend	iture on R	&D (BERD)				
Total public sector support for BERD as % of GDP	0.017	0.014	0.031	0.043	:	7.5	0.196
Green innovation							
Share of environment-related patents in total patent applications filed under PCT (%)	11.0	9.7	5.8	:	:	-7.7	12.8
Finance for innovation and Economic renewal							
Venture Capital (market statistics) as % of GDP	0.012	0.000	0.029	0.050	0.079	18.4	0.054
Employment in fast-growing enterprises in innovative sectors (% of total employment)	1.3	0.1	1.5	1.6	:	2.7	5.5

Source: Eurostat, OECD, DG JRC, Science-Metrix (Scopus database and EPO's Patent Statistical database), Invest Europe

Productivity growth is a critical driver of economic prosperity. well-being convergence over the long run. A major source of productivity for the EU economy is a wellfunctioning 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.

Cyprus is experiencing low and decreasing levels of labour productivity compared to the rest of the EU. In 2020, Cyprus' labour productivity per hour worked was around 74.2% of the EU27 average, down from 85.2% at the beginning of the financial crisis. (36) Nevertheless, there are reasons for optimism. Since 2015, total factor productivity has been increasing. Investments have also increased substantially, but matched by similar increases in employment. As a consequence, capital deepening has remained flat over this period. The Cypriot economy is now expected to shift gradually to a more sustainable and productivity-led growth model thanks to the RRF reforms and quality investments. This will take place in a context of relatively low unemployment and efforts to expand and diversify drivers of arowth. while the economy grasps opportunities provided by the twin transitions.

Cyprus has a relatively favourable business environment. but structural challenges **persist.** Contract enforcement is hampered by long delays both in the resolution of civil and commercial cases and in obtaining building permits, despite some improvement with regards to the residential buildings, thus hindering the development of land-intensive projects such as the deployment of renewable energy plants. Access to finance remains limited due to late payments (mentioned in surveys by almost two thirds of Cypriot companies) and limited access to loans for SMEs. There have been only limited improvements over time in this area in terms of the gap still separating local SMEs from their EU peers (although no SMEs have reported being refused a

bank loan in recent years). In the area of public procurement, Cyprus performs well in terms of SMEs bids and contractors, with figures consistently above the EU average in terms of proportion of SME contractors and bids. However, these figures have been falling since 2019, which will warrant attention in the coming years.

Cyprus has a good level of compliance with single market rules, although it has a limited level of integration, which is due partly to its size, sectoral specialisation and geographical location. Cyprus has made barriers in the regulated professions less restrictive, with notable improvements in key professions such as architectures and civil engineerings. It also performs significantly better than the rest of the EU in terms of recognising the qualifications of professionals from other EU and EFTA countries. Moreover, according to the Single Market Scoreboard, it has an average track record in the transposition of EU law into national legislation. However, surveys indicate that confidence in investment protection is low among local businesses (30%, compared to an EU average of 56%).

In terms of resilience, and competitiveness dynamics, Cyprus is expected to suffer significantly from increasing energy prices and supply chain disruptions. Given the size of the economy. Cyprus is structurally vulnerable to exogenous, global shocks, such as the recent spike in energy prices and material shortages due to supply chain disruption. Energy prices increased significantly over the past year, in line with the rest of the EU, and the low proportion of installed electric capacity will add to the overall vulnerability if imported energy prices do not decrease. In terms of supply disruptions, while still below EU27 averages, Cypriot businesses are increasing facing constraints in sourcing their raw material. Since their high reliance on imports of from outside the EU makes them even more vulnerable. This trend will have to be carefully monitored in the next years.

40

⁽³⁶⁾ Commission services, AMECO database

Table A10.1:Key Single Market and Industry Indicators

SUB-POLICY AREA	INDICATOR NAME	DESCRIPTION	2021	2020	2019	2018	2017	Growth rates	EU27 average*
		HEADLINE INDICATORS	5						
ture	Value added by source (domestic)	VA that depends on domestic intermediate inputs, % [source: OECD (TiVA), 2018]				55.54			62.6%
Economic structure	Value added by source (EU)	VA imported from the rest of the EU, % [source: OECD (TiVA), 2018]				16.39			19.7%
ECO	Value added by source (extra-EU)	% VA imported from the rest of the world, % [source: OECD (TiVA), 2018]				28.1			17.6%
Cost competitiveness	Producer energy price (industry)	Index (2015=100) [source: Eurostat, sts_inppd_a]	118	99.8	113.2	106.2	96	22.9%	127.3
		RESILIENCE							
chain	Material Shortage using survey data	Average (across sectors) of firms facing constraints, % [source: ECFIN CBS]	5	4	1	2	4	25%	26%
Shortages/supply chain disruptions	Labour Shortage using survey data	Average (across sectors) of firms facing constraints, % [source: ECFIN CBS]	0	1	2	2	1	-100%	14%
Shorta	Sectoral producer prices	Average (across sectors), 2021 compared to 2020 and 2019, index [source:Eurostat]						n.a.	5.4%
Strategic dependencies	Concentration in selected raw materials	Import concentration a basket of critical raw materials, index [source: COMEXT]	0.14	0.12	0.14	0.23	0.19	-26%	17%
Straí	Installed renewables electricity capacity	Share of renewable electricity to total capacity, % [source:Eurostat, nrg_inf_epc]		16.60	14.20	13.70	13.60	22%	47.8%
mics	Net Private investments	Change in private capital stock, net of depreciation, % GDP [source: Ameco]		6.7	6.8	4.3	8.3	-19.3%	2.6%
Investment dynamics	Net Public investments	Change in public capital stock, net of depreciation, % GDP [source: Ameco]		0.5	0.4	2.7	0.5	0%	0.4%

(Continued on the next page)

		SINGLE MARKET							
Single Market integration	Intra-EU trade	Ratio of Intra-EU trade to Extra-EU trade, index [source: Ameco]	1.25	1.07	1.18	0.75	0.95	31%	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])	3				6	-50%	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]	63.5						45%
Compliance - cooperation EC and MS	Transposition - overall	5 sub-indicators, sum of scores [source: Single Market Scoreboard]		On average	Above average	On average	Above average		
Compli cooperati M	Infringements - overall	4 sub-indicators, sum of scores [source: Single Market Scoreboard]		On average	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]	30						56%
		BUSINESS ENVIRONMENT - S	MEs						
_									
iness graph)	Bankruptcies	Index (2015=100) [source: Eurostat, sts_rb_a]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	70.1
Business demography	Bankruptcies Business registrations	Index (2015=100) [source: Eurostat, sts_rb_a] Index (2015=100) [source: Eurostat, sts_rb_a]	n.a.	n.a. n.a.	n.a. n.a.	n.a. n.a.	n.a. n.a.	n.a. n.a.	70.1 105.6
Business demograph									
lance	Business registrations	Index (2015=100) [source: Eurostat, sts_rb_a] Share of SMEs experiencing late payments in past 6	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	105.6
	Business registrations Late payments EIF Access to finance	Index (2015=100) [source: Eurostat, sts_rb_a] Share of SMEs experiencing late payments in past 6 months, % [source: SAFE] Composite: SME external financing over last 6 months, index from 0 to 1 (the higher the better)	n.a.	n.a. 52.3	n.a. 51.1	n.a. n.a.	n.a. n.a.	n.a. 25%	105.6 45%
lance	Business registrations Late payments EIF Access to finance index - Loan EIF Access to finance	Index (2015=100) [source: Eurostat, sts_rb_a] Share of SMEs experiencing late payments in past 6 months, % [source: SAFE] Composite: SME external financing over last 6 months, index from 0 to 1 (the higher the better) [source: EIF SME Access to Finance Index] Composite: VC/GDP, IPO/GDP, SMEs using equity, index from 0 to 1 (the higher the better) [source:	n.a.	n.a. 52.3 0.37	n.a. 51.1 0.34	n.a. n.a.	n.a. n.a. 0.2	n.a. 25% 82.7%	105.6 45% 0.56
lance	Business registrations Late payments EIF Access to finance index - Loan EIF Access to finance index - Equity % of rejected or refused	Index (2015=100) [source: Eurostat, sts_rb_a] Share of SMEs experiencing late payments in past 6 months, % [source: SAFE] Composite: SME external financing over last 6 months, index from 0 to 1 (the higher the better) [source: EIF SME Access to Finance Index] Composite: VC/GDP, IPO/GDP, SMEs using equity, index from 0 to 1 (the higher the better) [source: EIF SME Access to Finance Index] SMEs whose bank loans' applications were refused	n.a.	n.a. 52.3 0.37	n.a. 51.1 0.34 0.07	n.a. n.a. 0.32	n.a. n.a. 0.2	n.a. 25% 82.7% 6.9%	105.6 45% 0.56

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.

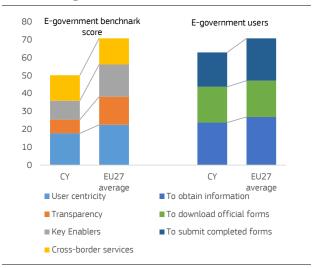
The public administration **Cyprus** in demonstrates effectiveness well below the average in the EU27 (37). Local government is fragmented, increasing the running costs and introducing higher coordination burden. Despite the Better Regulation Project, open public consultation of legislation is rare at an early stage. The recovery and resilience plan contains measures to improve public administration, policy making and implementation, including the introduction of a new legal framework for evaluation and selection processes for public servants and a new legal framework for local authorities. This new legal framework for local authorities was adopted in 2022 with the aim to notably reduce the number of municipalities.

Cyprus accelerated the digitalisation of its public administration during the COVID-19 pandemic. Several digital solutions to facilitate the submission of applications by citizens, workers and SMEs were put in place during the crisis. Yet a gap with the EU average remains in the egovernment score (50 vs 71 EU average). Around 63% of internet users engage actively with egovernment services (against an EU average of 71%) (Graph A11.1). The recovery and resilience plan (RRP) includes reforms and investments aiming at digitalization of public administration, covering e-government, e-health, and e-justice services.

Cyprus scores low on several civil service indicators. The share of public sector workers aged above 55 has been steadily increasing, while participation in adult training has been decreasing. Cyprus lacks data for more in-depth, systemic assessment of its civil service management. As part of the RRP, a new law on performance assessment, promotions and recruitments in public administration was adopted in January 2022.

Cyprus is taking measures to improve open data and transparency. The Cyprus National Action plan for Public Sector Information (PSI) reuse has set as a priority the continuous development of the national PSI Portal, a designated area to showcase open data re-use. A new law strengthening the principles of transparency and accountability in the public sector is part of the RRP and it entered into force at the end of 2020.

Graph A11.0: **E-government benchmark scores and** (lhs) and e-government users (rhs)

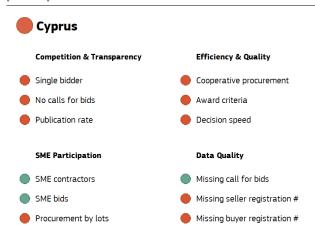


Source: Eurostat (ICT use survey) and E-government benchmark report

Selected elements of Cyprus' public financial management warrant attention. Over the past few years, Cyprus performance in the Single Market Scoreboard's public procurement indicator has gone down and Cyprus ranks at the bottom of EU Member States. This is due to broad underperformance across measures transparency, competition, efficiency and quality of information (Graph A11.2). Cyprus also performs below average in in terms of the Commission's medium-term budgetary framework and strength of fiscal rules indices. The RRP includes measures aiming at digitalising and professionalising the public procurement framework.

⁽³⁷⁾ Worldwide Governance Indicators, 2020.

Graph A11.1: Performance on the single market public procurement indicators



(1) The competition and transparency indicators are triple-weighted, whereas the efficiency and quality indicators have unitary weights. All others receive a 1/3 weighting in the SMS composite indicator.

Source: Single market scoreboard 2020 data.

The justice system faces serious efficiency and quality concerns. Civil, commercial and administrative judicial proceedings remain very lengthy. The time needed to resolve administrative cases in first instance courts (863 days in 2020) remains among the highest in the EU. The justice system faces serious challenges as regards digitalisation. In particular, digital tools are scarcely used in courts. The electronic case management system responds to basic needs but requires further development. As regards judicial independence, no systemic deficiencies have been reported. (38) The RRP contains measures that intend to increase the quality and efficiency of the justice system.

-

⁽³⁸⁾ For more detailed analysis of the performance of the justice system in Cyprus, see the 2022 EU Justice Scoreboard (forthcoming) and the country chapter for Cyprus of the Commission's 2022 Rule of Law Report (forthcoming).

Table A11.1: Public administration indicators

CY	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 $(\%)$	52.0	49.0	58.0	59.0	63.0	70.8
2	2021 e-government benchmark's overall score (2)	na	na	na	na	50.2	70.9
0	pen government and independent fiscal institutions						
3	2021 open data maturity index	na	na	na	na	91.3	81.1
4	Scope Index of Fiscal Institutions	64.3	66.8	66.8	66.8	na	56.8
E	ducational attainment level, adult learning, gender parity and a	geing					
5	Share of public administration employees with tertiary education, levels 5-8 (3)	57.8	55.6	55.6	60.0	61.4	55.3
6	Participation rate of public administration employees in adult learning (3)	11.1	10.9	10.0	4.9	13.5	18.6
7	Gender parity in senior civil service positions (4)	18.4	16.0	29.2	27.2	20.0	21.8
8	Share of public sector workers between 55 and 74 years (3)	16.1	19.5	19.1	20.7	19.5	21.3
Pı	ublic Financial Management						
9	Medium term budgetary framework index	0.62	0.62	0.62	0.62	na	0.72
10	Strength of fiscal rules index	1.2	1.2	1.2	1.2	na	1.5
11	Public procurement composite indicator	-8.3	-10.3	-10.7	-12.0	na	-0.7
E	ridence-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	0.88	na	na	na	na	1.6

⁽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

Table A12.1: Social Scoreboard

	Social Scoreboard for CYPRUS	
	Early leavers from education and training (% of population aged 18-24) (2021)	10.2
Equal opportunities	Individuals' level of digital skills (% of population 16- 74) (2021)	50.0
and access to the labour market	Youth NEET (% of total population aged 15-29) (2021)	15.4
	Gender employment gap (percentage points) (2021)	12.2
	Income quintile ratio (S80/S20) (2020)	4.3
	Employment rate (% population aged 20-64) (2021)	75.9
Dynamic labour markets and fair working conditions	Unemployment rate (% population aged 15-74) (2021)	7.5
	Long term unemployment (% population aged 15-74) (2021)	2.6
	GDHI per capita growth (2008=100) (2020)	94.9
	At risk of poverty or social exclusion (in %) (2020)	17.6
	At risk of poverty or social exclusion for children (in %) (2020)	19.0
Social protection	Impact of social transfers (other than pensions) on poverty reduction (% reduction of AROP) (2020)	34.7
and inclusion	Disability employment gap (ratio) (2020)	23.5
	Housing cost overburden (% of population) (2020)	1.9
	Children aged less than 3 years in formal childcare (% of under 3-years-olds) (2020)	20.7
	Self-reported unmet need for medical care (% of population 16+) (2020)	0.4
Critical To watch	Weak but Good but to On average Better than average Best per	

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:** Eurostat

The European Pillar of Social Rights provides 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 Cyprus' progress in achieving the goals under the European Pillar of Social Rights.

While the labour market is bouncing back from the COVID-19 crisis, strengthening the effectiveness of active labour market policies and outreach to young people is key to increasing labour market participation and reducing labour shortages. At 77.1% in Q4-2021, the employment rate in Cyprus is above the EU average of 74%. The proportion of young people aged 15-29 not in employment, education or training (NEETs), however, reached 15.4% in 2021 (up from 14.1% in 2019). Investments under the European Social Fund Plus (ESF+) in active labour market policies including for young people, together with outreach activities for young people, which are planned as part of the recovery and resilience plan (RRP), will help address this challenge. Meanwhile, the gender employment gap remains relatively wide at 12.2 pps in 2021 (vs EU 10.8 pps). This is partly due to the low proportion of children below the age of 3 enrolled in childcare services. In 2020, this proportion was 20.7%, having dropped 10.4 pps since 2019. This is considerably below the EU average of 32.3%, which has a negative impact on equal opportunities for children and work-life balance. However, this drop could be attributed to the COVID-19 pandemic and to the national lockdown. Both the ESF+ and Cyprus' RRP will support measures to strengthen early childhood education and care in Cyprus, by focusing on equal access and affordable services. Tackling these challenges will help Cyprus to reach the 2030 EU headline target on employment.

The population's low level of digital skills and the high rate of early school leaving are significant challenges for Cyprus, also for its implementation of the green and digital **transitions.** Poor digital literacy continues to negatively affect people's employability: In 2021, 50% of the population had basic digital skills, which is below the EU average of 54%. The early school leaving rate in Cyprus increased to 10.2% in 2021, which is above the EU average of 9.7%, and is particularly high amongst non-EU born people and people with disabilities. Thus, greater efforts on inclusiveness are required in education in general, and notably in tertiary education. Measures under the ESF+ to integrate students with a migrant background into the education system will help tackle this challenge. The 2018 PISA results point to pupils' below average skills in

reading, maths, and science (see also Annex 13). The proportion of people with a tertiary education in Cyprus is considerably above the EU average (583% versus 41.2% in 2021), but Cyprus still has one of the lowest proportions of science, technology, engineering and mathematics (STEM) graduates. The proportion of adults participating in learning (during the four weeks preceding the interview) was below the EU average in 2021 (9.7% vs 10.8%), having increased by 5 pps in a year, up from 7.5% in 2015. (39) Plans under the ESF+, RRP and the Just Transition Fund to strengthen the capacity and quality of vocational education and training, to provide programmes for training in green and digital skills and to develop and implement a national skills strategy and an eskills action plan, will help achieve the 2030 EU headline target on adult participation in learning.

While the proportion of people at risk of poverty or social exclusion has decreased, it remains high for specific groups. Although the at-risk-of-poverty-or-social-exclusion (AROPE) rate is relatively low in Cyprus, it remains higher than the EU average among people with disabilities (33.3% vs EU 28.9% in 2020). To foster equal opportunities and social inclusion, the ESF+ will support measures to restructure social welfare services in Cyprus, and to establish a new network of social inclusion services for people with disabilities. These measures will also be key to reaching the 2030 EU headline target on poverty reduction. Cyprus' growth of real gross disposable household income (GDHI) per person was one of the slowest in the EU, and it decelerated in 2020 as well. In 2019, Cyprus had one of the highest proportions of 65+ women with a severe level of difficulty with personal care or household activities (94.7% vs EU 78.1%), yet long-term care attracts low levels of public funding at 0.3% of GDP (2019). Furthermore, staff shortages pose a challenge, including for the health system (the density of nurses is 5.2 per 1 000 population, well below the EU average of 8.4). Cyprus' RRP and ESF+ operational programme will help address this problem by supporting long-term care for older people and people with disabilities. Energy poverty is a problem with 20.9% of the total population and 41.6% among those at risk of poverty unable to keep their home adequately warm in 2020 (against the EU average of 7.4%) in the total population (see also Annex 6). Cyprus intends to introduce a universal legislative minimum wage.

According to a recent study (40), a monthly minimum wage of EUR 1 000 is expected to have a significant impact on reducing the risk of poverty (-10%), especially in-work poverty (-22%), and will benefit young and female workers in particular. Furthermore, the reform would positively affect the government budget by increasing taxes and social security contributions while decreasing social benefit expenses.

⁽³⁹⁾ There is a break in the series in 2021.

⁽⁴⁰⁾ European Commission, Joint Research Centre, based on the Euromod model.

This annex outlines the main challenges for Cyprus' 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. Cyprus' education system is highly centralised, insufficiently monitored and evidence-based. Cyprus lags behind in basic skills and also in rankings on digital skills.

Despite efforts, accessible and affordable early childhood education and care (ECEC) remains a challenge. Participation in early childhood education is 2.7 pps below the EU average (92.8%) and also below the EU-level target for 2030 (90.1% vs 96%). Public spending on early childhood education is among the lowest in the EU. Although ECEC boosts inclusive education outcomes, Cyprus relies heavily on informal settings or private institutions especially

for children under 3. Free public and subsidised private childcare is available only to guaranteed minimum income recipients. EU funds aim to expand capacities and strengthen provisions for affordable ECEC. Efforts so far have been fragmented, although Cyprus will prepare and adopt by the end of 2024 a national strategy and its accompanying action plan on ECEC in order to further enhance early childhood education and care, and will also benefit from additional support via the Technical Support Instrument and the RRF.

In recent years, there has been only limited progress in education and training reforms, including the evaluation of teachers. This remains one of the key challenges for the Cypriot education system. It negatively affects pupils' educational outcomes, and results in low participation rates in vocational education and training (one of the lowest in the EU in 2019) and

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

Indicator			Target	Cyprus	EU27	Cyprus	EU27
Participation in early childhood educa	tion (age 3+)		96%	81.3%	91.9%	90.1% 2019	92.8 % ²⁰¹⁹
		Reading	< 15%	35.6%	20.4%	43.7% ²⁰¹⁸	22.5% ²⁰¹⁸
Low achieving 15-year-olds in:		Mathem atics	< 15%	42.6%	22.2%	36.9% ²⁰¹⁸	22.9% ²⁰¹⁸
		Science	< 15%	42.1%	21.1%	39.0% ²⁰¹⁸	22.3% ²⁰¹⁸
	Total		< 9 %	5.2%	11.0%	10.2%	9.7%
	By gender	Men		7.7%	12.5%	12.7%	11.4%
	ву уепиет	Women		3.1% ^u	9.4%	7.9%	7.9%
	By degree of	Cities		3.8% ^u	9.6%	10.7%	8.7%
Early leavers from education and training (age 18-24)	urbanisation	Rural areas		8.5% ^u	12.2%	8.0% ^u	10.0%
	By country of birth	Native		3.1%	10.0%	3.9%	8.5%
		EU-born		17.0% ^u	20.7%	20.5% ^u	21.4%
		Non EU- born		16.6% ^u	23.4%	31.4%	21.6%
	Total		45%	54.7%	36.5%	58.3%	41.2%
	By gender	Men		44.9%	31.2%	50.0%	35.7%
	ву уепиет	Women		63.9%	41.8%	66.2%	46.8%
	By degree of	Cities		60.9%	46.2%	63.0%	51.4%
Tertiary educational attainment (age 25-34)	urbanisation	Rural areas		45.4%	26.9%	53.2%	29.6%
		Native		62.8%	37.7%	69.4%	42.1%
	By country of	EU-born		31.9%	32.7%	38.7%	40.7%
	birth	Non EU- born		34.3%	27.0%	36.9%	34.7%
Share of school teachers (ISCED 1-3)	who are 50 year	s or over		21.7%	38.3%	27.4% ²⁰¹⁹	38.9% ²⁰¹⁹

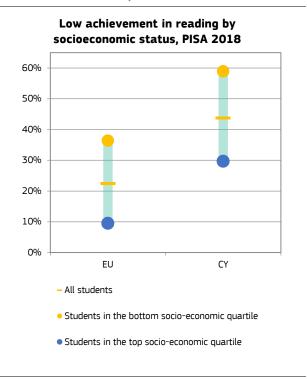
Notes: The 2018 EU average on PISA reading performance does not include ES; b = break in time series, p = provisional, : = not available; data are not yet available for the remaining EU-level targets under the European Education Area strategic framework, covering underachievement in digital skills, exposure of vocational education and training (VET) graduates to work-based learning and participation of adults in learning.

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

adult learning, as well as skills mismatches.

The level of basic skills among pupils in Cyprus remains a concern and highlights socio-economic disparities. PISA 2018 indicated that Cyprus has a high proportion of low achievers in reading, maths and sciences and a low proportion of top performers compared to other EU Member States. Almost two out of three students from the lowest socio-economic quartile are low achievers in reading (EU average: 36.4%) (see Graph A13.1). In the top socio-economic quartile, -one out of three students is a low achiever, which is one of the highest proportions in the EU. There is also a significant gender gap in reading, with girls outperforming boys on average by 47 score points. There is a risk that the pandemic will have a long-lasting negative effect on students' learning outcomes.

Graph A13.1: Low achievement in reading by socioeconomic status, PISA 2018



(1) The EU average does not include ES. **Source:** OECD (2019), PISA 2018.

Since 2015, early school leaving rates have increased, largely due to more foreign-born young people leaving school early. The proportion of early leavers from education and training is almost three boys to two girls. Cyprus is struggling to integrate asylum seekers into education and training. The country has one of the EU's highest asylum application rates by

inhabitant ratio. The proportion of young people (aged 18-34) among recently arrived asylum seekers is especially high at 62% (2018). The implementation of enhanced education measures aimed at pupils with a migrant background is ongoing and supported by ESF+.

Although tertiary education attainment is one of the highest in the EU, the labour market relevance of education needs to be tackled. Cyprus ranks high regarding tertiary education attainment, but has a significant gender gap for men of around 20 pps. A large gap of 30.8 pps also exists between native-born and foreignborn people. Interaction between academia and the business sector is limited and no comprehensive strategy for internationalisation exists. In addition, the proportion of graduates in science, technology, engineering and mathematics (STEM) is one of the lowest in the EU (13.8%).

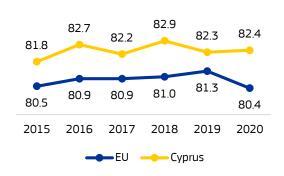
Spending on education as a percentage of GDP is relatively high in Cyprus but it is not reflected in high educational outcomes. Cyprus exceeds the EU average of 10% for the proportion of total government expenditure devoted to education. However, the high overall levels of spending on education do not translate into corresponding good educational outcomes compared to other Member States. This highlights challenges with regard to the effectiveness and efficiency of investment in education in Cyprus.

The reforms and investments under the Recovery and Resilience Facility will help address some of these longstanding challenges. Key measures focus on (i) rising skills mismatches and low digital skills, (ii) addressing the skills mismatch between education and the labour market, (iii) modernising the evaluation system for teachers and schools, (iv) addressing the quality of teaching and the availability and affordability of ECEC.

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 Cyprus.

Life expectancy in Cyprus is higher than in the EU as a whole and increased in 2020, despite COVID-19 (Graph A14.1). However, this disruption was smaller than for the rest of the EU, with only one other Member State (Denmark) not reporting a drop in life expectancy. As of 17 April 2022, 1.11 cumulative COVID-19 deaths per 1 000 inhabitants had been reported, and 523 confirmed cumulative COVID-19 cases per 1 000 inhabitants. Cyprus fares comparatively well in avoiding deaths from treatable causes, which is also reflected in low cancer mortality. However, high antibiotics consumption is a cause for public health concerns over antimicrobial resistance.

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

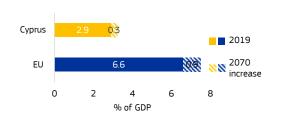


Source: Eurostat database

Health spending relative to GDP in Cyprus was below the EU average in 2019. A recent extensive health system reform to introduce universal health coverage (implemented in two phases in 2019-2020) has reduced what was the highest level of out-of-pocket spending in the EU, made healthcare more affordable and reported levels of unmet needs are low (see Annex 12). However, disparities by income groups and waiting lists for certain services persist. Public expenditure on health is projected to increase by 0.3 pp. of GDP by 2070 (compared to 0.9 pp. for the EU) (41)

(Graph A14.2). Nevertheless, public funding of long-term care remains very low at 0.3% of GDP (2019). The lack of a relevant comprehensive framework further impedes long-term care provision in Cyprus.

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



Source: European Commission/EPC (2021)

Staff shortages raise concern over the health system's long-term performance. The number of nurses in Cyprus is low and the number of graduates is falling. In the area of long-term care, the Deputy Ministry of Social Welfare has started mapping needs, yet more concise and evidence-based mapping, also looking at specialised staff, is still needed. Shortages, particularly of nurses, exist in both the health care and long-term care system. The increasing need, in particular, for long-term care requires more comprehensive measures.

Through its recovery and resilience plan, Cyprus plans to invest EUR 69.9 million (5.8 % of the total RRP) to strengthen its health system by refurbishing facilities and upgrading (procuring) equipment. Cyprus is also focusing on strengthening the performance of the public health system, notably through digitalisation.

^{(41) &}quot;The 2021 Ageing Report: Economic and Budgetary Projections for the EU Member States (2019-2070)", European Commission (ECFIN) and Ageing Working Group (EPC). Note that, due to data availability at the time of the projections, this does not account for the impact of the health system reform on expenditure in 2019-2021, which is expected to be substantial (and adding to the projected

increase up to an additional 4.6 percentage points to reach 7.5% of GDP in 2021, the level expected by the Cypriot authorities).

Table A14.0:Key health indicators

_	2016	2017	2018	2019	2020	EU average (latest year)
Treatable mortality per 100 000 population (mortality avoidable through optimal quality healthcare)	71.2	73.9	78.9	77.1		92.1 (2017)
Cancer mortality per 100 000 population	193.8	208.5	204.6	195.4		252.5 (2017)
Current expenditure on health, % GDP	6.6	6.6	6.8	7.0		9.9 (2019)
Public share of health expenditure, % of current health expenditure	42.3	42.1	42.9	56.5		79.5 (2018)
Spending on prevention, % of current health expenditure	1.3	1.3	1.3	1.2		2.8 (2018)
Acute care beds per 100 000 population	342.7	329.6	318.3	311.5		387.4 (2019)
Doctors per 1 000 population *	3.8	3.9	4.1	4.3		3.8 (2018)
Nurses per 1 000 population *	5.3	5.4	5.4	5.4		8.2 (2018)
Consumption of antibacterials for systemic use in the community, daily defined dose per 1 000 inhabitants per day **	28.4	28.9	28.0	30.1	28.9	14.5 (2020)

⁽¹⁾ 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: Eurostat Database; except: * Eurostat Database and OECD, ** ECDC.

average and it dropped to 76%.

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. Cyprus is at 90% of the EU average in terms of GDP per head (in purchasing power standards). Socio-economic differences persist in Cyprus between territories and there are large differences in terms of educational attainment. More than 52% of the population has a tertiary degree but this proportion drops to 38% in towns and suburbs and to 29% in rural areas. The proportion of young people dropping out of school and training tends to be higher in rural areas while the proportion of young people not in education, employment or training is higher in towns and suburbs. The incidence of poverty is also higher in rural areas where more than 24% of the population was at risk of poverty or social exclusion in 2020, against 18% in towns and suburbs and 15% in cities. Key challenges remain in relation to environmental sustainability. Waste and water management is inefficient and the transition towards a circular economy has barely begun. Despite some progress, Cyprus remains vulnerable to climate change due to droughts and water scarcity.

In the last decade, Cyprus has not converged with the rest of the EU. GDP per head decreased from 102% of the EU-27 average in 2010 to 90% in 2019. Real GDP per head grew on average at a rate of 0.4% per year between 2010 and 2019, which was much lower than the average EU growth rate of 1.4% per year. Labour productivity is below the EU-27 and the gap with the EU has steadily increased. In 2000, real gross value added per worker was 80% of the EU

Cyprus is among the Member States with the highest greenhouse gas (GHG) emissions: 11.2 tonnes of CO2 equivalent per head in 2019, compared to 8.4 at EU level. Thus, meeting the carbon neutrality goals and adapting to climate change will be particularly challenging for Cyprus in two respects. First, energy production and consumption will have to shift towards a significant increase in electricity production and consumption from renewable energy sources. Second, investments will have to be made in cleaner technologies to make manufacturing more efficient and less polluting. For such a transition to be effective, investments need to be made not only in diversifying, greening and making the economy more modern and competitive, but also in alleviating the socio-economic costs of the transition. This should include the upskilling and reskilling of workers in green and digital skills, as well as helping job- jobseekers to find work. It should also include measures to tackle energy poverty, such as those included in the RRP. A concrete plan for social and regional development measures is being deployed through the roll-out of the relevant Territorial Just Transition Plan.

Cyprus is a moderate innovator. Over time, its performance relative to the EU has improved greatly. According to the 2021 European Innovation Scoreboard, Cyprus performs strongly in Linkages, Innovators, and Employment impacts, and its top-three indicators are International scientific co-publications, Innovative SMEs collaborating with others, and Population with tertiary education. The strong improvement in performance between 2019 and 2021 is due to

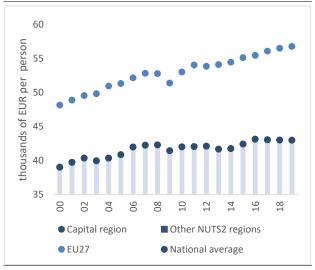
Table A15.1: Selected indicators at regional level - Cyprus

NUTS 2 Region	GDP per head (PPS)	Real productivity growth	GDP per head growth	Unemployment rate	At-risk-of- poverty or social exclusion	Population with high educational attainment	Early school leavers	R&D expenditure
	EU27=100, 2019	Avg % change on preceding year, 2010-2019	Avg % change on preceding year, 2010-2019	% of active	% of active population, 2019	% of population aged 30-34, 2017-2019	% of population aged 18-24, 2017-2019	% of GDP, 2018
European Union	100	1.00	1.39	7.1		39.4	10.4	2.19
Kýpros	90	0.37	0.42	7.6	22.30	57.3	8.5	0.63

Source: EUROSTAT, *EDGAR Database

very significant improvements in several indicators, including Venture capital, Broadband penetration, Product innovators and Innovative SMEs collaborating with others. Cyprus' scores on the climate change-related indicators are below average.

Graph A15.1: GVA per worker



Source: European Commission

Cyprus ranks 21st among the 27 EU Member States in the 2021 edition of the DESI. Cyprus has improved its performance in almost all DESI dimensions, although in most cases it still scores below the EU average. Most of its progress has been made in connectivity. The newly established Deputy Ministry of Research, Innovation and Digital Policy is responsible for implementing the '2020-2030 digital strategy for Cyprus', which will accelerate the country's digital transformation. The new Ministry has also drawn up an action plan for digital skills (2021-2025), as Cyprus currently has a low percentage of people with basic digital skills.

The unemployment rate decreased steadily over the last 5 years. However, in 2020 it started increasing moderately again by 0.5 percentage points. In 2020, the unemployment rate in cities was somewhat lower than in other types of areas, at 7.3% of the active population, against 8.0% in towns and suburbs and 8.1% in rural areas.

The COVID-19 pandemic has severely affected health conditions in Cyprus. Since week 9 of 2020, mortality has been 15.3% higher than the average mortality in the same weeks for the period from 2015 to 2019. The pandemic did not trigger significant changes in working habits, with the proportion of people working from home increasing by only 3.2% in 2020. Cyprus is currently preparing a legislative framework for telework, which will encourage flexible working arrangements. The legislation has not yet been voted on, but Cyprus has already launched flexible working arrangement schemes included in the RRP and ESF+.

average was 7.2%.

This Annex provides an overview of key developments in Cyprus' financial sector. The sector in Cyprus remains concentrated and dominated by domestic institutions. Total banking sector assets stood at almost 310% of GDP in 2021, of which the five largest banks had a share of 86.5% at the end of 2020, relatively stable in recent years. The banking sector is to a large extent domestically owned. The loan-to-deposit ratio has been on a steep declining path since 2017, reflecting the excess liquidity in the system. The market-funding ratio has recorded increases in recent years, but still stood very low in 2020, as bank loans remain the main form of external financing for most companies.

Cypriot banks' capital buffers are adequate but appear thin in face of the comparatively risky loan portfolios while profitability remains low. Supported by the EU Coronavirus banking package, which lowered capital charges for SME exposures, the solvency ratio rose to 20.3% in 2020 and remained flat in 2021. Meanwhile, banks are struggling to maintain acceptable levels of profitability, as they remain reliant on interest income and face high operating costs. The cost to income ratio stood at 72.1% in 2021 which is high compared to the EU average of 60.0%. Accordingly, Cypriot banks deliver low returns on equity at 1.6% in 2021, while the EU

Asset quality remains a challenge for Cypriot banks, but has improved for both corporates and households, both benefitting from the public support measures during pandemic. Banks made progress in improving their asset quality and working out non-performing loans through organic reductions and portfolio sales, bringing the non-performing loans ratio down to 8.1% in Q3-2021. The lending business slowed down in 2020, but recovered to prepandemic levels in the third quarter of 2021 for both households and companies. Household lending benefited from a buoyant mortgage market while lending to businesses was boosted by a number of government support schemes.

The performance of KEDIPES, the state-owned vehicle managing predominantly non-performing assets which originated from winding down the Cyprus Cooperative Bank, has been adversely affected by the pandemic, with some improvement registered in the course of 2021. In parallel, the authorities continue to work on the plan to transform KEDIPES into a national asset management company. Such an initiative should be carefully designed and assessed, to mitigate risks and concerns for the overall payment discipline. A stable and properly functioning foreclosure framework remains

Table A16.1: Financial Soundness Indicators

	2017	2018	2019	2020	2021
Total assets of the banking sector (% of GDP)	397.2	323.8	284.7	301.2	309.8
Share (total assets) of the five largest bank (%)	84.2	86.9	85.7	86.5	-
Share (total assets) of domestic credit institutions (%)	80.9	78.3	78.3	78.6	79.8
Financial soundness indicators:					
- non-performing loans (% of total loans)	30.7	20.2	18.1	11.0	8.1
- capital adequacy ratio (%)	16.3	17.1	19.9	20.3	20.3
- return on equity (%)	-11.9	7.1	3.5	-3.3	1.6
NFC credit growth (year-on-year % change)	0.3	3.5	2.2	1.9	1.7
HH credit growth (year-on-year % change)	0.0	-0.2	-0.2	3.0	2.5
Cost-to-income ratio (%)¹	53.6	62.3	72.3	63.2	72.3
Loan-to-deposit ratio (%)¹	71.9	60.3	60.0	56.7	49.0
Central bank liquidity as % of liabilities	1.6	1.5	0.0	3.8	10.6
Private sector debt (% of GDP)	304.3	282.9	249.9	260.5	-
Long-term interest rate spread versus Bund (basis points)	230.6	177.8	132.3	138.7	74.2
Market funding ratio (%)	12.7	14.7	18.8	19.9	-
Green bond issuance (bn EUR)	-	-	-	-	-

(1) Last data: Q3 2021.

Source: ECB, Eurostat, Refinitiv

another prerequisite for its success.

The Macroeconomic Imbalance Procedure Assessment matrix presents the main elements of the in-depth review analysis. It reports in accordance with Article 5 of Regulation (EU) No 1176/2011 on the prevention and correction of macroeconomic imbalances, as summarised in the Staff Working Document (SWD (2022) 628 final) (42). 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.

The Cypriot imbalances comprise high levels of government and private indebtedness, and a large current account deficit. The current account deficit deteriorated in 2020 after a sharp drop in tourism due to the pandemic and improved but remained below prudential levels in 2021. The government and private debt-to-GDP ratios declined in 2021 due to rebounding GDP growth, but still stand at an elevated level. Private debt stocks, however, improved even despite the pandemic, but much of the debt is concentrated in sectors with high non-performing loan (NPL) ratios. Strong progress was made in the reduction of the stock of NPLs in the banking sector, achieving a single digit ratio. Despite the clear progress so far, the non-performing loan ratio is still above that of most other euro area countries.

Going forward, the macroeconomic imbalances are expected to continue their correction, but the sustainability of the adjustment is surrounded risks, particularly for the current account deficit which is affected by the economic impact of the Russia's invasion of Ukraine. As a result, the current account deficit is projected to continue its decreasing path only in 2023. Government debt is set to improve thanks to nominal GDP growth combined with a lower deficit which profits from the pandemic-related measures being phased out and the use of excess cash reserves (above prefinancing needs for next nine months) accumulated since the beginning of the pandemic. The private debt-to-GDP ratio is also expected to improve. However, the economic outlook for 2022

remains surrounded by uncertainty related to the impact of Russia's invasion of Ukraine and associated sanctions in view of relevant trade of services exposures, a weaker economic environment and higher inflation. Possible rising interest rates could impact the debt-servicing capacity of households having mostly mortgage loans with variable interest rates.

A sustained reform agenda is crucial to facilitate the unwinding of macroeconomic imbalances. In response to the COVID-19 shock, Cyprus had put support measures into place which supported employment and household income and have successfully averted an immediate wave of bankruptcies and nonperforming debt. While the progress with policies concerned with structural issues has been uneven, the Cyprus RRP includes a range of measures that aim to address long-standing issues, such as the diversification of the economy, limit excess borrowing by the private sector, ensure the sustainability of government debt in the medium term and further resolve non-performing loans in and outside the banking sector. Timely and effective implementation of reforms planned in the RRP and further progress in these areas will be crucial to correct Cyprus' vulnerabilities in a sustained manner.

For those reasons, and more generally on the basis of the elements of the in-depth review undertaken for Cyprus under Regulation (EU) No 1176/2011 on the prevention and correction of macroeconomic imbalances as summarised in the Staff Working Document (SWD (2022)628 final), the Commission has considered in its Communication "European Semester – 2022 Spring Package" (COM(2022)600 final) that Cyprus continues to experience excessive imbalances.

⁽⁴²⁾ European Commission (2022), COMMISSION STAFF WORKING DOCUMENT In-Depth Review for Cyprus in accordance with Article 5 of Regulation (EU) No 1176/2011 on the prevention and correction of macroeconomic imbalances.

Gravity of the challenge

Evolution and prospects

Policy response

Imbalances (unsustainable trends, vulnerabilities and associated risks)

External position

The net international investment position remains very negative. It stood at-122.8% of GDP in 2021 lower than in 2020 -136.2%). Adjusting for special purpose entities (SPEs) according to Cyprus Central Bank's data, the net account deficit narrowed markedly, but international investment position amounted to - remained elevated. 43.3% of GDP in 2021.

The current account deficit improved from 10.1% of GDP in 2020 to 7.2% in 2021 However, it is not vet conducive to maintaining the NIIP within prudent levels (CY IDR 2022).

The negative net international investment position parrowed in 2021 mainly as a result of the GDP rebound that followed the sharp contraction in 2020. Meanwhile the current

Exports of non-tourism services such as ICT financial, business and transport expanded in 2021. However, tourism services exports, despite some recovery, remained below the prepandemic level. Russia's invasion of Ukraine is expected to negatively affect exports of services, the tourist product and to broaden the tourist in particular tourism. This in combination with high oil prices and a high and deteriorating deficit in the primary income account are expected to keep the current account in substantial deficit in 2022 and 2023 8.8% and 7.2% of GDP, respectively).

Post-pandemic phasing out of the government support measures is expected to improve the general government net borrowing position and thus contribute to an improvement in overall external position, provided that the net savings position of other sectors does not deteriorate. Measures to prevent excessive borrowing by the private sector and increase its net savings are also important.

A tourism strategy is under implementation, helped also by the RRP, which aim to diversify markets of Cyprus. In addition, the RRP includes measures to boost export-oriented businesses related to services as well as light manufacturing and agriculture, to help diversify the export base and improve the resilience of

The roll-out of renewables also supported by the RRP should alleviate the over-reliance of the economy on oil imports.

Public debt

Albeit decreased since the peak during the pandemic, public debt stood at 103.6% of GDP at the end of 2021.

Cyprus' debt-to-GDP ratio is expected to continue declining and reach 88.8% of GDP by 2023. The decline comes on the back of GDP growth, use of cash reserves and the improved primary balance.

The phasing out of the government support measures is expected to improve the general government debt.

The RRP includes several measures that can contribute to the reduction of public debt Improving tax collection and addressing aggressive tax planning is expected to make revenue collection more efficient and sustainable. Two reforms under the RRP also aim at ensuring the fiscal sustainability of the healthcare system, which was implemented in 2019-2020

the end of 2021, is above prudential benchmarks and remains one of the highest debt ratios in the EU, making it vulnerable to shocks.

The NEC debt to GDP ratio 154% of GDP in 2021 is high and remains above the prudential benchmark even when correcting for crossborder debt of non-financial SPEs (91% of GDP in 2021) which has reportedly limited impact on the domestic economy. It is concentrated in a few sectors, such as those related to tourism. and real estate

The household debt to GDP ratio (88% of GDP in used. 2021) remains above the prudential benchmark.

Non-performing loans remain elevated, split between the balance sheets of banks and credit acquiring companies.

Private debt Private sector debt, standing at 241% of GDP at The private sector debt ratio is expected to decline in 2022 mainly due to real GDP growth and inflation, resuming the declining trend observed since 2014. Moratoria for loan payments, implemented in 2020 to address the impact of the Covid-19 crisis, have expired, with default rates remaining low. Credit has been further supported in 2021 by interest rates subsidies to firms and households.

> Borrowers' participation in insolvency processes Further measures aim at preventing excessive should facilitate debt-workouts, but, so far, there private borrowing, including the creation of a has been limited progress with insolvency proceedings. Examinership and personal insolvency arrangements continue to be scarcely

The RRP foresees a number of long-standing measures aiming at facilitating the reduction of private sector debt, including a strategy for addressing inadequacies of the property transaction system and two reforms which seek to strengthen the insolvency framework, including a re-organisation of the department of insolvency, and to modernise the Companies

liabilities monitoring system expanding on the available financial data, the creation of a system of exchange of data and credit bureaus expected to improve the assessment of credit risk for new lending, and a strategy to improve financial education within the general population.

(Continued on the next page)

Financial sector

There has been a substantial reduction of nonperforming loans (NPLs) in the last 2 years, with in the banking sector continues to be the sales reduction, including a legislative package for the ratio of NPLs in November 2021 declining to of NPLs to credit acquiring companies, however, credit acquirers and servicers. However, 8.1% (from 18.1% in 2019) (*). However, there are risks to the debt repayment capacity of the private sector and stage 2 loans have increased since 2019 for the corporate sector.

banks have also achieved organic reductions. There is less and less scope for further reducing enforcement frameworks are also essential. legacy NPL stocks through sales, given the nature of the remaining portfolio.

The main driver of the reduction in the NPL ratio The Cypriot RRP includes an action plan for NPL safeguarding effective foreclosure and

in the economy. These are now managed outside the banking sector by credit acquiring and credit servicing companies, including the state asset management company KEDIPES.

A significant amount of troubled assets remains The supervision of credit acquiring companies has been strengthened but challenges remain.

The authorities continue to work on a plan to transform KEDIPES into a national asset management company. This could facilitate the implementation of mortgage to rent schemes to help resolve NPLs collateralised by primary residences. It should be designed carefully to put in place an effective governance, avoid moral hazard and minimise fiscal burden.

Foreclosures were suspended for several months, due to the pandemic but have resumed since August 2021. Safeguarding an effective foreclosure framework remains essential for further progress with NPL reduction and improving payment discipline.

Reforms in the justice system to accelerate the courts' proceedings in particular for NPL-related cases will help in the working out of NPLs. However, measures to improve the enforcement of contractual claims and courts' judgment need to accelerate.

^(*) The aggregate NPLs ratios referred to in this matrix are based on ECBs' data and thus they differ from the ratios referred to in the Post-Programme Surveillance Report Cyprus, Spring 2022, that are based on Central Bank of Cyprus' data. **Source:** European Commission

This Annex provides an indicator-based overview of Cyprus' tax system. It includes information on the tax structure, i.e. the types of tax that Cyprus 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 activity.

Cyprus' tax revenues are low relative to GDP, and the tax system is relatively diversified. However, its comparatively low reliance on **labour taxes is increasing.** Cyprus has low levels of tax revenues compared to GDP, which gives it a competitive advantage in achieving sustainable growth and income convergence with the EU. While the country's reliance on labour taxes is relatively modest compared to the EU average, it appears to be increasing. Thus, in the last 10 years, total taxes have increased by almost 3 percentage points, due entirely to increases in labour tax revenues (3.3 percentage points). At the same time, revenues from growth-friendly taxes have stagnated or decreased. Recurrent taxes on property were around the EU average 10 years ago, but are now among the lowest in the EU.

Cyprus' labour tax burden is relatively low across the various income levels. The labour

tax wedge for Cyprus in 2020 was lower than the EU average at various income levels, i.e. for single people at the average wage (100%) as well as at 50%, 67%, and 167% of the average wage. Second earners at a wage level of 67% of the average wage, whose spouses earn the average wage, also have a lower tax wedge compared to the EU average, although they are not taxed more heavily than single people at the same wage level. The low level of taxes meant that in 2020, the tax-benefit system reduced inequality measured by the GINI coefficient by less than the EU average. In other words, Cyprus' tax system is less distributive and thus has a smaller impact on income inequality compared to the EU average.

Cyprus is committed to taking steps to help tackle aggressive tax planning strategies. In November 2020, Cyprus suppressed its citizenship by investment regime that could be used to evade taxes. The high foreign direct investment flows and the high level of dividend, interest and royalty payments as a percentage of GDP suggest that Cyprus is being used by companies engaging in aggressive tax planning. In 2021, Cyprus' RRP provided for an introduction of new legislation to make outbound payments of dividends, interest and royalties to low tax jurisdictions subject to withholding taxes or non-deductibility in order to prevent double non-taxation. This new legislation will take effect from the end of 2024 at the latest.

				Cyprus					EU-27		
		2010	2018	2019	2020	2021	2010	2018	2019	2020	2021
	Total taxes (including compulsory actual social contributions) (% of GDP)	31.7	33.3	34.4	34.6		37.9	40.1	39.9	40.1	
	Labour taxes (as % of GDP)	11.3	11.7	13.5	14.6		20.0	20.7	20.7	21.5	
Tax structure	Consumption taxes (as % of GDP)	12.2	13.2	12.7	11.7		10.8	11.1	11.1	10.8	
	Capital taxes (as % of GDP)	8.2	8.4	8.2	8.2		7.1	8.2	8.1	7.9	
	Total property taxes (as % of GDP)	1.2	0.9	0.9	0.8		1.9	2.2	2.2	2.3	
	Recurrent taxes on immovable property (as % of GDP)	1.0	0.3	0.3	0.2		1.1	1.2	1.2	1.2	
	Environmental taxes as % of GDP	2.8	2.9	2.5	2.5		2.4	2.4	2.4	2.2	
	Tax wedge at 50% of Average Wage (Single person) (*)		17.3	18.1	18.1	18.1	33.9	32.4	32.0	31.5	31.9
	Tax wedge at 100% of Average Wage (Single person) (*)		17.8	18.9	19.0	19.4	41.0	40.2	40.1	39.9	39.7
Progressivity &	Corporate Income Tax - Effective Average Tax rates (1) (*)		10.8	10.8	10.8			19.8	19.5	19.3	
fairness	Difference in GINI coefficient before and after taxes and cash social transfers (pensions excluded from social transfers)	5.1	8.2	6.3	6.3		8.4	7.9	2019 2020 2 39.9 40.1 20.7 21.5 11.1 10.8 8.1 7.9 2.2 2.3 1.2 1.2 2.4 2.2 32.0 31.5 40.1 39.9		
Tax	Outstanding tax arrears: Total year-end tax debt (including		45.5	45.0				31.9	71.0		
administration &	debt considered not collectable) / total revenue (in %) (*)		45.5	45.0				31.9	31.8		
compliance	VAT Gap (% of VTTL)		8.6	2.7				11.2	10.5		
Financial Activity	Dividends, Interests and Royalties (paid and received) as a share of GDP (%)			115.1	194.2			10.7	10.5		
Risk	FDI flows through SPEs (Special Purpose Entities), $\%$ of total FDI flows (in and out)		95.6	93.5	92.6			47.8	46.2	36.7	

⁽¹⁾ Forward-looking Effective Tax Rate (OECD).

Source: European Commission and OECD.

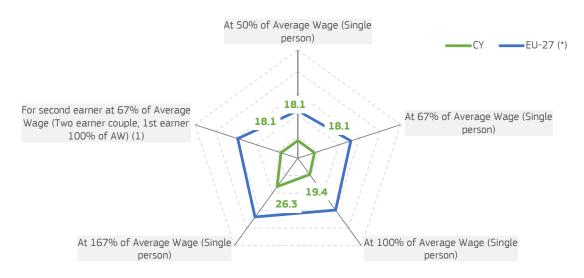
^(*) EU-27 simple average as there is no aggregated EU-27 value

Cyprus could make improvements in the area of tax administration digitalisation.

Outstanding tax arrears declined by 0.5 pp. to 45% of total net revenue in 2019, but remain well above the EU average of 31.8%. The RRP provides for measures to further digitise the tax administration. The VAT gap (an indicator of the effectiveness of VAT enforcement and compliance) decreased by 5.9 pps, falling to 2.7% in 2019, which is significantly below the EU-wide gap of 10.5%.

Graph A18.1: Indicators on tax wedge

Tax wedge 2021 (%)



⁽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

ANNEX 19: KEY ECONOMIC AND FINANCIAL INDICATORS

Table A19.1: Key economic and financial indicators

							forecast		
	2004-07	2008-12	2013-18	2019	2020	2021	2022	2023	
Real GDP (y-o-y)	4.9	0.1	2.1	5.3	-5.0	5.5	2.3	3.5	
Potential growth (y-o-y)	3.7	2.0	0.7	3.3	2.8	2.4	2.6	2.7	
Private consumption (y-o-y)	6.2	0.4	1.8	3.0	-5.0	3.7	2.2	2.0	
Public consumption (y-o-y)	2.7	2.4	-0.9	12.7	14.8	8.0	3.1	1.8	
Gross fixed capital formation (y-o-y)	10.0	-8.1	4.8	2.9	0.0	-6.3	5.4	5.8	
Exports of goods and services (y-o-y)	3.5	1.4	6.9	7.5	-5.1	14.0	1.7	4.6	
Imports of goods and services (y-o-y)	5.9	-0.1	6.5	8.3	-2.5	9.2	2.5	3.7	
Contribution to GDP growth:									
Domestic demand (y-o-y)	6.5	-1.1	1.8	4.3	-0.8	2.7	2.9	2.8	
Inventories (y-o-y)	-0.2	0.4	0.0	1.5	-2.3	-0.6	0.0	0.0	
Net exports (y-o-y)	-1.4	0.5	0.2	-0.5	-1.9	3.4	-0.6	0.7	
Contribution to potential GDP growth:									
Total Labour (hours) (y-o-y)	1.3	0.9	0.1	1.1	0.7	0.6	0.9	0.9	
Capital accumulation (y-o-y)	2.0	1.4	0.5	1.0	1.0	0.7	0.8	0.9	
Total factor productivity (y-o-y)	0.4	-0.4	0.1	1.1	1.1	1.1	1.0	1.0	
Output gap	3.8	0.4	-3.4	5.6	-2.3	0.6	0.3	1.1	
Unemployment rate	4.6	7.0	13.3	7.1	7.6	7.5	7.8	7.3	
GDP deflator (y-o-y)	3.0	2.0	-0.3	1.1	-1.1	2.7	4.5	3.2	
Harmonised index of consumer prices (HICP, y-o-y)	2.1	2.7	-0.2	0.5	-1.1	2.3	5.2	2.7	
Nominal compensation per employee (y-o-y)	3.7	2.7	-1.4	4.4	-3.2	4.7	4.1	4.5	
Labour productivity (real, hours worked, y-o-y)	2.1	0.1	0.9	1.4	1.6	1.6	-0.8	1.6	
Unit labour costs (ULC, whole economy, y-o-y)	2.3	2.8	-2.0	2.9	1.4	0.4	2.7	2.8	
Real unit labour costs (y-o-y)	-0.7	0.7	-1.7	1.8	2.5	-2.3	-1.8	-0.3	
Real effective exchange rate (ULC, y-o-y)	0.5	0.6	-2.1	-0.6	5	2.5	2.0	0.5	
Real effective exchange rate (HICP, y-o-y)	-0.1	-0.4	-0.7	-2.2	0.5	-0.3			
Net savings rate of households (net saving as percentage of net disposable									
income)	1.5	-0.5	-6.8	-0.3	1.8				
Private credit flow, consolidated (% of GDP)	27.9	18.8	3.7	1.7	-2.5	•	·	•	
Private sector debt, consolidated (% of GDP)	244.4	308.6	325.8	249.9	259.7	•	•		
of which household debt, consolidated (% of GDP)	88.5	117.1	117.6	86.0	90.7	•		•	
of which non-financial corporate debt, consolidated (% of GDP)	155.9	191.5	208.2	163.8	169.0	•	•		
Gross non-performing debt (% of total debt instruments and total loans and	133.3	131.3	200.2	105.0	105.0	•		•	
advances) (2)		8.9	31.3	15.4	9.1				
Corporations, net lending (+) or net borrowing (-) (% of GDP)	-9.9	2.3	5.1	-2.1	-1.2	-0.7	-1.5	-1.0	
Corporations, gross operating surplus (% of GDP)	23.7	20.0	21.5	20.0	21.6	21.6	21.0	22.0	
Households, net lending (+) or net borrowing (-) (% of GDP)	-7.6	-5.5	-5.1	-4.7	-3.1	-4.8	-7.0	-6.0	
Deflated house price index (y-o-y)	6.8	-4.9	0.0	2.6	0.7	•			
Residential investment (% of GDP)	10.9	8.2	4.6	7.6	7.6	6.6			
Current account balance (% of GDP), balance of payments	-6.2	-7.7	-3.2	-5.7	-10.1	-7.2	-8.8	-7.2	
Trade balance (% of GDP), balance of payments	-2.2	-6.4	1.3	0.2	-2.5	1.1	0.0	7.2	
Terms of trade of goods and services (y-o-y)	-0.5	-0.4	0.5	-0.7	-0.9	0.3	-2.6	-0.1	
Capital account balance (% of GDP)	0.1	0.3	0.5	0.1	0.1	0.7	2.0	0.1	
	-68.2	-123.6	-145.9		-136.2				
Net international investment position (% of GDP)	-00.2			-116.1		-122.8			
NENDI - NIIP excluding non-defaultable instruments (% of GDP) (1) IIP liabilities excluding non-defaultable instruments (% of GDP) (1)		-69.2 622.7	-204.3 624.5	-167.0 514.5	-169.8 539.2	-141.2 517.4			
Export performance vs. advanced countries (% change over 5 years)	-13.8	-7.5	2.7	21.0	29.1	J17.T			
Export market share, goods and services (y-o-y)	-5.8	-7.3 -4.2	3.8	3.5	6.9	3.7	-2.8	0.4	
Net FDI flows (% of GDP)	J.0	9.1	19.6	0.4	-17.9	J./	2.0	U. T	
General government balance (% of GDP)	-0.9	-4.1	-2.8	1.3	-5.8	-1.7	-0.3	-0.2	
Structural budget balance (% of GDP)			1.9	-0.3	-4.6	-2.1	-0.4	-0.7	
General government gross debt (% of GDP)	60.4	60.5	102.4	91.1	115.0	103.6	93.9	88.8	

⁽¹⁾ NIIP excluding direct investment and portfolio equity shares

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

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

This annex assesses fiscal sustainability risks for Cyprus 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

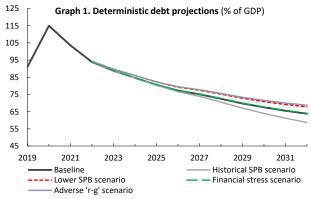
'adverse interest-growth rate' scenario assumes a less favourable snowball effect than in the baseline. In the 'financial stress' scenario, the country temporarily faces higher market interest rates in 2022.

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 long-term care, and the debt requirement measures the additional adjustment needed to

Table A20.1: Debt sustainability analysis for Cyprus

Table 1. Baseline debt projections	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Gross debt ratio (% of GDP)	91.1	115.0	103.6	93.9	88.8	84.7	80.6	77.2	75.1	72.5	69.8	67.5	65.5	63.8
Change in debt	-7.3	23.9	-11.4	-9.7	-5.1	-4.1	-4.1	-3.3	-2.1	-2.6	-2.7	-2.3	-2.0	-1.7
of which														
Primary deficit	-3.5	3.6	-0.2	-1.3	-1.1	-1.0	-1.0	-0.8	-0.4	-0.3	-0.6	-0.5	-0.4	-0.3
Snowball effect	-3.8	8.0	-7.1	-5.1	-4.6	-3.1	-3.1	-2.5	-1.8	-2.3	-2.1	-1.8	-1.6	-1.5
Stock-flow adjustment	0.0	12.3	-4.1	-3.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross financing needs (% of GDP)	5.8	25.8	4.0	2.7	5.8	5.4	6.5	8.8	9.2	9.1	9.0	8.7	6.5	6.4



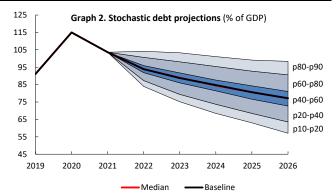


Table 2. Breakdown of the S1 and S2 sustainability gap indicators

		S1	S2						
Overall index (pps. of	-0.4	1.0							
of which									
Initial budgeta	ary position	-2.9	-0.1						
Debt requiren	2.2								
Ageing costs		0.3	1.1						
of which	Pensions	0.4	1.0						
	Health care	0.1	0.3						
	Long-term care	0.1	0.2						
	Others	-0.2	-0.4						

Source: European Commission

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

Short term	Medium term										Long term	
		C1	Debt sustainability analysis (DSA)									
Overall (S1+DSA) S1	Overall					Deter	ministic sce	narios	Stochastic projections	S2	Overall (S2+DSA)	
	31	Overall		Baseline	Historical	Lower	Adverse	Financial				
			Daseille	SPB	SPB	'r-g'	stress	projections				
LOW MEDIUM LOW			Overall	MEDIUM	LOW	MEDIUM	MEDIUM	MEDIUM	MEDIUM			
		Debt level (2032), % GDP	64	59	68	69	64					
	LOW	.ow MEDIUM	Debt peak year	2021	2021	2021	2021	2021		LOW	MEDIUM	
		2011		Fiscal consolidation space	35%	30%	37%	35%	35%		2011	
				Probability of debt ratio exceeding in 2026 its 2021 level						6%		
			Difference between 90th and 10th percentiles (pps. GDP)									

(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. (6) The strong reduction of GFN in 2021 is based on the assumption that GFN would be partly covered by the use of cash deposits.

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

reach the 60% of GDP debt target.

Finally, the heat map presents the overall sustainability risk classification (Table A20.2). The short-term risk category is based on the SO 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 (SO) does not signal major short-term fiscal risks (Table A20.2). Government financing needs are expected to remain low in the short term.

Medium-term risks to fiscal sustainability are medium. On the one hand, the debt sustainability analysis (DSA) points to medium risks. It shows that government debt is projected to continue falling significantly, from 93.9% in 2022 to around 64% of GDP in 2032 in the baseline (Table 1). This debt path is sensitive to possible shocks to fiscal, macroeconomic and financial variables, as illustrated by alternative scenarios and stochastic simulations (Graphs Ax1

and Ax2). On the other hand, the sustainability gap indicator S1 signals that no additional fiscal consolidation would be needed to reach a debt ratio of 60% of GDP in 15 years' time (Table 2). Overall, the medium risk reflects notably the currently high debt and the vulnerability to adverse shocks.

Long-term risks to fiscal sustainability are medium. Over the long term, the sustainability gap indicator S2 (at 1.0 pps. of GDP) points to low risks, while the DSA points to significant vulnerabilities, leading to the overall medium risk assessment. The S2 indicator suggests that, to stabilise debt over the long term, it will be necessary to address budgetary pressures stemming from population ageing, especially related to pension expenditure (Table 2).