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2024 Country Report - Cyprus

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Recommendation for a COUNCIL RECOMMENDATION

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

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European Commission

Cyprus

2024 Country Report

#EURO at25

ECONOMIC AND EMPLOYMENT SNAPSHOT

The economic outlook is positive despite a challenging context

Economic growth in Cyprus slowed in 2023 following buoyant growth in 2022 ([1]). After hitting 5.1% in 2022, GDP growth slowed but remained dynamic at 2.5% in 2023. It is expected to continue this strong performance and grow by 2.8% in 2024 and 2.9% in 2025. Domestic demand is expected to remain the main driver, with both consumption and investment growing strongly. Household spending is supported by rising employment and wages. In addition, growth benefits from investment in both private and public projects, mainly in construction. Net exports were a drag on growth as imports continued growing more strongly than exports as a result of high demand for imported goods. Net exports are expected to remain weak in the medium term due to the economic uncertainty in many trading partners and a strong demand for imports.

Private investment is not expected to increase in the short term. In 2023, private investment in Cyprus was somewhat below the EU average (18.6% of GDP against the EU average of 19.2%). A unique feature of private investment in Cyprus is that the share of household investment is proportionally higher than anywhere else in the EU. Households account for close to half of all investment in Cyprus, double the EU average. Investment activity in Cyprus is mainly concentrated in the construction sector, reflecting the strong demand for housing. Foreign investment is increasing in many sectors, helping the economy to diversify, but remaining particularly strong and increasing in real estate. By contrast, the level of productivity-enhancing investment, including research and development, is still low. This is not projected to increase, which may undermine the long-term competitiveness of the country (see Annex 11).

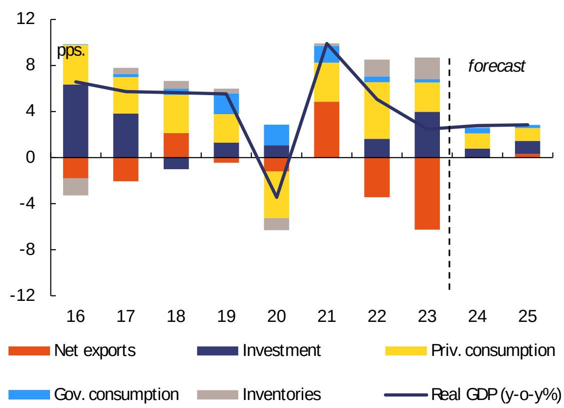
Export growth has slowed and the composition of exports is changing. Revenues from total exports of goods and services remains almost stagnant in 2023, following a strong annual growth of around 20% in the previous two years, in a context of a post-covid recovery of external trade. However, positive trends in certain sectors, notably services, continued. In particular, the tourism sector bounced back significantly in 2023, reaching about 97% of the arrival levels in 2019. Export revenues related to tourism recorded an annual increase of more than 20% in 2023. At the same time, exports of other services, such as legal and accounting, fell sharply, especially at the beginning of 2023, mainly due to further consequences of Russia's war of aggression in Ukraine. However, the trends to diversify the economy and to increase exports of new service sectors continue. ICT and professional services have played a significant role in this development, with their shares in exports of services having increased from around 21% in 2016-2019 to close to 40% in 2023 (CBC, BoP statistics). The share of gross value added by services (excluding sectors related to tourism and public services) increased from an average of almost 53% in the period 2016-2019 to around 61% in 2023.

The current account deficit has deteriorated, reflecting some vulnerabilities in Cyprus' economy. The current account deficit widened from 7.9% in 2022 to 12.1%% of GDP in 2023. The sharp deterioration of the external balance

([1]) The cut-off date for the data used to prepare the 27 Country Reports was 15 May 2024.

highlights the dependency on imports of oil, raw materials and consumer goods. The improvement expected in the overall current account performance is still below target. The high current account deficit is also related to resilient consumer spending, contributing to the historically low saving rate in Cypriot households. At the same time, foreign-owned companies, which continue to provide a significant boost to exports of services from Cyprus, contribute to the high and growing primary income deficit since they repatriate their profits. Moreover, the excessive profits of the mostly foreign-owned banking sector pushed primary income deficit above 10% in 2023.

Graph 1.1: **Read GDP growth breakdown**



Source: European Commission, Spring 2024 Economic Forecast

Inflation has started to fall. Following a peak of 8.1% in 2022, inflation dropped to 3.9% in 2023, thanks to the fall in energy and food prices and easing supply-side disruptions. It is expected to slow further in 2024 and 2025 as pressure from high energy prices abates. However, core inflation is expected to be slightly (0.5 pps) higher, which can be partly linked to wage indexation. Real wages rose by 2.4% in 2023 and are set to continue increasing by 1.4% in 2024. This follows a decade of low wage growth, amid low productivity gains.

Public finances continue to improve, and public debt has fallen swiftly. Following the challenging years of the COVID-19 pandemic, Cyprus's budget balance recovered quickly and turned positive in 2022, recording a general government surplus of 2.7%% of GDP. The surplus rose to 3.1%% of GDP in 2023 and is projected to be 2.9% of GDP in 2024-2025. Debt has been falling steeply since peaking at close to 115% of GDP in 2020. Debt is now expected to fall below 70% of GDP in 2025. However, healthcare costs and ageing are expected to be a drag on public finances in the future. Healthcare costs are projected to rise by 0.8 percentage points (pps) of GDP by 2070, against the EU average of 0.6 pps (see Annex 16). Overall, the risks to fiscal sustainability are low in the short term, medium in the medium term, and low in the long-term, according to the Commission's debt sustainability analysis.

Macroeconomic vulnerabilities relating to private, public and external debt remain, but continue to recede. An in-depth review [2] was carried out as part of the macroeconomic imbalance procedure earlier this year. It found that both household and non-financial corporate debt-to-GDP ratios continued falling in 2023 but remain high. However, corporate debt is inflated by the debt of Special Purpose Entities (SPEs), which pose limited risks to the economy. The decline in the stock of non-performing loans held by banks over the last years has been significant. Action to resolve these loans held by the credit acquiring companies is expected to bring down private debt further. The government debt ratio is decreasing swiftly, mainly thanks to the high budgetary surplus. The current account deficit remained high in 2023 due to the repatriation of profits, continued robust domestic demand and additional temporary factors, such as energy prices and ship registration. The deficit is expected to improve only slightly this year and next. The very negative Net International Investment Position (NIIP) is also inflated by the presence of SPEs. The NIIP, which is currently falling thanks to high nominal GDP growth, is set to deteriorate in the medium term unless the current account improves markedly.

(2) See SWD(2024) 81 final.

Box 1:

Cyprus' competitiveness in brief

Cyprus records mixed performance on competitiveness, making no significant progress since 2022 and the pre-pandemic years. The country performs well on exports of professional, ICT and tourism services and in attracting foreign investment. It is well integrated into the single market and is taking further action to boost its performance. Cyprus' recovery and resilience plan comprehensively tackles several challenges related to improving the business environment. The measures include reducing red tape in the public sector, streamlining permitting procedures, improving the efficiency of public administration, boosting the effectiveness of the tax system, promoting a robust anti-corruption framework, tackling the issue of non-performing loans and creating incentives for innovation.

However, the following competitiveness challenges remain:

- **skills mismatches, a decline in basic skills and a low level of digital skills** which hold back productivity, knowledge valorisation, labour supply and the green and digital transitions;
- **insufficient access to finance for companies, especially outside the monetary and financial institution sector, and access to private investment** in manufacturing and innovative businesses are limiting the potential for growth;
- **insufficient roll-out of renewable energy and the delayed transition to a circular economy** pose risks to energy autonomy and efficiency and could potentially undermine the long-term competitiveness of the country.

Despite positive developments, labour market and social cohesion challenges persist

Labour market performance has been strong, but challenges persist, notably in terms of skills mismatches and basic skills. The employment rate reached a peak of 78.9% in 2023 and is well above the EU average. This puts Cyprus on track to meet its national 2030 employment target of 80%. The unemployment rate fell to 6.1% in 2023 and is set to fall further in 2024 and 2025. Labour shortages in the green sector, in construction, science, technology, engineering, and mathematics (STEM) occupations and in nursing staff are increasing. However, Cyprus has one of the lowest shares of STEM students in the EU (11 vs EU 25.4%) (see Section 3). Digital literacy in Cyprus (49.5%) also lags significantly behind the EU average (55.5%). The 2022 OECD PISA report highlighted that the rate of underachievement among Cypriot students in basic skills is rising and is one of the highest in the EU (see Section 3 and Annex 15). These trends undermine Cyprus' capacity to achieve the twin green and digital transition and to diversify its economy.

Cyprus is doing relatively well in implementing the principles of the European Pillar of Social Rights, but not on all fronts. The gender employment gap (9 pp in 2023) is below the EU average (10.2 pp), and the gender pension gap is one of the widest in the EU (at 36.7% in 2022, against the EU average of 26.1%). The share of young people not in employment, education or training fell in 2023, but it is still above the EU average (see Annex 14). Public funding for long-term care is less than one fifth of the EU average, which forces families to find alternative care solutions and limits the employment rate, notably for women, which is currently 74.6%. Similarly, the limited availability of childcare services greatly reduces women's employment rate, including older women, and their capacity to build up pension rights. The employment gap between people with and without disabilities has been above the EU average since 2021. In general, the risk of poverty or social exclusion is low in Cyprus, but higher for disadvantaged groups, such as people with

Box 2: **UN Sustainable Development Goals (SDGs)**

Cyprus continues to make progress in almost all SDGs, and is above the EU average and continues to make progress in 7 of them, thus is achieving 'No poverty' (SDG 1), 'Zero hunger' (SDG 2) 'Good health' and 'Well-being' (SDG 3), 'Clean water and sanitation' (SDG 6), 'Reduced inequalities' (SDG10), 'Life below water' (SDG14) and 'Life on land' (SDG15). Cyprus is making progress on all SDG indicators related to macroeconomic stability (SDGs 8, 16, 17). However, efforts need to be stepped up to close the gap with the EU average on all of them. Even though Cyprus's overall performance in relation to 'Gender equality' (SDG 5) is worse than the EU average, Cyprus is performing better on gender employment rate and pay gap (see Annex 14). Related to environmental sustainability, Cyprus's performance is not improved in relation to 'Sustainable cities and communities' (SDG 11), while it still needs to catch up with the EU average on 'Affordable and clean energy' (SDG 7) and 'Responsible production and consumption' (SDG 12) (see Annex 6).

Out of the 17 indicators, 10 SDGs remain below the EU average. Besides those highlighted above, these relate to Fairness (SDGs 4 and 5) and Productivity (SDG 9).

disabilities and people born outside the EU. Vulnerable groups also

face persistent barriers to accessing the labour market and finding quality employment. This also limits employment and productivity, including in the development of the social economy. Despite recent improvements, energy prices for heating and cooling houses and for private transport fuel are high in Cyprus (see Annex 8). 19.2% of people stated that they could not properly heat their homes in 2022 (EU average 9.3%).

Cyprus is facing significant challenges in transitioning to a more sustainable economy.

Cyprus is making progress in its transition to a green economy and energy autonomy, but it faces notable obstacles and delays (see Section 3). Despite the significant steps taken to accelerate the roll-out of renewable energy and to improve energy security, substantial challenges remain for Cyprus. According to the draft updated National Energy and Climate Plan (NECP) Cyprus needs to increase its targets for reducing greenhouse gas emissions and for adaptation to climate vulnerabilities and risks. The country has implemented a series of energy efficiency measures with the support of several EU funds (see Annex 7).

The transition to sustainable public transport is still in its infancy and the number of electric vehicles and charging stations remains very low (see Annex 6). Cyprus is at risk of missing both the 2025 targets for municipal waste (55%) and packaging recycling (65%), with a waste recycling rate of only 15.3% in 2021 (see Annex 9). Cyprus also has a high degree of vulnerability to climate change. The national adaptation policies and measures planned are insufficient to tackle these vulnerabilities (see Annex 6).

IMPLEMENTATION OF KEY REFORMS AND INVESTMENTS USING EU INSTRUMENTS

Funding from the Recovery and Resilience Facility (RRF) and cohesion policy are mutually reinforcing Cyprus' efforts to boost competitiveness and stimulate sustainable growth. In addition to the EUR 1.2 billion of RRF funding described in Annex 3, cohesion policy provides Cyprus with EUR 968.6 billion for the 2021-2027 period. Combined support from these two instruments is equivalent to around 7.34% of the country's 2023 GDP, well above the EU average of 5.38% (see Annex 4).

Under its recovery and resilience plan (RRP), Cyprus has launched important policy measures that are expected to boost the country's competitiveness. In particular, the plan envisages major reforms in policies spanning justice, anti-corruption, the job market and renewable energy sources. Cyprus has also made substantial investments in its public health and public education system, in energy renovation of buildings, digital transition of the public sector and in protecting forests from wildfires.

The implementation of Cyprus' recovery and resilience plan is underway, however timely completion requires increased efforts. Cyprus has one complete payment request so far, while the Commission is currently working in collaboration with the Cypriot authorities to assess a second payment request, including the second and third instalments. The first payment request corresponded to 14 milestones and targets in the plan and resulted in the disbursement of EUR 85 million on 2 December 2022. As of mid-May 2024, EUR 262.7 million have been disbursed to Cyprus under the RRF (see Annex 3). The high number of remaining milestones and targets call for addressing emerging delays while strengthening administrative capacities to ensure that reforms and investments can be completed on time.

Cohesion policy funding contributes to tackling Cyprus' growth and competitiveness challenges and aims to reduce the country's regional and social disparities. During the 2014-2020 cohesion policy programming period, support focused on research and innovation, energy efficiency, environmental protection and education. For the current 2021-2027 programming period, support focuses on developing a competitive and innovative growth model, facilitating the transition to a circular economy, promoting sustainable urban transport, accelerating the energy transition, providing quality social services and making progress on the digital transition.

A lighter administrative burden and a better business environment

The RRP funds action to improve the efficiency of the public administration. For instance, Cyprus digitalised key workflows for public services and will provide 70 new public services by 2026. Under the RRP, Cyprus brought in new performance evaluation criteria to improve the efficiency of the public sector. In addition, it adopted an action plan to modernise human resources management in the civil service.

Under the RRP, Cyprus has taken steps to increase the efficiency of permitting procedures. For example, it upgraded its digital platform for building permits to streamline the application process for the authorities. As of June 2023, businesses can access a new digital platform to request permits for renewable energy, such as solar power. As a result, the reform cut the administrative burden in setting up solar parks by an estimated 50%. Streamlining the permitting procedures in Cyprus accelerates the roll-out of renewables. This is a partial response to the related country-specific recommendation on accelerating the deployment of renewables by further streamlining permitting procedures in Cyprus.

Measures to improve the effectiveness of the tax system are underway. These include digitalising tax services, and easing the administrative burden to improve tax compliance. A reform to reduce aggressive tax planning has also started and the authorities are tackling issues hampering the effectiveness of the new framework. The planned investment in modernising the customs and electronic payment system in 2024 should simplify and accelerate customs procedures, reduce administrative costs and make revenue collection more efficient.

Under the RRP, Cyprus took measures to improve its anti-corruption framework. In February 2022, Cyprus passed a law to protect whistle-blowers reporting fraud and corruption. In March 2022, it adopted a set of anti-corruption measures, including a law setting up the independent authority for anti-corruption. Cyprus also took steps to use blockchain technology and to protect traditional Cypriot products (such as dairy, honey and spirits) against fraud.

Cyprus took steps to tackle the long-standing issue of non-performing loans. In July 2022, Cyprus adopted two laws, putting credit servicers under the Central Bank's regulation and supervision, and giving digital access to credit servicers and credit acquiring companies to the Land Registry. This will improve the operating environment for managing non-performing loans. In December 2023, Cyprus amended the law governing the sale of properties to facilitate the swift transfer of property rights from lenders to buyers as soon as the contractual obligations of a transaction are met. The sense of ownership incentivises buyers to continue servicing their loans and partly responds to the related country-specific recommendation for Cyprus.

Making use of multiple funding sources, Cyprus has taken steps to improve support for research and innovation. Cohesion policy funds have helped facilitate active cooperation between business and research institutions and boosted the income of researchers across the country. Although challenges remain, the RRP includes reforms that aim to attract investment in and people to work in research and innovation through tax incentive schemes and collaboration between research institutes and public universities to create new education programmes. Under the RRP, Cyprus also committed to increasing research and development funding for businesses, with a focus on small and medium businesses and start-ups.

Unlocking investments in the energy transition

Cyprus is taking important steps to accelerate the energy transition and to end its isolation from the European electricity grid. The RRP includes investments in developing the Great Sea Interconnector, which will bridge the national electricity grids of Greece and Cyprus. This infrastructure will enable the take-up of more renewable energy sources, which will be boosted by further action under the Just Transition programme. Complementary investments in developing the Great Sea Interconnector are also planned under other EU funds, such as the Connecting Europe Facility.

Cyprus has taken a series of energy efficiency measures, thanks to support from several EU funds. Cyprus has made progress in improving the energy efficiency of a significant number of private and public buildings, for instance through a scheme for small and medium businesses and non-profit organisations. The scheme focuses on reducing energy consumption in buildings by at least 30% by 2025. Under the RRP, Cyprus upgraded the energy efficiency of 405 schools.

Investing in people to boost economic growth and resilience

Cyprus has implemented reforms and investments to tackle skills mismatches, improve productivity and promote inclusiveness. Under the RRP, Cyprus adopted an action plan to develop digital skills across the entire population. In addition, the RRF and the European Social Fund have supported training initiatives for over 150 000 people in Cyprus. It has also taken steps, with support from the Technical Support Instrument [3], to improve the integration of migrants by creating intercultural networks, which promote training and job opportunities. In addition, the European Social Fund Plus helps fund the employment of vulnerable groups of the population.

Making effective use of multiple funding sources, Cyprus has taken steps to stimulate youth employment and help young people join the labour market. For example, the European Social Fund funded placements for over 8 800 young people in traineeships and jobs during the 2014-2020 programming period. Cyprus also combines RRP measures to provide over 5 500 young people who are not in employment, education or training with coaching and career guidance. This lowers the barriers for young people seeking to join the labour market.

Cyprus is implementing RRP measures that aim to improve the education prospects for the most vulnerable people. In 2023, Cyprus inaugurated the first of four public childcare centres currently being built with the aim of meeting the needs of vulnerable families, including parents working in industrial areas. This helps Cyprus tap the economic potential of parts of the population who have a lower employment rate, such as women. Cyprus has also started building a technical school in Limassol to increase the capacity, quality and attractiveness of vocational education and learning. Works have also started to upgrade two of the nine public schools for children with special needs.

The RRF and cohesion policy funds support investment in modern medical and housing infrastructure to improve the quality of and access to health and long-term care. Under the RRP, Cyprus is focusing on modernising and increasing the capacity of two thirds of public hospitals, on procuring equipment, and on rolling out digital and interoperable e-health services. Complementary investments in digital health services and applications are also envisaged under the cohesion policy funds for the period 2021-2027. In addition, Cyprus is implementing an RRP measure to build or renovate at least 18 houses for people in need of long-term care, and for other beneficiaries.

(3) 1. Enhancing structures and policies for intercultural integration in Cyprus, SRSP2020/257, TSI2023/105.

Box 3: **Combined action to boost the impact of EU funds**

To boost economic growth and maximise the impact of EU funding, Cyprus' RRP includes reforms that support investment under other EU instruments, creating important synergies and complementarities between the different funds. For example, to stimulate investment in the country, an RRF-funded reform is developing a new system to simplify the licensing and permitting procedures for strategic investments, including in health, education, social care, tourism, environment and energy. This eases the administrative burden, streamlines procedures and will greatly increase the take-up of cohesion policy and other EU funds, given the limited human resources in Cyprus' public administration.

FURTHER PRIORITIES AHEAD

Cyprus faces challenges related to its business environment, fiscal and financial sustainability, skills mismatches and poor performance on basic and digital skills, the green transition and energy efficiency. Tackling these challenges will help boost Cyprus's long-term competitiveness and make its economy more resilient. It will also help make further progress in achieving the UN Sustainable Development Goals (SDGs).

The policy assessment under the macroeconomic imbalances procedure suggests that Cyprus is making progress on tackling its vulnerabilities. In December 2023, Cyprus took several measures to help resolve non-performing loans (NPLs). Full and swift implementation of the recovery and resilience plan and the measures to diversify the economy and the green transition are expected to further expand exports and ease the country's over-reliance on oil imports. However, additional efforts would be needed to create investment opportunities in sectors that would increase Cyprus' growth potential.

It is important to tackle the challenges both at national and at regional level to reduce regional disparities and boost the administrative and investment capacity in a balanced way across the country.

Cyprus' economic transformation requires a supportive business environment

High and rising levels of foreign investment are changing Cyprus's economic model; so far with only a limited impact on the economy's growth potential. Policies to promote company headquartering have borne some fruit in attracting new investments and diversifying the economy. In some sectors such as retail, the presence of foreign companies has given a boost to competition and some know-how transfer can also be expected in technology-intensive markets in the future. The stock of foreign direct investment today exceeds the country's GDP by over 15 times and dynamic sectors such as ICT have greatly contributed to value added. However, a very high share of foreign investment focuses on special purpose entities (SPEs). These are typically ship-owning companies registering (and deregistering) ships or financial and holding companies with no real economic activity in Cyprus, and thus with a low impact on economic output ([4]). Another high share of foreign investment is channelled to existing companies and activities such as real estate, which does not expand the productive capacity of the economy. Overall, the high and increasing number of foreign companies in Cyprus is not yet proportionally reflected in an increase in productivity and competitiveness.

Dependence on certain types of foreign investment may compound the economic vulnerabilities. The profits generated by foreign companies are not reinvested but tend to be repatriated abroad. This outflow of profits not only drives up the external deficit but it also leaves longstanding domestic investment needs unmet. At the same time, high dependency on foreign investments attracted by low taxes and special tax regimes also entails risks related to aggressive tax planning and anti-money laundering. Cyprus' recovery and resilience plan includes a number of measures to improve the business environment, for example by limiting aggressive tax planning, but a more holistic approach to tackle these issues is not yet in place.

([4]) See the 2024 in-depth review for Cyprus.

Cyprus' capital market remains comparatively small with a limited role in financing domestic companies. The market funding ratio was only 22.8%, significantly lower than the EU average of 50.8%, although it has steadily increased in recent years. According to the Association for Financial Markets in Europe, Cyprus has the lowest share of non-financial corporation bond and equity issuance of total non-financial corporation financing. It also has one of the worst indicators tracking the value of venture capital investments against GDP in the EU-27.

Administrative capacity limits the potential for reform. The strategic document, Vision 2035, adopted in 2022, is a long-term strategy to transform Cyprus' economic model and is currently being carried out ([5]). The administration often faces challenges in moving from strategies and action plans to performance-based implementation with specific targets and measurable outcomes. This can be linked to a lack of human resources and specific skills, but also to organisational weaknesses to plan effectively and ensure financing and business continuity. Public investment decisions are still mainly driven by financing opportunities without mapping the country's long-term investment needs for infrastructure and know-how. The recovery and resilience plan tackles these issues to a certain extent as it includes measures to boost the capacity and efficiency of the public administration. The government's long-term strategy includes actions and targets to that end, which still need to be carried out.

The administrative burden is a brake on competitiveness. The percentage of firms reporting regulation as a major obstacle to investment is not only well above the EU average, but it has also increased in Cyprus (see Annex 12). Despite the efforts made to improve the overall efficiency and effectiveness of the public procurement system, challenges persist, particularly in the areas of competition and strategic procurement (see Annex 12). Difficulties persist in enforcing the rule of law and accelerating the resolution of pending court cases ([6]) (see also Annex 13).

The independence and accountability of the prosecution service remain weak. Concerns relate to the Attorney General's dual role as legal adviser to the government and head of the prosecution service, with broad discretionary powers not subject to any review. The need to strengthen the independence of prosecution has been highlighted in the past, but these weaknesses have not yet been tackled. This may undermine the effectiveness of the criminal justice system and the broader anti-corruption framework and business environment.

The governance of state-owned enterprises (SOEs) requires further strengthening. In recent years, some policy measures were taken to improve the financial oversight of public entities, but SOE performance monitoring and planning is undermined by the lack of a complete inventory and no obligation to conduct regular reporting. Action is also needed to improve important aspects of corporate governance such as merit-based nomination of boards, ownership policy, performance-based management, transparency and accountability of financial performance. Against this background, there are concerns about the quality and prices of services in sectors dominated by SOEs, such as the electricity sector. The Ministry of Finance has received technical assistance from the International Monetary Fund to refine the current SOE governance framework. The technical assistance project was concluded in September 2023 and the specific recommendations issued are expected to be translated into a comprehensive reform.

([5]) A-long-term-strategy-for-sustainable-growth-for-Cyprus1.pdf (ccci.org.cy)

([6]) IMF Article IV 2023 Cyprus staff report.

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Safeguarding fiscal and financial resilience remain priorities

Despite recent progress, sound government finances remain a priority in the coming years. The current and projected budget surplus is partly due to temporary factors, such as the withdrawal of post-pandemic and energy support measures, but also due to growth driven taxes, such as on strong consumer spending, and the resolution of past tax cases. The inflow of foreign investment also gave a boost to revenue from corporate income taxes. Measures to expand the tax base, such as self-compliance, transparency and fairness in the tax system, remain challenging. Spending increases are expected to continue in the health and social sectors, and for public administration wages.

Cyprus' debt sustainability risks are low in the long run ([7]) and ageing-related costs are not yet a major concern ([8]). Pensions are projected to increase by 2.7 pps by 2045, but from a relatively low level (against the EU average) (8.2% of GDP). Spending on health is projected to increase by 0.5 pps of GDP over the same period. Spending on long-term care remains very low (0.2% of GDP), with no measures in place to date. The authorities are preparing an action plan to improve these services. Further pressure on government finances from an ageing population cannot be excluded in the long run. Reforms to improve health and pension spending are ongoing, but the timing and the scale of their impact on government finances is unclear at this stage.

Cyprus could take action to strengthen the Independent Fiscal Institution. The mandate of the Cyprus Fiscal Council focuses on monitoring the rules for government finances and assessing and endorsing macroeconomic and budgetary forecasts. However, the nomination and appointment procedure are under the responsibility of the government, which appoints the Board. The secretariat is staffed by government officials on secondment to the Cyprus Fiscal Council and staff numbers are limited by law, which has an impact on the independence and analytical capacity of the institution.

Private-sector debt has fallen significantly in recent years, a trend that is expected to continue. Private debt remains high at 199.6% of GDP in 2023. Excluding SPEs, private debt in Cyprus totalled 157% of GDP in [Q2] 2023 ([9]). It has fallen sharply in recent years and is projected to keep falling in 2024 and 2025. Despite the high inflation, high interest rate environment, the overall quality of loan portfolios has been relatively resilient. The risk of asset quality deterioration is mitigated by ample liquidity in the banking sector, improving profitability and sufficient capital buffers to withstand shocks. However, Cyprus still has one of the highest ratios of non-performing loans in the EU (4% in September 2023), above the euro-area average of 1.8%.

Taking further action to tackle non-performing loans remains a priority. Banks have made significant progress in reducing their portfolios of legacy non-performing loans, for example by sales to credit-acquiring companies and the public Asset Management Company (KEDIPES). However, these transfers still burden the economy through private indebtedness. The process to resolve non-performing loans through repayment by borrowers has been slow and frequent suspensions of foreclosures have delayed plans to restructure loans. To maintain payment discipline and give lenders leverage over uncooperative borrowers, it is essential to bring in an effective foreclosure framework. The new legislation package adopted in December 2023 improves transparency in loan resolution and will make it easier and faster to restructure non-performing loans by bringing in an out-of-court procedure

(7) 2024 debt sustainability monitor.

(8) 2024 ageing report.

(9) See also the 2024 in-depth review for Cyprus.

through the Financial Ombudsman. The Mortgage-to-Rent Scheme, designed to protect homeowners' primary homes, also came into effect in December 2023, making it easier for vulnerable borrowers to restructure their loans. The scheme is at an early stage of implementation, but its impact on reducing the overall legacy of household non-performing loans is expected to be minimal as it is above all a social scheme.

Skills challenges are a major obstacle to long-term competitiveness

Poor performance in basic skills, the low rate of science, technology, engineering and mathematics graduates, and the declining rate of adults enrolled in training are the main challenges to tackle skills mismatches and labour shortages. The rate of underachievement of Cypriot students in reading, mathematics and science has steadily worsened since 2012, ranking among the worst in the EU. The 2022 PISA report highlights a further decline in performance across all socio-economic groups since the previous results in 2018 (see Annex 15). Cyprus has not developed a coherent and coordinated provision of teacher education, including high quality initial teacher education, systematic support for beginning teaching staff and individualised career-long professional development. Additionally, the development and implementation of competence-based teaching methods such as the adoption of curricula reforms focused on developing key competences along with fostering a culture of evaluation is still lagging. For the period 2022-2032, demand for jobs in STEM occupations will constitute 40% of total demand, far exceeding the supply of graduates, particularly among women. Cyprus' labour market is also characterised by the limited integration of scientific talent in the workforce, with the share of researchers in both public and private-sector employees significantly below the EU average. The share of people enrolled in adult learning fell from 44.8% in 2016 to 28.3% in 2022. The take-up of vocational education and training is also still below the EU average (see Annex 14), which is another brake on competitiveness and economic diversification. In addition, the rate of learning digital skills has plateaued, exacerbating skills mismatches and labour shortages. It is crucial to Cyprus' future prosperity to provide a skilled and adaptable workforce able to meet industry needs. These are also bottlenecks to higher wage growth. Cyprus has had a decade of low wage growth. Although a minimum wage has now been brought in, overall wage growth is expected to remain weak.

Progress on the green transition in Cyprus is slow

Cyprus is not on track to reach its 2030 effort sharing target, which is to reduce greenhouse gas emissions in the effort sharing sectors by 32% in 2030 from 2005 levels. Reliable long-term strategies and investments are the cornerstone for achieving the economic transformation needed to reach the EU's climate-neutrality objective where research and innovation could play an essential role. Energy poverty remains a challenge in Cyprus, despite recent improvements. Although the share of the population unable to keep their homes properly warm fell from 28.3% in 2015 to 19.2% in 2022, it is still more than double the EU average (9.3%).

Accelerated action on sustainable mobility remains a key priority. The transport sector accounts for the highest share of energy consumption and it increased its final energy consumption by 12.2% (see Annex 7). Cyprus lacks railways, which means that all domestic freight is transported by road. In addition, public transport is only used for 13% of passenger travel (see Annex 6). The measures set out in the recovery and resilience plan on energy and transport, particularly focusing on energy efficiency and electric transport, are moving in the right direction. However, alone they are not enough to bridge the remaining gaps, notably in the transport sector. The country is still among the EU's worst performers on its electric passenger fleet distribution (see Annex 5).

Despite recent improvements, significant challenges remain to upgrade the electricity grid and roll out renewable energy. The main challenges are Cyprus' reliance on petroleum products, which are entirely imported and used to meet over 80% of its energy needs, and the state of the grid, which needs upgrading and expanding. The share of renewable energy in the electricity mix in Cyprus was 17% in 2022. The draft upgraded national energy and climate plan projects renewable electricity generation to reach 31.5% by 2030. Additional investments are needed to improve and modernise the grid, including grid-scale and small-scale storage. This will be crucial to integrate the additional renewable capacity without creating grid stability issues.

Since late 2021, Cyprus has taken horizontal and targeted measures to cushion the impact of rising prices. These measures included reducing VAT on electricity, subsidies for renewables and energy efficiency measures, lump-sum payments for vulnerable groups, reduced excise duties on fuels, support for the agricultural sector, subsidised electricity bills and zero VAT rates on basic goods. Most of the measures were phased out in 2023; only the subsidised electricity bills and the zero VAT rate on basic goods remain in force until the end of June 2024.

The pace of Cyprus' transition to a circular economy is too slow to achieve the goals set out in the EU circular economy action plan (Annex 9). Cyprus is at risk of missing the 2025 targets for both municipal waste and packaging recycling (55% and 65%), despite additional measures on household and landfill waste and the action taken to improve recycling and user awareness (see Annex 9). On this front, the priorities for Cyprus are waste management and the use of circular materials in industry and construction.

Cyprus has a high degree of vulnerability to climate change; its national adaptation policies and measures are insufficient. Cyprus is experiencing high anthropic pressure on habitats and ecosystems, especially in coastal zones. It has comparatively low levels of rainfall and high temperatures, which contribute to the highest level of water stress in the EU (see Annex 6). Agriculture is the industry that consumes the most water in Cyprus. The effects of climate change subject soil to additional degradation and desertification, resulting in lower crop yields. Given the changing climatic conditions, water management will need to be prioritised to manage the risk of electricity disruption as floods, heat and drought have an impact on energy production. Cyprus is one of the six worst performers in the EU on private insurance coverage against damage from climate hazards. Only 5% of Cyprus's economic losses between 1980 and 2020 were insured. The country's approach to climate change adaptation is mostly non-binding for the moment. It will be crucial to improve institutional arrangements to boost climate resilience and long-term competitiveness.

Box 4: The mid-term review of cohesion policy funding for Cyprus

The mid-term review of cohesion policy funding is an opportunity to assess cohesion policy programmes and tackle emerging needs and challenges in EU Member States and their regions. Member States are reviewing each programme taking into account, among other things, the challenges identified in the European Semester, including in the 2024 country-specific recommendations. This review forms the basis for a proposal by the Member State for the definitive allocation of 15% of EU funding included in each programme.

Cyprus has made progress in implementing cohesion policy programmes and the European Pillar of Social Rights, but challenges remain as outlined in this report, including Annexes 14 and 17. In particular, there is still a socio-economic divide in Cyprus between urban and non-urban areas. In this context, it is important to continue implementing the planned priorities, focusing on:

(i) the energy transition, including renewable energy, storage solutions and energy efficiency;

(ii) the circular economy and improved water management, especially wastewater treatment to comply with the Urban Wastewater Treatment Directive and environmental protection;

(iii) sustainable urban transport;

(iv) activation and skills development based on the comprehensive active labour market strategy to enable people join the labour market and promote the social integration of vulnerable groups, including people not in employment, education or training, women and persons with disabilities;

(v) strengthening implementation of individual learning accounts (ILAs) and implementing the European Child Guarantee;

(vi) providing quality and affordable long-term care services and social housing and developing the social economy.

The increasingly pressing needs to prevent damage and prepare for climate change-related risks merit specific analysis in preparation for the mid-term review. Cyprus could draw on the opportunities provided by the STEP initiative ([10]) to support its energy transition through clean and resource efficient technologies, including net-zero technologies.

([10]) Regulation (EU) 2024/795

KEY FINDINGS

Cyprus' recovery and resilience plan (RRP) is wide in scope and equipped with a substantial budget. Its measures tackle a series of structural challenges, in synergy with other EU funds, including cohesion policy funds. They include:

- **accelerating the green transition and reducing dependence on imports of fossil fuels** by promoting the use of renewable energy and boosting energy efficiency by renovating buildings;
- **supporting the digital transition** by investing in the digitalisation of public administration, educational facilities and businesses, in digital skills and by ensuring access for all;
- **improving the effectiveness of the tax system** by digitalising tax services and modernising the customs and the electronic payment system;
- **accelerating the resolution of non-performing loans** by improving the operating environment to manage loans and facilitating the swift transfer of property rights from lenders to buyers;
- **improving the business environment** by cutting red tape, streamlining permitting procedures, promoting a robust anti-corruption framework and by creating incentives for RD&I;
- **developing a skilled workforce** by improving infrastructure for pre-primary, primary and secondary school students, promoting inclusive training programmes and implementing active labour market policies;
- **improving social protection and inclusiveness** by strengthening the quality of and access to health and LTC systems, gradually developing family and community-based services to reduce poverty and helping to integrate disadvantaged groups.

The implementation of Cyprus' RRP is facing increasing challenges. Renewed efforts are key for a successful implementation of all measures by August 2026.

In addition to the reforms and investments in the RRP and cohesion policy programmes, Cyprus would benefit from:

- **pursuing sound budgetary policies** to boost its fiscal resilience and tackle the challenges related to future costs of ageing;
- **improving the business environment** by making it easier for companies to access financing on capital markets, improving the governance of SOEs and by boosting innovation;
- **maintaining an operational and efficient foreclosure framework** to reduce the stock of non-performing loans in the economy;
- **improving basic skills and educational outcomes, and adapting adult learning to labour market needs** to alleviate skills mismatches, boost the labour supply, foster business investment and social economy, and accelerate the twin transition;
- **accelerating the green transition by further advancing sustainable mobility**, increasing the share of renewable energy, improving energy efficiency, tackling energy poverty and boosting resilience to climate change.

ANNEXES

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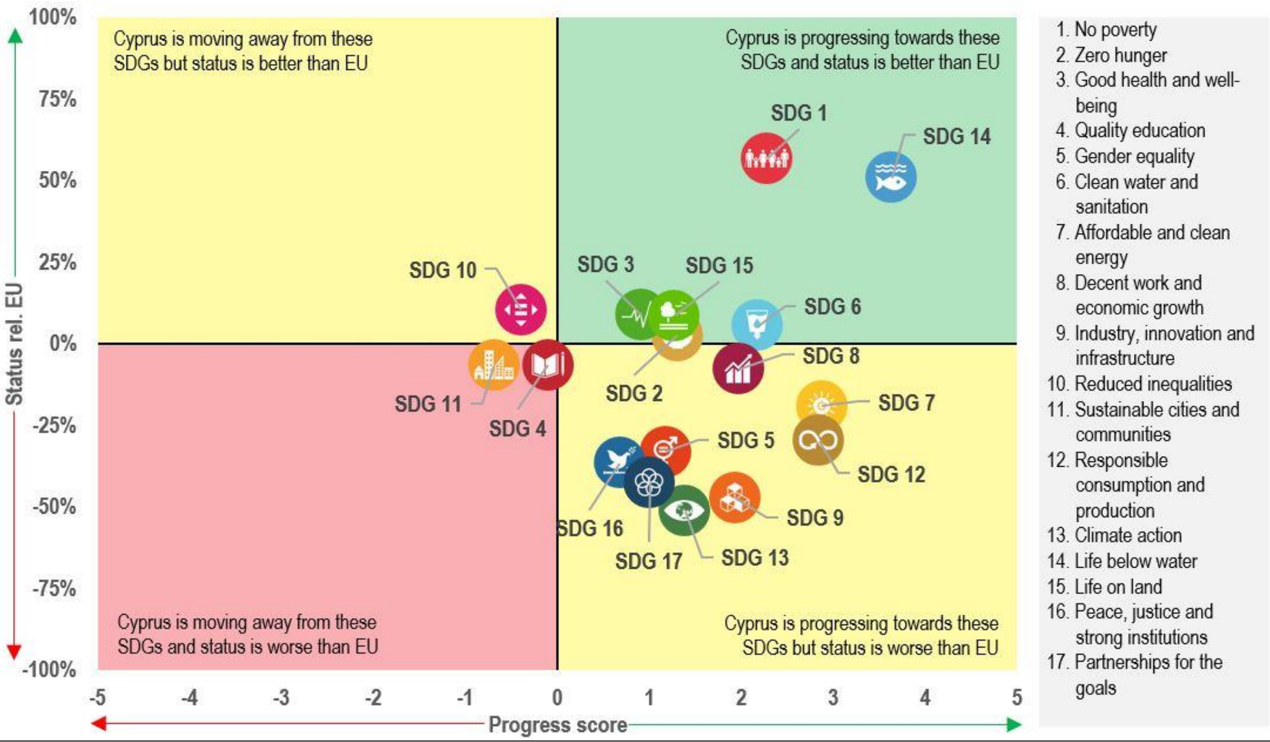
This Annex assesses Cyprus' progress on the Sustainable Development Goals (SDGs) along the four dimensions of competitive sustainability. The 17 SDGs and their related indicators provide a policy framework under the UN's 2030 Agenda for Sustainable Development. The aim is to end all forms of poverty,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

Cyprus is improving on most SDG indicators related to *environmental sustainability and it is well above the EU average for SDGs 14 and 15* *(Life under water and Life on Land) and for SDGs 2 and 6 (Zero hunger; Clean water and sanitation)*, and it is slightly moving away from the target for SDG 11 (Sustainable cities and communities). **However, it needs to catch up with the EU average on SDG 7 (Affordable and clean energy), SDG 12 (Responsible consumption and production) and SDG 13 (Climate action).** Per capita energy consumption in Cyprus is below the EU average, and the country has made progress on energy consumption indicators. These include the share of renewable energy in gross final energy consumption (SDGs 7 and 13), up from 10.5% in 2017 to 19.4% in 2022. However, Cyprus remains below the EU average of 23.0% on affordable energy (SDG 7), the percentage of the Cypriot population unable to keep their homes adequately warm was much higher than the EU average in 2022, at 19.2% (EU 9.3%), even if the figure dropped from 2017 (22.9%). While the concentration of nitrates in groundwater significantly dropped (7.8 mg/litre vs EU 20.5 mg/litre in 2021), ammonia emissions from agriculture are high (46.6 Kg/ha vs EU 18.8 Kg/ha). This, combined with a low recycling rate of municipal waste (14.8% vs EU 48.6% in 2022; SDG 11) and a high material footprint (in

Graph A1.1: **Progress towards the SDGs in Cyprus**



For detailed datasets on the various SDGs, see the annual Eurostat report '[Sustainable development in the European Union](#)'; for details on extensive country-specific data on the short-term progress of Member States: [Key findings – Sustainable development indicators - Eurostat (europa.eu)](#). A high status does not mean that a country is close to reaching a specific SDG, but signals that it is doing better than the EU on average. The progress score is an absolute measure based on the indicator trends over the past 5 years. The calculation does not take into account any target values as most EU policy targets are only valid for the aggregate EU level. Depending on data availability for each goal, not all 17 SDGs are shown for each country.
Source: Eurostat, latest update of 25 April 2024. Data refer mainly to the period 2017-2022 or 2018-2023. Data on SDGs may vary across the report and its annexes due to different cut-off dates.

2022, 24.0 tonnes per inhabitant, vs 14.9 tonnes for the EU; SDG 12), pose considerable challenges for the environment. The average CO_2 emissions per km from new passenger cars (SDG 13) were 136.8 g CO_2 per km, well above the EU average of 109.8. Measures in the recovery and resilience plan (RRP) (Policy Axis 2) such as energy efficiency renovations of public and private buildings and investments in sustainable water management and transport, will help achieve further progress on these SDGs. Coastal water bathing sites with excellent water quality amount to 99.2% (vs 88.9% in the EU) and the share of terrestrial protected area is at 37.7% (vs 26.0 in the EU).

While Cyprus is improving on several SDG indicators related to *fairness,* it still needs to catch up on SDGs 4, 5, 7, 8 ([11]). Cyprus outperforms the EU average on most indicators related to poverty, health and equalities (SDGs 1, 3 and 10). However, it is moving away from the EU average on indicators related to migration, basic education and gender equality. Asylum first-time applications per million inhabitants increased by 50% in 5 years and 6-fold the EU level. The EU/non-EU citizenship gap for early leavers from education and training was 21.3 percentage points (pps), vs the EU average of 17.1 pps in 2023, while the EU/non-EU citizenship gap for young people not in employment, education or training was 11.5 pps in 2022 (EU average: 11.1 pps). Furthermore, on SDG 4 (Quality education), the significant low achievement of 15-year-old students in basic skills (53.2% of low achievers in mathematics, vs EU 29.5%) (see Annex 15) poses challenges in the field of opportunities for young people. This is also reflected in the higher numbers of young people aged 15-29 not in education, employment or training (10.5% vs EU 9.5% in 2023). On gender equality, while the gender gap fell below the EU average (9.0 pps, vs EU 10.2 pps in 2023), the share of senior management positions held by women was much lower than in the EU (8.2% vs EU 33.8% in 2023). Reforms and investments under Policy Axis 5 of the RRP aim to improve the quality of education and training, reach out to young people not in education, employment or training, and improve access to early childhood education and care and to flexible working arrangements. This will provide equal opportunities for all children and make it easier for women to participate in the labour market.

Cyprus is improving on *productivity* (SDGs 8, 9), but still needs to catch up compared to the EU. On digital skills, Cyprus remains below the EU average, with 49.5% of adults aged 16-74 having basic digital skills (EU: 55.6%). The country is making progress on SDG 8 (Decent work and economic growth). However, it still needs to catch up on investments, as their share of GDP, at 20.4%, in 2022 was below the EU average of 22.7% in 2023. On SDG 9 (Industry, innovation and infrastructure), the country needs to catch up on R&D expenditure, which remains low at 0.77% of GDP in 2022 – one of the lowest in the EU (where the average is 2.24%). The share of households with a high-speed internet connection in Cyprus was 60.0% in 2022, well below the EU average of 73.4%. The RRP is targeting bottlenecks, especially in digitalisation and the diversification of the economy, and investing in R&D to facilitate further progress on these SDGs.

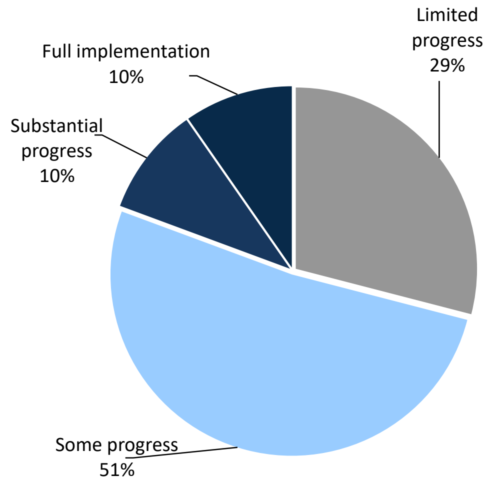
Cyprus is improving on all SDG indicators related to *macroeconomic stability* (SDGs 8, 16, 17*)* but still needs to catch up compared to the EU. Real GDP per capita is below the EU average (EUR 27 720, vs an EU average of EUR 28 940 in 2023). Cyprus is improving on SDG 16 (Peace, justice and strong institutions), with a lower share of people reporting crime, violence or vandalism in 2020 (10.4%, vs 12% in 2015 and the EU average of 10.7% in 2020). Moreover, numbers of victims of human trafficking are lower than the EU average (1.8 per 100 000, vs 2.3 per 100 000 in the EU). Also, government expenditure on the law courts is well below the EU average (EUR 43.1 per capita, vs EUR 113.8 for the EU in 2022). Although the perceived independence of the justice system (very good and fairly good) has increased to above that of the EU (54% of the population, vs EU 53% in 2023), the Corruption Perceptions Index scores worse in Cyprus (53 in 2023, vs 64 in the EU, with 0 highly corrupt and 100 very clean). The RRP includes reforms and investments under Component 3.4 (Modernising public and local authorities, making justice more efficient and fighting corruption) to address long-standing challenges in the areas of justice and the fight against corruption.

([11]) For more information, see Annex 12 'Employment, skills and social policy challenges in light of the European Pillar of Social Rights'.

As the SDGs form an overarching framework, any links to relevant SDGs are either explained or depicted with icons in the other Annexes.

The Commission has assessed the 2019-2023 country-specific recommendations (CSRs) ([12]) **addressed to Cyprus as part of the European Semester**. These recommendations concern a wide range of policy areas that are related to 14 of the 17 Sustainable Development Goals (see Annexes 1 and 3). The assessment considers the policy action taken by Cyprus to date ([13]) and the commitments in its recovery and resilience plan (RRP) ([14]). At this stage of RRP implementation, 71% of the CSRs focusing on structural issues from 2019-2023 have recorded at least 'some progress', while 29% recorded 'limited progress' (see Graph A2.1). As the RRP is implemented further, considerable progress in addressing structural CSRs is expected in the years to come.

Graph A2.1: **Cyprus' progress on the 2019-2023 CSRs (2024 European Semester)**



Source: European Commission

([12]) 2023 CSRs: EUR-Lex - 32023H0901(13) - EN - EUR-Lex (europa.eu)

2022 CSRs: EUR-Lex - 32022H0901(07) - EN - EUR-Lex (europa.eu)

2021 CSRs: EUR-Lex - C:2021:304:TOC - EN - EUR-Lex (europa.eu)
2020 CSRs: EUR-Lex - C:2020:282:TOC - EN - EUR-Lex (europa.eu)
2019 CSRs: EUR-Lex - 32019H0905(13) - EN - EUR-Lex (europa.eu)

([13]) Including policy action reported in the national reform programme and in Recovery and Resilience Facility (RRF) reporting (twice a year reporting on progress in implementing milestones and targets and resulting from the payment requests assessment).

([14]) Member States were asked to effectively address in their RRPs all or a significant subset of the relevant country-specific recommendations issued by the Council. The CSR assessment presented here considers the degree of implementation of the measures included in the RRP and of those carried out outside of the RRP at the time of assessment. Measures laid down in the Annex of the adopted Council Implementing Decision on approving the assessment of the RRP, which are not yet adopted or implemented but considered 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 A2.1: **Summary table on 2019-2023 CSRs**

Cyprus	Assessment in May 2024*	RRP coverage of CSRs until 2026**	Relevant SDGs
2019 CSR 1	**Limited progress**		
Adopt key legislative reforms to improve efficiency in the public sector, in particular as regards the functioning of the public administration	Some progress	Relevant RRP measures being implemented as of 2022.	SDG 16
and the governance of State-owned entities	Limited progress		SDG 9
and local governments.	Substantial progress	Relevant RRP measures planned as of 2024 and 2025.	SDG 16
Address features of the tax system that may facilitate aggressive tax planning by individuals and multinationals, in particular by means of outbound payments by multinationals.	Limited progress	Relevant RRP measures planned as of 2022.	SDG 8, 16
2019 CSR 2	**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 being implemented as of 2022.	SDG 8
taking steps to improve payment discipline	Limited progress	Relevant RRP measures being implemented as of 2022.	SDG 8
and strengthening the supervision of credit-acquiring companies.	Full implementation	Relevant RRP measures being implement as of 2021	SDG 8
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.	SDG 8
2019 CSR 3	**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.	SDG 8
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 being implemented as of 2021.	SDG 4
and affordable childhood education and care.	Some progress	Relevant RRP measures planned as of 2022 and 2024.	SDG 4, 5
Take measures to ensure that the National Health System becomes operational in 2020, as planned, while preserving its long-term sustainability.	Substantial progress	Relevant RRP measures planned as of 2022, 2023 and 2024.	SDG 3
2019 CSR 4	**Limited progress**		
Focus investment-related economic policy on sustainable transport,	Limited progress	Relevant RRP measures planned as of 2023 and 2024.	SDG 10, 11
environment, in particular waste and water management,	Limited progress	Relevant RRP being implemented as of 2021.	SDG 6, 10, 11, 12, 15
energy efficiency and renewable energy,	Some progress	Relevant RRP being implemented as of 2021.	SDG 7, 9, 10, 11, 13
digitalisation, including digital skills,	Some progress	Relevant RRP being implemented as of 2021.	SDG 4, 9, 10, 11
and research and innovation, taking into account territorial disparities within Cyprus.	Some progress	Relevant RRP being implemented as of 2021.	SDG 9, 10, 11
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.	SDG 8, 9
Improve access to finance for SMEs,	Some progress	Relevant RRP being implemented as of 2022.	SDG 8, 9
and resume the implementation of privatisation projects.	Limited progress	Relevant RRP measures planned as of 2024.	SDG 9
2019 CSR 5	**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 being implemented as of 2022.	SDG 9, 16
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.	SDG 8, 9
Accelerate anti-corruption reforms, safeguard the independence of the prosecution and strengthen the capacity of law enforcement.	Some progress	Relevant RRP being implemented as of 2022.	SDG 16
2020 CSR 1	**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	SDG 8, 16
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.	SDG 3

(Continued on the next page)

Table (continued)

2020 CSR 2	**Some progress**		
Provide adequate income replacement and access to social protection for all.	Some progress	Relevant RRP measures planned as of 2023.	SDG 1, 2, 8, 10
Strengthen public employment services,	Some progress	Relevant RRP measures planned as of 2022.	SDG 8
promote flexible working arrangements and	Limited progress	Relevant RRP measures planned as of 2023.	SDG 8
improve labour market relevance of education and training.	Limited progress	Relevant RRP being implemented as of 2021.	SDG 4
2020 CSR 3	**Some progress**		
Secure adequate access to finance and liquidity, especially for small and medium-sized enterprises.	Some progress	Relevant RRP being implemented as of 2022.	SDG 8, 9
Front-load mature public investment projects	Limited progress	Relevant RRP being implemented as of 2022.	SDG 8, 16
and promote private investment to foster the economic recovery.	Some progress	Relevant RRP being implemented as of 2021.	SDG 8, 9
Focus investment on the green and digital transition, in particular on clean and efficient production and use of energy,	Some progress	Relevant RRP being implemented as of 2021.	SDG 7, 9, 13
waste and water management,	Limited progress	Relevant RRP being implemented as of 2021.	SDG 6, 12, 15
sustainable transport,	Limited progress	Relevant RRP measures planned as of 2023 and 2024.	SDG 11
digitalisation,	Some progress	Relevant RRP being implemented as of 2021.	SDG 9
research and innovation.	Some progress	Relevant RRP being implemented as of 2021.	SDG 9
2020 CSR 4	**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.	SDG 8, 16
Improve the efficiency and digitalisation of the judicial system	Some progress	Relevant RRP being implemented as of 2022.	SDG 9, 16
and the public sector.	Some progress	Relevant RRP being implemented as of 2022.	SDG 9, 16
2021 CSR 1	**Not relevant anymore**		
In 2022, maintain a supportive fiscal stance, including the impulse provided by the Recovery and Resilience Facility, and preserve nationally financed investment.	Not relevant anymore	Not applicable	SDG 8, 16
When economic conditions allow, pursue a fiscal policy aimed at achieving prudent medium-term fiscal positions and ensuring fiscal sustainability in the medium term.	Not relevant anymore	Not applicable	SDG 8, 16
At the same time, enhance investment to boost growth potential. Pay particular attention to the composition of public finances, on both the revenue and expenditure sides of the 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.	Not relevant anymore	Not applicable	SDG 8, 16
Give priority to fiscal structural reforms that will help provide financing for public policy priorities and contribute to the long-term sustainability of public finances, including, where relevant, by strengthening the coverage, adequacy and sustainability of health and social protection systems for all.	Not relevant anymore	Not applicable	SDG 8, 16
2022 CSR 1	**Full implementation**		
In 2023, ensure that the growth of nationally financed primary current expenditure is in line with an overall neutral policy stance, taking into account continued temporary and targeted support to households and firms most vulnerable to energy price hikes and to people fleeing Ukraine. Stand ready to adjust current spending to the evolving situation.	Full implementation	Not applicable	SDG 8, 16
Expand public investment for the green and digital transitions, and for energy security taking into account the REPowerEU initiative, including by making use of the Recovery and Resilience Facility and other Union funds.	Full implementation	Not applicable	SDG 8, 16
For the period beyond 2023, pursue a fiscal policy aimed at achieving prudent medium-term fiscal positions.	Full implementation	Not applicable	SDG 8, 16
2022 CSR 2			
Proceed with the implementation of its recovery and resilience plan, in line with the milestones and targets included in the Council Implementing Decision of 28 July 2021.	RRP implementation is monitored by assessing RRP payment requests and analysing reports published twice a year on the achievement of the milestones and targets. These are to be reflected in the country reports.		
Swiftly finalise the negotiations with the Commission of the 2021-2027 cohesion policy programming documents with a view to starting their implementation.	Progress on the cohesion policy programming documents is monitored under the EU cohesion policy.		
2022 CSR 3	**Limited progress**		
Take measures to improve the governance of State-owned entities in line with international standards.	Limited progress		SDG 8, 9

(Continued on the next page)

Table (continued)

2022 CSR 4	**Some progress**		
Reduce overall reliance on fossil fuels and further diversify energy supply.	Limited progress	Relevant RRP measures being implemented as of 2022.	SDG 7, 9, 13
Accelerate the deployment of renewables, in particular by further streamlining permitting procedures	Some progress	Relevant RRP measures being implemented as of 2022.	SDG 7, 8, 9, 13
and expanding photovoltaics.	Some progress	Relevant RRP measures being implemented as of 2022.	SDG 7, 9, 13
Develop energy interconnections with neighbouring countries,	Limited progress	Relevant RRP measures being planned as of 2023.	SDG 7, 9, 13
while extending and accelerating energy efficiency measures,	Some progress	Relevant RRP measures being implemented as of 2022.	SDG 7
including in the transport sector.	Limted progress	Relevant RRP measures being planned as of 2023.	SDG 11
2023 CSR 1	**Substantial progress**		
Wind down the emergency energy support measures in force, as soon as possible in 2023 and 2024. Should renewed energy price increases necessitate new or continued support measures, ensure that these are targeted at protecting vulnerable households and firms, fiscally affordable, and preserve incentives for energy savings.	Some progress	Relevant RRP measures being implemented as of 2021.	SDG 8, 16
While maintaining a sound fiscal position in 2024,	Full implementation	Relevant RRP measures being implemented as of 2021.	SDG 8, 16
preserve nationally financed public investment and ensure the effective absorption of RRF grants and other EU funds, in particular to foster the green and digital transitions.	Some progress	Relevant RRP measure being implemented as of 2023	SDG 8, 16
Facilitate the reduction of private debt, including by implementing an effective foreclosure framework.	Substantial progress	Relevant RRP measures being implemented as of 2022.	SDG 8, 16
For the period beyond 2024, continue to pursue investment and reforms conducive to higher sustainable growth and preserve a prudent medium-term fiscal position.	Full implementation	Relevant RRP measures being planned as of 2025.	SDG 8, 16
2023 CSR 2			
Accelerate the implementation of its recovery and resilience plan, also by ensuring an adequate administrative capacity, and swiftly finalise the REPowerEU chapter with a view to rapidly starting its implementation. Proceed with the speedy implementation of cohesion policy programmes, in close complementarity and synergy with the recovery and resilience plan.	*RRP implementation is monitored through the assessment of RRP payment requests and analysis of the bi-annual reporting on the achievement of the milestones and targets, to be reflected in the country reports. Progress with the cohesion policy is monitored in the context of the Cohesion Policy of the European Union.*		
2023 CSR 3	**Limited progress**		
Take measures to improve the governance of the state-owned entities in line with international standards.	Limited progress		SDG 8, 9
2023 CSR 4	**Some progress**		
Reduce reliance on fossil fuels and diversify the energy supply.	Some progress	Relevant RRP measures being implemented as of 2022.	SDG 7, 9, 13
To better exploit all untapped potential for renewable energy generation, accelerate renewables deployment by using suitable economic instruments and making further investments to upgrade and modernise the electricity grid, including energy storage facilities.	Some progress	Relevant RRP measures being implemented as of 2023.	SDG 7, 8, 9, 13
Speed up the development of electricity interconnections.	Limited progress	Relevant RRP measures planned as of 2025.	SDG 7, 9, 13
Extend and accelerate energy efficiency measures,	Some progress	Relevant RRP measures being implemented as of 2022.	SDG 7, 9, 13
also to address energy poverty,	Some progress	Relevant RRP measures being implemented as of 2021.	SDG 7
as well as the shift towards sustainable transport.	Limited progress	Relevant RRP measures planned as of 2023.	SDG 11
Step up policy efforts aimed at the provision and acquisition of the skills needed for the green transition.	Limited progress	Relevant RRP measures planned as of 2024.	SDG 7

Note:
* See footnote (14).
** RRP measures included in this table contribute to the implementation of CSRs. Nevertheless, additional measures outside the RRP are necessary to fully implement CSRs and address their underlying challenges. Measures indicated as 'being implemented' are only those included in the RRF payment requests submitted and positively assessed by the European Commission.
Source: European Commission

This Annex provides a snapshot of Cyprus' implementation of its recovery and resilience plan (RRP), past the mid-way point of the Recovery and Resilience Facility's (RRF) lifetime. The RRF has proven central to the EU's recovery from the COVID-19 pandemic, helping speed up the twin green and digital transition, while adapting to geopolitical and economic developments, and strengthening resilience against future shocks. The RRF is also helping implement the UN Sustainable Development Goals and address the country-specific recommendations (see Annex 2).

The RRP paves the way for disbursing up to EUR 1 billion in grants and EUR 0.2 billion in loans under the RRF over the 2021-2026 period, representing 4.1% of Cyprus' GDP ([15]). As of mid-May 2024, EUR 262.7 million have been disbursed to Cyprus under the RRF, comprising EUR 236.7 million in grants and EUR 26 million in loans.

Cyprus still has EUR 957.3 million available in grants and loans from the RRF. This will be disbursed after the assessment of the future fulfilment of the remaining 268 milestones and targets ([16]) included in the Council Implementing Decision ([17]) (CID), ahead of the 2026 deadline established for the RRF.

Cyprus' progress in implementing its plan is recorded in the Recovery and Resilience Scoreboard ([18]). The scoreboard gives an overview of the progress made in implementing the RRF as a whole. Graphs A3.1 and A3.2 show the current state of play as reflected in the scoreboard.

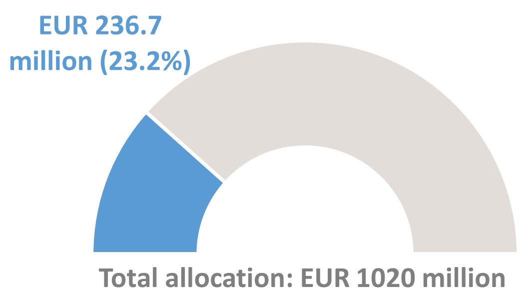
Table A3.1: **Key facts of the Cypriot RRP**

Initial plan CID adoption date	28 July 2021
Scope	Revised plan with REPowerEU chapter
Last major revision	8 December 2023
Total allocation	EUR 1,020 million in grants and EUR 200 million in loans (4.1% of 2023 GDP)
Investments and reforms	75 investments and 61 reforms
Total number of milestones and targets	282
Fulfilled milestones and targets	14 (5% of total)

Source: RRF Scoreboard

Cyprus' RRP includes a REPowerEU chapter to phase out its dependency on Russian fossil fuels, diversify its energy supplies and produce more clean energy in the coming years. To kick-start the REPowerEU chapter's implementation, EUR 20.9 million was disbursed as pre-financing on 25 January 2024. This helped launch relevant reforms like a regulatory framework for the connection of electric vehicles recharging points.

Graph A3.1: **Total grants disbursed under the RRF**



Note: This graph displays the amount of grants, including pre-financing, disbursed so far under the RRF. Grants are non-repayable financial contributions. The total amount of grants given to each Member State is determined by an allocation key and the total estimated cost of the respective RRP.
Source: RRF Scoreboard

The plan has a strong focus on the green transition, dedicating 45.1% of the available funds to measures that support climate objectives and 24.6% of its total allocation to support the digital transition. It also retains a strong social dimension with social protection measures, especially related to health care.

([15]) GDP information is based on 2023 data. Source: https://ec.europa.eu/economy_finance/recovery-and-resilience-scoreboard/index.html?lang=en

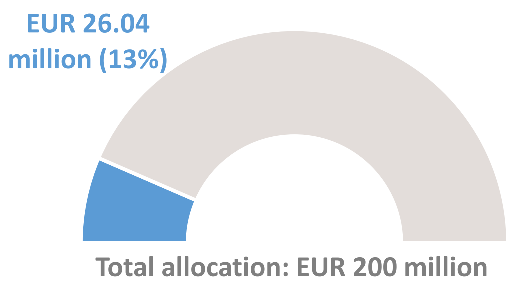
([16]) A milestone or target is satisfactorily fulfilled once a Member State has provided evidence to the Commission that it has reached the milestone or target and the Commission has assessed it positively in an implementing decision.

([17]) https://data.consilium.europa.eu/doc/document/ST-10686-2021-ADD-1/en/pdf

([18]) https://ec.europa.eu/economy_finance/recovery-and-resilience-scoreboard/country_overview.html

With one payment request completed, Cyprus' implementation of its RRP is underway. However, timely completion requires increased efforts. The Commission gave a positive assessment of Cyprus' payment request on 25 October 2022, taking into account the opinion of the Economic and Financial Committee. This led to EUR 85 million being disbursed in financial support on 2 December 2022 ([19]). The related 14 milestones and targets covered reforms and investments such as a National E-Skills Action Plan, and others in the areas of energy efficiency, circular economy, anti-corruption, transparency, financial sector, public administration, and digital skills.

Graph A3.2: **Total loans disbursed under the RRF**



Source: RRF Scoreboard

As of 15 May 2024, the Commission is working in collaboration with Cyprus to assess its second payment request, including the second and third instalments. Table A3.2 highlights some relevant measures achieved so far, and some that will be implemented before 2026 to keep making Cyprus' economy greener, more digital, inclusive, and resilient.

Table A3.2: **Measures in Cyprus' RRP**

Reforms and investments implemented
• Improvement of the legal and institutional framework for fighting corruption • Digital One-Stop Shops to streamline Energy Renovation in Buildings • National centre for excellence in agri-tech
Upcoming reforms and investments
• Law for flexible work arrangements in the form of telework • Expansion of Gigabit-ready internet connection take-up by households • Installation of photovoltaics system at the Nicosia General Hospital

Source: FENIX

(19) When requested payments are disbursed, the pre-financing is cleared proportionally. The net amounts are quoted here.

EU funding instruments provide considerable resources for recovery and growth to the EU Member States. In addition to the EUR 1.2 billion of Recovery and Resilience Facility (RRF) funding described in Annex 3, EU cohesion policy funds ([20]) provide EUR 968.6 million to Cyprus for the 2021-2027 period ([21]). Support from these two instruments combined represents around 7.34% of the country's 2023 GDP, compared to the EU average of 5.38% of GDP ([22]). Cohesion policy supports regional development, economic, social and territorial convergence and competitiveness through long-term investment in line with EU priorities and with national and regional strategies.

During the 2014-2020 programming period, cohesion policy funds boosted Cyprus's competitiveness, with tangible achievements notably in research and innovation, energy efficiency, environmental protection and education. Over the whole period, which financed investments until December 2023, cohesion policy funds ([23]) made EUR 877.7 million available to Cyprus ([24]), of which EUR 509.6 million has been disbursed since March 2020, when the COVID-19 pandemic began ([25]). The achievements of cohesion policy funds over the entire programming period include support to increase the number of people in direct employment by 2 677 full-time equivalents in businesses. In the research sector, the funds enabled 217 new researchers to take up positions in several bodies and facilitated cooperation between 87 enterprises and research institutions. In terms of energy efficiency, the policy yielded an improvement in the energy consumption classification of 1 768 households, and a significant reduction of 4 915 689 kWh/year in the annual primary energy consumption of public buildings. In urban development, the policy contributed to the creation or regeneration of 79 584 square metres of open space. On environmental conservation, cohesion policy funds supported projects to enhance 8 107 hectares of habitats, aiming to improve their conservation status. In the same programming period, the European Social Fund has supported training to boost employability and improve the education and training system, involving over 150 000 people in Cyprus. Action under the Youth Employment Initiative resulted in 2 500 young people being hired in new jobs, and over 6 300 young people taking up placements in traineeships/internships.

In the current programming period, cohesion policy will provide a further boost to Cyprus's competitiveness, to the green transition and to social cohesion, improving the living and working conditions of Cyprus's people. In 2021-2027, the cohesion policy programme *Thalia 2021-2027* will focus on key EU priorities such as the digital transition. The goal is to reach 133 000 users of new and upgraded public digital products and services. The programme will also help develop a new, competitive and innovative growth model, underpinned by an enhanced smart specialisation strategy. This model is expected to significantly boost job creation, business competitiveness and research capacity. It is expected to contribution to 885 research jobs and to creating an additional 1 775 jobs. The programme will also invest in projects to improve separate waste collection. This initiative aims to facilitate the transition to a circular economy and is projected to result in 300 000 tonnes/year of waste being collected separately.

Cohesion policy funds will also promote sustainable, multimodal urban transport with an expected 4 000 000 additional annual users of new or modernised public transport. The Cypriot territorial just transition programme represents a commitment to accelerating Cyprus's energy transition process and reach the 2030 and 2050 goals. The programme's plans include strengthening the energy transmission and distribution system, supporting SMEs in

([20]) In 2021-2027, cohesion policy funds include the Cohesion Fund, the European Regional Development Fund, the European Social Fund Plus and the Just Transition Fund.

([21]) European territorial cooperation (ETC) programmes are excluded from the figure. In 2021-2027, the total investment, including national financing, amounts to EUR 1.5 billion.

([22]) RRF funding includes both grants and loans, where applicable. The EU average is calculated for cohesion policy funds excluding ETC programmes. GDP figures are based on Eurostat data for 2022.

([23]) In 2014-2020, cohesion policy funds included the Cohesion Fund, the European Regional Development Fund, the European Social Fund and the Youth Employment Initiative. REACT-EU allocations are included but ETC programmes are excluded.

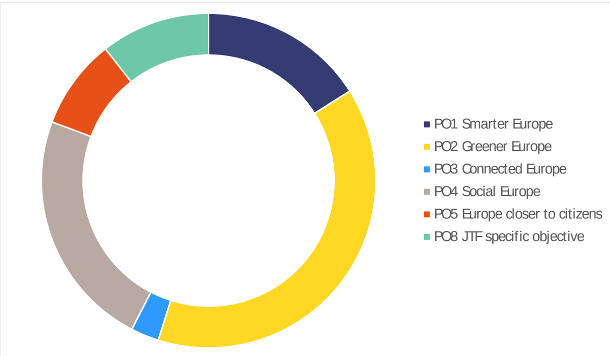
([24]) In 2014-2020, the total investment, including national financing, amounted to EUR 1.0 billion.

([25]) Cut-off date: 14 May 2024.

adopting new technologies and utilising renewable energy sources, and reducing their energy footprint and carbon dioxide emissions. One of the anticipated outcomes is an 18.3% increase in the share of renewable energy in Cyprus's energy mix.

The European Social Fund Plus will contribute to the priority heading on social inclusion with a budget of EUR 77.2 million. Work under this priority will involve promoting active inclusion projects, with a particular emphasis on boosting the employment of vulnerable groups of people. In addition, it will provide quality social services, including care services for people with disabilities, independent living in the community, early childhood education and care services. With this work, cohesion policy substantially contributes to the UN Sustainable Development Goals (SDGs) in Cyprus, in particular SDG 7 (Affordable and clean energy), SDG 9 (Industry, innovation, infrastructure) and SDG 8 (Decent work and economic growth).

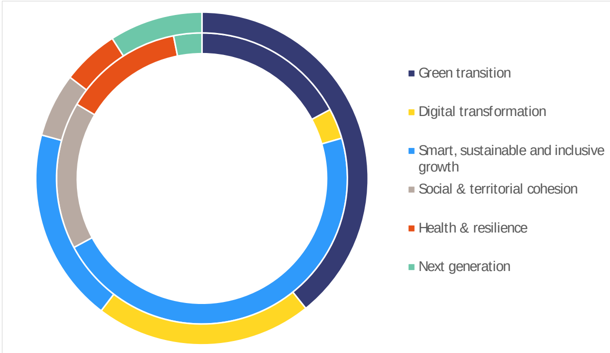
Graph A4.1: **Distribution of cohesion policy funding across policy objectives in Cyprus**



Source: European Commission

Through combined action, cohesion policy and the recovery and resilience plan (RRP) have a mutually reinforcing impact in Cyprus. While a large proportion of public investments in Cyprus are co-financed by cohesion policy funds, they will greatly benefit from action to simplify and reduce the administrative burden under an RRP-funded reform. The objective of this reform is to develop a new system to support strategic investments, with the aim to stimulate investment in the country by streamlining the rules and mechanisms, simplifying the licencing and permit procedures, reducing the administrative burden and making the strategic investment environment more efficient. Cohesion policy investments in the national research and innovation system, its links with the economy, the business world and society as a whole, and new digital services provided to people and businesses will benefit from complementary RRP reforms. These include adopting an action plan to implement the national strategy for research and innovation and a revised smart specialisation strategy. The contribution of cohesion policy and RRP funding by different policy objectives is illustrated by Graphs A4.1 and A4.2.

Graph A4.2: **Distribution of RRF funding by pillar in Cyprus**



(1) Each RRP measure helps achieve the aims of two of the six policy pillars of the RRF. The primary contribution is shown in the outer circle while the secondary contribution is shown in the inner circle. Each contribution represents 100% of the RRF funds. Therefore, the total contribution to all pillars displayed on this chart amounts to 200% of the RRF funds allocated to Cyprus.
Source: European Commission

The Technical Support Instrument (TSI) helps Cyprus invest in its public administration and create a better enabling environment for EU and national investment. The TSI has funded projects in Cyprus to design and implement growth-enhancing reforms since 2013. The support provided to Cyprus in 2023 included action to boost the economy's competitiveness by strengthening the entrepreneurial ecosystem, better integrate migrants by creating intercultural networks and making steps towards sustainable finance by boosting the capacity of financial supervisors to respond to challenges associated with economic, social and governance risks. The TSI also helped Cyprus achieve specific objectives in the context of its RRP, such as communicating the benefits of RRP measures to the public.

Cyprus also receives funding from several other EU instruments, including those listed in Table A4.1. For a more complete view of loans, see Table 4.2 on EU funded loans along with complementary bilateral Member States-funded

Table A4.1: **Support from EU instruments in Cyprus**

EU grants			
	Amount 2014-2020 (EUR million)		Amount 2021-2027 (EUR million)
Cohesion policy	877.7		968.6
RRF grants (1)	-		1 020.2
Public sector loan facility (grant component) (2)	-		7.7
Common agricultural policy (3)	700		374.0
EMFF/EMFAF (4)	39.7		38.3
Connecting Europe Facility (5)	187.9		40.2
Horizon 2020 / Horizon Europe (6)	319.8		212.1
LIFE programme (7)	27		5.2
EU guarantees			
	EU Guarantee (EUR million)		Volume of operations (EUR million)
European Fund for Strategic Investment 2015-2020 (8)	48.4		142.7
InvestEU 2021-2027 (9)	0		0
EU loans			
	Period	Total amount available (EUR million)	Disbursed amount (EUR million)
SURE (10)	2020-2022	633.0	633.0
RRF	2021-2026	200	26.0

(1) RRF implementation period is 2021-2026.
(2) The public sector loan facility's programming period is 2021-2025 and the amount reflects the national share in its grant component reserved until the end of the period.
(3) Common agricultural policy programming periods are 2014-2022 and 2023-2027.
(4) EMFF – European Maritime and Fisheries Fund, EMFAF – European Maritime, Fisheries and Aquaculture Fund.
(5) Data on the Connecting Europe Facility covers transport and energy and has a cut-off date of 15 May 2024.
(6) Data on Horizon Europe (2021-2027) has a cut-off date of 13 May 2024.
(7) 2021-2027 data on the LIFE programme has a cut-off date of 15 May 2024.
(8) The amount of the EU guarantee signed under the EFSI Infrastructure and Innovation Window was derived based on the signed amount of the operations and the average internal multiplier, as reported by the EIB (cut-off date is 31 December 2023).
(9) The amount of the EU guarantee and of the volume of operations signed under InvestEU includes the EU compartment as well as the Member State compartments (cut-off date is 31 December 2023).
(10) SURE - European instrument for temporary support to mitigate unemployment risks in an emergency.
Source: European Commission

Table A4.2: **EU / euro area loans under the 2010-2018 financial assistance programmes**

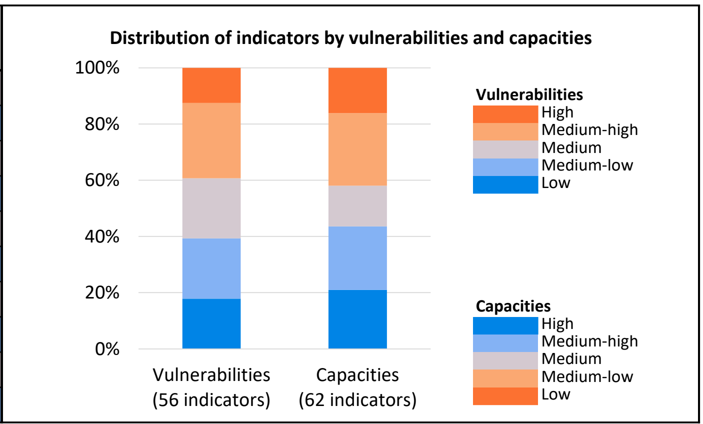
EU / euro area loans under the 2010-2018 financial assistance programmes (1)			
	Period	Total amount disbursed (EUR billion)	Outstanding amount (EUR billion)
European Stability Mechanism	2013-2016	6.3	6.3

(1) Data include upfront retained amounts (prepaid margin, service fee). The cut-off date is 15 May 2024.
Source: European Commission

loans given to Cyprus in the context of its past financial assistance programme and their outstanding amounts.

Table A5.1: **Resilience indices across dimensions for Cyprus and the EU-27**

Dimension		CY 2023 RDB	CY 2024 RDB	EU-27 2024 RDB
Overall resilience	Vulnerabilities			
	Capacities			
Social and economic	Vulnerabilities			
	Capacities			
Green	Vulnerabilities			
	Capacities			
Digital	Vulnerabilities			
	Capacities			
Geopolitical	Vulnerabilities			
	Capacities			



(1) The synthetic indices aggregate the relative resilience situation of countries across all considered indicators. For an indicator, each country's relative situation in the latest available year is compared with the collection of values of that indicator for all Member States and all years in the reference period.
Source: Resilience Dashboards - version spring 2024, data up to 2022

This Annex uses the Commission's resilience dashboards (RDB) ([26]) to show Cyprus' relative resilience capacities and vulnerabilities ([27]) that may be of relevance for societal, economic, digital and green transformations, and dealing with future shocks and geopolitical challenges. ([28])

According to the RDB's set of resilience indicators, Cyprus has medium resilience overall for both capacities and vulnerabilities, with no differences from before. Almost 60% of vulnerability indicators are medium to high, while even slightly more capacity indicators are medium to high.

Compared to 2023, Cyprus has slightly increased its social and economic vulnerabilities, and its capacities have remained stable, with both medium. Cyprus is among the EU's weakest performers for active labour market policies per person wanting to work, average Programme for International Student Assessment (PISA) scores, and to a less degree for the income stabilisation coefficient. Its major vulnerabilities, compared to other EU countries, are antimicrobial resistance (see also Annex 16) for which is the last in the EU, and the non-financial corporation debt to GDP ratio, in which regard Cyprus is the second last. Despite improvements, the country is also still far below the EU average in terms of young people neither in employment nor in education and training (NEET).

In the green dimension, Cyprus has higher vulnerabilities and lower capacities than the rest of the EU. In particular, it scores last in the EU in terms of water exploitation index, and the country is still among the EU's poorest performers in its electric and hydrogen passenger fleet distribution, the e-waste recycling rate, and soil carbon content.

In the digital dimension, Cyprus' capacities are medium-high and its vulnerabilities are medium-low. Only for a few capacity indicators, such as judicial system e-tools, the collaborative economy, the value of e-commerce sales, and e-healthcare, Cyprus is still lagging behind the rest of the EU. On a positive note though, it has no major vulnerabilities.

Cyprus' geopolitical capacities are on a par with the EU average, at medium-high, but it vulnerabilities are above the EU average, at

([26]) Https://ec.europa.eu/info/strategy/strategic-planning/strategic-foresight/2020-strategic-foresight-report/resilience-dashboards_en. Resilience is defined as the ability not only to withstand and cope with challenges but also to undergo transitions, in a sustainable, fair, and democratic manner. 2020 Strategic Foresight Report: *Charting the course towards a more resilient Europe* (COM(2020) 493).

([27]) Vulnerabilities describe features that can exacerbate the negative impact of crises and transitions, or obstacles that may hinder the achievement of long-term strategic goals, capacities refer to enablers or abilities to cope with crises and structural changes and to manage transitions.

([28]) This Annex is linked to Annex 1 on SDGs, Annex 6 on the green deal, Annex 8 on the fair transition to climate neutrality, Annex 9 on resource productivity, efficiency and circularity, Annex 10 on the digital transition and Annex 14 on the European pillar of social rights.

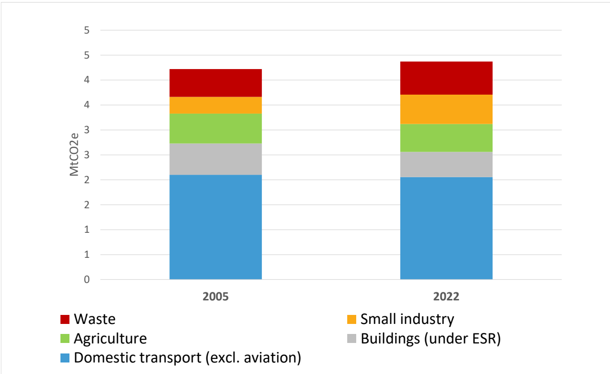
medium-high. Of particular concern are indicators such as supplier concentration in energy carriers import dependence in energy materials, Cyprus' net international investment position, and net lending/borrowing. For two capacity indicators, namely, value added share of foreign businesses, and the supplier diversification for base metals, rate of change, Cyprus is the second last in the EU.

Cyprus has made progress in the green transition, with more action needed in several areas, such as on managing potential losses from climate risks, sustainable water management, and on the circular economy. This Annex provides a snapshot of climate, energy, and environmental aspects of the transition in Cyprus ([29]).

Cyprus' draft updated national energy and climate plan (NECP) includes information on the investment needs to achieve its 2030 climate and energy targets, with a focus on energy- and transport-related investments. The needs distinguish between public (national and European) and private investment, both for WEM (with existing measures) and WAM (with additional measures) scenarios. The description of funding sources varies in the level of detail provided for each aspect of the Energy Union. On decarbonisation, energy efficiency, energy security, and the internal energy market, the plan outlines the funding sources for the key policies and measures. On research, innovation and competitiveness, the information on funding sources is rather generic, mentioning only potential available sources and EU funding programmes. It does not provide an overview with all budgetary information, which means it is difficult to identify potential funding gaps ([30]).

The additional policies and measures planned are not sufficient for Cyprus to reach its 2030 effort sharing target ([31]). Cyprus's 2022 greenhouse gas emissions from its effort sharing sectors are expected to come in at 2.5% above 2005 levels. Current policies are projected to reduce its effort sharing emissions by 0.7% from 2005 levels by 2030. Additional policies planned in Cyprus's draft updated NECP are projected to reduce these emissions by 23.1% from 2005 levels, falling short by 9 percentage points of Cyprus's effort sharing target to reduce by 32% ([32]).

Graph A6.1: **Greenhouse gas emissions from the effort sharing sectors in Mt CO2eq, 2005-2022**



Source: European Environment Agency

There is scope for increasing Cyprus targets for renewable energy and energy efficiency in its final updated NECP ([33]). Cyprus's renewable energy contribution set in its draft updated NECP, 26.5% by 2030, is significantly below the required 33%. The draft NECP also lacks a clear 2030 national energy efficiency contribution. While the expected contribution of 2.28 Mtoe in primary energy consumption is less ambitious than the required contribution under the Energy Efficiency Directive, the contribution of 1.81 Mtoe in final energy consumption is aligned.

(29) This Annex is complemented by Annex 7 on energy transition and competitiveness, Annex 8 on the fair transition to climate neutrality, Annex 9 on resource efficiency, circularity, and productivity, and relevant topics in other annexes to this country report.

(30) See the Commission's (2023) assessment of the draft national energy and climate plan of Cyprus.

(31) The national greenhouse gas emission reduction target is laid down in Regulation (EU) 2023/857 (the Effort Sharing Regulation). The aim is to align action in the sectors concerned with the objective to reach the EU-level economy-wide target of greenhouse gas reductions of at least 55% compared to 1990 levels. The target also applies to the sectors outside the current EU Emissions Trading System, notably buildings (heating and cooling), road transport, agriculture, waste, and small industry (known as the effort sharing sectors).

(32) The effort sharing emissions for 2022 are based on approximated inventory data. The final data will be established in 2027 after a comprehensive review. Projections on the impact of current policies ('with existing measures', WEM) and additional policies ('with additional measures', WAM) as per Cyprus' draft updated NECP.

(33) The EU target set out in the revised Renewable Energy Directive is to have 42.5% of gross final energy consumption coming from renewable energy sources by 2030, with the aspiration to reach 45%. The formula in Annex I to Directive (EU) 2023/1791 sets the indicative national contribution for Cyprus at 2. 038 Mtoe for primary energy consumption and 1.807 Mtoe for final energy consumption. See the Commission Recommendation of 18.2.2023 to Cyprus.

In Cyprus, the transition to sustainable transport is still in its infancy ([34]). Cyprus has no railways or inland waterways; all domestic freight transport is carried out on roads. Only 13% of passenger travel is by public transport (buses and coaches). Traffic congestion remains very high ([35]). With battery electric vehicles constituting a mere 0.1% of the passenger car fleet in 2022, Cyprus has one of the lowest adoption rates in the EU. In 2023, the island had 190 publicly accessible charging points, or one for every 6 electric vehicles (the EU average is 1:10).

Carbon removals through Cyprus' land use, land-use change and forestry (LULUCF) sector have declined significantly since 2021, though the sector still provides a net carbon sink. To reach the 2030 LULUCF target, additional carbon removals of 63 kt CO_2eq are needed ([36]). According to the latest projections for 2030, its carbon removals through the land sector are expected to fall short of the target ([37]).

Cyprus suffers from low levels of insurance coverage against climate risks and is severely vulnerable to climate change in water management (see below). Cyprus' historical share of insured economic losses due to climate-related events is about 2%, with wildfires being the highest risk category. Water management in changing climatic conditions requires particular attention due to risks of electricity disruption as floods, heat, and drought impact energy production. Further vulnerabilities and risks relate to sea-level rise, coastal erosion and saltwater intrusion. There are inconsistencies in Cyprus' estimated costs of adaptation measures and the approach to adaptation is largely voluntary. For example, Cyprus estimates the cost of adaptation at EUR 7.2 million for water resources, EUR 0.9 million for agriculture, and EUR 0.2 million for health, despite reporting water and health as the key sectors affected by climate change in 2023. It will also be vital to improve the institutional arrangements to boost climate resilience in Cyprus ([38]).

Sustainable water management is a major environmental issue for Cyprus. The country tops the ranking in the EU (from highest to lowest score) for the water exploitation index Plus (WEI+), which reached 113% in 2019. The worst seasonal water scarcity conditions saw it reach 124% in Q4 of 2019 ([39]). Croplands are generally the most damaged ecosystem by drought events in Cyprus. The efficient use of water resources can be measured by water productivity ([40]). In 2020, Cyprus' economy generated EUR 240 per cubic meter of water abstracted, below the EU average. Between 2000-2020, on average, 8% of Cyprus's area was affected by droughts, and 2.1% in 2022. Based on reporting in the 2nd river basin management plan ([41]), 58% of all surface waterbodies were in a good ecological status and 85% were in a good chemical status. The marine waters of Cyprus are not yet all in a good environmental status as tracked by the descriptors used in the Marine Strategy Framework Directive, based on the latest data reported for its marine strategy ([42]).

Cyprus is experiencing high anthropic pressure on habitats and ecosystems, especially in coastal zones. By the end of 2021, Cyprus had protected 37.7% of its land and 8% of its marine areas. However, as a result of land development, the share of protected ecosystems in good conservation status went from 98% over the reporting period 2007-2012 to 45% in 2013-2018 ([43]), i.e. it more than halved. The conservation status of protected species did not

([34]) Unless otherwise indicated, data in this section refer to 2021. See European Commission, 2023, EU transport in figures, transport.ec.europa.eu.

([35]) In 2020, road vehicle drivers experienced peak-hour delays of 38.5 hours on average (EU average: 29 hours).

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

([37]) Projections submitted in Cyprus's draft updated national energy and climate plan, 2023.

([38]) Also see the Commission's 2023 assessment and recommendation on Cyprus' progress on climate adaptation.

([39]) WEI+ values above 40% indicate severe stress and unsuitable freshwater use.

([40]) Measured as GDP over total fresh surface water abstracted in cubic meters.

([41]) Data from the 3rd river basin management plan are not available.

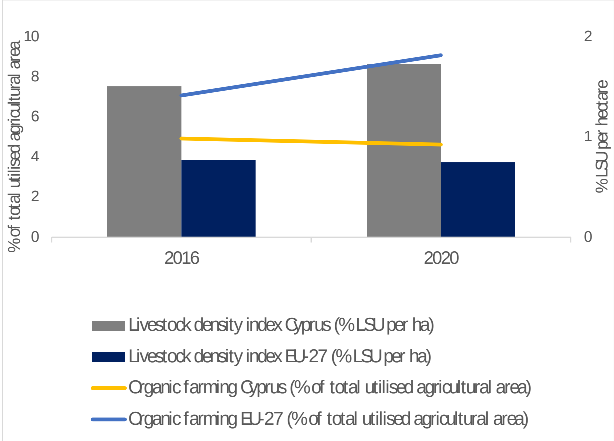
([42]) EUR-Lex – 52022XC0314(01) – EN – EUR-Lex (36europa.eu) ; The next report on the state of the marine environment is due in October 2024. See also Cyprus – Marine (europa.eu).

([43]) According to data collected under Article 17 of the Habitats Directive.

experience the same dramatic drop. 64% of the records indicate that species are in a good conservation status (44). Farmland birds were not dramatically affected either and the common farmland bird index was 115 in 2020.

Cyprus' agriculture sector has a large scope to manage water resources more sustainably. The annual output of Cyprus' agricultural sector was EUR 662 million (45) in 2023. Cyprus is increasing its share of organic farming, which accounted for 6.3% of total utilised agricultural area in 2021 against the goal of at least 25% of the EU's agricultural land under organic farming by 2030. Agriculture has a heavy impact on water resources. 21% of the total area under agriculture is irrigated and the water abstracted for agricultural purposes accounts for 78.9% of all water abstracted in 2019. Cyprus is the EU country that produces the most food waste per capita. In 2020, it produced 397 kg of waste per capita, three times the EU average. The composting and digestion rate of municipal waste fell from 21 kg per capita in 2015 to 8 kg per capita in 2021, only 1% of all municipal waste. Healthy, carbon-rich soils play a crucial role in preventing drought. The total estimated organic carbon content in arable land in Cyprus is 11 megatons, with an average of 18%, lower than the EU average of 24%. However, conservation tillage practices, which increase soil organic carbon, were used in 54% of all tillable area in 2016, the highest share in the EU.

Graph A6.2: **Changes in livestock density and organic farming**



Livestock unit (LSU)/ha of UAA: it measures the stock of animals (cattle, sheep, goats, equidae, pigs, poultry and rabbits) converted in LSUs per hectare of UAA.
Source: Eurostat

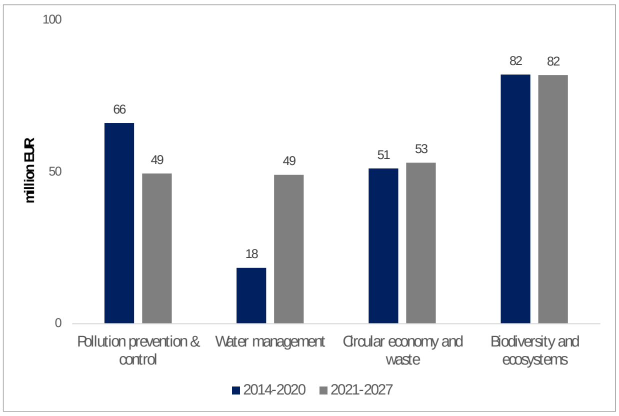
Cyprus' livestock farming sector is gradually increasing in density. While most EU Member States lowered their livestock density indices between 2010 and 2020, Cyprus recorded an increase (46). Livestock farming is one of the activities that places the highest burden on the environment in terms of ammonia emissions into the air. The agricultural sector was responsible for generating 96.4% of all ammonia emissions, against the EU average of 90.7%. Despite the slightly decreasing trends, there is scope to improve Cyprus's high nutrient surplus. The latest figures for the gross nitrogen balance on agricultural land in Cyprus show an average surplus of 194 kg per hectare per year in 2015. It has gradually fallen over the years but remains above the EU average. The nitrates content in groundwater is below the EU average at 7.8 against 20.5 mg nitrates/l and 17% of groundwater monitoring stations indicate levels above the maximum 50 mg nitrates/l. By contrast, Cyprus is the most affected country by phosphorous surplus, with the gross phosphorus balance at 32 kg/ha in 2014. However, Cyprus performs better than its EU peers on water contamination from pesticides. In 2021, no monitoring sites were reported to have pesticide levels exceeding the thresholds set by the Water Framework Directive.

(44) Against the EU average of 15% and 28% respectively.

(45) Production value at basic price (2015=100).

(46) The livestock density index increased from 1.69% to 1.73% in 2020, above the EU average of 0.75%.

Graph A6.3: **Environmental investment gap, annual average**



The numbers are computed by the European Commission based on the latest internal reports, Eurostat, EIB and national data sources.
Source: European Commission

Cyprus would benefit from investing more in sustainable water management, in measures to protect biodiversity, and in waste and waste water infrastructure. Between 2014 and 2020, the environmental investment gap was estimated to be at least EUR 218 million per year, equivalent to 1.1% of GDP. According to the latest estimates, the overall environmental investment needs for 2021-2027 reach at least EUR 528 million a year against the financing baseline of EUR 295 million. This leaves a slightly wider gap than in the previous financing period, equivalent to EUR 233 million. Sufficient resources have yet to be allocated, in particular to biodiversity and ecosystem protection (a gap of EUR 82 million), to the circular economy and to waste (EUR 53 million) and sustainable water management (EUR 49 million).

Table A6.1: **Indicators tracking progress on the European Green Deal from a macroeconomic perspective**

							Target	Distance	
		2005	2019	2020	2021	2022	2030	WEM	WAM
Progress to climate and energy policy targets									
Greenhouse gas emission reductions in effort sharing sectors (1)	Mt CO_{2eq}, %, pp	4,266.8	5%	1%	4%	2%	-32%	-23	-9
Net greenhouse gas removals from LULUCF (2)	Kt CO2eq	-221.000	-297.000	-299.000	-235.000	-299.000	-352	n/a	n/a
Share of energy from renewable sources (1) (3)	%	3%	14%	17%	19%	19%	33%	-	-
Energy efficiency: primary energy consumption (3)	Mtoe	2.5	2.5	2.2	2.3	2.5	2.0		
Energy efficiency: final energy consumption (3)	Mtoe	1.8	1.9	1.6	1.7	1.8	1.8		
							EU-27		Projected
		2018	2019	2020	2021	2022	2021	2022	2030
Green transition: mobility									
Greenhouse gas emissions: road transport	Mt CO2e	-	-	-	2.1	2.1	769.0	786.6	1.7
Share of zero-emission vehicles in new registrations (4)	%	0.3	0.5	0.4	0.8	3	9	12.1	n/a
Number of publicly accessible AC/DC charging points		-	-	47	60	67	299178	446956	n/a
Share of electrified railways	%	-	-	-	-	-	56.1%	-	n/a
Green transition: buildings									
Greenhouse gas emissions: buildings	Mt CO2e	-	-	-	0.5	0.5	537.0	486.7	0.6
Final energy consumption in buildings	2015=100	113.9%	120.8%	112.8%	115.6%	121.8%	104.0%	97.2%	
Climate adaptation									
Climate protection gap (5)	score 1-4	-	-	1.9	1.6	1.4	1.5	1.5	n/a
		2018	2019	2020	2021	2022	2020	2021	2022
State of the environment									
Water | Water exploitation index (WEI+) (1) (6)	% of renewable freshwater	92.5	113.0	-	-	-	3.6	-	-
Circular economy | Material footprint (7)	tonnes per person	23.0	24.6	23.1	23.5	22.3	14.2	14.8	14.9
Pollution | Years of life lost due to air pollution by PM2.5 (8)	per 100.000 inhabitants	482	508	494	536	-	545	584	-
Biodiversity | Habitats in good conservation status (9)	%	45.2					14.7		
Common farmland bird index (10)	2000=100	115	120	115	-	-	78	-	-
Green transition: agri-food sector									
Organic farming	% of total utilised agricultural area	4.55	4.98	4.63	6.43	-	9.1	-	-
Nitrates in groundwater	mg NO_3/litre	19	18.59	18.17	-	-	20.42	-	-
Food waste per capita	Kg per capita			397	-	-	130	131	-
Share of soil in poor health (11)	%					-			41
Soil organic matter in agricultural land (12)	Mt per ha	11	-	-	-	-	7,904	-	-

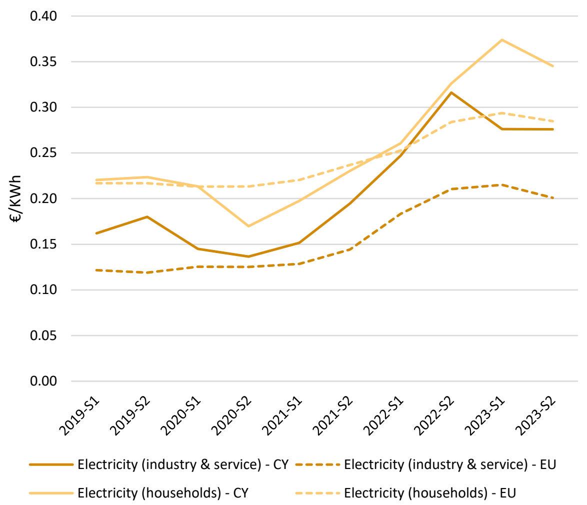
Sources: (1) Member States' emission data for 2019 and 2020 are in global warming potential (GWP) values from the 4th Assessment Report (AR4) of the Intergovernmental Panel on Climate Change (IPCC). Member States' 2005 base year emissions under Regulation (EU) 2018/842, emissions data for 2021 and 2022, and 2030 projections are in GWP values from the 5th Assessment Report (AR5) of the IPCC. 2021 data are based on the final inventory reports, 2022 data are based on approximated inventory reports and European Environmental Agency's calculation of effort sharing emissions. The final data for 2021 and 2022 will be established after a comprehensive review in 2027. The 2030 target is in percentage change of the 2005 base year emissions. Distance to target is the gap between the 2030 target and projected effort sharing emissions with existing measures (WEM) and with additional measures (WAM), in percentage change from the 2005 base year emissions. The measures included for the 2030 emission projections reflect the state of play as reported in Member States' draft updated national energy and climate plans or, if unavailable, as reported by 15 March 2023 as per Regulation 2018/1999. (2) Net removals are expressed in negative figures, net emissions in positive figures. Reported data are from the 2024 greenhouse gas inventory submission. 2030 value of net greenhouse gas removals as in Regulation (EU) 2023/839 – Annex IIa. (3) The 2030 national objectives for renewable energy and energy efficiency are indicative national contributions, in line with Regulation (EU) 2018/1999 (the Governance Regulation), the EU-level 2030 renewable energy target set out in Directive EU/2018/2001 amended by Directive EU/2023/2413 (the revised Renewable Energy Directive) – 42.5% of gross final energy consumption with the aspiration to reach 45% –, and the formula in Annex I to Directive (EU) 2023/1791 (the Energy Efficiency Directive). (4) Passenger battery electric vehicles (BEV) and fuel cell electric vehicles (FCEV). (5) The climate protection gap refers to the share of non-insured economic losses caused by climate-related disasters, based on modelling of the risk from floods, wildfires, windstorms, and the insurance penetration rate. Scale: 0 (no protection gap) –4 (very high gap) (European Insurance and Occupational Pensions Authority, 2022). (6) Total water consumption in renewable freshwater resources available for a territory and period. (7) Material extractions for consumption and investment. (8) Years of potential life lost through premature death due to exposure to particulate matter with a diameter of less than 2.5 micrometres. (9) Share of habitats in good conservation status according to the records submitted under Art. 17 of the Habitats Directive (Directive 92/43/EEC) for 2013-2018. (10) Multi-species index measuring changes in population abundances of farmland bird species. (11) Source: annex 12 of the Commission's proposal for a soil monitoring law, SWD (2023) 417 final. (12) Estimates of organic carbon content in arable land.

This Annex (47) sets out Cyprus' progress and challenges in accelerating the net-zero energy transition while bolstering the EU's competitiveness in the clean energy sector (48). It considers measures and targets put forward in the draft updated National Energy and Climate Plans (NECP) for 2030 (49)

Despite the visible progress made in accelerating the installation of renewable energy and implementing energy efficiency measures, Cyprus faces significant challenges in the energy sector also due to its isolated energy system. Ending its energy isolation, diversifying its energy supply and enhancing consumer empowerment in the electricity sector will be key to achieve its targets.

Unlike the prevailing trends witnessed across the EU, average household electricity prices in the country have not significantly decreased, while average industry/service electricity prices have experienced a small decline. This is mainly due to the absence of gas in the energy mix of Cyprus, where energy prices follow the trend of international oil (HFO, Diesel) and ETS prices. More specifically, in the first half of 2023, household electricity prices increased by 15% even though experiencing a 8% decline by the end of the year. In the industry/service sector, there has been a reduction of 13% between the second half of 2022 and the first half of 2023, remaining stable until the end of the year. Electricity prices in Cyprus remained considerably above the EU average.

Graph A7.1: **Cyprus' energy retail prices for households and industry & service**



(1) For industry, consumption bands are I3 for gas and IC for electricity, which refer to medium-sized consumers and provide an insight into affordability
(2) For households, the consumption bands are D2 for gas and DC for electricity
(3) Industry prices are shown without VAT and other recoverable taxes/levies/fees as non-household consumers are usually able to recover VAT and some other taxes
Source: Eurostat

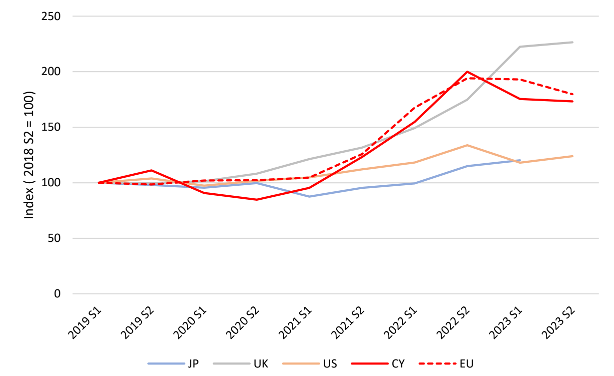
In relative terms, electricity prices for non-household consumers have increased significantly compared to the US and Japan. Although there has been a notable decline since the second half of 2022, Cyprus' electricity prices have persisted above those of the US and Japan. This could potentially affect the international competitiveness of energy-intensive industries in the country.

(47) It is complemented by Annex 6 as the European Green Deal focuses on the clean energy transition and by Annex 8 on the action taken to protect the most vulnerable groups, complementing ongoing efforts under the European Green Deal, REPowerEU and European Green Deal Industrial Plan.

(48) In line with the Green Deal Industrial Plan and the Net-Zero Industry Act

(49) Cyprus submitted its draft updated NECP in July 2023. The Commission issued an assessment and country-specific recommendations on 18 December 2023. Commission Recommendation, Assessment (SWD) and Factsheet of the draft updated National Energy and Climate Plan of Portugal - European Commission (europa.eu)

Graph A7.2: **Trends in electricity prices for non-household consumers (EU and foreign partners)**



(1) For Eurostat data (EU and CY), the band consumption is ID referring to large-sized consumers with an annual consumption of between 2 000 MWh and 20 000 MWh, such as in electricity intensive manufacturing sectors, and gives an insight into international competitiveness
(2) JP = Japan
Source: Eurostat, IEA

Cyprus continued to apply support measures during 2023 to help consumers mitigate high electricity prices. Those measures aimed to reduce energy bills by compensating part of electricity prices above a set limit. For vulnerable consumers, the compensation reached 100%, while for other consumer categories the compensation was linked to consumption level. Reductions in excise duty on petroleum products were applied during the first half of 2023.

Consumer empowerment in the electricity sector has not progressed, due to the specific features of the market and the lack of technologies that would enable consumers to engage actively in it. The deployment of smart meters is delayed and energy communities are still facing some implementation challenges. Until 2023, there was only one active supplier for the household market (the dominant supplier – EAC), therefore switching was not available yet for the household market.

Ending Cyprus' energy isolation will accelerate the green transition, boost renewables in power generation and reduce energy prices for consumers. The Great Sea Interconnector (former EuroAsia) project which will connect the Cypriot power grid to the Greek/European electricity market has experienced delays but positive developments had taken place by the end of 2023. Moreover, besides the gas discoveries in its exclusive economic zone (EEZ), Cyprus aims to include natural gas in its energy mix and is in the process of developing an LNG terminal at the Vasilikos port. The project has suffered significant delays and the completion date is July 2024. Cyprus relies on petroleum products that are entirely imported for more than 80% of its energy needs, but it has managed to substantially reduce its energy import dependency on non-EU countries, from 48% to 31% ([50]).

On fossil fuel phase-out, Cyprus' draft updated NECP is only partially consistent with its commitment in its territorial just transition plan. Notably the information on phasing out the capacity of the Dhekelia heavy fuel plant, which is unchanged until 2028, appear inconsistent with the territorial just transition plan, which states that there will be a reduction in emissions of 16% by 2026 and zero emissions by 2050 ([51]).

Installed renewable capacity surged by 30.8% in 2023 compared to 2022, driven by a significant increase in solar, in particular photovoltaics. Total renewable energy capacity in Cyprus in 2023 stood at 778 MW ([52]). Total wind capacity for 2023 was 158 MW, exactly the same as the eight previous years, all of which is onshore ([53]). Renewables' share in the power sector in Cyprus was 20.2% in 2023, with renewable electricity generation projected in the draft NECP to reach 31.5% in 2030. As regards the acceleration of solar deployment, the total installed capacity in 2023 was 606 MW ([54]). In its recovery and resilience plan (RRP) and the REPowerEU Chapter, Cyprus has committed to finalise the secondary legislation regarding renewable self-consumption and to create a one-stop-shop for renewable self-consumers, active customers and energy communities.

([50]) Eurostat data

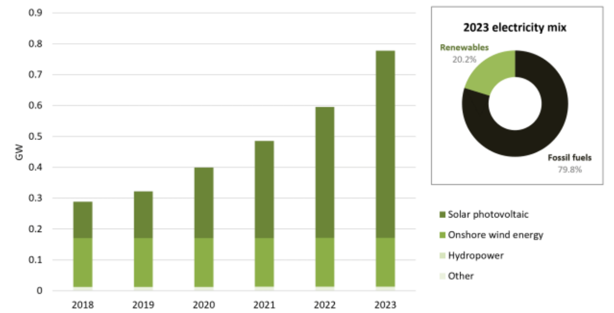
([51]) See the Commission's assessment of the draft updated NECP.

([52]) IRENA report Renewable Capacity Statistics 2024. The data might differ from the Eurostat data because a different methodology is used to calculate capacity in AC and DC

([53]) idem

([54]) idem

Graph A7.3: **Cyprus' installed renewable capacity (left) and electricity generation mix (right)**



(1) "Other" includes biogas
Source: IRENA, Ember

Cyprus does not have offshore wind but has committed (55) to installing offshore wind farms starting in 2030 and reaching 100 MW by 2050. In May 2023, Cyprus expressed preliminary interest in participating in the 2024 tender as a host state in the 'EU Financing Mechanism for Renewable Energy Projects', spurring cooperation on renewables between Member States.

Despite the significant steps towards implementing reforms to accelerate the deployment of renewables, significant challenges remain. Given that Cyprus has not published its long-term schedule for auctions, the visibility of the renewable energy project pipeline is not clear, especially since it faces challenges with its grid, which is in need of upgrade and expansion if it is to accommodate more renewables. Cyprus introduced legislation which qualifies all renewable energies for favourable permitting procedures and has recently activated the digital single contact point for the electronic submission and assessment of applications for authorisation of RES projects. Furthermore, Cyprus is still working on identifying and optimising further the introduced permit procedures.

Cyprus' relatively high share of renewables in heating and cooling (41.56% in 2022) is mainly related to solar energy, through the widespread use of solar thermal systems for water heating. The contribution of heat pumps and biomass (wood products) for heating purposes and the use of waste-based biomass in industry (cement factory) is also significant.

Cyprus is facing major challenges in short-term grid capacity to accommodate increasing renewables, leading to frequent curtailments. Based on Cyprus' Energy Regulatory Authority (CERA) official data, as of the end of November 2023 there was a total of 782.57MW of renewables plants in operation in the Cypriot system (157.50MW of wind, 625.93MW of photovoltaics and 9.15MW of biomass). At the same time, CERA has granted construction permits for a total of 2 383MW in renewables projects. Cyprus needs to ensure that its grid will be able to accommodate at least the volume of planned capacity of renewable energy projects, especially considering self-consumption and EVs, which have been intensively promoted in recent years, especially through the Recovery and Resilience Facility. However, the rolling out of smart meters will improve the flexibility and the overall efficiency of the system.

Energy efficiency gains slowed in Cyprus, although there is still untapped potential in this area. In 2022 Cyprus had a primary energy consumption of 2.5 Mtoe – a 7.4% increase compared to 2021 and a 0.7% decrease compared to 2012. It had a final energy consumption of 1.8 Mtoe – a 7.7% increase compared to 2021) and a 3.1% increase compared to 2012. In 2022, the best results came from the industry sector, which nevertheless increased its final energy consumption by 0.9%, and the worst from the transport sector, which increased its final energy consumption by 12.2%.

Cyprus has implemented a series of energy efficiency measures with the support of several EU funds. However, most of the schemes are still grant-based and the use of financial instruments is still very limited. Cyprus registered progress in the efficiency of buildings, while the measures to improve public transport and develop electric vehicles show a limited uptake from the public. Both the number of electric vehicles and of charging stations are very low. The structure of energy consumption is dominated by road transport and buildings, both

(55) 2023 non-binding agreement on goals for offshore renewable generation in 2050, with intermediate steps in 2040 and 2030 for priority offshore grid corridor South and East offshore grids https://energy.ec.europa.eu/document/download/6efccbb1-4439-4f2e-bce9-511ff999bbb7_en?filename=SE_offshore_non-binding_offshore_goals_final.pdf

residential and non-residential, and these are the sectors where the most significant potential is; the share from industry is limited.

Cyprus' current energy-saving efforts in the residential sector are delivering more ambitious results than the target set for the whole building sector. In particular, between 2020 and 2022 and given the impact of the covid crisis, the final energy consumption of the residential sector decreased by around 10.2% ([56]), whereas in its 2020 Long Term Renovation Strategy (LTRS), Cyprus envisaged an increase by 10% in final energy consumption in the building sector by 2030, compared to 2020 (8% saving compared to the baseline projections for 2030).

Due to its economic and geographical characteristics, Cyprus has limited potential for the development of a fully-fledged Net-Zero supply chain, and remains dependent on imports for renewable energy deployment. Clean-tech initiatives are currently limited, with the majority of examples being start-ups or pilot projects (e.g. design of innovative technologies for renewable natural gas). Regarding key materials for clean technologies, Cyprus is home to a hydrometallurgical plant in the area of Skouriotissa which processes laterite to recover nickel, an essential material for battery manufacturing. The plant has been operational since 2021, with an expected annual production capacity of 50 000 tones of nickel sulphate.

Despite notable progress within Cyprus' innovation ecosystem, the country still trails behind many other EU Member States. Recent assessments of research and innovation (R&I) trends have revealed encouraging developments. However, private investment in research and development aligned with Energy Union priorities remained relatively low at 0.04% of GDP in 2020, marking a considerable gap compared to the EU average. Of this expenditure, approximately 70% was directed towards renewable energy projects. Venture capital investment has displayed positive trends in recent years, albeit at modest levels (see e.g. Annex 12). In 2021, approximately EUR 3.8 million was invested in climate technology firms within the energy sector in Cyprus, constituting roughly 1.2% of total venture capital investment in the country. This figure falls below the EU average (approximately 9% of venture capital investment channelled into energy-related firms).

([56]) Final energy consumption in households from Eurostat, climate-corrected by the Joint Research Centre with reference period 2005-2022

Table A7.1: **Key Energy Indicators**

ENERGY DEPENDNCE

	Cyprus 2019	Cyprus 2020	Cyprus 2021	Cyprus 2022	EU 2019	EU 2020	EU 2021	EU 2022
Import Dependency [%]	**92.8%**	**93.2%**	**89.5%**	**92.0%**	**60.5%**	**57.5%**	**55.5%**	**62.5%**
of Solid fossil fuels	117.2%	105.4%	97.6%	147.3%	43.3%	35.8%	37.3%	45.8%
of Oil and petroleum products	99.7%	101.7%	98.4%	100.2%	96.7%	96.8%	91.7%	97.7%
of Natural Gas	0.0%	0.0%	0.0%	0.0%	89.7%	83.6%	83.6%	97.6%
Dependency from Russian Fossil Fuels [%]								
of Natural Gas	0.0%	0.0%	0.0%	0.0%	39.7%	41.3%	41.1%	21.0%
of Crude Oil	0.0%	0.0%	0.0%	0.0%	28.8%	26.7%	26.4%	19.5%
of Hard Coal	100.0%	100.0%	100.0%	74.2%	43.5%	49.1%	47.4%	21.5%

DIVERSIFICATION OF GAS SUPPLIES

	2016	2017	2018	2019	2020	2021	2022	2023
Gas Consumption (in bcm)	-	-	-	-	-	-	-	-
Gas Consumption year-on-year change [%]	-	-	-	-	-	-	-	-
Gas Imports - by type (in bcm)	-	-	-	-	-	-	-	-
Gas imports - pipeline	-	-	-	-	-	-	-	-
Gas imports - LNG	-	-	-	-	-	-	-	-

	2019	2020	2021	2022	2023
LNG Terminals - storage capacity m3 LNG					
Number of LNG Terminals	0	0	0	0	0
LNG Storage capacity (m3 LNG)	0	0	0	0	0
Underground Storage					
Number of storage facilities	0	0	0	0	0
Technical Capacity (bcm)	0.0	0.0	0.0	0.0	0.0

ELECTRICITY/ENERGY

	2016	2017	2018	2019	2020	2021	2022	2023
Gross Electricity Production (GWh) (2)	**4,888**	**5,004**	**5,061**	**5,141**	**4,849**	**5,119**	**5,268**	-
Combustible Fuels	4,515	4,621	4,640	4,685	4,313	4,405	4,442	-
Nuclear	0	0	0	0	0	0	0	-
Hydro	0	0	0	0	0	0	0	-
Wind	227	211	221	239	240	246	224	-
Solar	146	172	199	218	296	468	602	-
Geothermal	0	0	0	0	0	0	0	-
Other Sources	-0	-0	0	0	-0	-0	0	-
Gross Electricity Production [%]								-
Combustible Fuels	92.4%	92.3%	91.7%	91.1%	88.9%	86.0%	84.3%	-
Nuclear	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-
Hydro	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-
Wind	4.6%	4.2%	4.4%	4.6%	5.0%	4.8%	4.3%	-
Solar	3.0%	3.4%	3.9%	4.2%	6.1%	9.1%	11.4%	-
Geothermal	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-
Other Sources	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-
Net Imports of Electricity (GWh)	0	0	0	0	0	0	0	-
As a % of electricity available for final consumption	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-
Electricity Interconnection [%]	-	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**
Share of renewable energy consumption - by sector [%]								-
Electricity	8.6%	8.9%	9.4%	9.8%	12.0%	14.8%	17.0%	-
Heating/cooling	24.7%	26.4%	37.2%	35.1%	37.1%	42.6%	41.6%	-
Transport	2.7%	2.6%	2.7%	3.3%	7.4%	7.2%	7.2%	-
Overall	9.8%	10.5%	13.9%	13.8%	16.9%	19.1%	19.4%	0.0%

CLEAN ENERGY

	2019	2020	2021	2022	2023
VC investments in climate tech start-ups and scale-ups (EUR Mln)	-	-	-	-	-
as a % of total VC investment (3) in Cyprus start-ups and scale-ups	-	-	-	-	-
Research & Innovation spending in Energy Union R&i priorites					
Public R&I (EUR mln)	0.7	0.4	0.2	-	-
Public R&I (% GDP)	0.003%	0.002%	0.001%	-	-
Private R&I (EUR mln)	16.2	9.0	-	-	-
Private R&I (% GDP)	0.070%	0.041%	-	-	-

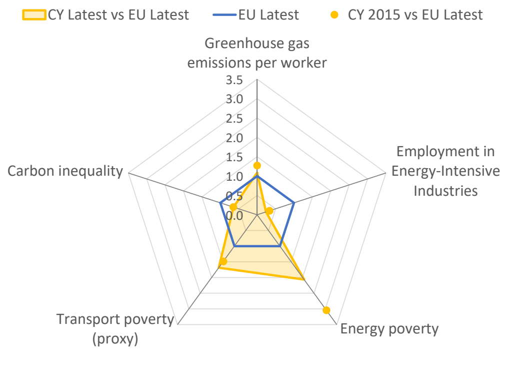
(1) The ranking of the main suppliers is based on the latest available figures (for 2022)
(2) Venture Capital investment includes Venture Capital deals (all stages), Small M&A deals and Private Equity (PE) growth deals (for companies that have previously been part of the portfolio of a VC investment firm or have received Angel or Seed funding).
Source: Eurostat, Gas Infrastructure Europe, JRC elaboration based on PitchBook data (03/2024), JRC SETIS (2024)

This Annex monitors Cyprus's progress in ensuring a fair transition towards climate neutrality and environmental sustainability, particularly for workers and households in vulnerable situations. The green economy is expanding in Cyprus. Total jobs in the environmental goods and services sector grew to around 12 000 in 2021, which accounted for % of total employment (EU: 2.7%). Between 2015 and 2022, the greenhouse gas emission intensity of Cyprus's workforce (see Graph A8.1 and Table A8.1) declined from 18.2 to 15.6 tonnes per worker 2. Although this is above the EU average (14.3 tonnes per worker in 2022) ([57]), it indicates a positive trend in the green transition. In line with the Council Recommendation on ensuring a fair transition towards climate neutrality ([58]), actions for a fair green transition, including on upskilling and reskilling, are taking place. Measures such as the construction of technical and green schools and related training schemes have been outlined in Cyprus's recovery and resilience plan (RRP) as well as in the Thalia programme which includes financing from the European Social Fund Plus and the Just Transition Fund (JTF).

Employment in Cyprus's sectors that are most affected by the green transition has decreased. Employment in Cyprus's energy-intensive industries ([59]) comprised 0.8% of total employment in 2023 (EU: 3.5%). Employment in mining and quarrying has increased by 16.7% since 2015 (to around 700 workers in 2023). The job vacancy rate in construction (see Graph A8.2), a key sector for the green transition, is lower than the EU average (2.0% vs 3.6% in 2023). Nevertheless, 44% of small and medium-sized enterprises (SMEs) in the sector agreed that skills shortages are holding them back in general business activities ([60]). According to the European Labour Authority (ELA) ([61]), labour shortages were reported in 2023 for a number of occupations that required specific skills or knowledge for the green transition ([62]), including civil engineers, air conditioning and refrigeration mechanics, and electricians.

Upskilling and reskilling in declining and transforming sectors is necessary to help achieve the green transition. In Cyprus, 47% of the SMEs think that the skills required for greening business activities are becoming more important (EU: 42%) ([60]). If Cyprus matches its projected contribution to the EU's 2030 renewable energy target, between 400 and 600 additional skilled workers will be needed for the deployment of wind and solar energy, which may require an investment in skills of EUR 1.4-1.8 million. ([63]) In Cyprus, the Green Technical School supported by the JTF and investments under the RRP will help to upskill and reskill the workforce through training and education and to provide specialised training in related sectors.

Graph A8.1: **Fair transition challenges in Cyprus**



Source: Eurostat, EU Labour Force Survey, EMPL-JRC GD-AMEDI/AMEDI+ and DISCO(H) projects (see Table A8.1).

Despite improvements in recent years, energy poverty remains a challenge in Cyprus. Even though the share of the population

([57]) Workforce-related calculations are based on the EU Labour Force Survey. Note, in the 2023 country report for Cyprus, such indicators were calculated based on employment statistics in the national accounts. This may result in limited comparability across the two reports.

([58]) Council Recommendation of 16 June 2022 on ensuring a fair transition towards climate neutrality (2022/C 243/04) covers employment, skills, tax-benefit and social protection systems, essential services and housing.

([59]) Mining and quarrying (NACE B), chemicals (C20), minerals (C23), metals (C24) and automotive (C29).

([60]) Eurobarometer on skills shortages, recruitment, and retention strategies in small and medium-sized enterprises.

([61]) European Labour Authority 2024 EURES Report on labour shortages and surpluses in 2023.

([62]) Skills and knowledge requirements are based on the European Skills Competences and Occupations (ESCO) taxonomy on skills for the green transition.

([63]) EMPL-JRC AMEDI+ project.

Table A8.1: **Key indicators for a fair transition in Cyprus**

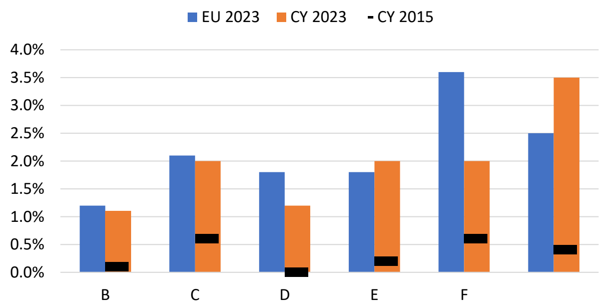
Indicator	Description	CY 2015	CY	EU
GHG per worker	Greenhouse gas emissions per worker – CO_2 equivalent tonnes	18.2	15.6 (2022)	14.3 (2022)
Employment EII	Employment share in energy-intensive industries, including mining and quarrying (NACE B), chemicals (C20), minerals (C23), metals (C24) and automotive (C29)	1.2%	0.8% (2023)	3.5% (2023)
Energy poverty	Share of the total population living in a household unable to keep its home adequately warm	28.3%	19.2% (2022)	9.3% (2022)
Transport poverty (proxy)	Estimated share of the AROP population that spends over 6% of expenditure on fuels for personal transport	55.1%	62.7% (2023)	37.1% (2023)
Carbon inequality	Ratio between the consumption footprint of the top 20% vs bottom 20% of the income distribution	1.8	1.8 (2021)	2.7 (2021)

Source: Eurostat (env_ac_ainah_r2, lfsa_egan2d, ilc_mdes01), EU Labour Force Survey (break in time series in 2021), EMPL-JRC GD-AMEDI/AMEDI+ and DISCO(H) projects.

unable to keep their homes adequately warm decreased from 28.3% in 2015 to 19.2% in 2022, it is still more than double the EU average (9.3%) ([64]). The indicator decreased by 0.2 percentage points between 2021 and 2022. In particular, 50.6% of the population at risk of poverty (AROP) and 19.4% of lower middle-income households in deciles 4-5 were unable to keep their homes adequately warm (vs EU averages of 20.1% and 11.6%, respectively). On the other hand, in January 2023, 62.7% of population at risk of poverty spent a considerable proportion of their budget (more than 6%) on private transport fuels (EU: 37.1%) ([65]). There are also significant energy costs related to cooling houses, among the highest in the EU. In 2021, space cooling was 10.6% of the final energy consumption of households, compared to the EU average of 0.5%. Cyprus's RRP includes targeted investments to improve the energy efficiency of residential buildings, especially for vulnerable households.

Air pollution remains a critical issue leading to environmental inequalities in Cyprus. In Cyprus, the average levels of air pollution in 2021 stood at 14.0 µg/m3 PM2.5 (EU: 11.4), with the entire population exposed to critical levels of air pollution ([66]). This led to a significant impact on health, affecting vulnerable groups in particular, and around 630 premature deaths annually ([67]). In 2021, the consumption footprint for 20% of the population with the highest income was 1.8 times higher than the footprint of the poorest 20% (EU: 1.8) ([68]). For both groups, the consumption footprint is highest for food and mobility.

Graph A8.2: **Job vacancy rate in transforming sectors and mining and quarrying**



B - Mining and quarrying
C - Manufacturing
D - Electricity, gas, steam and air conditioning supply
E - Water supply; sewerage, waste management and remediation activities
F - Construction
H - Transportation and storage
Source: Eurostat jvs_a_rate_r2.

Cyprus is starting to implement policies for a fair transition towards climate neutrality in the context of the Council Recommendation of June 2022. Cyprus introduced different measures which are specifically focused on the green economy, such as awareness-raising measures, the construction of the new Green Vocational Education and Training School, and training programmes related to specific green occupations included in the National Action Plan of Cyprus for the European Year of Skills. There

([64]) Energy poverty is a multi-dimensional concept. The indicator used focuses on an outcome of energy poverty. Further indicators are available at the Energy Poverty Advisory Hub.

([65]) Affordability of private transport fuels is one key dimension of transport poverty. The indicator has been developed in the context of the EMPL-JRC GD-AMEDI/AMEDI+ projects. Methodology explained in Economic and distributional effects of higher energy prices on households in the EU.

([66]) Two times higher than the recommendations in the WHO Air Quality Guidelines (annual exposure of 5µg/m3).

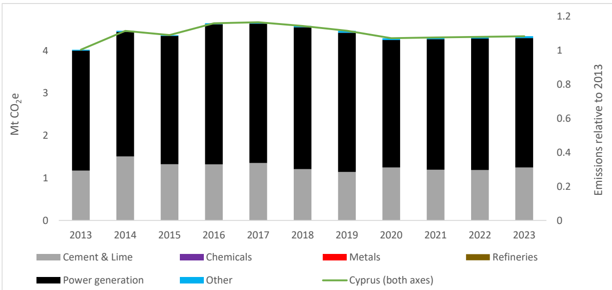
([67]) EEA- Air Quality Health Risk Assessment

([68]) Developed in the context of the EMPL-JRC DISCO(H) project. Methodology explained in Joint Research Centre, 2024. Carbon and environmental footprint inequality of household consumption in the EU. JRC137520. The EU average refers to EU27 without Italy (household income data not available for IT in the HBS) is scope for further efforts that focus on the green transition, e.g. strengthening the evidence-base and introducing measures on adequate income security in the labour market. In addition, individual learning accounts, currently rolled out under a pilot project, could be used to encourage people to acquire green skills.

The green transition of industry and the built environment, in particular decarbonisation, resource efficiency and circularity, is essential to boost Cyprus's competitiveness ([69]). In this regard, priorities for Cyprus are waste management and the use of circular materials in industry and construction.

The pace of Cyprus's circular economy transition is insufficient to achieve the EU Circular Economy Action Plan goals, as there is room for improvements in waste management and resource efficiency. The material footprint increased from 23 to 25.2 tonnes per capita between 2018 and 2021, and then decreased to 24.0 tonnes per capita in 2022, remaining well above the EU average. By contrast, total waste generation per capita is well below the EU average – 2.5 vs 4.8 tonnes per capita – and decreased between 2016 and 2020. There is still room to make better use of the potential of the circular economy transition to drive the decarbonisation of Cyprus's industry.

Graph A9.1: **ETS emissions by sector since 2013**



Source: European Commission

Greenhouse gas emissions from the sectors covered by the EU emissions trading system (ETS) in Cyprus ([70]) remained relatively stable from 2013 to 2023, with a consistent structure of contributing sectors. In 2023, power generation accounted for 70% of total emissions, significantly higher than the EU average. This is largely due to the historical dominance of imported oil as the primary energy source on the island. The cement and lime sector virtually constituted the remaining 29% of emissions. From 2019 to 2023, ETS emissions in Cyprus fluctuated only slightly, with a total increase by 3%, composed by a 7% decrease of greenhouse gas emissions in the power sector (mostly in 2020) and an increase by 9% of emissions from cement and lime production. Since 2013, Cyprus has shown a trajectory of slightly increasing ETS emissions, with power generation being the dominant contributor.

Cyprus is not keeping up with the EU average resource efficiency and productivity levels in resource use in the industrial sector. The overall circular material use rate increased from 2.4% in 2017 to 3.2% in 2022 ([71]). However, it still stands well below the EU average of 11.7%. Similarly, resource productivity stood below the EU average and reached 1.7 purchasing power standards per kilogram in 2022. Furthermore, Cyprus was reliant on imports for 31.4% of materials used in 2022, compared with an EU average of 22.4%, making the country comparatively more vulnerable to supply chain disruptions. The manufacturing sector does not generate as much pressure on water resources as other sectors. Water abstracted for this purpose accounted for less than 1% of total water abstracted in 2019. Cyprus reuses 95.4% of treated urban wastewater for irrigation in agriculture and other uses. The 2022 Eco-Innovation Scoreboard placed the country in the 'catching-up group', with a score of 94.7. As of September 2023, Cyprus totalled 3 awarded EU Ecolabel licences and 84 products with the EU Ecolabel, showing a low take-up of products and licences. The Cypriot national energy and climate plan mentions circular economy and its potential only in relation to waste management.

Cyprus is at risk of missing both the 2025 targets for municipal waste and packaging recycling ([72]) and the 2035 target for landfilling. With a municipal waste recycling rate of only 15.3% in 2021, Cyprus already missed the EU target of recycling 50% by 2020. Moreover, the country is still highly reliant on landfilling, and registered the highest amount of waste landfilled per capita in the EU. The plastic

([69]) See also Annexes 6, 7 and 12.

([70]) This analysis excludes air travel. For more details and the data sources, see Weitzel, M; van der Vorst, C. (2024), Uneven progress in reducing emissions in the EU ETS, JRC Science for policy brief, JRC138215, Joint Research Centre.

([71]) With a peak of 3.7% in 2020.

([72]) With specific concern for plastic packaging, aluminium, and glass.

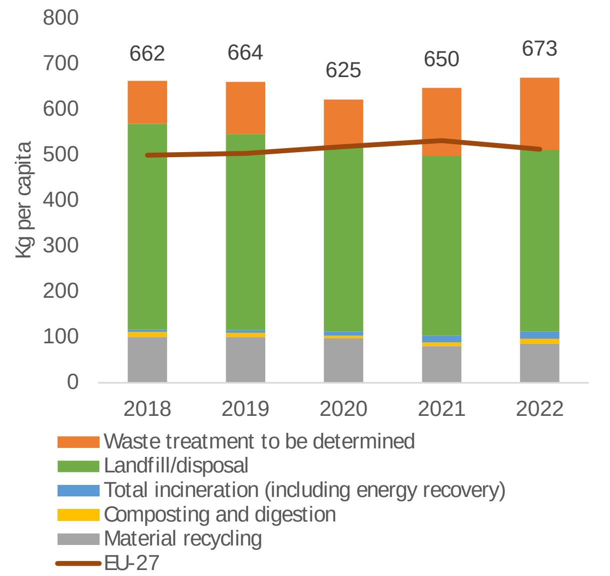
Table A9.1: **Circularity indicators**

	2018	2019	2020	2021	2022	2023	EU-27	Latest year
Industry								
Resource productivity (purchasing power standard (PPS) per kilogram)	1.5	1.5	1.5	1.5	1.7	-	2.5	2022
Circular material use rate (%)	2.7	3.1	3.8	2.8	3.2	-	11.5	2022
Eco-innovation index (2013=100)	73.6	86.0	78.2	93.3	94.7	-	121.5	2022
Recycling of plastic packaging (%)	54.3	50.5	48.6	41.6	-	-	40.7	2021
Cost of air emissions from industry (EUR bn)	0.8	0.8	0.7	0.7	-	-	352.7	2021
Built environment								
Recovery rate from construction and demolition waste (%)	64.0	-	79.0	-	-	-	89.0	2020
Soil sealing index (base year = 2006)	111.1	-	-	-	-	-	103.4	2018
Non-residential floor area (m^2 per capita)	26.8	26.8	26.8	-	-	-	18.0	2020
Waste backfilled (%)	-	-	-	-	-	-	9.9	2020

Source: Eurostat, European Environment Agency

packaging recycling rate was above the EU average in 2021 – 41.6% versus 39.7%. However, this rate declined compared to the last few years. Plastic packaging waste production is increasing and recycling facilities should be improved to respond to this trend. However, there are some positive trends. In 2021, the recycling rate of e-waste was above the EU average, accounting for 81.6%. Cyprus did not register any new patents on waste recycling in 2020.

Graph A9.2: **Treatment of municipal waste**



Source: Eurostat

The built environment could be used more efficiently. In 2023, Cyprus's building permits index, based on useful floor area, stood at 261.9, showing a strong increase in construction activities compared to 2015 (73). Cyprus's residential floor area per capita remained relatively stable between 2016 and 2020 while being significantly higher than the EU average, 42.68 versus 36.48 m² per capita in 2020. By contrast, the non-residential floor area remained well below the average, 9.34 versus 15.31 m² per capita in 2020. In 2020, Cyprus submitted a long-term renovation strategy aiming to decarbonise the building stock.

Cyprus progressed in sustainably managing waste from the construction sector but there is still room for improvement. Waste generated from construction and demolition activities almost tripled between 2010 and 2020, reaching approximately 430 000 tonnes. However, the per-capita figure is well below the EU average. The proportion of backfilling reached 38.5% in 2020, below the EU average of 52.6%. Cyprus successfully has improved its recovery rate, which increased to 79% in 2020, meeting the Waste Framework Directive's target for 2020 but remaining below the EU average. In 2020, 83% of the Cypriot population was connected to at least secondary wastewater treatment.

(73) 2015=100.

Digital transformation is key to ensuring a resilient and competitive economy. In line with the Digital Decade Policy Programme, and in particular with the targets in that Programme for digital transformation by 2030, this Annex describes Cyprus's performance on digital skills, digital infrastructure/connectivity and the digitalisation of businesses and public services. Where relevant, it makes reference to progress on implementing the Recovery and Resilience Plan (RRP). Cyprus allocates 24.6% of its total RRP budget to digital (EUR 274 million) ([74]). Under Cohesion Policy, an additional EUR 0.1 billion (12% of the country's total Cohesion Policy funding) is allocated to the country's digital transformation ([75]).

The Digital Decade Policy Programme sets out a pathway for EU's successful digital transformation by 2030. Cyprus's national roadmap outlines the actions it intends to take to reach the objectives and targets at national level. The first Report on the State of the Digital Decade highlighted the need to accelerate and deepen the collective efforts to reach the EU-wide targets and objectives ([76]). Among others, a digitally skilled population increases the development and adoption of digital technologies and leads to productivity gains and new business models. It also leads to higher inclusion and participation in an environment increasingly shaped by the digital transformation ([77]). Digital technologies, infrastructure and tools all play a role in addressing the current structural challenges, including strategic dependencies, cybersecurity and climate change.

There is still some significant progress to be made on basic digital skills in Cyprus. Slightly less than half of the population aged between 16 and 74 has at least basic digital skills. However, the share of ICT specialists in the workforce increased significantly in 2023 above the EU average. Cyprus adopted a National Action Plan for Digital Skills 2021-2025 ('e-skills Action Plan') to improve the digital skills of everyone in Cyprus, including vulnerable groups. This plan is being implemented as an RRP measure and includes, among other initiatives, training programmes for the labour force in the private and public sector and the general population, as well as a communication strategy to promote lifelong learning.

Cyprus performs moderately well on digital infrastructure/connectivity. Despite recent significant improvements in fixed very high capacity network (VHCN) coverage, Cyprus still performs slightly below the EU average. In 2023, under the RRP, Cyprus launched a voucher scheme to further improve fixed VHCN connectivity by encouraging the building of fibre cabling in private premises. It is also launching an investment to improve fixed VHCN coverage in underserved areas. On the other hand, Cyprus is one of the few Member States that have reached a 100% rate in overall 5G coverage.

Cyprus performs fairly well on the digitalisation of businesses. The percentage of SMEs with at least a basic level of digital intensity (67%) is well above the EU average (58%); however, compared to 2021, not much progress has been made. Regarding the adoption of advanced digital technologies, enterprises in Cyprus are also above the EU average (55%) for the three technologies monitored in the Digital Decade: 58% of enterprises in Cyprus use at least one of cloud computing services, big data or artificial intelligence. In 2022, 4.6% of enterprises in Cyprus reported ICT service outage due to cyberattacks (e.g. ransomware or denial of service attacks). Over the same year, 21% of enterprises developed or reviewed their ICT security policy within the previous 12 months.

Digital public services are an area in which Cyprus performs well, though there is still room for improvement. The country scores

([74]) The share of financial allocations that contribute to digital objectives has been calculated using Annex VII to the Recovery and Resilience Facility Regulation.

([75]) This amount includes all investment specifically aimed at or substantially contributing to digital transformation in the 2021-2027 Cohesion Policy programming period. The source funds are the European Regional Development Fund, the Cohesion Fund, the European Social Fund Plus, and the Just Transition Fund.

([76]) European Commission (2023): Report on the state on the Digital Decade 2023, [2023 Report on the state of the Digital Decade | Shaping Europe's digital future (europa.eu).]

([77]) See for example OECD (2019): OECD Economic Outlook, Digitalisation and productivity: A story of complementarities, [OECD Economic Outlook, Volume 2019 Issue 1 | OECD iLibrary (oecd-ilibrary.org)] and OECD (2019): Going Digital: Shaping Policies, Improving Lives – Summary, https://www.oecd.org/digital/going-digital-synthesis-summary.pdf.

Table A10.1: **Key Digital Decade targets monitored by the Digital Economy and Society Index indicators**

	Cyprus 2022	Cyprus 2023	Cyprus 2024	EU 2024	Digital Decade target by 2030 (EU)
Digital skills					
At least basic digital skills	**50%**	**50%**	**49%**	**56%**	**80%**
% individuals	2021	2021	2023	2023	2030
ICT specialists (1)	**3.9%**	**4.6%**	**5.4%**	**4.8%**	**20 million**
% individuals in employment aged 15-74	2021	2022	2023	2023	2030
Digital infrastructure/connectivity					
Fixed very high capacity network (VHCN) coverage	**41%**	**60%**	**77%**	**79%**	**100%**
% households	2021	2022	2023	2023	2030
Fibre to the premises (FTTP) coverage (2)	**41%**	**60%**	**77%**	**64%**	**-**
% households	2021	2022	2023	2023	
Overall 5G coverage	**75%**	**100%**	**100%**	**89%**	**100%**
% populated areas	2021	2022	2023	2023	2030
Digitalisation of businesses					
SMEs with at least a basic level of digital intensity	**66%**	**NA**	**67%**	**58%**	**90%**
% SMEs	2021		2023	2023	2030
Data analytics	**NA**	**NA**	**34%**	**33%**	**-**
% enterprises			2023	2023	
Cloud	**42%**	**42%**	**46%**	**39%**	**-**
% enterprises	2021	2021	2023	2023	
Artificial intelligence	**3%**	**3%**	**5%**	**8%**	**-**
% enterprises	2021	2021	2023	2023	
AI or cloud or data analytics (3)	**NA**	**NA**	**58%**	**55%**	**75%**
% enterprises			2023	2023	2030
Digitalisation of public services					
Digital public services for citizens	**56**	**64**	**74**	**79**	**100**
Score (0 to 100)	2021	2022	2023	2023	2030
Digital public services for businesses	**86**	**85**	**86**	**85**	**100**
Score (0 to 100)	2021	2022	2023	2023	2030
Access to e-health records	**NA**	**70**	**68**	**79**	**100**
Score (0 to 100)		2022	2023	2023	2030

(1) The 20 million target represents about 10% of total employment.
(2) The fibre to the premises coverage indicator is included separately as its evolution will also be monitored separately and taken into consideration when interpreting VHCN coverage data in the Digital Decade.
(3) At least 75% of EU enterprises have taken up one or more of the following, in line with their business operations: (i) cloud computing services; (ii) big data; (iii) artificial intelligence.

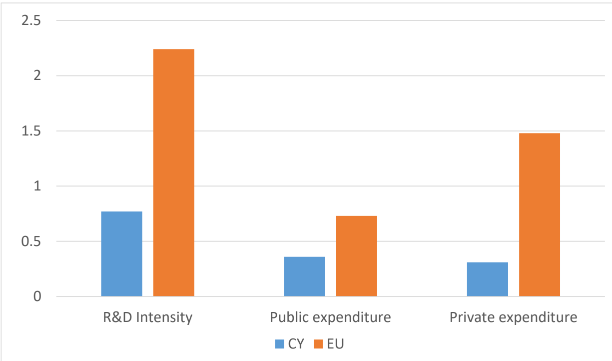
Source: Digital Economy and Society Index

slightly above the EU average on digital public services for business (86 versus 85) but is still below the EU average in providing digital public services for citizens (74 versus 79). Cyprus's RRP includes measures to provide high-quality and user-friendly digital services, such as the reform 'Digital Services Factory'. For electronic identification (eID), Cyprus has notified a national eID scheme under the eIDAS Regulation in 2023.

This Annex provides a general overview of the performance of Cyprus's research and innovation system, which is essential for delivering the twin transition and ensuring long-term competitiveness.

Cyprus's (78) R&D intensity has stagnated and remains far below the European average. In 2022, R&D investment slightly decreased from the previous year, coming to 0.77% of GDP. Both public expenditure on R&D (at 0.36% of GDP in 2022) and business enterprise expenditure on R&D (0.31% of GDP in 2022) remained below the EU average (0.73% and 1.48% respectively). This hinders the country's ability to diversify its economy towards innovation-led activities and calls for a national long-term R&D vision with well-defined objectives, a monitoring mechanism and financial targets. The country currently lacks a long-term R&I strategy that provides a clear vision, objectives and commitments to provide a stable framework for R&I in line with the country's Vision 2035.

Graph A11.1: **R&D expenditure (as % of GDP)**



Source: Eurostat

Weak human capital in science and technology continues to limit Cyprus's capacity to create new knowledge and generate further innovations. The share of new graduates in science & engineering per thousand population aged 25-34 ranks amongst the lowest in Europe (7.2%, compared to the EU average of 16.9%). Moreover, the rate of science, technology, engineering, and mathematics (STEM) graduates as a share of all graduates stood at 11.2% in 2021 (in comparison to the EU average of 25.4%), the lowest in the EU (79). The low rate of scientific talent integration in the workforce is evidenced by the very low share of researchers among public-sector employees per thousand active population (1.9% in 2021, against 4.2% for the EU average) and among private-sector employees (1.2% in 2021 against 5.4% for the EU average) (80). This, coupled with poor performance on secondary education as evidenced by the Programme for International Student Assessment (PISA) results (see Annex 15), represents a risk for the country's innovation capacity. The recovery and resilience plan (RRP) includes a reform to digitally transform school units with the aim of enhancing digital and science, technology, engineering and maths skills. Notwithstanding these measures, the update of the skills framework from Cyprus Vision 2035 is a key element for addressing the skills shortages more decisively and developing a thriving society which is innovative, resilient, diversified, and underpinned by the principles of digitalisation and the green economy.

Private innovation is affected by very low R&D investments and low venture capital. Private R&D investment is very low, partially due to the economic structure of the country; and government support for private R&D is equally low. This, coupled with weak levels of venture capital (see also Annex 12) and the low level of access to public research infrastructures by companies, hinders the ability of new start-ups to flourish and of these companies to scale up their activities. According to a study by McKinsey & Co (81), Cyprus had 503 start-up companies in 2022, whose market capitalisation represents 15% of the national economy, while Malta had 465 start-up companies, whose market capitalisation was 146% of the national GDP; and Estonia had 1 047 start-up companies whose

(78) Cyprus is among Europe's strong innovators according to the 2023 edition of the European Innovation Scoreboard. 2023 European Innovation Scoreboard, Country profile: Cyprus. Web page: ec_rtd_eis-country-profile-cy.pdf (europa.eu) The EIS provides a comparative analysis of innovation performance in EU countries, including the relative strengths and weaknesses of their national innovation systems (also compared to the EU average).

(79) 2023 Education and training monitor. Cyprus. https://op.europa.eu/en/publication-detail/-/publication/b29d88da-8ce2-11ee-8aa6-01aa75ed71a1/language-en.

(80) COM internal indicators.

(81) McKinsey & Company. Reinventing our economy from within. How Europe's start-up ecosystems can learn from each other to ignite and scale up entrepreneurship, 2023.

Table A11.1: **Key innovation indicators**

Cyprus	2010	2015	2020	2021	2022	EU average (1)
Key indicators						
R&D intensity (GERD as % of GDP)	0.44	0. 48	0.84	0.8	0.77	2.24
Public expenditure on R&D as % of GDP	0.31	0.3	0.36	0.36	0.36	0.73
Business enterprise expenditure on R&D (BERD) as % of GDP	0.08	0.11	0.37	0.34	0.31	1.48
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	8.6	8.6	9.92	:	:	*9.6*
Patent Cooperation Treaty (PCT) patent applications per billion GDP (in PPS)	0.3	0.5	0.88	:	:	*3.4*
Academia-business cooperation						
Public-private scientific co-publications as % of total publications	10.8	6.8	8.0	8.9	8	*7.6*
Public expenditure on R&D financed by business enterprise (national) as % of GDP	0.004	0.002	0.007	0.007	:	*0.054*
Human capital and skills availability						
New graduates in science & engineering per thousand pop. aged 25-34	5.2	8.2	7.2	7.2	:	*16.9*
Public support for business enterprise expenditure on R&D (BERD)						
Total public sector support for BERD as % of GDP	0.022	0.014	0.054	0.052	:	*0.204*
Tax R&D incentives: foregone revenues as % of GDP	0	0	0	0	:	*0.104*
Green innovation						
Share of environment-related patents in total patent applications filed under PCT (%)	11	9.7	16.9	:	:	*14.7*
Finance for innovation and economic renewal						
Venture capital (market statistics) as % of GDP	0.013	0.0	0.033	0.027	0.014	*0.085*
Employment share of high growth enterprises measured in employment (%)	:	2.69	2.85	:	:	12.51

(1) EU average for the last available year or the year with the largest number of country data.
Source: Eurostat, OECD, DG JRC, Science-Metrix (Scopus database and EPO's Patent Statistical Database), Invest EU

market capitalisation represented 40% of the national economy. These values showcase that Cyprus's potential to foster innovative entrepreneurship and boost its knowledge-based economy can be further developed in order to partially address these shortcomings. The RRP includes measures to foster investment in innovative companies and attract entrepreneurial and scientific human capital from abroad through tax reductions, the development of a scientific VISA scheme for researchers and their families and the start-up VISA scheme for founders of innovative enterprises and their families. In addition, the RRP includes an innovation funding programme to support start-ups, SMEs and innovative companies, as well as supporting access to consulting services for SMEs to strengthen their competitiveness and growth potential. Other support measures in the RRP include an innovation funding programme for start-ups, innovative companies and SMEs and a scheme to provide consulting services for SMEs to strengthen their competitiveness and business growth potential. Also, through the RRP, a state-funded equity fund has been set up in Cyprus, and a National Promotional Agency is in operation, both of which are supportive to financing innovation. The full and correct implementation of RRP objectives thus remains crucial to address this long-standing shortcoming of Cyprus's business environment.

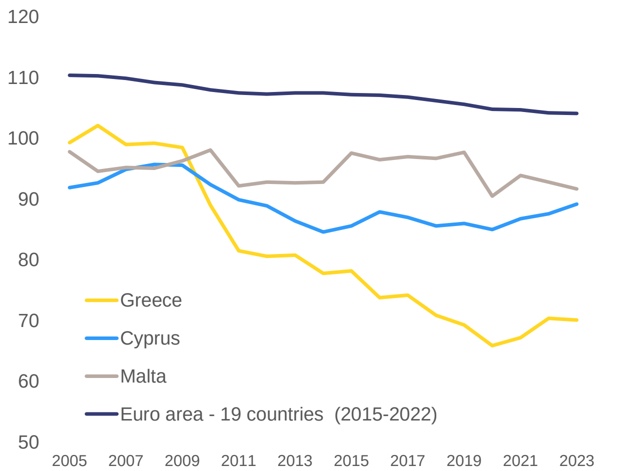
Academia-business linkages are weak, hampering the valorisation of research. The share of public-private co-publications (8% in 2022) has decreased but remains above the EU average (7.6%). However, the business sector involvement in financing public R&D is one of the lowest in Europe (0.007% in 2021 compared to an EU average of 0.054%). Findings from a recent Policy Support Facility study [82] published in 2020 highlighted that businesses are not properly benefiting from the research and services that universities and research

[82] https://ec.europa.eu/research-and-innovation/en/statistics/policy-support-facility/specific-support-cyprus.

institutes could offer. The RRP includes measures to facilitate and support closer university linkages by opening access to research infrastructures from research institutions to the business sector, and the setting up of a Knowledge Transfer Office. However, a deeper reform of the policies for knowledge transfer services will boost innovation that leads to commercially viable patents, products and services.

In 2023, Cyprus's productivity growth remained positive, although productivity levels are still well below the EU average. Cyprus's labour productivity (GDP per person employed) grew by 1% in 2023 compared to the previous year, outperforming both the EU and the euro area growth (-0.8% and -1% respectively). As shown in Graph A12.1, Cyprus's labour productivity is therefore slowly catching up with the EU and euro area average levels, although it still stands well below the benchmark, at 89.2% of the EU average in 2023.

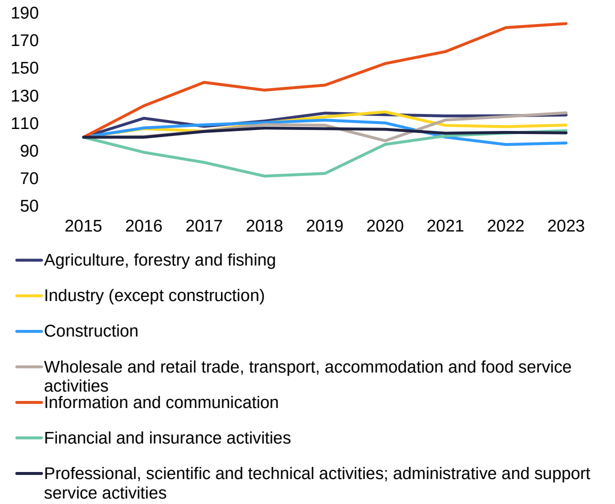
Graph A12.1: **Labour productivity (GDP per person employed) [% of EU-27]**



Source: Eurostat.

Sectoral differences in productivity performance, however, are noticeable (Graph A12.2)**.** The information and communication sector, for instance, continued its productivity growth in 2022 and 2023, largely outperforming the EU average. The wholesale and retail trade, accommodation and food services sector also did better than the average – possibly reflecting the catching up of tourism after COVID-19 –, whereas in construction productivity started recovering in 2023 after a significant drop in the pandemic years. Professional services and financial and insurance activities, instead, have experienced some productivity fluctuations in recent years, but show substantial stagnation compared to the mid-2010s, while in industry productivity growth has been overall moderate in the past few years, although showing some signs of recovery in the course of 2023.

Graph A12.2: **Labour productivity (GDP per hour worked) by sector [2015=100]**



Source: Eurostat.

The Cypriot economy maintains relevant strategic dependencies, particularly due to the characteristics of its energy mix and to its pattern of sectoral diversification. Cyprus's energy mix is still largely reliant on fossil fuels, in particular on oil, which still makes up around 85% of the country's total energy supply. This constitutes a severe strategic dependency for Cyprus, particularly in the current unstable geopolitical context, as it exposes the country to fluctuations on global markets. Moreover, despite significant potential, Cyprus still lags significantly behind in the uptake and deployment of renewable energy sources, with installed renewable electricity capacity standing at only 21.3% in 2022, well below the EU average. Given its location and climate, Cyprus is instead well placed to play a relevant role in the green transition, among others in the field of solar energy production. Investments in this field, including the full implementation of the measures already envisaged under the recovery and resilience plan (RRP), will therefore be crucial to ensure Cyprus's competitiveness over the coming years and in the transition towards a net-zero economy [83]. The country's competitiveness would also benefit in the long term from a further diversification of its economic structure, which currently is heavily skewed towards a limited number of sectors, among which tourism (generating around 14%

[83] Net-Zero Industry Act, COM(2023) 161 final.

of the country's GDP ([84]) alone) and business and professional services. Moreover, diversification is lacking not only across sectors, but also within them, with certain segments of the economy over-relying on demand coming from a limited number of foreign countries, and thus exposed to significant dependencies in the event of asymmetric demand shocks in such countries ([85]).

Given the largely service-based character of its economy, Cyprus has been much less affected than other EU countries by material shortages, with only 1.3% of Cypriot firms reporting constraints in finding materials in 2023, against an EU average of 17.2%. Conversely, skills shortages constitute a more severe problem for Cypriot businesses, with 46% of them considering it 'very difficult' to find staff with the right skills (well above the EU average of 38%). The shortages affect mostly candidates with vocational training qualifications, with 48% of Cypriot firms reporting difficulties (which is 10 percentage points higher than the EU average), whereas for candidates with master's degrees and PhDs the problem is less acute than for EU peers ([86]).

As regards the business environment, margins for improvement remain, particularly in areas with long-standing challenges such as access to finance. Cypriot firms are among those in the EU that cite access to finance more frequently when asked to rate the importance of different areas for their business ([87]). This perception is reflected in a higher-than-average share of finance-constrained firms (although the situation has improved compared to the peak of 2021), and in largely below-average scores in both the equity and loans sub-indexes of the EIF SME Access to Finance Index. Cyprus's performance is particularly unsatisfactory in the case of equity, where the country has one of the lowest scores in the EU (0.05 in 2022, compared to an EU average of 0.17). Cypriot firms are also significantly more dissatisfied than their EU peers with the collateral requirements attached to external financing, with a four times higher dissatisfaction rate in Cyprus than on average in the EU ([88]). The Cypriot RRP includes measures to improve access to finance for businesses: the full and correct implementation of RRP objectives therefore remains crucial to address this long-standing shortcoming in Cyprus's business environment.

For what concerns the general regulatory framework, there is also still room for improvement. According to the EIB Investment Survey, for instance, the percentage of firms reporting regulation as a major obstacle to investment is well above the EU average, standing at 31% in 2023 vs an EU average of 22.2%. Similarly, the level of regulation of professions is overall higher than the EU average, in particular for lawyers, patent/trademark agents, real estate agents, civil engineers, architects and tourist guides. In addition, according to the EU Justice Scoreboard, the level of confidence in investments being protected by law and courts stands at only 31% (vs EU average of 54%), while 42% of surveyed investors in Cyprus cite the difficulty to enforce rights in courts due to concerns about quality, efficiency or independence of justice as one of their main worries ([89]).

As for public procurement, despite the efforts made to improve the overall efficiency and effectiveness of the system, challenges persist, particularly in the areas of competition and strategic procurement. Although the use of negotiated procedures without a call for tenders decreased compared to last year (29% in 2023 vs 39% in 2022), Cyprus remains one of the worst performers in the EU on this indicator, with no stable reduction trend seen in recent years. Similarly, Cyprus still underperforms in the use of quality-based criteria in public procurement, having one of the highest shares of contracts awarded exclusively on the basis of the lowest price (93% in 2023). A wider uptake of strategic procurement – encouraging green, innovation-oriented and socially responsible procurement practices – could improve Cyprus's procurement system and

([84]) International Monetary Fund, *IMF Country Report No. 21/126*, 2021.

([85]) Cyprus Economy and Competitiveness Council, *Cyprus Competitiveness Report*, 2021.

([86]) Flash Eurobarometer 537, *SMEs and skills shortages*, 2023.

([87]) European Central Bank, SAFE survey, 2023.

([88]) European Investment Bank, EIB investment survey – Cyprus overview, 2023.

([89]) EU Justice Scoreboard, 2024.

allow the country to harness the potential of public purchases to support the green and digital transitions.

While Cyprus is well integrated into the single market, particularly for services, barriers remain. Cyprus' trade integration for services is among the highest in the EU, whereas for goods it is below average. In terms of transposition of single market rules, the percentage of non-transposed directives is slightly higher in Cyprus than on average in the EU, whereas for what concerns the levels of incorrect transposition Cyprus performs slightly better than EU benchmarks. The SOLVIT network, which aims to provide help with problems linked to the application of single market rules, is also functioning comparatively well in Cyprus, solving 95% of the cases handled as lead centre (above the EU average of 88.3%).

Finally, Cyprus is in the initial stage of technical implementation of the Once-Only Technical System (OOTS) ([90]). As part of the Single Digital Gateway Regulation ([91]), the system will enable the automated cross-border exchange of evidence between competent authorities, improving online access to information, administrative procedures and assistance within the EU. The onboarding of Cypriot competent authorities is crucial for the system to function smoothly and to reduce administrative burden.

([90]) Implementing Regulation (EU) 2022/1463.

([91]) Regulation (EU) 2018/1724.

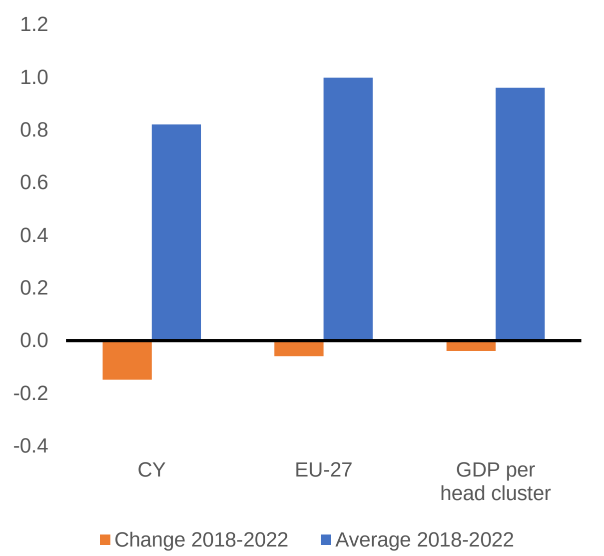
Table A12.1: **Industry and the Single Market**

Cyprus							
POLICY AREA	**INDICATOR NAME**	**2019**	**2020**	**2021**	**2022**	**2023**	**EU27 average***
HEADLINE INDICATORS							
Economic Structure	Net Private investment, level of private capital stock, net of depreciation, % GDP[1]	7,3	8,1	7,6	8,6	10,1	**3,8**
	Net Public investment, level of public capital stock, net of depreciation, % GDP[1]	0,4	0,5	0,8	0,7	1,3	**1,2**
	Real labour productivity per person in industry (% yoy)[2]	3,8	-0,9	-3,1	-1,1	1,1	**-1,24**
Cost competitiveness	Nominal unit labour cost in industry (% yoy)[2]	-0,1	-1,4	7,6	1,4	4,1	**9,83**
SINGLE MARKET							
Single Market integration	EU Trade integration, % (Average intra-EU imports + average intra EU exports)/GDP[2]	31,5	32,2	37,4	39,6	36,9	**42,9**
Compliance	Transposition deficit, % of all directives not transposed[3]	1	1,9	1,8	0,9	0,9	**0,7**
	Conformity deficit, % of all directives transposed incorrectly[3]	0,6	1,1	1	0,7	0,9	**1,1**
	SOLVIT, % resolution rate per country[3]	95,3	93,3	97,0	98,0	95,0	**88,3**
	Number of pending infringement proceedings[3]	18	19	23	23	23	**25,9**
Restrictions	EEA Services Trade Restrictiveness Index[4]	-	-	-	-	-	**0,05**
Public procurement	Single bids, % of total contractors[3]	22	25	23	16	16	**28,6**
	Direct Awards, %[3]	25	26	28	39	29	**8,1**
ECONOMIC STRUCTURE							
Shortages	Material Shortage (industry), firms facing constraints, %[5]	1,4	2,8	2,3	3,7	1,3	**17,2**
	Labour Shortage using survey data (industry), firms facing constraints, %[5]	3,1	2,0	0,6	2,3	3,3	**23,3**
	Vacancy rate, % of vacant posts to all available ones (vacant + occupied)[2]	1,95	1,6	2,6	2,8	2,9	**2,5**
Strategic dependencies	Concentration in selected raw materials, Import concentration index based on a basket of critical raw materials[6]	0,14	0,13	0,14	0,15	0,19	**0,22**
	Installed renewables electricity capacity, % of total electricity produced[2]	9,1	8,9	8,6	21,3	-	**50**
BUSINESS ENVIRONMENT - SMEs							
Investment obstacles	Impact of regulation on long-term investment, % of firms reporting business regulation as major obstacle[7]	27,5	25,4	33,4	39,0	31,0	**22,2**
Business demography	Bankruptcies, Index (2015=100)[2]	43,5	35,9	32,6	20,6	16,3	**105,6**
	Business registrations, Index (2015=100)[2]	-	-	-	-	-	**120,2**
Late payments	Payment gap - corporates B2B, difference in days between offered and actual payment[8]	-	-	-	-	-	**15**
	Payment gap - public sector, difference in days between offered and actual payment[8]	-	-	-	-	-	**16**
	Share of SMEs experiencing late payments in past 6 months, %[9]	51,1	52,3	63,6	63,6	41,6	**48,7**
Access to finance	EIF Access to finance index - Loan, Composite: SME external financing over last 6 months, index values between 0 and 1[10]	0,33	0,29	0,19	0,34	-	**0,49**
	EIF Access to finance index - Equity, Composite: VC/GDP, IPO/GDP, SMEs using equity, index values between 0 and 1[10]	0,07	0,20	0,06	0,05	-	**0,17**

Source: (1) AMECO, (2) Eurostat, (3) Single Market Scoreboard, (4) OECD, (5) ECFIN BCS, (6) COMEXT and Commission calculations, (7) EIB Investment Survey, (8) Intrum Payment Report, (9) SAFE survey, (10) EIF SME Access to Finance Index
* Own Commission calculations for the EU27 average

Cyprus' public administration is essential for the economy's competitiveness by, in particular, shaping the conditions for the twin transitions and creating a favourable business environment. Overall, Cyprus' performance on perceived government effectiveness is still below the EU average (Graph A13.1). Despite improving in 2022, the level of government effectiveness remains lower than in the pre-pandemic period, indicating a need for continued focus on improving public administration and governance. In this context, Cyprus has been implementing reforms under its recovery and resilience plan (RRP) to modernise human resource management in the civil service and improve the public administration's digital transformation. A local government reform, entering in force in July 2024, aims to reduce the number of municipalities to streamline services and strengthen financial autonomy and sustainability.

Graph A13.1: **Government effectiveness**



Average value over 2018-2022 and change over 2018-2022. The GDP per head bar shows the mean value of the government effectiveness indicator for the group of EU countries belonging to the same GDP per head cluster as Cyprus (EU countries are ranked in terms of their GDP per head and grouped into three equally sized clusters).
Source: Worldwide Governance Indicators

Several reforms of the human resource management systems are planned for implementation in 2024. New legislation aims to ensure due consideration of performance in civil servants' appraisal and promotion. In addition, the country will run recruitment competitions in a new examination centre with selection based on meritocratic and objective exams, currently supported by a tailored Technical Support Instrument project.

There are gaps in the quality of best practices for state-owned enterprise (SOE) governance. For example, unlike listed companies, there is no requirement for all large SOEs to be subject to audits by an independent audit firm. There is no comprehensive financial and non-financial reporting on the SOE sector. Nomination procedures for boards fail to adequately protect them from political interference. In addition, board evaluations rely on self-evaluations, with no external evaluators. The evaluation results have no specific consequences for the company's board and management.

The efficiency and quality of the justice system continues to be of serious concern. Despite some improvements, the length of civil, commercial and administrative judicial proceedings is the highest in the EU. Digitalisation in the justice system also faces challenges as e-justice implementation has been slow. On judicial independence, no systemic deficiencies have been reported. However, there are concerns about the independence and accountability of the prosecution service. This is due to the Attorney General's dual role as legal adviser to the government and head of the prosecution service, which has broad discretionary powers that are not subject to any review ([92]).

Cyprus has accelerated the digitalisation of its public administration. Several digital solutions have been put in place during the COVID-19 pandemic, making it easier for the public and small and medium-sized enterprises to request services. Personal digital wallets are also available, giving people a secure way to request, store and share certificates issued by public services. However, there is still a gap with the EU average in the share of e-government users, the e-government benchmark score and the level of digital skills (Graph A13.2). Ongoing RRP measures aim to improve the provision of digital public services, including in health and justice.

(92) For a more detailed analysis, see the 2024 EU Justice Scoreboard and the 2024 Commission's Rule of Law Report (forthcoming).

Table A13.1: **Public administration indicators**

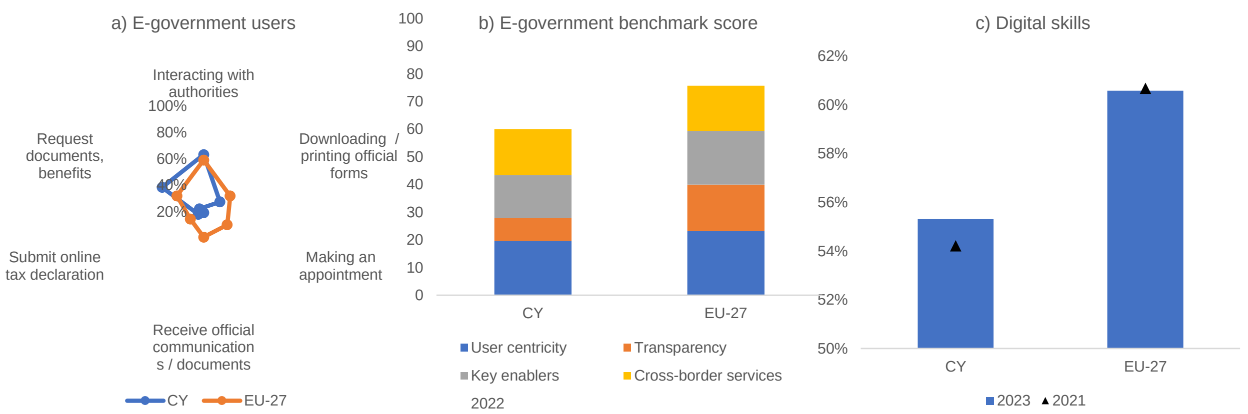
CY	Indicator ([1])	2019	2020	2021	2022	2023	EU-27([2])
E-government and open government data							
1	Share of internet users within the last year that used a public authority website or app	n/a	n/a	n/a	98.7	72.4	75.0
2	E-government benchmark overall score ([3])	n/a	54.4	50.2	53.4	60.1	75.8
3	Open data and portal maturity index	0.8	0.9	0.9	0.9	0.9	0.8
Educational attainment level, adult learning, gender parity and ageing							
4	Share of public administration employees with higher education (levels 5-8, %)	55.6	60.0	61.4 (b)	58.9	62.8	52.9
5	Participation rate of public administration employees in adult learning (%)	9.5	4.8 (u)	12.9 (b)	17.4	13.9	17.9
6	Gender parity in senior civil service positions ([4])	29.2	27.2	20.0	8.4	0.0	9.2
7	Ratio of 25-49 to 50-64 year olds in NACE sector O	2.1	2.0	1.9 (b)	1.7	1.6	1.5
Public financial management							
8	Medium-term budgetary framework index	0.6	0.6	0.8	0.8	n/a	0.7
9	Strength of fiscal rules index	1.1	1.1	1.1	1.1	n/a	1.4
Evidence-based policy making							
10	Regulatory governance	n/a	n/a	0.83	n/a	n/a	1.7

([1]) High values denote a good performance, except for indicator # 6. ([2]) 2023 value. If unavailable, the latest value available is shown. ([3]) 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. ([4]) Defined as the absolute value of the difference between the percentage of men and women in senior civil service positions.
Flags: (b) break in time series; (d) definition differs; (u) low reliability.
Source: E-government activities of individuals via websites, Eurostat (# 1); E-government benchmark report (# 2); Open data maturity report (# 3); Labour Force Survey, Eurostat (# 4, 5, 7); European Institute for Gender Equality (# 6); Fiscal Governance Database (# 8, 9); OECD Indicators of Regulatory Policy and Governance (# 10).

There is room to strengthen the Independent Fiscal Institution of Cyprus. Its secretariat is staffed by government officials and staff numbers are limited by law, which has an impact on its independence and analytical capacity.

The quality of legislation in Cyprus is facing challenges. The country's performance on the indicators on regulatory governance and policy is below the EU average (Table A13.1). Cyprus has taken some steps to institutionalise stakeholder consultations via an online consultation platform, although further measures are needed to ensure a meaningful public participation.

Graph A13.2: **a) Use of public authorities' websites or apps (left side); b) e-government maturity (centre); c) share of individuals with basic or above basic overall digital skills (right side)**



(1) 2023 data. Indicators a and c: % of people who used the internet in the last year.
Source: Eurostat and e-government benchmark report

ANNEX 14: EMPLOYMENT, SKILLS AND SOCIAL POLICY CHALLENGES IN LIGHT OF THE EUROPEAN PILLAR OF SOCIAL RIGHTS

The European Pillar of Social Rights is the compass for upward convergence towards better working and living conditions in the EU. This Annex provides an overview of Cyprus' progress in implementing the Pillar's 20 principles and the EU headline and national targets for 2030 on employment, skills and poverty reduction.

Table A14.1: **Social Scoreboard for Cyprus**

Policy area	Headline indicator	
Equal opportunities and access to the labour market	Adult participation in learning (during the last 12 months, excl. guided on the job training, % of the population aged 25-64, 2022)	28.3
	Early leavers from education and training (% of the population aged 18-24, 2023)	10.5
	Share of individuals who have basic or above basic overall digital skills (% of the population aged 16-74, 2023)	49.5
	Young people not in employment, education or training (% of the population aged 15-29, 2023)	13.8
	Gender employment gap (percentage points, population aged 20-64, 2023)	9
	Income quintile ratio (S80/S20, 2022)	4.3
Dynamic labour markets and fair working conditions	Employment rate (% of the population aged 20-64, 2023)	78.9
	Unemployment rate (% of the active population aged 15-74, 2023)	6.1
	Long term unemployment (% of the active population aged 15-74, 2023)	1.9
	Gross disposable household income (GDHI) per capita growth (index, 2008=100, 2022)	104.1
Social protection and inclusion	At risk of poverty or social exclusion (AROPE) rate (% of the total population, 2022)	16.7
	At risk of poverty or social exclusion (AROPE) rate for children (% of the population aged 0-17, 2022)	18.1
	Impact of social transfers (other than pensions) on poverty reduction (% reduction of AROP, 2022)	30.85
	Disability employment gap (percentage points, population aged 20-64, 2022)	25.7
	Housing cost overburden (% of the total population, 2022)	2.5
	Children aged less than 3 years in formal childcare (% of the under 3-years-old population, 2022)	24.4
	Self-reported unmet need for medical care (% of the population aged 16+, 2022)	0.1

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

Update of 25 April 2024. Members States are categorised based on the Social Scoreboard according to a methodology agreed with the EMCO and SPC Committees. Please consult the Annex of the Joint Employment Report 2024 for details on the methodology.
Source: Eurostat

The Cypriot labour market is performing strongly but there are labour shortages, and challenges remain for young people not in employment, education or training (NEETs), women and persons with disabilities. Despite the expected moderation of economic activity in 2023, the employment rate reached a peak of 78.9% in 2023 and is well above the EU average of 75.3%. On the back of this growth, the unemployment rate fell in 2023 by 0.7 percentage points (pps) year-on-year to 6.1% and is at the EU average. Labour shortages, as measured by the job vacancy rate, were at 2.8% in -2023 (vs EU 2.7 %) and are substantial in construction (16%). Employment challenges persist for specific groups such as NEETs, whose rate (13.8%) is higher than the EU average at 11.2% in 2023, even with a decrease of 0.9 pps, and higher for women than for men (14.8% vs 12.7%). Persons with disabilities also face a relatively wide employment gap (25.7 pps vs 21.4 pps in the EU in 2022), even after narrowing by 1.3 pps since 2021.

Fostering the employment of people outside the labour force, including those with care responsibilities, and increasing participation in early childhood education and care are related priorities. To this end, a law on regulating telework was passed by the Cypriot parliament on 16 November 2023, as included in the recovery and resilience plan (RRP). This law is also expected to further reduce the gender employment gap in Cyprus (9.0 pps in 2023 vs EU 10.2 pps), as well as the gender pension gap, which is one of the widest in the EU (34.3% in 2022). The participation rate in formal childcare for children under 3 years of age was only 24.4% in 2022 (vs EU 35.9%) after a substantial drop of 3 pps. Both the Recovery and Resilience Facility (RRF) and the European Social Fund Plus (ESF+) support investments in early childhood education and care, which are expected to increase their accessibility for children in Cyprus, while helping reconcile family and working life for those with care responsibilities. Implementation of the European Child Guarantee is ongoing as described in the Cypriot progress report. Addressing these challenges, along with additional measures, would support progress towards the 2030 national employment target of 80%.

Basic skills have further deteriorated and there is a low level of digital skills. Skills mismatches persist, especially in the areas of science, technology, engineering and mathematics (STEM), and the green and digital transitions. The early school leaving rate further decreased in Cyprus but remains above the EU average for people born outside the EU. However, the 2022 OECD Programme for International Student Assessment (PISA) shows that pupils' basic skills are below average and have worsened compared to 2018 (see Annex 15). A low level of basic skills hinders a person's future development: only 39.8% of the working age population is employed in high-skilled jobs (vs EU 44.2%). STEM students were only 11.2% of all graduates in 2021 (vs EU 25.4%), one of the lowest rates in the EU, while demand for STEM jobs by 2032 is forecast to be 50% more than the supply in 2021. Digital literacy is low overall: only 49.5% of the population had at least basic digital skills in 2023, below the EU average of 55.6%. In addition, there is a strong skills mismatch: in 2022, 31.8% of employed people were over-qualified for their job, 9.6 pps more than the EU average. The share of upper secondary students enrolled in vocational education and training programmes in 2021 was very low at 17.6% (vs EU 52.1%), while share of tertiary graduates (25-34 year-olds) in 2023 was the highest at 61.6% (vs EU 43.1%). Adult learning has a limited potential to correct this situation as the proportion of those aged 25-64 participating in learning in the previous 12 months was 28.3% in 2022 (vs EU 39.5%), a substantial decrease from 44.8% in 2016. Along with deteriorating levels of basic skills and skills mismatches, the low rates of adult participation in learning undermine Cyprus's potential to improve its economic competitiveness. Besides the considerable additional efforts needed, training programmes (including for young NEETs) and the modernisation of vocational education and training systems financed by the RRP and the ESF+ are expected to reduce skills mismatches and contribute to achieving the ambitious national target of at least 61% of adults participating in training every year by 2030.

The high share of people in specific groups at risk of poverty or social exclusion (AROPE) in 2022 remains a challenge, while low purchasing power and limited access to long-term care persist. The AROPE rate improved to 16.7% in 2022 (17.3% in 2021), below the EU average of 21.6%. It was much higher for persons with disabilities, at 28%. The impact of social transfers on reducing poverty decreased by almost 7 pps from 2021 (37.6%) to 2022 (30.8%) ([93]). This is an area to watch, because the growth in real gross disposable household income (GDHI) per person in Cyprus was one of the lowest in the EU in 2022. Cyprus introduced a universal statutory minimum wage on 1 January 2023, which is expected to safeguard the purchasing power of people earning low wages. It should also help alleviate the risk of in-work poverty, which is one of the highest in the EU for people born outside the EU (23.1% in 2022 vs EU 19.9%). From January 2024, the minimum wage will be readjusted every 2 years based on specific criteria, including the purchasing power of the minimum wage in view of variations in the cost of living. Access to social protection benefits is uneven, as self-employed people are not entitled to unemployment benefits or benefits for accidents at work or occupational diseases. This will be partly addressed in the revised law on social insurance as promoted in the RRP.

Table A14.2: **Situation of Cyprus on 2030 employment, skills and poverty reduction targets**

Indicators	Latest data	Trend (2016-2023)	2030 target	EU target
Employment (%)	78.9 (2023)		80	78
Adult learning[1] (%)	28.3 (2022)		61	60
Poverty reduction[2] (thousands)	-12 (2022)		-10	-15,000

(1) Adult Education Survey, special extraction: adults in learning in the past 12 months, special extraction excl. guided on-the-job training
(2) Change in the number of persons at risk of poverty or social exclusion (AROPE), reference year 2019.
Source: Eurostat, DG EMPL

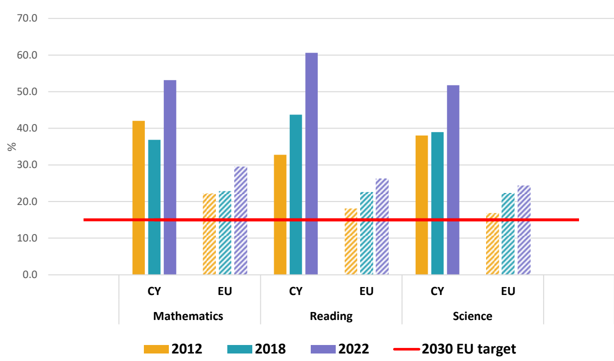
The development of the social economy and social inclusion services will help improve equal opportunities and assist people in vulnerable situations. This is key for those in need of home-care support and for persons with disabilities. Public funding for long-term care is low at 0.33% of GDP in 2021, less than a fifth of the EU average (1.74%), while the share of the population in need well exceeds the EU average, with very strong disparities between income quintiles. This imposes caregiving obligations on people, which has an impact on activity rates. Staff shortages pose a challenge to the health system (there are 5.2 nurses per 1 000 inhabitants, well below the EU average of 8.3). The RRP and ESF+ support investments in infrastructure for long-term care and services for older people and persons with disabilities. By 2022, Cyprus had reached its national 2030 target of reducing the number of persons at risk of poverty or social exclusion by at least 10 000 people compared to 2019, including its complementary target on child poverty (to reduce by 3 000).

([93]) A break in series is flagged for this indicator for 2022.

This Annex outlines the main challenges of Cyprus's education and training system based on the 2023 Education and Training Monitor and the 2022 OECD Programme for International Student Assessment (PISA) results.

Cypriot students' underachievement rate in basic skills continues to increase and is one of the highest at EU level. The 2022 OECD Programme for International Student Assessment (PISA) [94] showed that 60.6% of Cypriot 15-year-olds could not identify the main idea in a text of moderate length and reflect on its purpose. 53.2% had difficulties in interpreting and recognising how a simple situation can be represented mathematically. 51.8% could not recognise the correct explanation for familiar scientific phenomena and draw evidence-based conclusions, putting Cyprus among the worst performers. Cyprus recorded the highest increase since 2012 (+27.9 pps vs EU +8.2 pps) in the share of underachievement.

Graph A15.1: **Underachievement rates by field, PISA 2012, 2018 and 2022**



Source: OECD (2023).

The strong decline in students' performance in basic skills might affect the country's competitiveness and social cohesion. Low performance in all three tested subjects has grown over the entire socio-economic distribution since the previous PISA cycle (2018). Cyprus recorded the largest increases among all Member States since 2018 for both the top quartile rate (10.6 pps vs EU 2.2 pps) and the bottom quartile (17.6 pps vs EU 9.9 pps). As a result, one in three students underachieve even in the most advantaged group, while for disadvantaged learners, this reaches 69.8%. In contrast, the underperformance rate of foreign-born students is lower compared with native-born students (Table A15.1), although the increase in the percentage of students with migrant background during the last decade was one of the highest in the EU (11.1 pps). All this points to severe challenges for the Cypriot education system that may affect even adult participation in learning (see Annex 14). These trends point to structural challenges; reforms are more than necessary to improve educational outcomes and address strong socio-economic disparities in education, equity, quality, and inclusion. For instance, schools have little autonomy (a factor that is associated with better outcomes), and competence-based teaching methods are yet to be further developed and implemented together with a culture of evaluation. An early warning system and developing pathways to school success could, in particular, help low-achieving students.

The teaching profession is attractive in Cyprus and teachers are highly qualified. Teachers' salaries and working conditions compare favourably with those of their European peers. Teaching was the first-choice career for 70% of teachers in Cyprus (vs EU-22 average 67%). Half of lower secondary teachers in Cyprus (49.7%) hold a master's degree, a much higher rate than for other EU countries, and 8% of them hold a PhD (Eurydice, 2021). In addition, the country has a large supply of candidate teachers. Promotion is the main incentive for continuous professional development. Although a new approach to teachers' evaluation has been high on the political agenda for many years, and also part of the Cyprus recovery and resilience plan [95], it is still not legislated. An effective teacher and school evaluation process could help improve education outcomes.

Consistent efforts continue to extend compulsory preschool education under the national recovery and resilience plan (RRP). Between 2020 and 2021, the participation rate in early childhood education and care above the age of 3 dropped by 5.3 pps to 85.8%, well below the EU-level target of 96%. More children are in preschool from age 4+ (87.7%) as 4 years and 8

[94] OECD (2023), PISA 2022 Results (Volume I): [The State of Learning and Equity in Education]

[95] Education and Training Monitor 2023, Volume II.

Table A15.1: **EU-level targets and other contextual indicators under the European Education Area strategic framework**

Indicator			Target	2012 Cyprus	2012 EU-27	2018 Cyprus	2018 EU-27	2023 Cyprus	2023 EU-27
[1]Participation in early childhood education (age 3+)			96%	69.4% [2013]	91.8% [2013]	88.4%	92.2%	85.8% [2021]	92.5% [2021,d]
[2]Low-achieving 15-year-olds in:		Reading	< 15%	32.8%	18.0%	43.7%	22.5%	60.6% [2022]	26.2% [2022]
		Mathematics	< 15%	42.0%	22.1%	36.9%	22.9%	53.2% [2022]	29.5% [2022]
		Science	< 15%	38.0%	16.8%	39.0%	22.3%	51.8% [2022]	24.2% [2022]
Early leavers from education and training (age 18-24)	[3]Total		< 9 %	11.4%	12.6%	7.8%	10.5%	10.5%	9.5%
	[3] *By gender*	*Men*		16.5%	14.5%	9.9%	12.1%	11.2%	11.3%
		Women		7.0%	10.6%	6.0%	8.7%	10.0%	7.7%
	[4] *By degree of urbanisation*	*Cities*		9.8% [b]	11.2%	7.9%	9.4%	8.2%	8.6%
		Rural areas		12.2% [b]	14.0%	4.8% [u]	11.0%	13.2%	9.9%
	[5] *By country of birth*	*Native*		8.0%	11.3%	6.2%	9.2%	5.2%	8.2%
		EU-born		22.7%	26.2%	14.7% [u]	22.4%	27.1%	21.0%
		Non EU-born		18.8%	30.1%	13.4% [u]	23.0%	24.2%	21.6%
[6]Socio-economic gap (percentage points)				39.1	:	30.1	29.5	37.1 [2022]	37.2 [2022]
[7]Exposure of VET graduates to work-based learning			≥ 60% (2025)	:	:	:	:	39.2%	64.5%
Tertiary educational attainment (age 25-34)	[8]Total		45%	53.6%	34.1%	58.5%	38.7%	61.6%	43.1%
	[8] *By gender*	*Men*		46.9%	29.1%	49.9%	33.3%	53.4%	37.6%
		Women		59.8%	39.2%	66.5%	44.2%	69.2%	48.8%
	[9] *By degree of urbanisation*	*Cities*		58.6% [b]	43.5%	64.5%	49.0%	66.8%	53.3%
		Rural areas		42.0% [b]	24.8%	45.0%	27.7%	49.9%	31.7%
	[10] *By country of birth*	*Native*		61.3%	35.4%	65.6%	39.7%	71.3%	44.2%
		EU-born		39.6%	29.3%	40.2%	36.7%	39.1%	40.2%
		Non EU-born		39.6%	24.2%	43.1%	31.0%	44.9%	37.1%
[11]Participation in adult learning (age 25-64)			≥ 47% (2025)	:	:	44.8% [2016]	37.4% [2016]	28.3% [2022]	39.5% [2022]
[12]Share of school teachers (ISCED 1-3) who are 55 years or over				7.5% [2013]	22.7% [2013]	15.8%	23.8%	16.6% [2021]	24.5% [2021]

Notes: b = break in time series; d = definition differs; e = estimated; p = provisional; u = low reliability; : = data not available.
Source: 1,3,4,5,7,8,9,10,12=Eurostat; 11= Eurostat, Adult Education Survey; 2,6=OECD, PISA.

months is currently the starting age of compulsory education. Based on the revised Barcelona target, Cyprus should increase the participation rate in formal childcare for children under 3 by 12.6 pps, to 40.6% in 2030 (from an average of 28% in 2017-2021). The national authorities planned consistent measures to increase affordability of early childhood education and care, through the ESF+, the Recovery and Resilience Facility and the EU Technical Support Instrument. Cyprus committed to extending compulsory pre-primary education from the age of 4 under its RRP. The relevant law was adopted by the Parliament in March 2024.

Cyprus faces structural difficulties in integrating minors into the formal education system. In 2022, the share of young people (18-24-year-olds) having left education and training prematurely decreased compared with the previous year by 2.1 pps to 8.1% (EU 9.6%). This was the first decrease recorded after steady increases since 2015 and it is mainly due to the 2022 drop by 5.3 pps in the share among the non-EU born population. However, the gap between native and non-EU born youngsters is still the widest in the EU, at 22.7 pps.

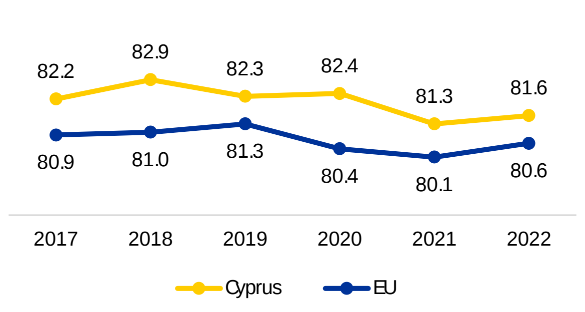
Cyprus is a leading EU country in tertiary educational attainment. At 61.6% in 2023 (EU 43.1%), Cyprus is above the EU target for 2030 (45%) and increasing steadily. The employment rate of recent tertiary graduates is close to the EU average (82.7% vs 87.7% in 2023), having increased significantly by 17.8 pps during the last decade. Skills and labour shortages persist, especially related to the science, technology, engineering and mathematics (STEM) fields and the green and digital transitions (see Annex 14).

Education for environmental sustainability (EES) is a key aspect of Cypriot education. By giving emphasis to EES in the new primary and secondary curricula, Cyprus aims at creating a long-lasting awareness in schools of the need to address global warming, climate change, energy, and urban development. EES is part of professional development courses for teachers.

A healthy population and an effective, accessible and resilient health system are prerequisites for a sustainable economy and society. This Annex provides a snapshot of population health and the health system in Cyprus.

Despite a sharp decline in 2021, life expectancy in Cyprus rebounded slightly in 2022 and remains well above the EU average. Before 2020, and against an overall EU trend of increasing life expectancy, life expectancy appeared to be plateauing in Cyprus. In 2020, mortality from COVID-19 was low in Cyprus, but in 2021 it almost quadrupled and was a key factor in the reduction in life expectancy that year. Life expectancy increased slightly in 2022 even though mortality from COVID-19 remained at the same level as in 2021 ([96]). Cyprus fares comparatively well with respect to avoidable mortality, which is also reflected in its relatively low cancer mortality rate. In 2021, the leading causes of death were diseases of the circulatory system ('cardiovascular diseases'), with mortality rates decreasing over the last decade, followed by cancer, for which mortality rates have remained unchanged. The third leading cause of death was endocrine, nutritional and metabolic diseases (e.g. diabetes).

Graph A16.1: **Life expectancy at birth, years**



Source: Eurostat

Health spending in Cyprus increased to 9.1% of GDP in 2021 but remained below the EU average. The 2019-2020 health system reform introduced universal health coverage and unified a previously fragmented system. This pushed up the public share of health spending to 85.3% in 2021 (above the EU average of 81.1%) and reduced what was the highest level of out-of-pocket spending for healthcare in the EU. Concretely, out-of-pocket spending for healthcare in Cyprus accounted for 10.0% of total health spending in 2021, well below the EU average of 14.5%. The reform made healthcare more affordable and reduced self-reported levels of unmet needs for medical care, placing Cyprus among the top performing countries in the EU according to 2022 data (also see Annex 14). Cyprus spends more per capita on inpatient care than the EU overall, a reflection of increased spending for COVID-19 care. On the other hand, spending per capita is below the EU averages for outpatient care, pharmaceuticals and medical devices, disease prevention and long-term care. The relatively low expenditure on long-term care can be attributed to the absence of a dedicated framework for long-term care provision in Cyprus, including home care services. To improve the quality of health spending, under its recovery and resilience plan (RRP), Cyprus has already begun a gradual move towards value-based models for healthcare provision and its reimbursement system. Based on the age profile of the Cypriot population, public expenditure on health is projected to increase by 0.8 percentage points (pps) of GDP by 2070, compared to 0.6 pps for the EU overall (see Graph A16.2 and Annex 21).

Spending on prevention remains among the lowest in the EU. Between 2019 and 2021, spending on prevention in Cyprus as a proportion of total health expenditure increased from 1.2% to 2.2%. Despite this increase, Cyprus was among the few EU countries that spent less than 3% of total healthcare spending on prevention in 2021, compared with an EU average of 6.0%. Proportionally, budget shares for prevention across the EU increased most (between 2019 and 2021) for emergency response, disease detection and immunisation programmes. Between 2019 and 2021, Cyprus saw a remarkable proportional increase in reported spending on early disease detection programmes. Also in the field of public health, there is concern about the high level of consumption of antibacterials in Cyprus, which could accelerate antimicrobial resistance. Cyprus is among the five EU countries with the highest morbidity and mortality attributable to

([96]) Based on data provided directly by Member States to the European Centre for Disease Prevention and Control, under the European Surveillance System.

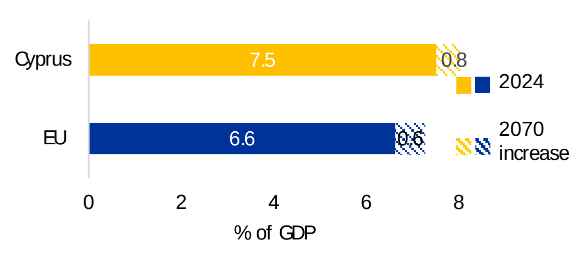
Table A16.1: **Key health indicators**

	2018	2019	2020	2021	2022	EU average (latest year)
Treatable mortality per 100 000 population (mortality avoidable through optimal quality healthcare)	78.9	77.1	70.5	78.4	NA	93.3 (2021)
Cancer mortality per 100 000 population	204.6	195.4	205.6	213.2	NA	235.4 (2021)
Current expenditure on health, % GDP	6.8	7.1	8.3	9.1	NA	10.9 (2021)
Public share of health expenditure, % of current health expenditure	42.0	54.2	74.9	85.3	NA	81.1 (2021)
Spending on prevention, % of current health expenditure	1.3	1.2	1.6	2.2	NA	6.0 (2021)
Available hospital beds per 100 000 population	318	311	317	312	NA	525 (2021)
Doctors per 1 000 population	4.1	4.3	4.7	4.9	NA	4.1 (2021)*
Nurses per 1 000 population	5.3	5.3	5.2	5.0	NA	7.9 (2021)
Total consumption of antibacterials for systemic use, daily defined dose per 1 000 inhabitants per day ***	28.0	30.1	28.9	25.0	33.5	19.4 (2022)

Note: The EU average is weighted for all indicators except for doctors and nurses per 1 000 population, for which the EU simple average is used. Doctors' density data refer to practising doctors in all countries except Greece, Portugal (licensed to practise) and Slovakia (professionally active). Nurses' density data refer to practising nurses in all countries except Ireland, France, Portugal, Slovakia (professionally active) and Greece (hospital only).
Source: Eurostat Database; except: * OECD, ** Joint Questionnaire on non-monetary healthcare statistics, *** ECDC, **** Council Recommendation on stepping up EU actions to combat antimicrobial resistance in a One Health approach.

infections with resistant bacteria ([97]). Total consumption of antibacterials in 2022 (33.5 daily defined doses per 1 000 population) increased by 11% compared to 2019 and was well above the EU average. Under the Council Recommendation on stepping up EU actions to combat antimicrobial resistance in a One Health approach, the national recommended target for Cyprus is to reduce total consumption of antibiotics by 27% by 2030 compared to the 2019 level. To address this, Cyprus' RRP contains a measure to set up an electronic platform for monitoring antibiotic consumption.

Graph A16.2: **Projected increase in public expenditure on healthcare over 2024-2070**



Baseline scenario
Source: European Commission / EPC (2024)

Staff and bed shortages jeopardise the health system's long-term performance. The number of doctors per 1 000 population is above the EU average, while the number of nurses is below it, and the number of graduates in both professions considerably lower than the EU average. The age profile of active physicians (40.6% aged 55 or above) raises concerns for the long-term accessibility of health services. The limited availability of some specialists translates into longer waiting times for consultations and elective surgery. Both healthcare and long-term care are affected by nurse shortages. The increasing need for long-term care calls for more comprehensive measures, aimed at optimal service provision across all aspects of care (see also Annex 14). Cyprus had 312 hospital beds per 100 000 population in 2021, still below the EU average of 525 beds, mirroring pre-pandemic trends. Private hospital beds and staff were requisitioned as part of the pandemic response. As more private providers are now contracting with the General Healthcare System, access to emergency departments is improving.

Through its RRP, Cyprus plans a wide range of investments and reforms in the healthcare sector. Around EUR 69.6 million (5.7% of the RRP's total value) will be spent on health. Historical levels of investment in healthcare in Cyprus, measured in terms of gross fixed capital formation as share of GDP, are among the lowest in the EU. An impetus for higher investment may come from Cyprus' RRP. In this, Cyprus is focusing on modernising state hospitals, procuring equipment and rolling out digital and interoperable e-health services. Complementary investments worth EUR 8.3 million in digital health services and applications are also

([97]) See: ECDC/EFSA/EMA third joint report on the integrated analysis of the consumption of antimicrobial agents and occurrence of antimicrobial resistance in bacteria from humans and food-producing animals (JIACRA III) (europa.eu).

envisaged under the cohesion policy funds in the period 2021-2027 [98].

[98] The EU cohesion policy data reflect the status as of 13 May 2024.

Annex 17 showcases the economic and social regional dynamics in Cyprus. It provides an analysis of economic, social and territorial cohesion in the Cypriot regions and assesses emerging investment and subnational reform needs to foster economic growth, social development and competitiveness in the country.

Overview of economic and social performance at regional level

Cyprus has been progressively recovering from its economic crisis since 2015, demonstrating resilience in its economic growth. While its GDP per capita remains below the EU average, it has been gradually converging towards it. The real GDP per capita grew at an annual rate of 1.1% between 2012 and 2021, marginally higher than the EU average (1%), to reach 94% in 2021-2022. Cyprus was not classified to be in a development trap between 2003 and 2021 (99).

In terms of labour productivity, Cyprus has shown progress, albeit with some room for improvement when compared to the EU average. It reached 86% in 2021-2022, despite a stronger annual growth (0.7%) compared to the EU (0.4%) between 2012 and 2021.

Cyprus lags in competitiveness and investments. In 2022, it ranked below the EU average in terms of competitiveness (100). Moreover, the investment rate in 2022 (gross fixed capital formation as a share of GDP) was 20.4%, lower than the EU rate (22.5%), with expenditures in R&D notably low (0.8%, compared to 2.23% in the EU). Employment in high-technology and knowledge-intensive sectors was around the EU average (4% and 42%, respectively).

The Cypriot economy relies strongly on services. Services accounted for 84.7% of total Gross Value Added in 2022 (72% for the EU). Labour productivity per person employed varied from 137% of the EU average in the information and communication sector to a low of 58% in industry (excluding construction).

A socio-economic urban-rural divide persists in Cyprus. The rural-urban divide was more pronounced in terms of high educational attainment in 2022. In cities, 54.3% of the population aged 25-64 held a tertiary degree, but this share dropped to 40.3% in towns and suburbs and further to 36.7% in rural areas. The share of early leavers from education and training (age 18-24), as well as the NEET (not in education, employment or training) share, tended to be higher in cities and towns and suburbs compared to rural areas (Table A17.1).

In 2022, the labour market was most dynamic in towns and suburbs, also featuring the lowest gender employment gap. The employment rate for ages 20-64 in Cyprus (77.9%) slightly exceeded the EU average (74.6%). Towns and suburbs were in the lead (79.8%), followed by cities (78.0%) and rural areas at the bottom (76.0%). The gender employment gap in rural areas (17.3 percentage points) was double that of towns and suburbs (9.1 percentage points) while cities had a gap of 11.4 percentage points. However, reflecting lower activity and low female employment, rural areas had the lowest unemployment rate (5.9%), followed by cities (6.9%) and towns and suburbs at the highest (7.3%).

Cyprus achieved positive social outcomes. The risk of poverty or social exclusion (AROPE (101)) standing at 16.7% in 2022, was lower than the EU average (21.6%) across different urbanisation levels. However, the risk of poverty and social exclusion was notably higher in rural areas (20.9%) compared to 16.0% in towns and suburbs and 15.6% in cities. The material and social deprivation (MSD (102)) rate, recorded at 11.0% in 2022, was below the

(99) Region is classified to be in a development trap if it has experienced an extended period (>16 years) of below-average growth in GDP, productivity and employment during 2003-2021.

(100) 2022 Regional Competitiveness Index, EU-27 = 100.

(101) Risk of poverty or social exclusion (AROPE) relates to people who are in at least one of the situations: risk of monetary poverty (AROP in the previous year), severe material and social deprivation (SMSD in the concurrent year) and very low work intensity of household (VLWI in the previous year).

(102) Material and social deprivation (MSD) rate is a proportion of population experiencing an enforced lack of at least 5 out of 13 deprivation items (6 individual and 7 household items). Severe MSD means an enforced lack of at least 7 out of 13 items. The SMSD rate for Cyprus is 2.7%, compared to the EU average of 6.7%.

Table A17.1: **Main socio-economic indicators by degree of urbanisation, Cyprus, 2022 (%)**

	Emplyment rate 20-64	Male employment rate	Female employment rate	Employment rate gender gap (pp dif. female - male)	Unemployment rate 15+ (% of labour force)	NEET 15-34	Early leavers 18-24	Population 25-64 with tertiary education	At risk of poverty or social exclusion rate	At risk of poverty rate	Social and material deprivation rate
Total	77.9	84.2	72.1	-12.1	6.8	14.4	8.1	48.2	16.7	13.9	11.0
Cities	78.0	83.9	72.5	-11.4	6.9	15.0	8.6	54.3	15.6	12.6	8.9
Towns and suburbs	79.8	84.4	75.3	-9.1	7.3	13.9	10.0	40.3	16.0	13.4	13.1
Rural areas	76.0	85.0	67.7	-17.3	5.9	12.6	4.8	36.7	20.9	18.5	15.3

Source: Eurostat, EDGAR database

EU average (12.7%) only in cities (8.9%). In contrast, it was elevated in rural areas (15.3%) and towns and suburbs (13.1%).

The population is expanding, yet ageing might soon become a challenge having inevitable consequences for the economy. The population has expanded by an average rate of 4.9 per 1 000 residents between 2012 and 2021. This growth is attributed to natural increases (4.1 per 1000 per year), with a modest contribution from net migration (+0.8 per 1 000 per year). The population aged 65 and over increased at an annual rate of 30 per 1 000 residents between 2012 and 2021, raising their share to 17%. However, it remains one of the lowest in the EU. Meanwhile, the working-age population increased by 2.8 per 1 000 residents per year while the increase in the number of young people (under 20 years old) was modest (5.9 per 1 000 residents per year).

Investment and subnational reform needs ahead

Cyprus faces major challenges in sustainable transport, requiring investment in public transport, electric vehicles, pedestrian, and bicycle infrastructure. In order to accomplish its energy transition, the country also needs additional investment in renewable energy, storage solutions and energy efficiency. Cyprus could also benefit from the opportunities of the STEP initiative to support its energy transition through clean and resource efficiency technologies, including net-zero technologies. In addition, Progress towards a circular economy in waste management is critical and requires investment in recycling capacity, waste reduction and waste-to-energy projects. Improving water management, especially wastewater treatment, is essential to comply with the Urban Wastewater Treatment Directive. Furthermore, the protection of the environment and biodiversity is of vital importance, especially for the EU Natura 2000 network, which requires sufficient resources for effective management.

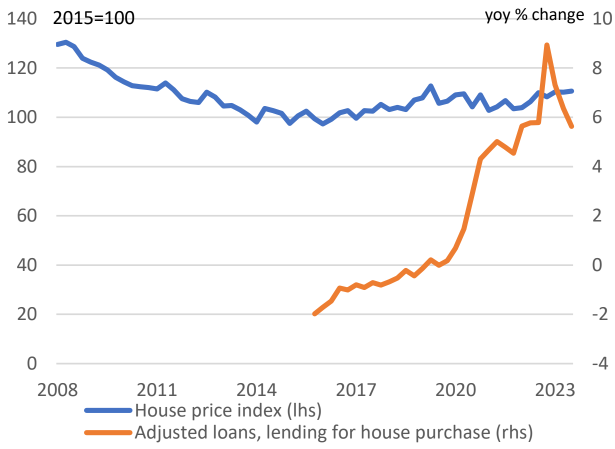
Ahead of Cyprus' legislative reform in local government, set for June 2024, which includes an increase in local government competences and the creation of five District organisations for local administration, there is a pressing need to boost the capacity and efficiency of local authorities. These organisations will be responsible for strategic services like water supply, sewage, solid waste management, and issuing urban planning and building permits at district level. Given this context, it is important that local authorities prioritise the digitisation and professionalisation of their administrative processes. Additionally, ensuring interoperability between the different levels of government is essential for maintaining effective service delivery across different administrative layers. Moreover, it is vital for these authorities to actively engage in Integrated Territorial Investments, as part of broader integrated territorial and local development strategies. This approach, along with the adoption of other territorial tools, will be instrumental in fostering sustainable and cohesive regional development.

The Cypriot banking sector remains a fundamental pillar of the country's economy, despite experiencing significant downsizing since the 2012-2013 financial crisis. Total banking-sector assets stood at EUR 68.3 billion, or 228% of GDP in September 2023, which is below the EU average of 257%. The sector consists of six local banks, four subsidiaries and several branches of foreign banks. The top five lenders hold approximately 92% of total banking-sector assets. The sector is dominated by domestic banks, which accounted for about 78% of total assets in September 2023 (see Table A18.1).

Overall, in 2023, the Cypriot banking sector retained a solid capital position, operated with high liquidity levels, and recorded strong profits. The total-own-funds ratio reached a record high of 23.9% in September 2023, up from 21.2% in December 2022, driven by improved profitability. The bulk of the profits came from banks' excess liquidity placed with the European Central Bank (ECB) and from higher interest rates on variable-rate loans (by mid-2023, almost 70% of household loans in Cyprus were on variable interest rates). Interest cost was contained due to the low pass-through of the interest-rate hikes to deposits. Cypriot banks operate with abundant liquidity. The sector's loan-to-deposit ratio of 44.3% is one of the lowest in the euro area, and therefore banks have little incentive to increase interest rates on savings accounts to attract additional deposits. Deposits remain the primary funding source for Cypriot banks. In June 2023, the sector's liquidity coverage ratio was 330%, which is well above the minimum requirement of 100%, and nearly double the euro area average. Furthermore, banks have reduced staff costs and other administrative expenses, mainly through the digitalisation of operations. This has resulted in a significant improvement in the cost-to-income ratio, which dropped to 33.3% in September 2023 from 68.7% in December 2022, and to an annualised return on equity of 22.1%.

The Cypriot banking system has significantly improved its asset quality in recent years. After considerable progress in the work-out of non-performing loans (NPLs), there have been no further outright NPL sales since January 2022. Banks resorted to organic actions to manage their legacy NPLs, resulting in a slow pace of NPL reduction, although progress varies across different banks. The overall NPL ratio declined to 4% ([103]) in September 2023, yet it remains one of the three highest in the EU, above the EU average of 1.8%. Inflation and prevailing high interest rates are challenges that pose a risk to banks' asset quality in the near future. Inflation, for as long as it remains above its long-term average, puts extra pressure on the finances of households and corporations. Moreover, interest rates have been increasing, and thus borrowers could come under pressure as they face a higher debt-servicing burden. Adverse macro-financial dynamics or heightened geopolitical risks could also negatively impact banks' asset quality.

Graph A18.1: **Lending for house purchases and changes in house prices**



Source: ECB

Housing prices have continued to increase, while growth in new lending has been hindered by higher interest rates and weakening debt-servicing capacity. In 2023, total new loans, excluding restructurings, amounted to EUR 3.27 billion, around the same levels as in 2022. Lending for house purchases fell below last year's level as households were deterred by higher borrowing and construction costs. Nevertheless, residential property prices continued increasing in 2023, supported by

([103]) Source: ECB. This NPL ratio differs from the NPL ratio in the 2024 Cyprus Post Programme Surveillance Report. The latter uses data from the Central Bank of Cyprus (CBC), which excludes from loans and advances to central banks and credit institutions and stood at 8.3% in September 2023.

Table A18.1: **Financial Soundness Indicators**

	2017	2018	2019	2020	2021	2022	2023	EU	Median
Total assets of the banking sector (% of GDP)	395.9	322.8	282.7	293.8	288.5	244.1	228.2	257.0	184.6
Share (total assets) of the five largest banks (%)	84.2	86.9	85.7	86.5	87.3	91.9	-	-	69.6
Share (total assets) of domestic credit institutions (%)[1]	80.9	78.3	78.3	78.6	78.6	77.2	77.7	-	62.9
NFC credit growth (year-on-year % change)	0.3	3.5	2.2	1.9	1.7	0.8	-2.3	-	2.4
HH credit growth (year-on-year % change)	0.0	-0.2	-0.2	3.0	2.5	7.3	1.3	-	1.4
Financial soundness indicators:[1]									
- non-performing loans (% of total loans)	30.7	20.2	18.1	11.0	5.6	4.5	4.0	1.8	1.8
- capital adequacy ratio (%)	16.3	17.1	19.9	20.3	20.6	21.2	23.9	19.6	20.1
- return on equity (%)[2]	-11.9	7.1	3.5	-3.3	0.6	5.1	22.1	9.9	13.2
Cost-to-income ratio (%)[1]	53.6	62.3	72.3	63.2	71.9	68.7	33.3	52.8	44.9
Loan-to-deposit ratio (%)[1]	71.9	60.3	60.0	56.7	46.8	44.1	44.3	93.3	80.2
Central bank liquidity as % of liabilities	1.6	1.5	0.0	3.8	10.5	8.7	7.6	-	0.7
Private sector debt (% of GDP)	303.6	281.8	265.5	267.2	242.1	213.4	-	133.0	118.4
Long-term interest rate spread versus Bund (basis points)	230.6	177.8	132.3	138.7	74.2	181.7	147.9	107.7	104.2
Market funding ratio (%)	13.0	15.0	19.9	20.5	21.3	22.2	-	50.8	39.8
Green bonds outstanding to all bonds (%)[3]	-	-	-	-	-	1.2	1.4	4.0	2.7

1-3	4-10	11-17	18-24	24-27	Colours indicate performance ranking among 27 EU Member States.

(1) Last data: Q3 2023.
(2) Data is annualized.
(3) Data available for EA countries only, EU average refers to EA area.
Source: ECB, Eurostat.

demand from foreign buyers (see Graph A18.1). Conversely, business loan volumes increased in 2023 compared with the previous year as corporates required additional credit lines, primarily to cover working capital needs. Regardless of the level of prevailing interest rates, the high level of private indebtedness, at 214% of GDP, limits investing opportunities for banks and constrains credit expansion.

On the policy side, there has been progress with both the mortgage-to-rent scheme, and reforms to facilitate the work-out of NPLs. The long-awaited mortgage-to-rent scheme was announced in July 2023, aiming at safeguarding vulnerable non-performing borrowers from being evicted from their homes. In December 2023, following lengthy discussions, the Cypriot Parliament agreed on a package of amending laws that promote out-of-court resolution and improve transparency during the work-out of NPLs. Unresolved disputes will be examined by specialised NPL district courts. These developments offer an additional safety net to eligible borrowers in default and are expected to end the repetitive suspensions of the foreclosure framework.

The local capital market remains underdeveloped, with banks serving as the primary source of funding for individuals and corporates. Cyprus ranks low in the EU as regards non-bank financing. Households and non-financial corporations predominately hold their financial assets in cash and bank deposits. The market funding ratio in Cyprus is 22%, significantly below the EU average of 51%. The local stock and bond markets are small, and access to alternative sources of finance is particularly difficult for startups, and for research and innovation projects. In the fund-management industry, alternative investment funds are growing strongly. There is increasing interest among investors in authorised companies under the scope of the Alternative Investment Fund Managers Directive. The financial industry in Cyprus has also seen improvements in its digital performance, and while the fintech industry is still in its early stages, it is expanding, with domestic banks increasingly investing in digital and mobile channels.

In the area of sustainable finance, the Cypriot government issued its inaugural 10-year sustainable bond in April 2023. The bond featured an annual yield of 4.219% and raised EUR 1 billion. The proceeds were earmarked to finance projects and activities that: (i) promote sustainability; (ii) combat climate change; or (ii) have other environmental and social purposes.

The insurance sector remains resilient with a solvency ratio that surpasses the EU average. Despite its small size, the sector is highly competitive, with many insurance suppliers relative to the population. The total assets of all insurers is equivalent to 16.3% of GDP, compared to 56.1% in EU. The sector maintains strong solvency, with the corresponding ratio standing at a robust 306% in December 2022, surpassing the EU average of 259%, although this varies between life and non-life insurers and across companies.

This annex provides an indicator-based overview of Cyprus's tax system. It includes information on the types of tax that Cyprus derives most of its revenue from, the tax burden on 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 (ATP).

Cyprus's tax revenues as a percentage of GDP are slightly lower than the EU aggregate and property taxes are low. Table A19.1 shows that Cyprus's tax revenues as a share of GDP were below the EU aggregate in 2022, although almost 2 pps higher than in 2021. The share of labour taxes, as a share of both GDP and total tax revenues, was well below the EU average, and revenues from consumption taxes and environmental taxes were slightly above the EU average. However, pollution and resources taxes account for only 1.3% of environmental taxes, so the 'polluter pays' principle could be strengthened. Cyprus is not advanced in the implementation of such taxes and does not have any of the six main types of pollution and resources taxes. There is therefore scope to implement taxes on NOx emissions, discharge of waste into water, incineration and landfilling, fertilisers, pesticides and plastic products. Revenues from property taxes were relatively low as a percentage of both GDP and total tax revenue. Revenues from recurrent property taxes, which are among the taxes least detrimental to growth, were among the lowest in the EU (as a percentage of GDP). In fact, Cyprus currently has no immovable property tax. Tax revenues could therefore be increased by making greater use of currently underused tax types, such as property taxes.

Cyprus's Recovery and Resilience Plan (RRP) includes measures to make Cyprus's tax system greener. The green taxation reform aims to address environmental challenges related to climate change, air pollution, waste management, water pollution and water management. The reform consists of the introduction of a carbon tax (initially on fuels), a levy on water and a charge on household/landfill waste. The reform is expected to be accompanied with compensatory measures to alleviate the impact on affected sectors. The government aims to ensure that the tax reform is budget-neutral, with revenue generated from green taxes being returned to households and businesses through reimbursement or incentives, such as subsidies for electric vehicles or support for the adoption of renewable energy sources like photovoltaic systems.

Cyprus's labour tax burden is relatively low across the various income levels and the redistributive power of the tax and benefit system is also limited. Graph A19.1 shows that the labour tax wedge for Cyprus in 2023 was

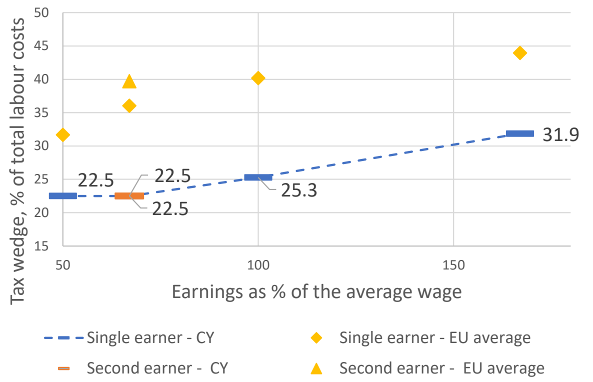
Table A19.1: **Taxation indicators (to be updated once new data are available)**

		Cyprus					EU-27				
		2010	2020	2021	2022	2023	2010	2020	2021	2022	2023
Tax structure	Total taxes (including compulsory actual social contributions) (% of GDP)	31.7	33.7	34.8	36.5		37.9	40.0	40.4	40.2	
	Labour taxes (as % of GDP)	11.3	14.2	14.2	14.5		20.0	21.3	20.7	20.3	
	Consumption taxes (as % of GDP)	12.2	11.4	11.9	12.6		10.8	10.7	11.2	11.0	
	Capital taxes (as % of GDP)	8.2	8.1	8.7	9.5		7.1	8.0	8.6	8.9	
	Of which, on income of corporations (as % of GDP)	5.5	5.7	6.2	6.6		2.4	2.5	3.0	3.4	
	Total property taxes (as % of GDP)	1.2	0.7	0.7	0.7		1.9	2.3	2.2	2.1	
	Recurrent taxes on immovable property (as % of GDP)	1.0	0.2	0.2	0.2		1.1	1.2	1.1	1.0	
	Environmental taxes as % of GDP	2.7	2.4	2.3	2.2		2.4	2.2	2.3	2.0	
Progressivity & fairness	Tax wedge at 50% of average wage (Single person) (*)		20.9	22.5	22.5	22.5	33.9	31.7	32.1	31.8	31.7
	Tax wedge at 100% of average wage (Single person) (*)		21.5	23.4	24.6	25.3	41.0	40.1	39.9	40.0	40.2
	Corporate income tax - effective average tax rates (1) (*)		11.3	11.3	11.4			19.5	19.0	19.0	
	Difference in Gini coefficient before and after taxes and cash social transfers (pensions excluded from social transfers) (2) (*)	5.1	6.3	6.5	5.5		8.6	8.1	8.2	7.9	
Tax administration & compliance	Outstanding tax arrears: total year-end tax debt (including debt considered not collectable) / total revenue (in %) (*)		41.5	34.2				40.9	35.5		
	VAT Gap (% of VAT total tax liability, VTTL)(**)		17.5	8.3				9.7	5.4		

(1) Forward-looking effective tax rate (OECD).
(2) A higher value indicates a stronger redistributive impact of taxation.
(*) EU-27 simple average.
(**) Forecast value for 2022, if available. For more details on the VAT gap, see European Commission, Directorate-General for Taxation and Customs Union, 2023, *VAT gap in the EU*, https://data.europa.eu/doi/10.2778/911698.
For more data on tax revenues as well as the methodology applied, see the Data on Taxation webpage, https://ec.europa.eu/taxation_customs/taxation-1/economic-analysis-taxation/data-taxation_en.
Source: European Commission and OECD

much lower than the EU average for single people at various income levels. Overall, labour taxation is less progressive in Cyprus than the EU average. The limited progressivity of the tax and benefit system is also reflected in the fact that the tax and benefit system reduced income inequality (as measured by the Gini coefficient) below the EU average in 2022 (Table A19.1). The tax and benefit system reduced the Gini coefficient by 5.5 pps, while it was 7.9 pps for the EU as a whole in 2022.

Graph A19.1: **Tax wedge for single and second earners as a % of total labour costs, 2023**



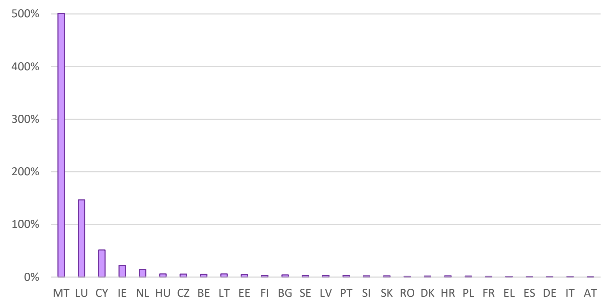
The second earner tax wedge assumes a first earner at 100% of the average wage and no children. For the methodology of the tax wedge for second earners, see OECD, 2016, Taxing Wages 2014-2015.
Source: European Commission

Cyprus performs fairly well on tax compliance and administration. Outstanding tax arrears decreased from 41.5% of total net revenue in 2020 to 34.2% in 2021. This is just below the EU-27 average of 35.5%. The VAT gap (the gap between revenues actually collected and the theoretical tax liability) decreased from 17.5% to 8.3% but is above the EU-wide gap of 5.4%. However, Cyprus was among the worst performers in the EU for on-time filing of both corporate and personal income tax returns in 2020.

Cyprus has made progress with the digitalisation of its tax administration as part of its RRP. In 2023, Cyprus put into operation an integrated tax administration system (the 'Tax For All' portal), which has modernised taxpayers' interaction with the tax administration. The new portal is a comprehensive system of tax administration which aims to replace the previous non-linked systems and to provide the tax authorities with a single unified picture of taxpayers. It will facilitate consolidated monitoring, assessment and inspection of taxpayers.

Data suggests that Cyprus's tax system may be used for ATP. For instance, graphs A19.2 and A19.3 show that outgoing dividends as a share of GDP, as well as FDI stock held through SPEs, are significantly higher than the EU average. Historically, Cyprus has also attracted Russian financial flows, but this has changed following Russia's war of aggression against Ukraine.

Graph A19.2: **Total outgoing dividends by Member State as % of GDP, 2022**



Source: European Commission

The Cypriot RRP also contains measures to address ATP. Cyprus adopted a law in 2021 to tackle ATP (a) by imposing withholding tax on interest, dividend and royalty payments to jurisdictions included in Annex I to the Council conclusions on the revised EU list of non-cooperative jurisdictions for tax purposes; (104) and (b) by establishing that companies are taxable not only when they are managed and controlled in Cyprus, but also when only registered in the country. By the end of 2024, the withholding tax should be extended to include such payments to low-tax jurisdictions, and Cyprus should assess the effectiveness of the overall set of measures related to ATP via an independent evaluation. This evaluation shall lead to further policy action.

Despite this recent progress, tackling ATP remains a priority. Data indicating ATP and several features of the Cyprus tax system should be closely monitored. For instance, Cyprus has a residence-by-investment scheme and exempts the income of so-called 'non-domiciled' residents (tax residency in Cyprus for less than 17 of the 20 past years). Cyprus also has preferential tax

(104) EU list of non-cooperative jurisdictions for tax purposes - Consilium (europa.eu)

rules for foreign-sourced pension income, as well as for workers coming from abroad.

Table A20.1: **Key economic and financial indicators**

	2004-07	2008-12	2013-20	2021	2022	2023	forecast 2024	forecast 2025
Real GDP (y-o-y)	4.9	0.1	3.0	9.9	5.1	2.5	2.8	2.9
Potential growth (y-o-y)	.	2.1	2.1	3.6	3.4	4.1	3.7	3.5
Private consumption (y-o-y)	6.2	0.4	2.2	5.6	8.6	4.2	2.2	1.9
Public consumption (y-o-y)	2.7	2.4	3.1	7.5	2.7	1.6	2.5	1.4
Gross fixed capital formation (y-o-y)	10.0	-8.1	8.5	0.0	8.3	19.5	3.6	5.1
Exports of goods and services (y-o-y)	3.5	1.4	7.3	21.6	13.6	-1.5	3.2	3.3
Imports of goods and services (y-o-y)	5.9	-0.1	8.1	15.4	18.3	5.1	3.2	2.9
Contribution to GDP growth:								
Domestic demand (y-o-y)	6.5	-1.1	3.4	4.9	7.1	6.8	2.6	2.5
Inventories (y-o-y)	-0.2	0.4	0.2	0.2	1.4	1.9	0.2	0.0
Net exports (y-o-y)	-1.4	0.6	-0.5	4.9	-3.4	-6.3	0.0	0.3
Contribution to potential GDP growth:								
Total Labour (hours) (y-o-y)	.	0.9	0.8	1.3	1.2	1.6	1.4	1.2
Capital accumulation (y-o-y)	.	1.4	0.7	1.2	1.3	1.8	1.7	1.7
Total factor productivity (y-o-y)	.	-0.3	0.6	1.1	0.9	0.7	0.6	0.6
Output gap	3.8	0.3	-2.0	2.5	4.2	2.6	1.6	0.9
Unemployment rate	4.6	7.0	11.2	7.5	6.8	6.1	5.6	5.4
GDP deflator (y-o-y)	3.0	2.0	-0.1	2.7	6.1	4.7	3.7	2.4
Harmonised index of consumer prices (HICP, y-o-y)	2.1	2.7	-0.3	2.3	8.1	3.9	2.4	2.1
HICP excluding energy and unprocessed food (y-o-y)	1.0	1.7	-0.1	1.0	5.3	4.4	2.6	2.3
Nominal compensation per employee (y-o-y)	3.7	2.8	0.1	4.3	1.1	5.6	3.9	1.5
Labour productivity (real, hours worked, y-o-y)	2.1	0.2	1.2	1.9	0.9	0.7	0.7	0.5
Unit labour costs (ULC, whole economy, y-o-y)	2.3	2.8	-0.4	-2.1	-0.9	4.6	2.5	0.1
Real unit labour costs (y-o-y)	-0.7	0.7	-0.3	-4.6	-6.6	-0.1	-1.2	-2.2
Real effective exchange rate (ULC, y-o-y)	0.7	0.5	-1.9	-2.0	-4.2	-1.8	-1.9	-2.2
Real effective exchange rate (HICP, y-o-y)	0.2	0.2	-1.1	0.2	-1.8	0.7	.	.
Net savings rate of households (net saving as percentage of net disposable income)	1.5	-0.5	-3.4	7.9	0.4	.	.	.
Private credit flow, consolidated (% of GDP)	27.9	18.7	4.7	6.5	-3.9	.	.	.
Private sector debt, consolidated (% of GDP)	244.4	308.0	305.9	242.1	213.4	.	.	.
of which household debt, consolidated (% of GDP)	88.5	116.9	106.9	79.9	71.7	.	.	.
of which non-financial corporate debt, consolidated (% of GDP)	155.9	191.1	198.9	162.2	141.6	.	.	.
Gross non-performing debt (% of total debt instruments and total loans and advances) (1)	.	8.9	25.0	4.7	3.8	.	.	.
Corporations, net lending (+) or net borrowing (-) (% of GDP)	-9.9	2.3	2.0	-3.0	-4.8	-6.9	-6.7	-6.6
Corporations, gross operating surplus (% of GDP)	23.7	20.0	21.2	21.4	22.5	21.6	21.8	21.9
Households, net lending (+) or net borrowing (-) (% of GDP)	-7.6	-5.5	-4.2	-0.5	-5.4	-8.0	-7.2	-6.8
Deflated house price index (y-o-y)	6.8	-4.9	1.2	-4.2	-3.6	-0.2	.	.
Residential investment (% of GDP)	10.9	8.2	5.6	8.3	8.6	8.6	.	.
Current account balance (% of GDP), balance of payments	-6.2	-7.7	-4.7	-6.1	-7.9	-12.1	-11.2	-10.8
Trade balance (% of GDP), balance of payments	-2.2	-6.4	0.8	4.0	0.3	-0.9	.	.
Terms of trade of goods and services (y-o-y)	-0.5	-0.4	0.2	0.9	-0.2	5.3	0.3	0.4
Capital account balance (% of GDP)	0.1	0.3	0.2	0.3	0.2	0.0	.	.
Net international investment position (% of GDP)	-68.2	-123.4	-137.1	-104.0	-96.2	-96.4	.	.
NENDI - NIIP excluding non-defaultable instruments (% of GDP) (2)	.	-69.0	-192.3	-2.2	39.9	42.1	.	.
IIP liabilities excluding non-defaultable instruments (% of GDP) (2)	.	621.7	585.0	361.2	277.9	255.8	.	.
Export performance vs. advanced countries (% change over 5 years)	.	.	12.4	38.0	24.8	23.2	.	.
Export market share, goods and services (y-o-y)	-5.8	-4.2	5.5	3.5	-5.5	-2.6	-0.3	-0.4
Net FDI flows (% of GDP)	.	9.0	9.1	-31.1	-30.4	-12.6	.	.
General government balance (% of GDP)	-0.9	-4.1	-2.3	-1.8	2.7	3.1	2.9	2.9
Structural budget balance (% of GDP)	.	.	1.4	-3.2	0.6	1.8	2.1	2.4
General government gross debt (% of GDP)	60.4	60.4	102.7	99.3	85.6	77.3	70.6	65.4

(1) domestic banking groups and stand-alone banks, EU and non-EU foreign-controlled subsidiaries and EU and non-EU foreign-controlled branches.
(2) NIIP excluding direct investment and portfolio equity shares.
Source: Eurostat and ECB as of 2024-5-17, where available; European Commission for forecast figures (Spring forecast 2024).

This annex assesses fiscal sustainability risks for Cyprus over the short, medium and long term. It follows the multi-dimensional approach of the European Commission's 2023 Debt Sustainability Monitor, updated based on the Commission 2024 spring forecast.

1 – Short-term risks to fiscal sustainability are low. The Commission's early-detection indicator (S0) does not point to major short-term fiscal risks (Table A21.2) ([105]). Government gross financing needs are expected to decrease to around 6% of GDP on average over 2024-2025 (Table A21.1, Table 1) ([106]). Financial markets' perceptions of Cyprus are favourable as its debt rating continued to be upgraded in 2023. The main four credit-rating agencies now rate Cyprus' sovereign debt at investment grade (two notches within the investment-grade area with a positive or stable outlook).

2 – Medium-term fiscal sustainability risks are medium.

The DSA baseline shows that the government debt ratio is expected to decline substantially to reach around 38% of GDP in 2034 (Graph 1, Table 1) ([107]). The debt reduction is supported by the assumed sizeable structural primary surplus (excluding changes in cost of ageing) of 3.5% of GDP as of 2024. This appears ambitious compared with past performance, suggesting limited fiscal room of manoeuvre ([108]). The debt decline also benefits from a still favourable but declining snowball effect of around 1 pp. of GDP annually on average over 2025-2034, which is also supported by the expected impact on potential growth of Next Generation EU (NGEU).

The baseline projections are stress-tested against four alternative deterministic scenarios to assess the impact of changes in key assumptions relative to the baseline (Graph 1). Under the *historical structural primary balance (SPB) scenario* (i.e. the SPB returns to its historical 15-year average of 1.5% of GDP) the debt ratio would be about 15 pps. of GDP higher than under the baseline in 2034. Under the *adverse interest-growth rate differential scenario* (i.e. the interest-growth rate deteriorates by 1 pp. compared with the baseline), the debt ratio would be higher than under the baseline by 4 pps. of GDP in 2034. Under the *financial stress scenario* (i.e. interest rates temporarily increase by 1 pp. compared with the baseline) government debt ratio would be almost unchanged compared with the baseline. Finally, under the *lower structural primary balance scenario* (i.e. the projected cumulative improvement in the SPB over 2023-2024 is halved) the debt ratio would be higher than under the baseline by about 1 pp. in 2034.

The stochastic projections indicate medium risk, pointing to the moderate sensitivity of these projections to plausible unforeseen events ([109]). These stochastic simulations indicate a 9% probability that the debt ratio will be higher in 2028 than in 2023, implying limited risks. At the same time, the uncertainty surrounding the baseline debt projections is high: the difference between the 10th and 90th

(105) The So is a composite indicator of short-term risk of fiscal stress. It is based on a wide range of fiscal and financial-competitiveness indicators that have proven to be a good predictor of emerging fiscal stress in the past.

(106) Gross financing needs are determined in line with the methodology described in the European Commission's 2023 Debt Sustainability Monitor, updated based on the Commission 2024 spring forecast

(107) The assumptions underlying the Commission's 'no-fiscal policy change' baseline include in particular: (i) a structural primary surplus, before ageing costs, of 3.5% of GDP from 2024 onwards; (ii) inflation converging linearly towards the 10-year forward inflation-linked swap rate 10 years ahead (which refers to the 10-year inflation expectations 10 years ahead); (iii) the nominal short- and long-term interest rates on new and rolled over debt converging linearly from current values to market-based forward nominal rates by T+10; (iv) real GDP growth rates from the Commission 2024 spring forecast, followed by the EPC/OGWG 'T+10 methodology projections between T+3 and T+10 (average of 1.9%); (v) ageing costs in line with the 2024 Ageing Report (European Commission, Institutional Paper 279, April 2024). For information on the methodology, see the 2023 Debt Sustainability Monitor (European Commission, Institutional Paper 271, March 2024).

(108) This assessment is based on the consolidation space indicator, which measures the frequency with which a tighter fiscal position than assumed in a given scenario has been observed in the past. Technically, this consists of looking at the percentile rank of the projected SPB within the distribution of SPBs observed in the past in the country, taking into account all available data from 1980 to 2022.

(109) The stochastic projections show the joint impact on debt of 10000 different shocks affecting the government's budgetary position, economic growth, interest rates and exchange rates. This covers 80% of all the simulated debt paths and therefore excludes tail events.

debt distribution percentiles points) is high, as there is a 80% probability that the debt ratio will lie in a large range of 45 pps. of GDP in five years' time (Graph 2).

3 – Long-term fiscal sustainability risks appear overall low. This assessment is based on the combination of two fiscal gap indicators, capturing the required fiscal effort to stabilise debt (S2 indicator) and bring to 60% of GDP (S1 indicator) over the long-term ([110]). This assessment is driven by the very favourable initial budgetary position, which is, however, (partly) offset by the projected increase in ageing costs. These results are conditional on the country maintaining a high structural primary surplus over the long term.

The S2 indicator points to low fiscal sustainability risks. The indicator shows that, relative to the baseline, the SPB would only need to improve by 0.7 pp. of GDP in 2025 to ensure debt sustainability over the long term. This result is underpinned by significant ageing costs (contribution of 3.7 pps. of GDP), which are partly offset by a very favourable initial budgetary position (-3 pps. of GDP). Ageing costs are primarily driven by the projected increase of public pension expenditure (3.3 pps. of GDP) (Table A21.1, Table 2).

The S1 indicator also points to low fiscal sustainability risks. The S1 indicator signals that no consolidation effort is needed to bring debt to 60% of GDP by 2070. This result is driven by the very favourable initial budgetary position (contribution of -3.5 pps. of GDP), which is only partly offset by ageing costs (2.8 pps. of GDP) and the debt requirement (0.2 pp. of GDP) (Table A21.1, Table 2).

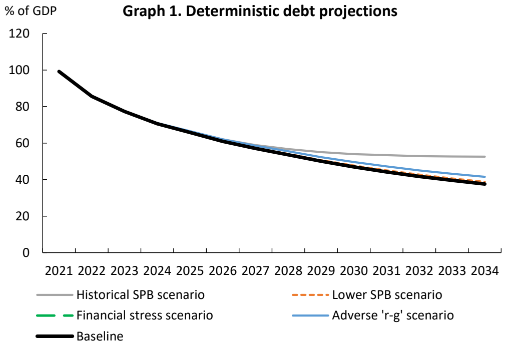
4 – Finally, several additional risk factors need to be considered in the assessment. On the one hand, risk-increasing factors are related to heightened borrowing costs and increased exposure to interest rate fluctuations in light of the high interest rate environment, Cyprus' negative net international investment position and risks to the budget balance due to higher public wage and social spending as well as a number of government-sponsored housing schemes, including the mortgage-to-rent scheme offered through KEDIPES. On the other hand, risk-mitigating factors include the lengthening of debt maturities in recent years, substantial cash reserves, credit rating upgrades, relatively stable financing sources (with a diversified investor base), the currency denomination of debt, the low share of short-term public debt and the phasing out of energy-related support measures.

([110]) The S2 fiscal sustainability indicator measures the permanent SPB adjustment in 2024 that would be required to stabilise public debt over an infinite horizon. It is complemented by the S1 indicator, which measures the permanent SPB adjustment in 2024 to bring the debt ratio to 60% by 2070. The impact of the drivers of S1 and S2 may differ due to the infinite horizon component considered in the S2 indicator. For both the S1 and S2 indicators, the risk assessment depends on the amount of fiscal consolidation needed: 'high risk' if the required effort exceeds 6 % of GDP, 'medium risk' if it is between 2% and 6% of GDP, and 'low risk' if the effort is negative or below 2% of GDP. The overall long-term risk classification combines the risk categories derived from S1 and S2. S1 may notch up the risk category derived from S2 if it signals a higher risk than S2. See the 2023 Debt Sustainability Monitor for further details.

Table A21.1: **Debt sustainability analysis - Cyprus**

Table 1. Baseline debt projections	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Gross debt ratio (% of GDP)	**99.3**	**85.6**	**77.3**	**70.6**	**65.8**	**60.9**	**57.1**	**53.6**	**50.1**	**47.0**	**44.2**	**41.7**	**39.6**	**37.6**
Changes in the ratio	-15.7	-13.7	-8.3	-6.7	-4.8	-4.9	-3.9	-3.5	-3.5	-3.1	-2.8	-2.5	-2.2	-2.0
of which														
Primary deficit	0.1	-4.2	-4.5	-4.3	-3.7	-3.2	-2.8	-2.5	-2.7	-2.4	-2.2	-2.0	-1.7	-1.6
Snowball effect	-11.4	-8.7	-4.4	-3.4	-2.4	-1.6	-1.0	-0.9	-0.9	-0.7	-0.6	-0.5	-0.5	-0.4
Stock-flow adjustments	-4.4	-0.7	0.6	1.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross financing needs (% of GDP)	6.0	4.5	2.7	5.2	6.8	6.8	6.5	6.6	5.8	4.9	4.9	2.3	2.2	2.1

Graph 1. Deterministic debt projections



Graph 2. Stochastic debt projections 2024-2028

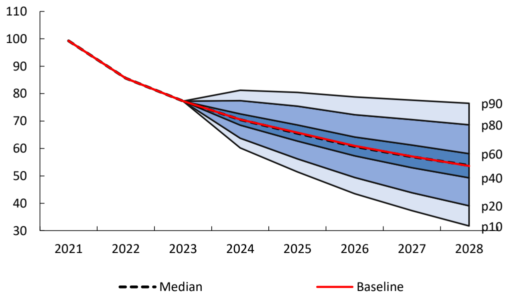


Table 2. Breakdown of the S1 and S2 sustainability gap indicators

		S1	S2
Overall index (pps. of GDP)		**-0.5**	**0.7**
of which			
Initial budgetary position		-3.5	-3.0
Debt requirement		0.2	
Ageing costs		2.8	3.7
of which	*Pensions*	2.6	3.3
	Health care	0.5	0.7
	Long-term care	0.1	0.1
	Education	-0.3	-0.4

Source: Commission services

Table A21.2: **Heat map of fiscal sustainability risks - Cyprus**

Short term	Medium term - Debt sustainability analysis (DSA)								Long term		
			Deterministic scenarios								
Overall (S0)	Overall		Baseline	Historical SPB	Lower SPB	Adverse 'r-g'	Financial stress	Stochastic projections	S2	S1	Overall (S1 + S2)
LOW	MEDIUM	Overall	LOW	LOW	LOW	LOW	LOW	MEDIUM	LOW	LOW	LOW
		Debt level (2034), % GDP	37.6	52.6	38.7	41.5	37.7				
		Debt peak year	2024	2024	2024	2024	2024				
		Fiscal consolidation space	20%	31%	20%	20%	20%				
		Probability of debt ratio exceeding in 2028 its 2023 level						9%			
		Difference between 90th and 10th percentiles (pps. GDP)						44.7			

(1) Debt level in 2034. 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 debt ratio exceeding in 2028 its 2023 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 10000 different shocks. Green, yellow and red cells indicate increasing uncertainty. (For further details on the Commission's multidimensional approach, see the 2023 Debt Sustainability Monitor)

Source: European Commission (for further details on the Commission's multidimensional approach, see the 2023 Debt Sustainability Monitor)

Source: Commission services.