



OECD Skills Studies

OECD Skills Strategy Bulgaria

ASSESSMENT AND RECOMMENDATIONS

REPORT SUMMARY



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Foreword

Developing and using people's skills effectively is crucial for Bulgaria's economic prosperity and social cohesion.

Demographic change, digitalisation, globalisation and climate change are combining to increase and transform the skills needed to thrive in Bulgarian workplaces and society. People will need a stronger and more well-rounded set of skills, including cognitive, social and emotional, and job-specific skills, to flourish in life both in and outside of work. Bulgaria will also need to make better use of people's skills in the labour market and in individual workplaces to minimise skills imbalances and harness the potential of people's skills. The coronavirus (COVID-19) crisis has accelerated the digitalisation of learning and work and made upskilling and reskilling even more critical for many adults.

Bulgaria faces several persistent skills challenges. First, many young people lack high levels of cognitive skills, which this has not clearly improved over time. There remain large gaps in skill levels and educational attainment between youth from disadvantaged and advantaged backgrounds. Skills imbalances are high, with many employers facing skills shortages and many graduates being mismatched to their jobs. Many adults appear to be low-skilled, but relatively few participate in education and training. Finally, employers are not using workers' skills to their full potential to support productivity and innovation.

Bulgaria is at various stages of implementing key reforms to improve its performance in developing and using people's skills. For example, the country has lowered the age of mandatory early childhood education, developed a competency-based curriculum for schools, increased teachers' salaries, increased adults' access to vocational education and training, mapped regional supply and demand in higher education, and increased the retirement age, among other reforms.

Today, Bulgaria has a unique window of opportunity to progress and build upon these reforms to improve performance and equity across its skills system. This OECD's Skills Strategy seeks to support Bulgaria in seizing this opportunity. This review provides a detailed analysis, benefiting from widespread engagement with stakeholders, leading to several tailored recommendations for Bulgaria.

The OECD stands ready to support Bulgaria as it seeks to put skills at the forefront of its development agenda and develop an Action Plan with a comprehensive set of skills policy actions.

Executive summary

OECD-Bulgaria collaboration on the OECD Skills Strategy project

This OECD Skills Strategy (OSS) project provides Bulgaria with tailored findings and recommendations on its skills performance from an international perspective and supports Bulgaria's ongoing strategic planning activities. The OSS project was launched via a virtual Skills Strategy Seminar in February 2022 with senior representatives from the Ministry of Education and Science (MES), the Ministry of Labour and Social Policy (MLSP), the Ministry of Innovation and Growth (MIG), the Ministry of Economy and Industry (MEI), the Ministry of Finance, the Bulgarian Industrial Capital Association (BICA), the Bulgarian Industrial Association (BIA), the Union for Private Economic Enterprise, and the Education Bulgaria 2030 Association (non-governmental organisation).

During consultations in April and June 2022, the OECD engaged with nearly 40 organisations and over 80 individuals in workshops, expert meetings, regional discussions and bilateral meetings (see Annex A in the full report). This process provided invaluable input that shaped the findings and recommendations in the full report.

Key findings and opportunities for improving Bulgaria's skills performance

In Bulgaria, as in other OECD countries, megatrends such as demographic change, digitalisation, globalisation and climate change are transforming jobs and how society functions and people interact. There are many consequences of these megatrends in Bulgaria, including employers often struggling to find the skills they need, productivity becoming a more important driver of economic development and workers facing higher risks of job automation. In addition, the coronavirus (COVID-19) crisis accelerated the digitalisation of learning and work, disrupted several economic sectors and exacerbated inequalities in the country. Although the economic contraction of 2020 has been followed by strong growth since, unemployment rose more starkly, and the employment rate only reached its pre-pandemic levels by mid-2022. Moreover, low growth is projected for 2023 due to the deteriorating macroeconomic situation in Europe, high energy prices and rising interest rates.

These megatrends and challenges reinforce the need for Bulgaria to design forward-looking, dynamic skills policies. To thrive in the world of tomorrow, people will need a stronger and more comprehensive set of skills, underpinned by high-quality learning opportunities over the life course, and better opportunities to use skills in the labour market and workplaces.

Bulgaria has made significant efforts in this direction – the National Development Programme “Bulgaria 2030”, the Strategic Framework for the Development of Education, Training and Learning (2021-2030), the National Strategy for Employment (2021-2030) and other strategies have a strong focus on skills. In addition, Bulgaria has embarked on a range of skills policy reforms in recent years spanning early childhood education, school curricula, vocational education and training, and the labour market. Therefore, as Bulgaria moves towards developing a comprehensive Action Plan for skills policies, it has a unique opportunity to implement these and other critical reforms to positively influence the megatrends, tackle the challenges and seize the opportunities facing the country.

The OECD and the Government of Bulgaria have identified four priority areas for improving Bulgaria's skills performance. These priority areas are the focus of the full report. The key findings and opportunities for improvement in each of the areas are summarised below and elaborated in the chapters in the full report, which also have detailed policy recommendations.

Priority 1: Improving youth skills (Chapter 2 of the full report)

Ensuring that young people develop the skills, knowledge, values and attitudes needed to thrive in an interconnected world is vital for the general well-being of Bulgaria. Bulgaria continues to struggle with low levels of performance in its student population. Furthermore, Bulgaria has not managed to reduce the large gaps in learning outcomes between different student populations over time. The success of vocational and higher education in meeting labour market demand is limited, with many graduates lacking strong transversal cognitive and practical skills to meet this demand.

The OECD has identified and made recommendations to help Bulgaria realise three main opportunities to improve youth skills:

- Opportunity 1: Ensuring that curriculum reform and assessment practices improve students' skills
- Opportunity 2: Developing a highly skilled teaching workforce
- Opportunity 3: Making vocational and higher education more responsive to labour market needs.

Priority 2: Improving adult skills (Chapter 3 of the full report)

Across OECD countries, adults of all skill levels need to upskill and/or reskill during their careers. Strengthening adult skills can help Bulgaria to address skills shortages, bolster its ongoing economic recovery, prepare for shifting skills demands and improve labour productivity. However, participation in adult education and training in Bulgaria is the lowest in the European Union (EU). Many adults and employers lack motivation to engage in education and training or otherwise face time-related, financial and other barriers to doing so.

The OECD has identified and made recommendations to help Bulgaria realise three main opportunities to improve adult skills:

- Opportunity 1: Increasing motivation among adults and employers to participate in adult learning
- Opportunity 2: Making education and training more flexible and accessible for adults and employers
- Opportunity 3: Improving the quality and relevance of adult education and training for adults and employers.

Priority 3: Using skills effectively in the labour market and at work (Chapter 4 of the full report)

The benefits of developing skills will be maximised only if policies also support people to supply their skills in the labour market and use them effectively at work. This entails using skills in various dimensions – activating the skills of Bulgaria's working-age population, utilising the skills of return migrants and skilled immigrants and utilising workers' skills effectively at work. Most of Bulgaria's unemployed or inactive adults are from vulnerable groups with relatively low participation in public employment services. High emigration and low return emigration, as well as low levels of skilled immigration of EU citizens and third-country nationals, have limited Bulgaria's ability to use people's skills and address skills shortages. In addition, many Bulgarian enterprises lack the capacity to implement high-performance workplace practices to support skills use, nor do they receive support for doing so.

The OECD has identified and made recommendations to help Bulgaria realise three main opportunities to improve using skills effectively:

- Opportunity 1: Activating the skills of vulnerable groups in the labour market
- Opportunity 2: Fostering return emigration and skilled immigration to Bulgaria
- Opportunity 3: Supporting enterprises to utilise workers' skills more effectively.

Priority 4: Improving the governance of the skills system (Chapter 5 of the full report)

Effective governance arrangements are essential to support Bulgaria's performance in developing and using people's skills. At the national level, there is a need to better co-ordinate different ministries and agencies, as existing arrangements such as the Council of Ministers and ad hoc bilateral arrangements are insufficient to ensure a whole-of-government approach to skills. Beyond government, the involvement of stakeholders in Bulgaria's skills system is growing but appears fragmented and limited in scope. Bulgaria lacks high-quality information on skills needs in the labour market and how well the government's various skills policies and programmes are working. Public expenditure on skills development and use is low by international standards, and funding sources are not highly diversified.

The OECD has identified and made recommendations to help Bulgaria realise three main opportunities to improve skills governance:

- Opportunity 1: Developing a whole-of-government and stakeholder-inclusive approach to skills policies
- Opportunity 2: Building and better utilising evidence in skills development and use
- Opportunity 3: Ensuring well-targeted and sustainable financing of skills policies.

Key insights and recommendations for Bulgaria

This Report Summary describes the context, key insights and policy recommendations of the OECD Skills Strategy project in Bulgaria. It applies the OECD Skills Strategy Framework to assess the performance of Bulgaria's skills system and introduces the four priority areas for action, including key findings and recommendations for each. The four priority areas are: 1) improving youth skills; 2) improving adult skills; 3) using skills effectively in the labour market and at work; and 4) improving the governance of the skills system. Chapters in the full report provide a more detailed analysis of the priority areas, opportunities for improvement and recommendations.

Skills matter for Bulgaria

Skills are vital for enabling individuals and countries to thrive in an increasingly complex, interconnected and rapidly changing world. Countries in which people develop strong skills, learn throughout their lives, and use their skills fully and effectively at work and in society are more productive and innovative and enjoy higher levels of trust, better health outcomes and a higher quality of life.

As new technologies and megatrends increasingly shape our societies and economies, getting skills policies right becomes even more critical for ensuring societal well-being and promoting inclusive and sustainable growth. For Bulgaria, implementing a strategic approach to skills policies is essential, given the country's exposure to demographic and digital disruptions and persistent inequalities among different social groups. The coronavirus (COVID)-19 crisis has accelerated the digitalisation of learning and work in Bulgaria and risks increasing inequalities in education and labour markets.

Against this backdrop, the Bulgarian Government is seeking to develop an Action Plan for Skills (the "National Skills Strategy") that supports the country in developing and implementing a comprehensive set of skills policy actions. The present report provides comprehensive analysis and advice on Bulgaria's skills policies and performance as a basis for developing a national action plan for skills.

Skills are essential for Bulgaria's response to global megatrends

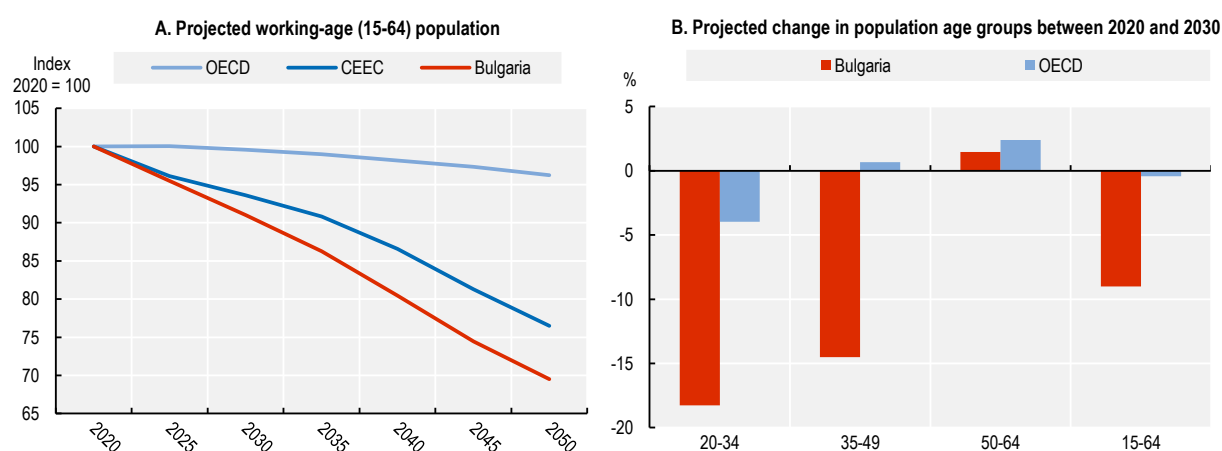
In Bulgaria, as in other OECD countries, megatrends such as digitalisation, globalisation, demographic change and climate change are transforming learning systems and the world of work. To thrive in the world of tomorrow, people will need a stronger and more well-rounded set of skills. These include foundational skills; cognitive and meta-cognitive skills; social and emotional skills; and professional, technical and specialised knowledge and skills. Bulgaria will also need to make better use of people's skills in the labour market and at work to realise the potential benefits of skills development.

The digital transformation continues to significantly impact all aspects of life in Bulgaria, including developing and using skills. Information and communications technologies (ICT), advances in artificial intelligence and robotics are profoundly changing the way people learn, work, communicate and live across OECD countries (OECD, 2019^[1]). Although data on job automation in Bulgaria are scarce, one study estimated that a typical Bulgarian employee is more likely to be in a job that may be automated (68% probability) than the typical employee in any other European Union (EU) country (Pouliakas, 2018^[2]). At the same time, Bulgarian workers seem to be unprepared to cope with the transformations brought by digitalisation. Bulgaria is the lowest-performing country in the European Union in terms of adult digital skills, with only 29% of its adult population having basic digital skills (see Figure 3.2 in Chapter 3 of the full report). Furthermore, the COVID-19 crisis has required a sudden transition to remote working in many occupations, forcing enterprises and workers to rapidly increase their digital competencies. On the one hand, Bulgaria will need to support the creation of higher value-added jobs that are more resilient to automation. On the other hand, Bulgaria will need to provide lower-skilled workers with upskilling and reskilling opportunities to prepare them for the jobs of tomorrow.

Bulgaria's high levels and evolving patterns of trade and integration into global value chains (GVCs) affect the skills required by the country's workforce. Trade liberalisation has led to a more globalised world characterised by expanding supply chains and outsourcing certain forms of work (OECD, 2017^[3]). Bulgarian imports and exports make up a relatively high share of its national gross domestic product (GDP), and the country has increased its involvement in GVCs in recent decades. Although Bulgaria's trade and involvement in GVCs is mainly in manufacturing, business services have become increasingly important, including a dynamic computer and information services sector. In addition, the country has the potential to expand into higher value-added manufacturing (OECD, 2021^[4]). These trends and opportunities will continue to influence the structure and competitiveness of Bulgaria's economic sectors, which in turn will affect skills supply and demand in the labour market.

Population decline and ageing are deeply impacting the skills profile and needs of Bulgaria's economy and society. Population ageing and low fertility rates have contributed to a shrinking population in Bulgaria, but emigration has been a particularly major challenge. The share of emigration in the demographic decline has increased: while emigration accounted for 32.3% of population loss between 2002 and 2011, its share increased to 40.7% between 2012 and 2021 (Karadjov and Gelovska, 2022^[5]). Looking forward, Bulgaria's population is expected to shrink by one-quarter from 2020 to 2050, representing the largest negative growth in population size in the world among countries with at least half a million people (United Nations, 2022^[6]). The youngest population age groups (e.g. 20-34 year-olds) will decline the fastest (Figure 1, Panel A), leading to a shrinking working-age population (Figure 1, Panel B).

Figure 1. Projected decreases in the working-age population in Bulgaria, CEEC and OECD countries, 2020-30 and 2020-50



Source: United Nations (2019^[7]), *World Population Prospects 2019*, www.un.org/development/desa/pd/news/world-population-prospects-2019-0.

StatLink  <https://stat.link/mhbg97>

As the working-age population declines, so will labour utilisation, which will make economic growth more dependent on labour productivity improvements. Labour productivity growth in Bulgaria had caught up with its CEEC (Central and Eastern European Countries) peers in the most recent period (2010-19). However, compared to other CEEC, labour productivity in Bulgaria has been driven less by output per hour worked and more by growth in average hours worked. Labour productivity is also highly unequal across sectors in Bulgaria (OECD, 2021^[4]). Developing and using skills effectively will be essential for achieving sustainable and inclusive labour productivity growth in Bulgaria.

The transition towards more environmentally sustainable goods and services will also affect the structure and skills needs of Bulgaria's economy. As economies undergo this green transition, new jobs will be created, and some existing jobs will be transformed or eliminated (ILO, 2018^[8]; Cristina Martinez-Fernandez, 2010^[9]). Bulgaria's economy remains relatively carbon- and energy-intensive, with state-subsidised coal-fired power plants producing almost half of the country's energy. However, this is changing, with Bulgaria's share of renewables in energy supply recently exceeding the OECD average (OECD, 2021^[4]). As this transition continues, the challenge for Bulgarian policy makers is to transition away from high-carbon energy sources while reskilling workers for more sustainable and productive activities.

The megatrends of digitalisation, globalisation, demographic change and climate change make it even more complex for Bulgaria to achieve an equilibrium between skills demand and supply. Today, Bulgarian employers report that skills shortages are their major barrier to hiring (Ministry of Education and Science, 2019^[10]). High-skilled occupations, such as those in manufacturing, communications and information technology, are already facing skills shortages. On the other hand, certain low-skilled occupations (e.g. agriculture and construction) are experiencing skills surpluses. Furthermore, over-qualification is common in Bulgaria, with only 53% of higher education graduates working in a position requiring tertiary education. The shrinking working-age population could exacerbate skills shortages as the supply of skills decreases.

Against this background, Bulgarians will increasingly need to upgrade their skills to perform new tasks in their existing jobs or acquire skills for new jobs. Strong foundational, digital, social and emotional skills, such as critical thinking, communication and adaptability, will become essential for them to be resilient to changing skills demands and succeed in both work and life.

The COVID-19 pandemic has disrupted progress and may exacerbate systemic challenges

In the last two decades, Bulgaria's economic performance has converged towards EU and OECD levels, but recent crises have slowed convergence. After Bulgaria was severely hit by the 2008 global financial crisis, it experienced high production, employment and wage growth to 2019 (OECD, 2021^[4]). However, the COVID-19 pandemic caused GDP to fall by 4.0% in 2020 and unemployment to peak at 5.3% in 2021, despite the government's strong fiscal response to the crisis (OECD, 2022^[11]). The economy rebounded strongly in 2021 (with GDP growth of 7.6%), and in 2022 employment reached its pre-pandemic levels (by July) and there was real wage growth despite very high inflation. Growth in 2022 was 3.4% and is projected to slow to 1.7% in 2023 due to the deteriorating macroeconomic situation in Europe, high energy prices and rising interest rates (OECD, 2022^[11]).

The COVID-19 pandemic has exacerbated other structural challenges. Inequalities have drastically risen over the last decade (indicated by an increase in the Gini coefficient). At the same time, poverty levels remain high, and the percentage of Bulgarians at risk of poverty increased in 2020, reaching 22.1% (versus an EU average of 16.8%) (Eurostat, 2023^[12]). Poverty rates are particularly high among the Roma population, low-educated individuals, the elderly and people with disabilities, and are concentrated in peripheral regions. As in other countries, Bulgaria will need to implement targeted policies to prevent inequalities from rising further. The government has recently set ambitious goals to reduce inequalities and poverty, yet the results remain to be seen.

Skills should be at the core of Bulgaria's policy response

Bulgaria requires comprehensive and co-ordinated skills policies to respond to these challenges. In today's rapidly changing world, people need stronger and more comprehensive sets of skills to perform new tasks in their jobs or to acquire new skills for new jobs. Strong foundational, transversal, social and emotional, and job-specific skills (Box 1) will make people more adaptable and resilient to changing skills demands and give them more opportunities to succeed in work and life. High-quality learning systems must equip young people with skills for work and life and give all adults opportunities to upskill and reskill over the life course. Adult skills need to be utilised to their potential in the labour market and at work. Finally, robust governance is needed to ensure a co-ordinated response to these challenges. Bulgaria's Action Plan for Skills, the preparations for which began in 2022, will pave the way for such a comprehensive and co-ordinated approach to skills policy.

Box 1. A wide range of skills are needed for success in work and life

The *OECD Skills Strategy 2019* identifies a broad range of skills that matter for economic and social outcomes, including:

- **Foundational skills:** Including literacy, numeracy and digital literacy.
- **Transversal cognitive and meta-cognitive skills:** Including critical thinking, complex problem solving, creative thinking, learning to learn and self-regulation.
- **Social and emotional skills:** Including conscientiousness, responsibility, empathy, self-efficacy and collaboration.
- **Professional, technical and specialised knowledge and skills:** Needed to meet the demands of specific occupations.

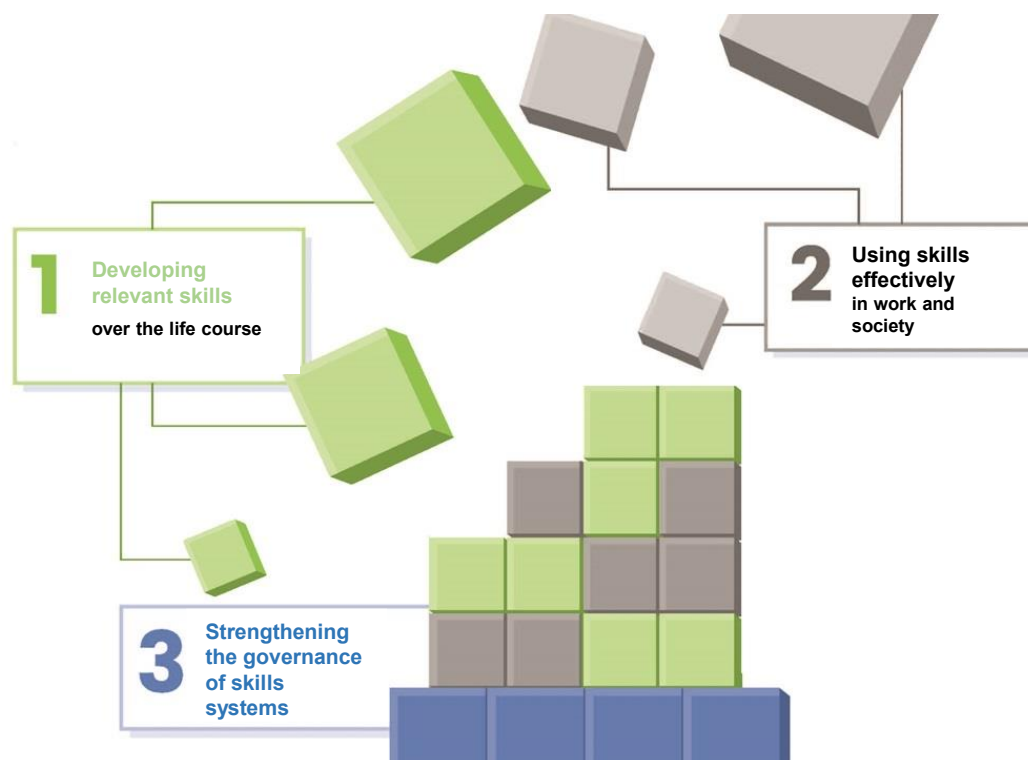
Source: OECD (2019^[1]), *OECD Skills Strategy 2019: Skills to Shape a Better Future*, <https://dx.doi.org/10.1787/9789264313835-en>.

The OECD Skills Strategy project in Bulgaria

OECD Skills Strategy projects provide a strategic and comprehensive approach to assessing countries' skills challenges and opportunities and building more effective skills systems. The OECD collaborates with countries to develop policy responses tailored to each country's specific skills challenges and needs. The foundation of this approach is the OECD Skills Strategy Framework (Figure 2), the components of which are:

- **Developing relevant skills over the life course:** To ensure that countries are able to adapt and thrive in a rapidly changing world, all people need access to opportunities to develop and maintain strong proficiency in a broad set of skills. This process is lifelong, starting in childhood and youth and continuing throughout adulthood. It is also "life-wide", occurring both formally in schools and higher education, and non-formally and informally in the home, community and workplaces.
- **Using skills effectively in work and society:** Developing a strong and broad set of skills is just the first step. To ensure that countries and people gain the full economic and social value from investments in developing skills, people also need opportunities, encouragement and incentives to use their skills fully and effectively at work and in society.
- **Strengthening the governance of skills systems:** Success in developing and using relevant skills requires strong governance arrangements to promote co-ordination, co-operation and collaboration across the whole of government; engage stakeholders throughout the policy cycle; build integrated information systems; and align and co-ordinate financing arrangements. The OECD Skills Strategy project for Bulgaria adopted this approach by forming an interdepartmental project team to support the whole-of-government approach to skills policies and by engaging a broad variety of stakeholders.

Figure 2. The OECD Skills Strategy Framework



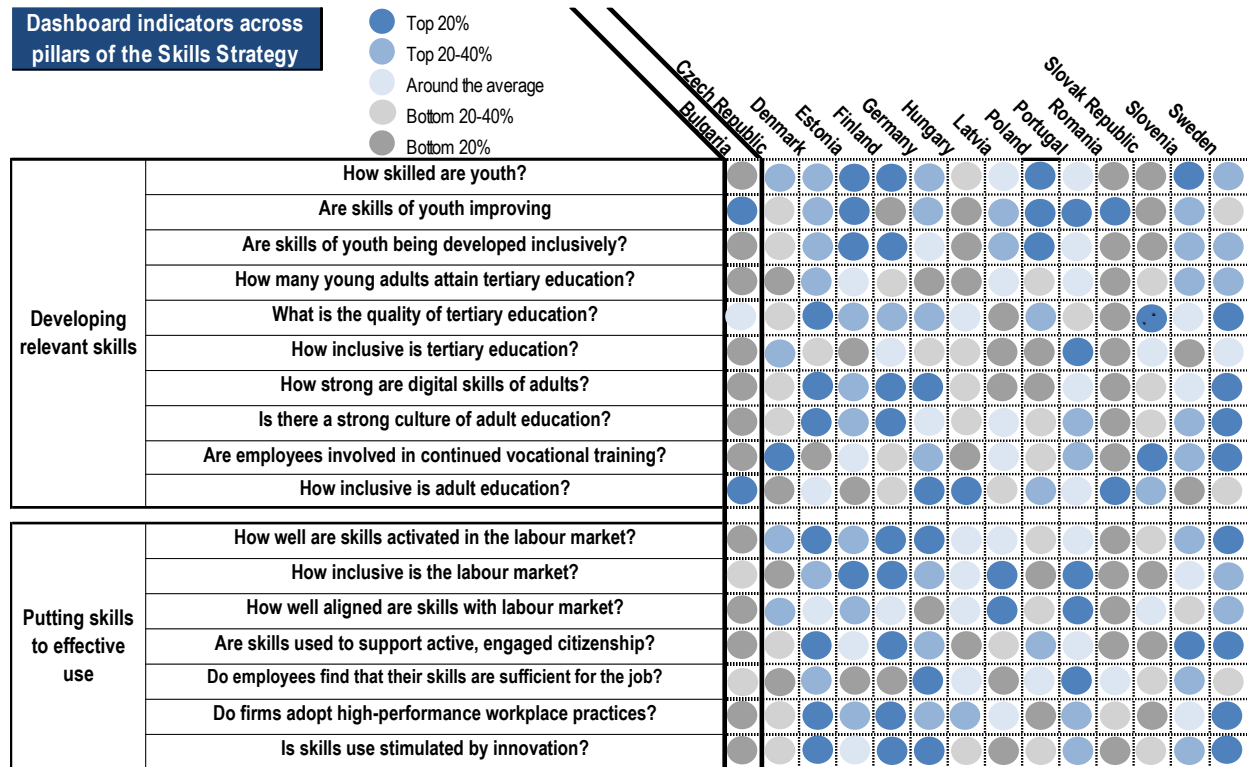
Source: OECD (2019^[1]), *OECD Skills Strategy 2019: Skills to Shape a Better Future*, <https://dx.doi.org/10.1787/9789264313835-en>.

The OECD Skills Strategy project for Bulgaria commenced with a virtual skills seminar for senior officials from various ministries in February 2022. Consultations were held in Bulgaria and on line in April to assess Bulgaria's skills performance and again in June to develop recommendations for improving Bulgaria's performance. The consultations involved bilateral meetings, expert group discussions and interactive stakeholder workshops. The consultations sought not only to enrich the report with local insights but also to develop a constructive dialogue and cultivate a shared understanding of Bulgaria's skills challenges and opportunities as a basis for action. Overall, the OECD Skills Strategy project in Bulgaria engaged over 80 individuals who represented nearly 40 organisations, including ministries and agencies, municipalities, education providers, employers, workers, researchers and other sectors (hereafter referred to as "project participants"). The full report is the main outcome of this engagement.

The performance of Bulgaria's skills system

The OECD Skills Strategy Dashboard provides an overview of the relative performance of countries across the dimensions of the OECD Skills Strategy (Figure 3). For each dimension of the strategy, there are a number of indicators, some of which are composite indicators, which provide a snapshot of a country's performance (see Annex A for the indicators). For comparison purposes, Bulgaria's relative skills performance is shown next to a range of European countries.

Figure 3. OECD Skills Strategy Dashboard: Bulgaria and selected European countries



Note: These summary indicators are calculated as a simple average of a range of underlying indicators (see Annex A). All underlying indicators have been normalised in a way that implies that a higher value and being among the “Top 20%” reflects better performance.

Developing relevant skills

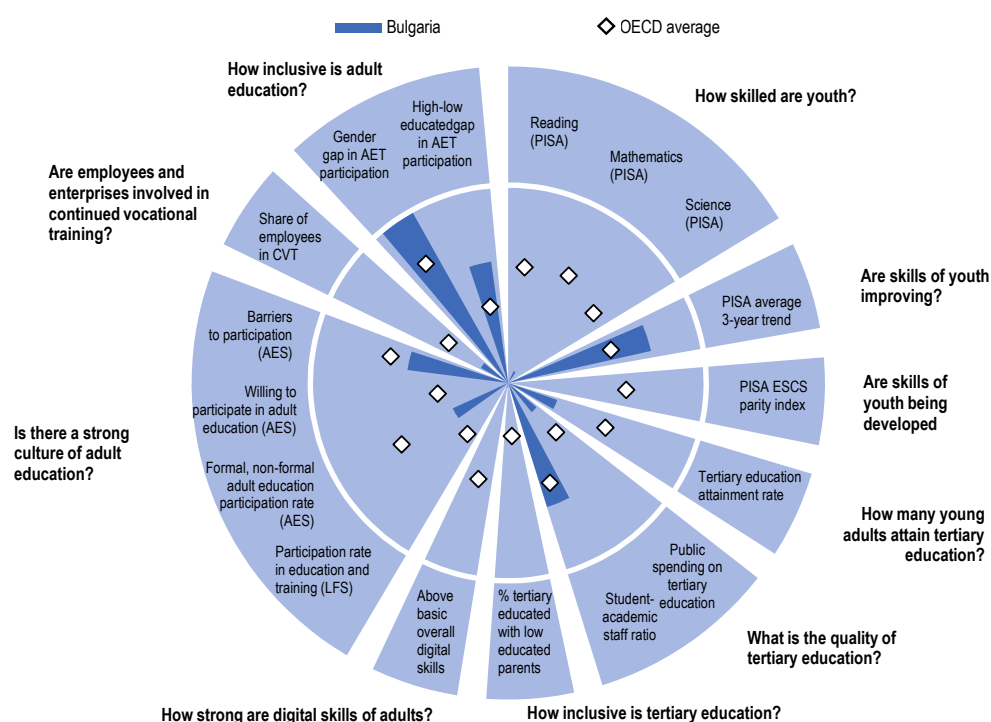
To ensure that countries are able to adapt and thrive in a rapidly changing world, all people need access to opportunities to develop and maintain strong proficiency in a broad set of skills. This process is lifelong and “life-wide”, occurring formally, non-formally and informally. Bulgaria could improve its performance in several areas of developing people’s skills (Figure 4).

Participation in formal education is relatively low and unequal

In Bulgaria, participation in education is compulsory from pre-primary to lower secondary education (from the ages of 4 to 16). By 2020, participation in early childhood education was low and falling, especially for children from socio-economically vulnerable groups. However, this is expected to improve – after the starting age of compulsory pre-school education was lowered from 5 to 4 years in 2020. Early school leaving rates have declined since peaking in 2019 (from 14% to 12.2% in 2021). However, they remain above the EU average and are highest for rural students and ethnic minorities. The share of young adults (aged 25-34) in Bulgaria with tertiary education (33.6% in 2021) has not changed significantly over the last five years and remains well below the EU average (41.2%). In addition, individuals from rural areas and minority groups are under-represented in tertiary education.

Figure 4. Bulgaria's performance on key indicators for developing relevant skills

Relevant position in country ranking (based on normalised scores), where higher value reflects better performance



How to read this figure: The normalised scores indicate the relative performance across EU countries: the further away from the core of the chart, the better the performance. For example, the indicator “Tertiary education attainment” has a low score compared to the average, indicating that the share of young adults with tertiary education in Bulgaria is near the bottom of the ranking in comparison with the EU average.

Note: ESCS refers to the PISA index of economic, social and cultural status.

Source: See Annex A for an explanation of sources and methodology.

Many young people, and particularly those from vulnerable groups, have low levels of skills

Young people in Bulgaria have comparatively low levels of skills. Results from the OECD Programme for International Students Assessment (PISA) 2018 show that the performance of 15-year-old students in reading, mathematics and science is well below the EU average (Bulgaria scores last in the European Union in reading and science). Bulgaria is in the top 20% of EU countries for improving youth skills over time, because students’ mathematics performance increased significantly from 2006 to 2015. However, students’ performance in mathematics declined from 2015 to 2018, there has been no long-term improvement in students’ reading performance, and students’ science performance has declined. (OECD, 2019^[1]) Students from vulnerable groups perform worse than other students, with performance gaps among the highest in the European Union.

Adults have low levels of skills, and few participate in education and training

Available data suggest that Bulgarian adults have low levels of skills and are not highly engaged in learning. For instance, only 11% of Bulgarian adults had above-basic digital skills in 2021, about one-third of the EU average. Despite having low skill levels, the share of Bulgarian adults who participate in education and training is the lowest in the European Union (about 1.8% in the four weeks prior to the survey conducted in 2021). Adults’ motivation to participate in learning is also the lowest in the European Union, and those who wish to participate face various barriers to doing so. On the other hand, the adult education system is relatively inclusive - Bulgaria is in the top 20% of EU countries because there are not large differences in participation between different groups of adults.

Using skills effectively

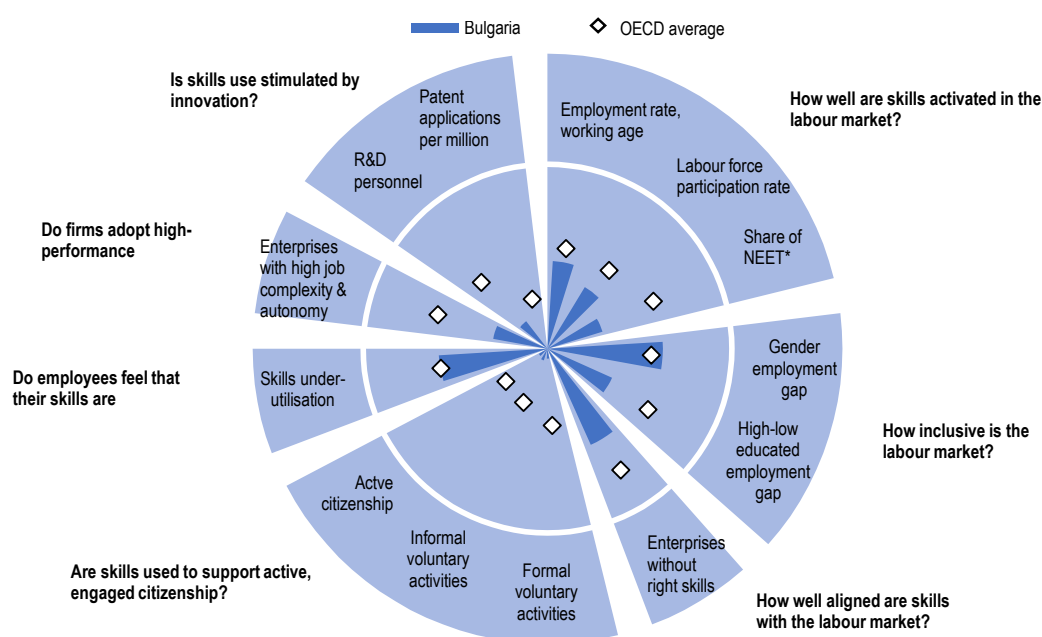
To ensure that countries gain the full economic and social benefits of investing in developing skills, people also need opportunities, encouragement and incentives to use their skills fully and effectively at work and in society. Bulgaria could also utilise people's skills more effectively in workplaces and society (Figure 5).

Employment outcomes are on par with EU averages but could be strengthened

Bulgaria's performance in activating people's skills in the labour market is mixed. On the one hand, the share of adults in employment is in line with EU averages and has increased over the last decade. In addition, the gender gap in employment is relatively low. On the other hand, some groups perform poorly in the labour market, inhibiting Bulgaria's overall performance in activating skills. For example, despite improvements over the last decade, the share of youth not in employment, education or training (NEET) and the gap in employment between low- and high-educated adults remain among the largest in the European Union.

Figure 5. Bulgaria's performance on key indicators for using skills effectively

Relative position in country ranking (based on normalised scores), where higher value reflects better performance



How to read this figure: The normalised scores indicate the relative performance across EU countries: the further away from the core of the chart, the better the performance. For example, the indicator 'Labour force participation rate' indicates performance below the EU average, i.e. Bulgaria has a comparatively low labour force participation rate relative to the EU average.

Note: *Youth not in employment, education or training (NEET).

Source: See Annex A for an explanation of sources and methodology.

Skills imbalances in the labour market are relatively high

The skills that individuals supply to the labour market in Bulgaria are not closely aligned with the demands of the labour market. Bulgaria is facing widespread labour shortages (OECD, 2022^[11]), with employer surveys showing that around 70% of employers face difficulties filling vacancies, well above previous levels

(ManpowerGroup, 2021^[13]). Skills shortages are common for medium- and high-skilled occupations (e.g. in manufacturing, communications and information technology). In contrast, skills surpluses are more common in low-skilled occupations (e.g. in agriculture and construction) (OECD, 2021^[4]). Skills mismatches are also common in the Bulgarian labour market. For example, only a relatively low (albeit increasing) share of tertiary graduates (53%) work in a position requiring tertiary education (Ministry of Education and Science, 2021^[14]).

People's skills are not used to their potential in work or society

Data suggest that adults in Bulgaria use their skills less frequently at work and in life than most adults in the European Union. Although data are limited, the European Working Conditions Survey 2015 (Eurofound, 2017^[15]) showed that work intensity was lower in Bulgarian workplaces than in every EU country except Latvia. Over half of Bulgarian workers declare that they almost never use computers, laptops or smartphones at work. A more recent skills survey in selected high-carbon-emitting industries in Bulgaria showed a low intensity of using foundational cognitive skills (reading, writing and numeracy skills) at work (Hristova and Ferre, 2022^[16]).

Strengthening the governance of skills systems

While not featured in the OECD Skills Strategy Dashboard, sound public governance of skills systems is contingent upon a government's ability to co-ordinate, steer, monitor, communicate and work horizontally (across departments and institutions within government) and vertically (with local authorities and with external, public and private stakeholders) (OECD, 2019^[11]). This both requires and contributes to integrated skills information systems, as well as aligned and co-ordinated skills financing arrangements.

Whole-of-government co-ordination and stakeholder engagement on skills policy are needed

In Bulgaria, ministries have several overlapping responsibilities and policies related to skills, and there is a lack of multilateral and bilateral co-ordination between them. While not limited to skills policy, the Bertelsmann Foundation's 2022 Sustainable Governance Indicators (SGI) ranks Bulgaria's performance in inter-ministerial co-ordination as 37th of 41 countries (Stanchev, Popova and Brusis, 2022^[17]). This result reflects several factors. First, the official government office in Bulgaria, the Administration of the Council of Ministers, plays a mainly administrative role and has very limited capacity for in-depth evaluation of the policy content of line-ministry proposals. Second, while Bulgaria has numerous cross-cutting advisory councils involving ministers or other high-ranking officials, it does not have cabinet or ministerial committees to co-ordinate proposals for cabinet meetings. Third, some co-ordination of policy proposals by ministry officials and civil servants takes place, but ministries remain highly segmented and insulated, with limited inter-ministerial co-ordination by senior civil servants. Finally, vertical co-ordination with subnational actors (especially municipalities) is hampered by these actors' limited capacity and the lack of a central institution to oversee the skills system and bring subnational actors to the table.

Stakeholders report fragmentation in their involvement in the skills policy-making process, although some stakeholder advisory bodies exist or are planned. The 2022 SGI ranks Bulgaria's performance in societal consultation as 20th out of 41 countries (Stanchev, Popova and Brusis, 2022^[17]). Various interests are represented and involved in consultations in the policy-making process. The National Council for Tripartite Co-operation is formally involved in many decisions, and its role has expanded to negotiating policies and adopting proposals that are later enacted in legislation. Overall, Bulgaria has more than 70 advisory councils at different levels of government, some of which cover skills topics. However, the influence of these councils on policy decisions is limited, and public consultations on policy proposals have often been short or altogether skipped. That said, government agencies are becoming more transparent about their deliberations, and in 2021, the government substantially increased the number of consultations.

Skills information and evidence could be strengthened

Weak co-ordination between ministries has contributed to fragmented and inconsistent data and information collection, as well as a lack of evidence-based policy making. There are examples of good practice within different ministries and agencies on data collection, evaluation and analysis, e.g. the Ministry of Labour and Social Policies' employment and sector forecasting exercises. However, data collection, evaluation and analysis on skills is not comprehensive or systematic, leading to a lack of evidence-based policy making overall.

Bulgaria's overall performance in evidence-based policy making is not strong. The 2022 SGI ranks Bulgaria's performance in both the quality of *ex post* policy evaluations and the utilisation of expert advice as 28th out of 41 countries (Stanchev, Popova and Brusis, 2022^[17]). The rules for impact assessments in Bulgaria, established in 2016, require an *ex post* evaluation of policies and their effects within five years of implementation. However, by the end of 2021, only two evaluations had been published through the government's public consultation portal. The government has various ways to consult stakeholders and experts, including a special online portal at the Council of Ministers, via advisory councils, and by public councils linked to specific ministries. In addition, representatives of academia and research institutes are usually included in the process on an ad hoc basis, and it is unclear if or how often experts' inputs lead to policy change.

There is a need for aligned and co-ordinated skills financing arrangements

Finally, public spending on skills is relatively low in Bulgaria. Total general government expenditure on all levels of education in Bulgaria was 4% of GDP in 2020, below the EU average of 5% (Eurostat, 2022^[18]). Bulgaria's expenditure was below the EU average at all levels of education (early childhood to tertiary) except early childhood. Although data are sparse, public funding appears low in adult education and training, as indicated by low participation and frequent reports of financial barriers to training by individuals and enterprises (see Chapter 3 of the full report). Furthermore, spending on active labour market programmes for unemployed persons in Bulgaria (0.16% of GDP in 2019, excluding employment services and administration) is low compared to the EU average (0.39%). This expenditure is also focused on direct employment creation programmes rather than employment incentives and training measures, which tend to be more effective (OECD, 2022^[19]). Funding of skills programmes is often highly reliant on European Social Funds, which can limit the continuity of programmes as funding periods end or priorities change. There are limited cost-sharing arrangements for skills policies across ministries and with social partners.

The policy context in Bulgaria

A range of Bulgarian policies recognise the importance of skills

Bulgaria has already developed a range of key strategies (see Annex B for a complete overview) to help the country positively influence megatrends, address the challenges and seize the opportunities facing its skills system. Relevant priorities and goals from these strategies are summarised at the beginning of each chapter of the full report to highlight their connection with the OECD's assessment and recommendations. Importantly:

- The **National Development Programme "Bulgaria 2030"** (*България 2030*) defines the vision of Bulgaria's future to 2030. It envisions a society with high living standards in which citizens are highly educated, creative and innovative and can enjoy diverse professional and personal opportunities. The first priority of the strategy focuses on education and skills. It aims to equip young people with the right skills for their future by providing a better-quality education, including by improving the quality of and increasing participation in lifelong learning.

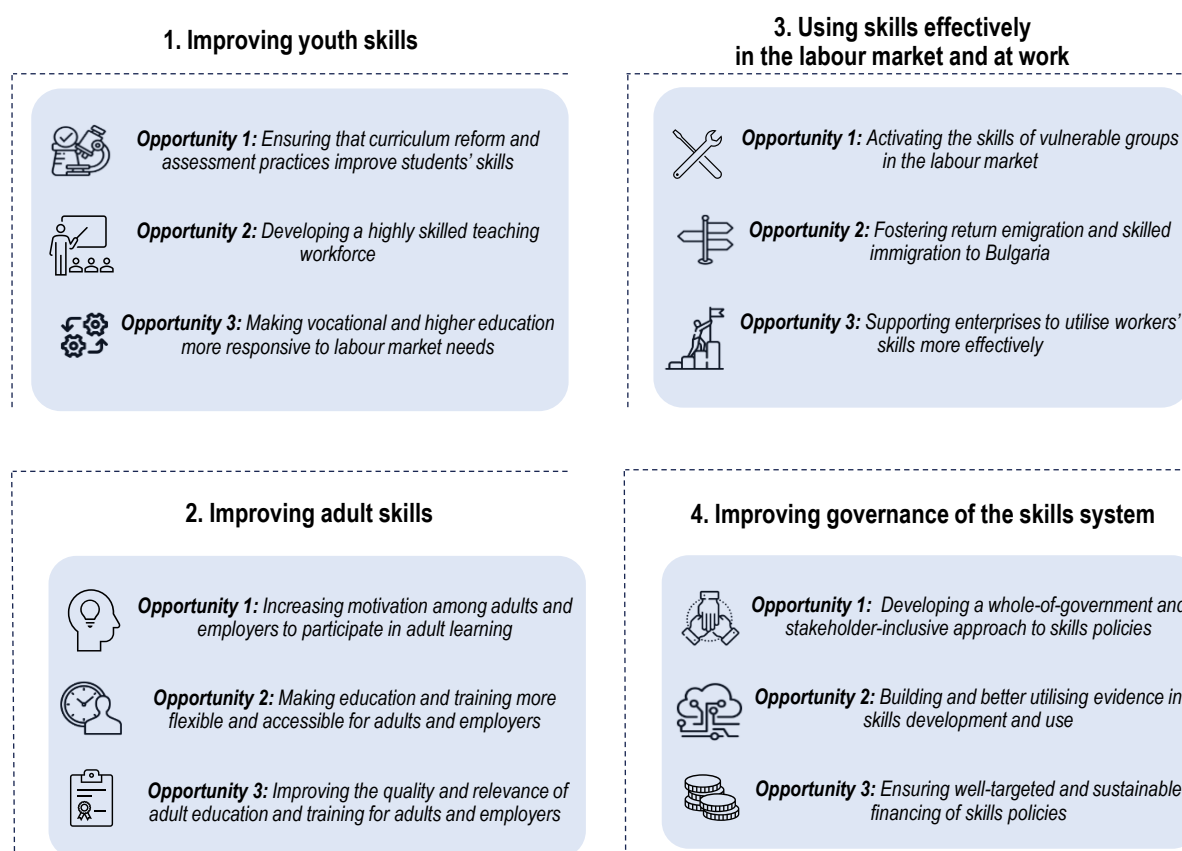
- The **Strategic Framework for the Development of Education, Training and Learning (2021-2030)** sets skills development priorities for the next decade. It aims to improve general education and vocational education and training (VET) by increasing its quality and making it more responsive to labour market needs. Priority 8 of the framework is dedicated specifically to lifelong learning. Separately, Bulgaria also has specific strategies for higher education and VET.
- The **National Strategy for Employment (2021-2030)** outlines the main policy directions related to the use of skills in the labour market. It aims to increase employment and improve the quality of the labour force, focusing specifically on individuals from vulnerable groups and their opportunities to upskill and reskill throughout their lifetimes. The strategy is supported by annual Employment Action Plans that define policies to be carried out in a given year, in line with the Employment Strategy.
- The **National Reform Program 2022** includes skills-related measures in response to the findings of the European Commission's Country Report for Bulgaria, and the Council of the European Union's recommendations to ensure adequate social protection and essential services for all, strengthen active labour market policies, improve access to distance working, and promote digital skills and equal access to education.
- Governance is mainly addressed in the **National Development Programme**, in which Priority 10, "Institutional Framework", aims to increase the sustainability and quality of policies by increasing dialogue, partnerships with other stakeholders and evidence-based decision making. A small number of governance provisions can also be found in the Education Strategy (2021-2030).

The above-mentioned strategies provide only a sample of the most recent initiatives directly related to improving the development, activation and use of skills. Nonetheless, they indicate that the Bulgarian Government is actively working to address skills challenges. Reinforcing efforts in this direction, the Government has asked the OECD and the Directorate-General for Structural Reform Support (DG REFORM) of the European Commission to support Bulgaria from 2022 to 2024 to develop an action plan for a comprehensive set of skills policy actions. The present report is an important first step in this regard, as the assessment and recommendations will feed into the action plan to help Bulgaria improve its skills performance in the coming years.

Priority areas and recommendations

Based on the OECD's initial assessment of the performance of Bulgaria's skills system and discussions with project participants, four priority areas across the three dimensions of the OECD Skills Strategy Framework were identified for this project. Over the course of the project, the OECD identified opportunities for improvement and developed recommendations in each priority area based on in-depth desk analysis and consultations with the Government of Bulgaria and stakeholder representatives. Figure 6 depicts these priority areas and opportunities for improvement.

Figure 6. OECD Skills Strategy Bulgaria: Priorities and opportunities



The summaries below highlight the key findings and recommendations for each priority area, while subsequent chapters of the full report provide more details in these areas.

Priority 1: Improving youth skills (Chapter 2 of the full report)

Ensuring that young people develop the skills, knowledge, values and attitudes needed to thrive in an interconnected world is vital for the general well-being of Bulgaria. The importance of youth developing a broad range of relevant skills is growing in the country, especially as Bulgaria faces a shrinking labour force linked to population ageing and high levels of emigration. Such a scenario puts extra pressure on the country's education system to ensure its youth develop the skills needed to ensure their smooth transition into employment and, at the same time, respond effectively to the skills needs of the labour market.

Bulgaria continues to struggle with low levels of performance in its student population. In particular, while Bulgarian students do relatively well at learning the knowledge taught in school curricula during initial education, students appear to struggle to apply their knowledge in real-world settings. Furthermore, within Bulgaria, gaps in learning outcomes between different student populations are a major concern, and Bulgaria has not managed to reduce these gaps over time.

On top of these challenges, and despite recent reforms, there are concerns about the quality of recent teaching graduates in Bulgaria and their readiness for the profession. Evidence shows that teacher candidates' grades are below the average of students in other higher education programmes and that Bulgaria's continuous professional development (CPD) system is fragmented and lacks quality control. The COVID-19 pandemic has further highlighted teachers' limited skills and resources to support students.

Another concern that needs to be addressed in Bulgaria is the responsiveness of VET and higher education to labour market needs. While employers in Bulgaria face challenges in finding the skills they need, vocational and higher education are not consistently equipping youth with strong transversal cognitive and practical skills to meet these needs. Successfully equipping young people with skills for work and life should positively affect their employment outcomes and reduce skills mismatches.

Opportunity 1: Ensuring that curriculum reform and assessment practices improve students' skills

Successfully designing and implementing modern school curricula are essential for equipping students with the skills needed for success in work and life. Bulgaria initiated a major curriculum reform in 2016 with the goal of establishing a competency-based education model. However, the country is struggling to implement the curriculum reform, in part due to a lack of awareness and capacity among practitioners. Several project participants stated that Bulgaria lacks a clear and shared vision of the curriculum reform and its benefits, apart from a detailed action plan with defined roles, responsibilities and actionable measures. Furthermore, training, support and capacity building for teachers to implement the competency-based curriculum in classrooms has been insufficient and inconsistent across regions, despite the availability of methodological support for this purpose. Moreover, the move to a competency-based curriculum requires modernising assessment practices in Bulgaria. To align with the new curriculum, national external assessment tools need to be reformed to monitor students' acquisition of diverse and higher-order competencies. The results of assessments should be used to monitor the implementation of the competency-based curriculum and students' progress against national learning standards, guiding system improvement over time.

Table 1. Opportunity 1: Ensuring that curriculum reform and assessment practices improve students' skills

Policy directions	High-level recommendations
Building awareness and capacity for curriculum implementation	<p>1.1 Increase education stakeholders buy-in to the vision for curriculum reform, and develop a detailed action plan with these stakeholders to facilitate implementation.</p> <p>1.2 Reinforce the capacity of regional education departments to provide methodological support to teachers in implementing the competency-based curriculum.</p>
Aligning external assessments with the competency-based curriculum	<p>1.3 Strengthen the national external assessment system by accelerating efforts to align it with the competency-based curriculum.</p>

Opportunity 2: Developing a highly skilled teaching workforce

Ensuring youth achieve higher skill levels depends on empowered, trained and motivated teachers. Despite recently introduced policies to build teacher capacity, the quality of teacher candidates and their readiness to enter the profession remain challenges for Bulgaria's education system. Initial teacher education (ITE) admission processes do not set minimum academic requirements or systematically assess candidates' broader competencies and motivations. Practical learning and exposure to different teaching practices during ITE are limited, hampering the classroom readiness of young teachers. Ensuring relevant and high-quality CPD opportunities for teachers is also critical for Bulgaria's efforts to develop a highly skilled teaching workforce that can improve the skills of young people. Like most OECD and European countries, Bulgaria has made CPD mandatory for teachers, but the quality and relevance of teachers' CPD could be improved. Despite high participation, the CPD system in Bulgaria is not based on a robust assessment of teachers' training needs. In addition, *ex ante* (pre-training) quality assurance of CPD programmes and providers is limited, and Bulgaria lacks a systematic approach for *ex post* (post-training) quality assurance of CPD to ensure the desired outcomes of CPD are being achieved.

Table 2. Opportunity 2: Developing a highly skilled teaching workforce

Policy directions	High-level recommendations
Selecting and preparing high-quality teaching candidates	<p>1.4 Introduce a more selective and comprehensive admission system for initial teacher education to ensure the suitability and quality of teaching candidates.</p> <p>1.5 Improve the quality and relevance of initial teacher education by aligning it more closely with classroom practice, including by expanding and supporting teaching practicum.</p>
Monitoring and improving teachers' continuing professional development	<p>1.6 Align continuing professional development programmes more closely to teachers' training needs by improving the collection and use of appraisal, assessment and evaluation data in CPD planning.</p> <p>1.7 Strengthen quality assurance of teachers' continuing professional development by expanding <i>ex ante</i> evaluation and introducing systematic <i>ex post</i> evaluation of the outcomes of CPD.</p>

Opportunity 3: Making vocational and higher education more responsive to labour market needs

Increasing the responsiveness of vocational and higher education to current and anticipated labour market needs benefits students, employers and the economy as a whole. Currently, Bulgarian employers have difficulty finding workers with the right set of skills. Greater involvement of employers and other local actors in initial VET could improve the relevance of VET graduates' skills to employers' needs. However, in Bulgaria, stakeholder engagement in VET is not systematic at the subnational level, which is important given that skills needs vary significantly across the regions. Collaboration between schools and employers can be improved by promoting greater work-based learning during initial VET through increased financial and non-financial support to employers and students. Furthermore, Bulgaria has limited tracking of higher education student outcomes, and higher education institutions struggle to make use of the available data. Public funding of higher education institutions could be used to create stronger incentives for institutions to offer programmes and curricula that align with labour market needs. Finally, youth from disadvantaged backgrounds have limited access to and success in higher education in Bulgaria. They require greater financial and non-financial support to succeed in higher education institutions, particularly when studying in fields that are considered national priorities.

Table 3. Opportunity 3: Making vocational and higher education more responsive to labour market needs

Policy directions	High-level recommendations
Strengthening the role of employers and local actors in vocational education and training	<p>1.8 Involve subnational vocational education and training stakeholders in the new sectoral skills councils and create fora for subnational stakeholders to discuss and improve the responsiveness of VET.</p> <p>1.9 The Ministry of Education and Science (MES) and the Ministry of Labour and Social Policy should co-operate to improve financial and non-financial support to enterprises and students to engage in work-based learning.</p>
Increasing the relevance of higher education to labour market needs	<p>1.10 Strengthen higher education institutions' institutional capacity and incentives to use labour market information and align their educational offers to labour market needs.</p> <p>1.11 Continue to provide financial aid and expand non-financial measures to support students from disadvantaged backgrounds in higher education, especially in programmes meeting priority skills needs.</p>

Priority 2: Improving adult skills (Chapter 3 of the full report)

Strengthening adult skills can benefit Bulgaria in both the short and long term. In the short term, improving adult skills through ongoing education and training can help to address current skills shortages in many sectors. Equally, it can help Bulgaria recover from the economic shocks of the COVID-19 crisis and, Russia's war of aggression against Ukraine, both of which have slowed the growth of the Bulgarian economy (OECD, 2022^[20]). In the long term, improving adult education and training, and subsequently, adult skills, can help Bulgaria prepare for shifting skills demands and improve labour productivity, boosting the Bulgarian economy.

The participation in adult education and training in Bulgaria is the lowest in the European Union. Low participation is driven by an especially low motivation to engage in lifelong learning, with a much higher percentage of adults in Bulgaria not participating and not wanting to participate in education and training than in the European Union on average. Furthermore, despite evidence of low skill levels among adults in Bulgaria, Bulgaria has the highest share in the European Union of adults responding that they do not participate in adult education and training because there is “no need”.

Even adults and employers in Bulgaria who are motivated and want to participate in adult learning face a number of barriers to doing so, most notably time and financial constraints. Scheduling and cost barriers are substantially greater in Bulgaria than in the European Union on average for both adults and employers. Project participants emphasised the need for greater flexibility and accessibility to help a wider range of adults fit learning into their work and personal schedules.

Regarding the quality and relevance of adult education and training, adults in Bulgaria are more likely to cite the lack of a suitable offer for education and training as a barrier to participating than in the European Union on average. Project participants also noted a lack of mechanisms for evaluating and improving the quality of adult education, training options and instructors as a barrier to raising adult skill levels in Bulgaria.

Opportunity 1: Increasing motivation among adults and employers to participate in adult learning

Adults and employers are more likely to feel motivated to participate in upskilling and reskilling activities if they are aware of the general benefits of lifelong learning and believe that participating in these activities will benefit them and lead to desired outcomes. During consultations, project participants cited low motivation as one of the primary challenges that needs to be addressed to improve adult skills in Bulgaria. Low motivation among individuals and employers can be boosted by better guidance and support. However, Bulgaria’s current infrastructure for adult career guidance is substantially underdeveloped and underfunded. Similarly, evidence shows that employers in Bulgaria do not often assess their future skills needs, and there is a lack of guidance and support to help them do so. Assessment of training needs is even more difficult for smaller enterprises. Both individuals and employers in Bulgaria also lack financial motivation to improve adult skills. Bulgaria’s existing financial incentives for adult learners appear to be insufficient for improving adult learning rates and do not successfully account for greater challenges faced by vulnerable groups. Employers in Bulgaria also face significant cost barriers to providing or supporting adult education and training for their employees, which are particularly acute for smaller-sized enterprises.

Table 4. Opportunity 1: Increasing motivation among adults and employers to participate in adult learning

Policy directions	High-level recommendations
Improving non-financial mechanisms to increase motivation among individuals and employers to participate in adult education and training	2.1 Strengthen holistic career guidance services for employed adults by expanding the capacity and quality of information and guidance centres.
	2.2 Strengthen support to employers to assess their skills and training needs.
Improving financial mechanisms to increase motivation among individuals and employers to participate in adult education and training	2.3 Expand individual training vouchers, while differentiating support to better target vulnerable groups.
	2.4 Better engage small- and medium-sized enterprises in adult education and training by piloting a sectoral training fund(s), with relatively higher support for smaller-sized enterprises.

Opportunity 2: Making education and training more flexible and accessible for adults and employers

Improving the flexibility and accessibility of adult education and training provision is crucial to improving the participation of adults in lifelong learning. International evidence supports this, suggesting that flexibility in format and design (e.g. part-time, online, non-formal, micro-credentials) can help overcome time- and distance-related barriers (OECD, 2019^[21]). Thus, flexibility is particularly important in Bulgaria, where schedule and distance are among the main barriers cited by individuals who want to but do not participate in adult learning. While Bulgaria currently has some flexible learning opportunities for adults, most notably partial qualification courses, these courses are not optimal for flexible adult learning because of their current funding, recognition and quality assurance mechanisms. Furthermore, adult learning that is flexible to the needs of employers is limited in Bulgaria by barriers to employers providing training in the workplace and/or during work hours. In addition, while shortening and simplifying learning pathways through the recognition of prior learning (RPL) can improve adult skills and participation in adult learning, the take-up of RPL remains low in Bulgaria. At the same time, while participation in adult upskilling and reskilling is generally low in Bulgaria, it lags even further behind for low-skilled adults. Easing access to basic education for adults can make adult learning more accessible to a wider range of individuals, encouraging greater participation.

Table 5. Opportunity 2: Making education and training more flexible and accessible for adults and employers

Policy directions	High-level recommendations
Improving the flexibility of adult education and training offers	<p>2.5 Introduce financial incentives for employers to increase employee education and training opportunities during working hours, with higher support for small- and medium-sized enterprises.</p> <p>2.6 Support and promote existing flexible adult education and training opportunities, including partial qualification courses.</p>
Making learning more accessible for low-skilled adults	<p>2.7 Reform the recognition of prior learning system for adults to encourage greater uptake of RPL services.</p> <p>2.8 Ease access to adult basic education and expand basic education opportunities for learners in other education and training programmes.</p>

Opportunity 3: Improving the quality and relevance of adult education and training for adults and employers

An extremely important aspect of making adult learning attractive to adults in Bulgaria is ensuring that adult learning opportunities are of high quality and teaching skills relevant to Bulgaria's current and future labour market. It is difficult to assess the quality of adult learning opportunities in Bulgaria due to a lack of relevant evidence for doing so, but there are indications that the quality is not particularly high. *Ex ante* quality assurance needs to be strengthened, and *ex post* quality assurance mechanisms need to be put in place in Bulgaria. While there are indications that the quality of teaching by adult learning trainers could be improved, Bulgaria lacks plans to address the low qualifications and capabilities of adult education trainers. In addition to challenges related to quality, low participation in adult learning in Bulgaria may be related to the perception that adult learning is not relevant to the needs of learners and employers. Adult learning opportunities in Bulgaria can be made more relevant by involving employers in designing adult education and training programmes, a practice that is not very prevalent in Bulgaria. Furthermore, the system currently in place to promote study in fields of national strategic importance in initial education is not sufficiently extended to adult learning.

Table 6. Opportunity 3: Improving the quality and relevance of adult education and training for adults and employers

Policy directions	High-level recommendations
Improving the quality of adult learning opportunities	<p>2.9 Strengthen <i>ex ante</i> assessment of adult learning providers and develop a system for independent, <i>ex post</i> monitoring and assessment of adult learning quality and outcomes.</p> <p>2.10 Strengthen initial and continuing professional development for adult learning trainers.</p>
Making adult learning more relevant to learners' and labour market needs	<p>2.11 Increase the involvement of employers in the design of adult education and training programmes.</p> <p>2.12 Develop a list of prioritised areas for adult education and training to inform differentiated public subsidies for adult learners in areas of skills shortages and/or of strategic economic importance.</p>

Priority 3: Using skills effectively in the labour market and at work (Chapter 4 of the full report)

The benefits of developing skills will be maximised only if policies also support people to supply their skills in the labour market and use them effectively at work. This entails using skills in various dimensions – activating the skills of Bulgaria's working-age population, utilising the skills of return migrants and skilled immigrants and utilising workers' skills effectively at work.

Better activating the skills of vulnerable groups in Bulgaria's labour market will be essential for improving overall skills use in the labour market. The majority of Bulgaria's unemployed or inactive adults are from often overlapping, vulnerable groups. Out-of-work adults from these vulnerable groups require proactive, tailored and high-quality services from the public employment service, in close and efficient co-operation with other relevant stakeholders due to the myriad barriers to employment they face.

Making the most of skills and minimising skills imbalances in Bulgaria's economy also require effective policies to foster the return emigration of Bulgarian nationals and the skilled immigration of foreign nationals. High emigration rates in Bulgaria have shrunk the labour force and contributed to chronic labour shortages in the country. Return migration can bring positive effects as emigrants acquire new experiences and values, develop new networks and learn new skills while working abroad. Likewise, foreign skilled immigrants can bring similar benefits, especially for priority sectors and those facing shortages.

Realising the benefits of skills development also requires policies to ensure that workers' skills are used effectively at work. A higher intensity of skills use at work is associated with higher job satisfaction, wages and productivity for workers, and higher output and innovation for employers. The organisation of workplaces is arguably the most important determinant of skills use. Practices known to positively affect the performance of employees and businesses are referred to as high-performance workplace practices (HPWPs). These include work flexibility and autonomy, teamwork and information sharing, training and development, career progression and performance management.

Opportunity 1: Activating the skills of vulnerable groups in the labour market

Activating the skills of adults from vulnerable groups requires connecting more of them to Bulgaria's National Employment Agency (NEA). However, unemployed and inactive adults from vulnerable groups do not currently have strong incentives to register with Bulgaria's public employment service. While Bulgaria's outreach efforts to unemployed and inactive adults from vulnerable groups appear to be insufficient, Bulgaria lacks evidence on the efficacy of these efforts to determine whether some should be expanded or ceased. Once in contact with the NEA, unemployed adults from vulnerable groups need intensive and tailored support to activate their skills in the labour market. Unemployed adults from vulnerable groups tend to receive less attention from Bulgaria's NEA caseworkers than other unemployed adults, in part reflecting caseworkers' high workloads and outdated client-profiling tools. Most of Bulgaria's unemployed adults from vulnerable groups have low levels of skills and education and so need to upskill or reskill in order to gain stable employment. However, investments in training for unemployed adults in Bulgaria are relatively low and volatile, and few unemployed adults from vulnerable groups receive training under active labour market policies.

Table 7. Opportunity 1: Activating the skills of vulnerable groups in the labour market

Policy directions	High-level recommendations
Connecting more vulnerable adults to public employment services	<p>3.1 Strengthen incentives for unemployed and inactive adults from vulnerable groups to register with the National Employment Agency and participate in active labour market policies by making benefits more accessible and generous.</p> <p>3.2 Evaluate the efficacy of Bulgaria's existing outreach programmes for unemployed and inactive adults from vulnerable groups and expand the most effective programmes.</p>
Expanding and tailoring employment services for vulnerable groups of adults	<p>3.3 Increase the frequency and intensity of National Employment Agency caseworker interactions with unemployed adults from vulnerable groups to help more of these adults access training and jobs.</p> <p>3.4 Place more unemployed adults from vulnerable groups into tailored and labour-market-relevant National Employment Agency training programmes by increasing the supply and demand for these programmes.</p>

Opportunity 2: Fostering return emigration and skilled immigration to Bulgaria

A major challenge and opportunity for using skills in Bulgaria's labour market and reducing skills imbalances is migration. High emigration and low return emigration, as well as low levels of skilled immigration of EU citizens and third-country nationals (TCNs), have limited Bulgaria's ability to use people's skills and address skills shortages. The first step towards fostering return emigration and skilled immigration is to make them a high priority in the national policy agenda. However, Bulgaria lacks cross-cutting and consistent buy-in for fostering return emigration and skilled immigration. Existing strategies do not set a clear, compelling vision and plan for fostering return emigration and skilled immigration. The public bodies with formal responsibilities for immigration have limited initiatives and co-ordination mechanisms to this end. A second step towards fostering return emigration and skilled immigration for Bulgaria is to develop effective policy measures and services targeting potential and arrived return emigrants and skilled immigrants. Bulgaria lacks outreach and communications measures for potential return emigrants and skilled immigrants. Return emigrants face some challenges integrating into Bulgaria's local labour market, and the same appears true of skilled immigrants. TCNs' access to Bulgaria's labour market has improved, but this has not clearly translated into higher skilled immigration or better employment outcomes. Bulgaria lacks support measures to help return emigrants and skilled immigrants successfully (re-)integrate into the labour market, or to adjust to other aspects of life in Bulgaria, such as schooling, healthcare and taxation, among others.

Table 8. Opportunity 2: Fostering return emigration and skilled immigration to Bulgaria

Policy directions	High-level recommendations
Prioritising return emigration and skilled immigration in Bulgaria's skills agenda	<p>3.5 Develop a comprehensive, ambitious vision and strategy for return emigration and skilled immigration.</p> <p>3.6 Assign clear responsibility and adequate resources for fostering return emigration and skilled immigration, both at the level of strategic councils and national agencies.</p>
Reaching and supporting return migrants and skilled immigrants	<p>3.7 Develop a comprehensive suite of measures for reaching out to Bulgarian emigrants and potential skilled immigrants, including an online portal promoting their migration to Bulgaria.</p> <p>3.8 Develop a comprehensive suite of services to help returning emigrants, skilled immigrants and international students find suitable work, start businesses and integrate into Bulgarian society.</p>

Opportunity 3: Supporting enterprises to utilise workers' skills more effectively

A country can successfully develop, activate and attract skills but fail to realise the full benefits of those skills if they are not used effectively at work. Indeed, some project participants argued that employers would need to better utilise workers' skills for the country to fully benefit from skills. Bulgaria will need to raise awareness of skills use in workplaces and HPWPs through inclusion in national, regional and sectoral strategies, as well as the dissemination of knowledge and good practices on HPWPs through targeted campaigns and centralised online information. Bulgarian strategies and policies tend not to give attention to skills use and HPWPs in workplaces. There also appears to be a limited understanding of the importance and concepts of skills use and HPWPs among policy makers and enterprises in Bulgaria. Project participants confirmed that small- and medium-sized enterprises (SMEs) lack the capacity to modernise workplace practices, such as HPWPs, and likely require targeted support to do so. Bulgaria lacks measures to support enterprises in adopting HPWPs. Bulgaria could potentially build on certain existing programmes and adapt good practices from other countries to support enterprises in adopting HPWPs.

Table 9. Opportunity 3: Supporting enterprises to utilise workers' skills more effectively

Policy directions	High-level recommendations
Raising awareness of effective skills use in Bulgarian workplaces	<p>3.9 Develop a clear vision and strategy for skills use and high-performance workplace practices in Bulgarian enterprises as part of a broader Action Plan for Skills.</p> <p>3.10 Raise awareness of the concepts, benefits and support for skills use and high-performance workplace practices among Bulgarian employers by leveraging existing employer networks and business portals.</p>
Supporting employers to improve skills use and adopt high-performance workplace practices	<p>3.11 Develop events and networking opportunities for enterprises to learn about high-performance workplace practices from peers and professionals.</p> <p>3.12 Pilot subsidised advisory services on implementing high-performance workplace practices for small- and medium-sized enterprises to overcome time and cost barriers to HPWPs.</p>

Priority 4: Improving the governance of the skills system (Chapter 5 of the full report)

A wide range of actors in Bulgaria have an interest in and influence the success of policies to develop and use people's skills. They include ministries of the central government, subnational authorities, education and training institutions, workers and trade unions, employers and their associations, civil society organisations and others. As a result, governing skills policies can be complex and multi-faceted, requiring co-ordination between a wide variety of institutions in policy design and delivery, financing, reform and day-to-day administration. Good governance is an enabling condition for successful skills policies and involves effective whole-of-government co-ordination, stakeholder engagement, integrated information systems and co-ordinated financing arrangements.

A whole-of-government approach includes horizontal co-ordination between different ministries of government with a stake in skills policy, as well as vertical co-ordination between different levels of government (such as the municipal level, the regional level and the central government). Such an approach can prevent overlaps and gaps in skills policies and ensure that authorities and policies are working together coherently towards complementary goals. Stakeholder engagement can occur during policy design, implementation and evaluation, and ranges from stakeholders voicing their interests or concerns to taking responsibility for implementing skills policies. Effective engagement can provide important intelligence for policy makers and build stakeholders' buy-in, all of which help to ensure the success of skills policies.

To cope with the inherent complexity and uncertainty of skills investments, integrated information systems on skills needs and outcomes are necessary for actors in the skills system. Such systems help the government to develop evidence-based skills policies; learning institutions to provide relevant and responsive courses; employers to plan hiring and training; and individuals to make informed learning and

career decisions. Finally, aligning and co-ordinating skills financing arrangements involves responsible ministries allocating public funding for skills in a coherent way that minimises gaps and overlaps and maximises impacts. This includes ensuring sufficient funding for each stage of learning over the life course. Co-ordinated financing also involves leveraging funding from supra-national sources (such as the European Union) and private sources (employers, workers and their representatives) to ensure that beneficiaries pay according to their capacity and that skills funding is sustainable in the long term.

Opportunity 1: Developing a whole-of-government and stakeholder-inclusive approach to skills policies

At the national level, there is a need to better co-ordinate different ministries and agencies, as existing arrangements such as the Council of Ministers and ad hoc bilateral arrangements are insufficient to ensure a whole-of-government approach to skills. Bulgaria lacks an overarching skills body to lead and oversee the skills system and to manage and co-ordinate different actors, institutions and strategies, including those currently planned at sector and local levels. Bilateral and multilateral relationships between ministries, agencies and municipalities in the area of skills policy could be strengthened. Currently, Bulgaria lacks co-ordination mechanisms like memoranda of understanding, joint policy projects and delivery teams, partnership agreements, etc., to strengthen co-operation on skills. Beyond government, project participants reported fragmentation in the involvement of stakeholders in Bulgaria's skills system. Existing advisory bodies, such as the Consultative Council for VET and the planned sectoral skills councils, have the potential to facilitate effective stakeholder engagement but are currently limited in their scope and do not take a skills-system-wide perspective. In addition, employers, trade unions, providers and subnational actors should be more systematically engaged and involved during policy design and implementation, including piloting initiatives and data collection and analysis.

Table 10. Opportunity 1: Developing a whole-of-government and stakeholder-inclusive approach to skills policies

Policy directions	High-level recommendations
Developing a whole-of-government approach to skills policies	<p>4.1 Improve whole-of-government leadership, oversight and co-ordination of the skills system by creating a permanent Skills Policy Council for Bulgaria.</p> <p>4.2 Identify and strengthen the most important bilateral inter-ministerial relationships for skills policies, including through joint projects and other formalised co-ordination actions.</p>
Engaging stakeholders effectively for skills policy making	<p>4.3 Strengthen and extend the Consultative Council for Vocational Education and Training to become a formal committee that works across and supports the whole skills system, reporting to and advising the Skills Policy Council.</p> <p>4.4 Ensure the planned sectoral skills councils include all relevant stakeholders and that they support the skills system as a whole.</p>

Opportunity 2: Building and better utilising evidence in skills development and use

Project participants expressed concerns that Bulgaria lacks high-quality information on skills needs in the labour market and on how well the government's various skills policies and programmes are working. Bulgaria's skills assessment and anticipation (SAA) includes numerous activities, such as quantitative forecasts, assessments of workforce skillsets and needs, surveys of employers and sectoral studies. However, the generated information sometimes lacks detail or relevance for end-users, such as education and training providers seeking to update their programmes or counsellors seeking to provide advice and guidance to learners and workers. Furthermore, the results of SAA activities are not systematically used by the ministries involved in skills policy. There is also a lack of monitoring and evaluation of education, training and labour market programmes, which hinders Bulgaria's understanding of what is working and how best to direct public finances. Authorities often lack the capacity to systematically undertake high-quality analysis and evaluations of skills policies and do not utilise the capacity of experts to their potential.

Table 11. Opportunity 2: Building and better utilising evidence in skills development and use

Policy directions	High-level recommendations
Improving the quality and use of skills needs information	4.5 Develop a more comprehensive and consolidated skills assessment and anticipation approach for use by all key actors in the skills system.
Improving the quality and use of performance data and evaluation evidence in skills policy	4.6 Create a cross-government data and evidence centre responsible for collating and improving skills data and evaluation evidence.

Opportunity 3: Ensuring well-targeted and sustainable financing of skills policies

There are four principal funding sources for education and training in Bulgaria: the state budget, European Structural and Investment Funds, employers and learners. In 2019, public expenditure on formal education per student in Bulgaria was below the EU average at all levels of education, from early childhood to tertiary education, even after adjusting for differences in purchasing power between countries. While secondary VET is state-funded at a higher rate per student than general education, VET centres and continuing VET for adults are mostly private, and training is often self-funded by learners, employers, or, in some cases, through EU funding. As noted earlier, public funding for adult learning and training active labour market policies for unemployed persons also appears low and not well-targeted in some instances. In addition, Bulgaria currently lacks a clearly defined and sustainable financing model and principles for sharing the costs of skills development between the state, employers and individuals. More robust and ongoing evaluation of existing spending across the skills system could enable the government to allocate – or reallocate – funding to those activities where there is the most return on investment.

Table 12. Opportunity 3: Ensuring well-targeted and sustainable financing of skills policies

Policy directions	High-level recommendations
Increasing and reallocating spending on skills development and use	4.7 Set medium- and longer-term targets for increasing expenditure on skills development in the new Action Plan for Skills.
	4.8 Evaluate existing spending across the skills system with the aim of reallocating resources to the activities offering the greatest returns.
Effectively sharing the costs of skills development	4.9 Define and find agreement on a clear overarching division of responsibility for funding skills development – between government (local and national), employers and individuals.

References

- Cristina Martinez-Fernandez, C. (2010), “Greening Jobs and Skills”. [9]
- Eurofound (2017), *Sixth European Working Conditions Survey – Overview report (2017 update)*, Publications Office of the European Union, Luxembourg. [15]
- Eurostat (2023), *At-risk-of poverty rate by detailed age group - EU-SILC survey*, https://ec.europa.eu/eurostat/databrowser/view/TESSI120/default/table?lang=en&category=s.tesip.tessi.tessisec.tessisec_rp (accessed on 8 May 2023). [12]
- Eurostat (2022), *Government expenditure on education*, Statistics Explained, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Government_expenditure_on_education (accessed on 1 February 2023). [18]
- Government of Bulgaria (2022), *Responses to the OECD Questionnaire for the OECD Skills Strategy Bulgaria*. [23]
- Hristova, A. and C. Ferre (2022), *Are workers in brown occupations prepared for the green transition? The case of Bulgaria’s high GHG-emitting districts. Background Paper to “Support to Territorial Decarbonization - Bulgaria” Project*, World Bank, Mimeo. [16]
- ILO (2018), *World Employment Social Outlook 2018: Greening with Jobs*, International Labour Office, Geneva, https://www.ilo.org/global/publications/books/WCMS_628654/lang-en/index.htm (accessed on 24 April 2023). [8]
- Karadjov, M. and E. Gelovska (2022), *Over 40% of Bulgaria’s population decline is due to emigration [translated]*, https://www.dnevnik.bg/bulgaria/2022/10/08/4400529_nad_40_ot_spada_na_naselenieto_e_zaradi_emigracii/ (accessed on 13 October 2022). [5]
- ManpowerGroup (2021), *ManpowerGroup Employment Outlook Survey Q3 2021 - Bulgaria Results*, https://go.manpowergroup.com/hubfs/Talent%20Shortage%202021/MPG_2021_Outlook_Survey-Bulgaria.pdf (accessed on 16 February 2023). [13]
- Ministry of Education and Science (2021), “Рейтингова система на висшите училища в България (Ranking system of higher education institutions in Bulgaria)”, <https://rsvu.mon.bg/rsvu4/#/media-article/131>. [14]
- Ministry of Education and Science (2019), *Анализ на резултатите от анкетно проучване на уменията, необходими за успешна реализация на пазара на труда (Analysis of the results of a survey of skills, necessary for successful performance in the labour market)*, https://ill.mon.bg/uploaded_files/Analiz_na_rezultatite.pdf. [10]
- OECD (2022), *Bulgaria Economic Snapshot*, OECD, Paris, <https://www.oecd.org/economy/bulgaria-economic-snapshot/> (accessed on 3 October 2022). [20]
- OECD (2022), *OECD Economic Outlook, Volume 2022 Issue 2*, OECD Publishing, Paris, <https://doi.org/10.1787/f6da2159-en>. [11]
- OECD (2022), *Reaching Out and Activating Inactive and Unemployed Persons in Bulgaria, Connecting People with Jobs*, OECD Publishing, Paris, <https://doi.org/10.1787/7b91154a-en>. [19]

- OECD (2021), *OECD Economic Surveys: Bulgaria 2021: Economic Assessment*, OECD Publishing, Paris, <https://doi.org/10.1787/1fe2940d-en>. [4]
- OECD (2019), *OECD Skills Outlook 2019: Thriving in a Digital World*, OECD Publishing, Paris, <https://doi.org/10.1787/df80bc12-en>. [21]
- OECD (2019), *OECD Skills Strategy 2019: Skills to Shape a Better Future*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264313835-en>. [1]
- OECD (2019), *PISA 2018 Results (Volume I): What Students Know and Can Do*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/5f07c754-en>. [22]
- OECD (2017), *OECD Skills Outlook 2017: Skills and Global Value Chains*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264273351-en>. [3]
- Pouliakas, K. (2018), *Determinants of Automation Risk in the EU Labour Market: A Skills-Needs Approach*, <http://hdl.handle.net/10419/185289>. [2]
- Stanchev, K., M. Popova and M. Brusis (2022), *Bulgaria Report - Sustainable Governance Indicators 2022*, Bertelsmann Stiftung. [17]
- United Nations (2022), *World Population Prospects 2022: Summary of Results*, Department of Economic and Social Affairs - Population Division, United Nations, New York, https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/wpp2022_summary_of_results.pdf. [6]
- United Nations (2019), *World Population Prospects 2019*, Department of Economic and Social Affairs, Population Division, United Nations, New York, <https://www.un.org/development/desa/pd/news/world-population-prospects-2019-0>. [7]

Annex A. The OECD Skills Strategy Dashboard for Bulgaria

This annex presents the OECD Skills Strategy Dashboard, which presents the performance of skills systems in OECD countries. It is the starting point for analysis in the diagnostic phase of Skills Strategy projects and allows the OECD and a country project team to identify the priority skills policy themes to be covered in greater detail. Presenting the relative position of countries on key skills outcomes, the dashboard provides a general overview of the strengths and weaknesses of a given country or region's skills system. This annex describes the characteristics, presents the indicators and describes the underlying methods for calculating the indicators.

Characteristics

The OECD Skills Strategy Dashboard for Bulgaria is the result of internal consultation and analysis of core indicators used in OECD Skills Strategy projects. It presents a simple, intuitive overview of the outcomes of skills systems that is easy to interpret. It provides a quick overview of Bulgaria's skills performance across the dimensions of the OECD Skills Strategy ("developing relevant skills" and "putting skills to effective use"). The dashboard applies a broad definition of skills by presenting foundational skills, problem-solving skills and breadth of skillsets, and considers both economic and social outcomes. A total of 33 key outcome indicators were selected and grouped into 16 aggregated indicators.

Indicator selection

The selection of indicators followed a process whereby a longlist of the most commonly used indicators in OECD Skills Strategy reports was gradually reduced to a shortlist of core indicators. This process built on the principle that the indicators describe the core outcomes of the different dimensions of the skills system. In addition, these indicators express outcomes in terms of level, trend, distribution and equity. The indicators need to be comparatively easy to interpret and based on OECD sources, using the most recently available.

Method for the calculation of aggregate indicators

To develop aggregate indicators that represent the relative position of countries on key outcomes of the skills system, a number of calculations were made on the collected data. To describe the relative position across countries, a score for each indicator was calculated ranging from 0 to 10, with 0 for the weakest performance and 10 for the strongest performance. This resulted in an indicator that allows comparisons between different types of indicators (e.g. averaging the performance of literacy scores and educational attainment rates). The resulting scores were normalised in such a way that better performance results in a higher score. Subsequently, an unweighted average of the indicators was calculated for each of the aggregates, and these scores were then ranked. The final ranking was separated into five groups of equal size, ranging from "Top 20% performer" to "Bottom 20% performer". Aggregate indicators are only presented in the dashboard when more than half of the underlying indicators have data available.

Table A A.1. The OECD Skills Strategy Dashboard: Dimensions, indicators and sources

Dimension and aggregates	Indicator	Source
Developing relevant skills		
How skilled are youth?	Reading (PISA), mean score, 2018 Mathematics (PISA), mean score, 2018 Science (PISA), mean score, 2018	OECD (2019 ^[22]), <i>PISA 2018 Results (Volume I): What Students Know and Can Do</i> , https://doi.org/10.1787/5f07c754-en .
Are the skills of youth improving?	PISA average three-year trend (reading, mathematics, science) ¹	
Are the skills of youth being developed inclusively?	PISA ESCS parity index, reading performance, 2018	
How many young adults attain tertiary education?	Tertiary education attainment rate, 25-34 year-olds, 2021 ²	Eurostat (2023), population by educational attainment level, sex and age (%) [edat_ifs_9903]
What is the quality of tertiary education?	Public expenditure on tertiary education, % of GDP, 2019	Eurostat (2023), Public expenditure on education by education level and programme orientation, as % of GDP [educ_uoe_fine06]
	Student-academic staff ratio, tertiary, 2020	Eurostat (2023), Education administrative data [educ_uoe_perp04]
How inclusive is tertiary education?	Share of tertiary educated with low-educated parents, 25-59 year-olds, 2019	Eurostat (2019), EU Survey on Income and Living Conditions, ad hoc module 2011
How strong are the digital skills of adults?	Above-basic overall digital skills, % 25-64 year-olds, 2019	Eurostat (2023), Survey on ICT Usage by Households and Individuals [isoc_sk_dskl_i]
Is there a strong culture of adult education?	Participation rate in education and training (LFS), last 4 weeks, 2021	Eurostat (2023), Labour Force Survey 2018
	Formal, non-formal adult education participation rate (AES), last 12 months, 2016	Eurostat (2018), Adult Education Survey 2016
	Willing to participate in adult education (AES), % of population, 2011/16	
	Barriers to participation (AES), % of people wanting to participate who did not, 2016	
Are employees and enterprises involved in continuing vocational training?	Share employees participating in CVT courses, 2020	Eurostat (2022), Continuing Vocational Training Survey 2020 (CVTS) [trng_cvt_12s]
How inclusive is adult education?	Gender (m-f), adult education participation rate difference (AES), 2016	Eurostat (2018), Adult Education Survey 2016
	High-low educated, adult education participation rate difference (AES), 2016	
Putting skills to effective use		
How well are skills activated in the labour market?	Employment rate, 15-64 year-olds, 2021	Eurostat (2023), Labour Force Survey [lfsi_emp_a]
	Labour force participation rate, 2021	Eurostat (2023), Labour Force Survey [lfsi_emp_a]
	Youth not in employment, education or training (NEET), % of 15-29 year-olds, 2021	Eurostat (2023), Transition from education to work [edat_ifse_20]
How inclusive is the labour market?	Gender (m-f), difference employment rate, 2021	Eurostat (2023), Labour Force Survey [lfsa_ergan]
	High-low educated, difference employment rate, 2021	Eurostat (2023), Labour Force Survey [lfsa_ergaed]
How well aligned are skills with the labour market?	Percentage of enterprises where fewer than 40% of employees have the skills that are about right to do the job, 2019	Eurofound (2019), European Company Survey 2019
Are skills used to support active, engaged citizenship?	Share of adults participating in formal voluntary activities, 2015	Eurostat (2018), Statistics on income and living conditions (EU-SILC)
	Share of adults participating in informal voluntary activities, 2015	
Do people use their skills intensively in daily life?	Share of adults with active citizenship, 2015	Eurostat (2018), Statistics on income and living conditions (EU-SILC)
	Under-skilling, share of employees with skills lower than required for job, 2014	CEDEFOP (2014), European Skills and Jobs Survey

Dimension and aggregates	Indicator	Source
Do firms adopt high-performance workplace practices?	Percentage of enterprises with high levels of job complexity and autonomy	Eurofound (2019), European Company Survey 2019
Is skills use stimulated by innovation?	Total R&D personnel, % of total employment, 2018-2020	Eurostat (2023), Total R&D personnel and researchers by sectors of performance, as % of total labour force and total employment, and by sex [rd_p_perslf]
	Patent applications European Patent office, per million inhabitants, 2017	Eurostat (2019), Patent applications to the EPO by priority year

Note: Indicators without a specific source between brackets are OECD indicators from OECD Data (<https://data.oecd.org/home/>).

1. The average trend is reported for the longest available period since PISA 2006 for science, PISA 2009 for reading, and PISA 2003 for mathematics.

2. Labour market imbalances, average standard deviation across occupations in wages, employment, hours worked, unemployment and under-qualifications, 2015/17.

Acronyms and abbreviations used in this table: PISA: Programme for International Student Assessment; ESCS: Economic, social and cultural status; LFS: Labour Force Survey; AES: Adult Education Survey; CVT: Continuing vocational training; R&D: Research and development.

Annex B. Strategies and recent reforms in Bulgaria related to skills and education

Table A B.1. Recent strategies and reforms in Bulgaria related to skills and education

Strategies/reforms	Year	Overview
National Development Programme (NDP) "Bulgaria 2030"	2020	"Bulgaria 2030" is Bulgaria's highest strategic document. It determines the vision of the development policies in all government sectors for the decade. Three strategic goals have been determined: accelerated economic development, demographic upswing and reduction of inequalities, to be achieved through 13 national priorities.
National Recovery and Resilience Plan	2022	This plan sets out the reforms and public investment projects Bulgaria plans to implement to emerge stronger from the COVID-19 pandemic and push forward the green and digital transitions. It is financed with the support of the EU Recovery and Resilience Facility.
Strategic Framework for the Development of Education, Training and Learning in the Republic of Bulgaria (2021-2030)	2021	This document outlines the principles and priorities for developing education and training for the coming decade. It corresponds to the objectives of Priority 1 of the NDP.
Employment Strategy of the Republic of Bulgaria (2021-2030)	2021	This strategy lays out Bulgaria's commitments in the field of employment, deriving from the Action Plan of the European Pillar of Social Rights. Its main objective is to improve the quantity and the quality of employment, with a special focus on vulnerable groups.
National Strategy for Lifelong Learning (2014-2020)	2014	This strategy aims to improve lifelong learning in Bulgaria by implementing a co-ordinated education and training system covering all ages and focusing on educational quality, equality, and corresponding to labour market needs.
Strategy for the Development of Higher Education in the Republic of Bulgaria (2021-2030)	2020	This strategy sets the policy directions in higher education for the next decade with a special focus on increasing the quality, digitalisation, accessibility and competitiveness of Bulgarian universities.
National Employment Action Plan (2022)	2022	This plan aims to create the conditions to reduce imbalances in the labour market with a special focus on disadvantaged groups. The National Employment Action Plans are updated annually.
National Strategy for Promotion and Improvement of Literacy Skills (2014-2020)	2014	This strategy aims to increase the quality, affordability and accessibility of literacy courses and to make functional literacy a national priority.
Operational Programme for Human Resource Development (OPHRD) (2014-2020)	2014	This OP aims to boost employment, reduce social exclusion and fight against poverty. It is co-financed by the European Union. The next programme – OPHRD (2021-2027) – should be adopted in the course of 2022.
Partnership Agreement with Bulgaria (2021-2027)	2022	This agreement with the European Commission defines Bulgaria's cohesion policy investment strategy. Its objective is to promote economic, social and territorial cohesion in Bulgarian regions and help implement key EU priorities, such as the green and digital transition.
Innovative Strategy for Smart Specialisation (2014-2020)	2014	This strategy identifies thematic areas to develop the innovation potential of Bulgaria. It is the basis for implementing the Operational Programme for Innovation and Competitiveness (2014-2020), which provides funding opportunities to accelerate the transition to a knowledge-based economy.
Programme "Education" (PE) (2021-2027)	2021	This programme is one of the main tools for implementing Priority 1 of the NDP, the Strategic Framework of Education (2021-2030) and the Strategy for the Development of Higher Education (2021-2030).
Action Plan of the Employment Agency 2022	2022	This action plan envisions the Employment Agency as a new-generation intermediary, technologically and professionally adapted to the dynamics and challenges of the market as well as the needs of job seekers and job providers.
Strategy for Development of Vocational Education and Training in the Republic of Bulgaria (2015-2020)	2015	This strategy aims to improve the quality and accessibility of VET in Bulgaria. An updated document has been issued to actualise the strategy for 2019-21. The development of VET was subsequently included in the Framework for Development of Education, Training and Learning (2021-2030).

Source: Government of Bulgaria (2022^[23]), Responses to the OECD Questionnaire for the OECD Skills Strategy Bulgaria.

Annex C. Full policy recommendations for Bulgaria

This annex presents the OECD's full policy recommendations for Bulgaria arising from this project. These recommendations and the analysis, evidence and international examples that support them can be found in Chapters 2-5 of the full report.

Priority 1: Improving youth skills (Chapter 2 of the full report)

Opportunity 1: Ensuring that curriculum reform and assessment practices improve students' skills

Table A C.1. Policy recommendations for ensuring that curriculum reform and assessment practices improve students' skills

Policy directions	Recommendations
Building awareness and capacity for curriculum implementation	<p>1.1. Increase education stakeholders buy-in to the vision for curriculum reform and develop a detailed action plan with these stakeholders to facilitate implementation. The MES should increase efforts to clearly communicate the rationale, expected benefits and desired outcomes related to the implementation of curriculum reform to education stakeholders (e.g. government officials, experts, teachers, school leaders and local authorities). These communication efforts should be accompanied by a detailed action plan that articulates how the vision will be translated to changes at the classroom level. The action plan should identify the key activities, timelines, resources, indicators and responsible actors to implement the curriculum reform. This includes setting out what resources and tools will be available to schools and teachers (e.g. teacher training on the competency-based curricula), and defining relevant indicators and targets to monitor reform implementation.</p> <p>1.2. Reinforce the capacity of regional education departments to provide methodological support to teachers in implementing the competency-based curriculum. MES should reinforce the capacity of (Regional Education Departments (REDs) to provide methodological support to teachers and school communities in developing practices focused on students' acquisition of key competencies. To do so, MES should review REDs' capacity and resources. It should subsequently build capacity within REDs through staff training to support and mentor teachers on the competency-based curriculum (e.g. how to develop and apply competency-based curricula). MES should also increase REDs' resources as needed while improving monitoring of REDs' activities to ensure effective support for implementing the competency-based curriculum.</p>
Aligning external assessments with the competency-based curriculum	<p>1.3. Strengthen the national external assessment system by accelerating efforts to align it with the competency-based curriculum. The Centre for Evaluation of Pre-school and School Education (CAPSE) should introduce test items that are able to assess students' competencies in relevant, practical contexts and focus less on student memorisation of knowledge. This could include introducing constructed-response items that measure a student's ability to formulate an argument and defend a point of view. CAPSE should develop an item bank with calibrated test items to increase the validity of the test. The agency should also prioritise investments in other essential psychometric resources to strengthen the national assessment system, such as installing a criterion-referenced scoring process to compare results over time. This would involve introducing performance levels and aligning these with Bulgaria's national learning standards. MES should work closely with and support CAPSE to ensure the agency has sufficient financial and technical resources to implement these reforms to the national external assessments.</p>

Opportunity 2: Developing a highly skilled teaching workforce

Table A C.2. Policy recommendations for developing a highly skilled teaching workforce

Policy Directions	Recommendations
Selecting and preparing high-quality teaching candidates	<p>1.4. Introduce a more selective and comprehensive admission system for initial teacher education to ensure the suitability and quality of teaching candidates. MES should create a working group gathering university representatives to encourage initial teacher education (ITE) providers to establish a common minimum threshold score for ITE admission. The threshold score should be based on State Matura scores and ensure that candidates have achieved a basic level of competency in key subject areas assessed by the State Matura. The working group should also be responsible for developing additional, more comprehensive selection criteria for assessing ITE applicants. This could include structured interviews and aptitude tests to assess both academic ability and candidates' non-cognitive skills (such as motivation, commitment, interpersonal skills, etc.). The working group should also discuss the weight to be given to the different criteria in the new ITE admission system.</p> <p>1.5. Improve the quality and relevance of initial teacher education by aligning it more closely with classroom practice, including by expanding and supporting teaching practicum. The Bulgarian Government should raise the minimum requirements for practical training during initial teacher education (ITE) to increase teachers' time in classrooms. In parallel, Bulgaria should better prepare teacher mentors for their roles, including through mandatory training. MES should also work with university representatives to expand the pool of schools available to teacher trainees. The pool of schools available for teacher practicum should be diversified and include schools from disadvantaged areas. MES should also work with university representatives to diversify the profile of teachers delivering course content during ITE, including inviting more current teachers to ITE classrooms. In particular, teachers working in rural and disadvantaged schools should be included in such an initiative to expose teacher candidates to a diverse range of classroom experiences and teaching methods.</p>
Monitoring and improving teachers' continuing professional development	<p>1.6. Align continuing professional development programmes more closely to teachers' training needs by improving the collection and use of appraisal, assessment and evaluation data in CPD planning. MES should ensure that the priority areas for CPD in the National Programme for Qualifications are based on comprehensive and timely information about the learning needs of teachers. For this purpose, MES should systematically collect, synthesise and use aggregated findings on training needs from teacher appraisals, students' results from national external assessments and school results from external evaluations and information from classroom observations. CPD providers should then be required to develop their programmes around those priorities. Teachers and principals should also be supported to identify and communicate their training needs. To complement the current appraisal system, MES should consider introducing an annual, school-based formative appraisal to generate evidence on teachers' and principals' training needs. Results from these school-based assessments should then be used to link schools' annual professional development plans to teachers' and principals' learning needs.</p> <p>1.7. Strengthen the quality assurance of teachers' continuing professional development by expanding <i>ex ante</i> evaluation and introducing systematic <i>ex post</i> evaluation of the outcomes of CPD. MES should ensure that all CPD programmes leading to teacher qualification credits are approved and registered in the Information Register of the Approved Qualification Programmes (IRAQP). The ministry should also introduce a data-driven, systematic approach to monitoring the quality of all registered CPD programmes over time. As a starting point, MES should make sure that CPD providers offering programmes that receive poor feedback in the MES's new teacher feedback mechanism be inspected. MES should also introduce indicators to evaluate programmes' effectiveness. These could include outcome indicators (e.g. new knowledge and skills for teachers; improved quality of student-teacher interaction based on teachers' surveys and teacher appraisals) and process indicators (e.g. material, equipment, and facilities; number of training hours delivered). In the long term, the ministry should invest in capacity building to ensure all registered CPD providers are re-assessed on an ongoing basis based on the measured quality of their CPD offerings.</p>

Opportunity 3: Making vocational and higher education more responsive to labour market needs

Table A C.3. Policy recommendations for making vocational and higher education more responsive to labour market needs

Policy Directions	Recommendations
Strengthening the role of employers and local actors in vocational education and training	<p>1.8. Involve subnational vocational education and training stakeholders in the new sectoral skills councils and create fora for subnational stakeholders to discuss and improve the responsiveness of VET. The Bulgarian Government should ensure that its sectoral skills councils (SSCs), which will be established in 2023, include representatives from the subnational level. This could be in the form of dedicated members or committees representing particular geographical regions. In parallel, Bulgaria should utilise District Development Councils to strengthen districts' input to initial VET provision, including on designing and updating the initial VET curriculum. The government should consider creating skills or VET committees under District Development Councils and including VET stakeholders in these bodies. These committees should provide VET-relevant insights to the central government, SSCs and local VET schools, including about local skills needs. Finally, each of these bodies should seek to support schools and employers to expand WBL and apprenticeships in initial VET (see Recommendation 1.9).</p> <p>1.9. MES and the Ministry of Labour and Social Policy should co-operate to improve financial and non-financial support to enterprises and students to engage in work-based learning (WBL). Bulgaria should encourage and support businesses, especially SMEs, to provide work-based learning opportunities to VET students. This could be done by providing apprentice wage subsidies and subsidising student mentors' training. The government should also offer incentives to set up training associations to share the costs of organising apprenticeships among groups of SMEs. In addition, the sectoral skills councils and any new subnational VET fora (see Recommendation 1.8) should have responsibility for supporting employers and schools to expand WBL in VET. They could do this, for example, by helping to establish partnerships between schools and employers and informing enterprises about government incentives for apprenticeships. Finally, government and municipalities should increase subsidised transportation for secondary VET students to attend school and WBL.</p>
Increasing the relevance of higher education to labour market needs	<p>1.10. Strengthen higher education institutions' institutional capacity and incentives to use labour market information and align their educational offers to labour market needs. The data collected under the planned national graduate survey should be combined with relevant information from BURS and made available to higher education institutions in an accessible and user-friendly way. The most important indicators should be presented annually to higher education institutions, for example, in the form of automatically generated factsheets. Authorities and higher education institutions should discuss and agree on the most useful data to include in such factsheets. At a minimum, they should include graduate labour market outcomes (employment status, field of study (mis-match, under-/over-qualification, etc.) by degree programme and level of study. MES should also adjust public higher education funding settings to increase completions in fields facing shortages and/or being of strategic importance. When determining the number of state-subsidised places by field and region, MES should utilise information from the planned national graduate survey and the improved skills assessment and anticipation activities proposed in Chapter 5 of the full report. The MES should also make greater use of performance-based funding in higher education by increasing the share of institutions' funding based on the employment outcomes of their graduates.</p> <p>1.11. Continue to provide financial aid and expand non-financial measures to support students from disadvantaged backgrounds in higher education, especially in programmes meeting priority skills needs. In the context of declining higher education enrolments, persistent skills imbalances, and unequal access to higher education, MES should continue to provide financial incentives to disadvantaged students (e.g. scholarships) to access higher education. In addition, MES should incentivise higher education institutions to implement non-financial support for disadvantaged students to succeed in university programmes. This should include earmarked and/or performance-based funding to public higher education institutions to identify and support students at risk of attrition, for example, through mentoring and counselling, bridging courses (e.g. in mathematics or literacy) and other tailored interventions. The ministry should prioritise such financial support for institutions offering programmes that meet critical skills needs in the labour market.</p>

Priority 2: Improving adult skills (Chapter 3 of the full report)

Opportunity 1: Increasing motivation among adults and employers to participate in adult learning

Table A C.4. Policy recommendations for increasing motivation among adults and employers to participate in adult learning

Policy Directions	Recommendations
Improving non-financial mechanisms to increase motivation among individuals and employers to participate in adult education and training	<p>2.1. Strengthen holistic career guidance services for employed adults by expanding the capacity and quality of information and guidance centres. The National Agency for Vocational Education and Training (NAVET), in collaboration with MES and the Ministry of Labour and Social Policy (MLSP), should launch a programme to improve the quality of existing information and guidance centres by providing resources, support and incentives for these centres to provide guidance and registration for guidance through multiple ways (e.g. in person, via phone and on line). Furthermore, the programme should involve targeted outreach and tailored guidance for groups of vulnerable employed individuals such as older Bulgarians, low-skilled workers and individuals working in sectors at risk of automation.</p> <p>2.2. Strengthen support to employers to assess their skills and training needs. MLSP, in collaboration with social partners, should strengthen information and support to employers, particularly SMEs, on assessing their skills and training needs (e.g. providing access to online skills assessment tools) and on finding suitable training opportunities to provide to their employees. Skills assessment tools should be developed by MLSP, and skills assessment support and information could be provided by social partners or by expanded sectoral skills councils (see Chapter 5 of the full report).</p>
Improving financial mechanisms to increase motivation among individuals and employers to participate in adult education and training	<p>2.3. Expand individual training vouchers, while differentiating support to better target vulnerable groups. As a first step towards implementing ILAs in Bulgaria, MLSP should collaborate with NAVET and MES to better design targeted financial incentives for individuals to participate in adult education and training. This can be done by extending the “vouchers for employees” scheme to all employed and unemployed individuals and reducing the co-finance rate for vulnerable groups, such as those with average or below qualification levels, older workers, low-income Bulgarians and individuals in occupations at risk of automation. Furthermore, to ensure the quality and relevance of this training, the list of courses that are eligible for the training vouchers should be from the areas of adult education and training of national and/or regional importance as determined by Recommendation 2.12 below (e.g. green skills, digital skills, etc.) and subject to the quality assurance mechanisms outlined in Recommendation 2.9.</p> <p>2.4. Better engage small- and medium-sized enterprises in adult education and training by piloting a sectoral training fund(s), with relatively higher support for smaller-sized enterprises. Bulgaria should pilot sectoral training funds in one or two sectors in order to raise enterprises’ commitment to funding training for workers. Both enterprises and government should contribute to the fund, with smaller contributions from smaller firms. Contributing to the fund could be voluntary for firms in the first instance and, should uptake be low, made mandatory through a levy scheme. A dedicated institution (such as an expanded sectoral council recommended in Chapter 5 of the full report) should oversee and support the implementation of the pilot, including by monitoring outcomes of education and training.</p>

Opportunity 2: Making education and training more flexible and accessible for adults and employers

Table A C.5. Policy recommendations for making education and training more flexible and accessible for adults and employers

Policy Directions	Recommendations
Improving the flexibility of adult education and training offers	<p>2.5. Introduce financial incentives for employers to increase employee education and training opportunities during working hours, with higher support for small- and medium-sized enterprises. To make education and training more accessible and flexible for working adults, MLSP should dedicate funds for a pilot programme to subsidise the costs to employers of providing education and training to employees during work hours. Funding could be provided to employers directly or via sectoral skills councils (see Chapter 5 of the full report) in specific strategic sectors and/or for specific skills (e.g. digital skills). Funding should subsidise training fees and could also subsidise wages during training. Finally, funding should cover more training costs for SMEs than for large enterprises.</p> <p>2.6. Support and promote existing flexible adult education and training opportunities, including partial qualification courses. NAVET, in collaboration with MES and MLSP, should support increased participation and quality in partial qualification courses. First, they should increase the affordability of partial qualification courses by including them on the list of approved courses for which individuals can redeem training vouchers (related to Recommendation 2.3). Second, they should improve the recognition of partial qualification awards to allow learners to transfer partial qualifications from one learning institution to another or from one “profession” of study to another (related to Recommendation 2.7). Third, they should strengthen the quality assurance of partial qualification courses to overcome the lack of regulation of these courses and build confidence in them among learners and employers (related to Recommendation 2.9). Finally, NAVET, MES and MLSP should raise awareness about flexible courses, such as partial qualifications and online courses to employers, employed individuals, and education and training providers through holistic career guidance (see Recommendation 2.1) and other existing communications channels, such as business associations, trade unions and sectoral skills councils (see Chapter 5 of the full report).</p>
Making learning more accessible for low-skilled adults	<p>2.7. Reform the recognition of the prior learning (RPL) system for adults to encourage greater uptake of RPL services. NAVET, MES and MLSP should collaborate with emerging RPL centre(s) to implement more streamlined and effective RPL processes and to incentivise greater take-up of RPL services, particularly among low-skilled adults. The RPL process should be streamlined by simplifying and shortening the administrative process for both individuals and providers; altering the design of RPL certificates to match other learning certificates; collecting data on RPL outcomes through the data and evidence centre (see Recommendation 5.6 in Chapter 5 of the full report); and targeting RPL services to specific vulnerable groups, such as low-skilled adults. In addition, to incentivise greater take-up of RPL, subsidies for RPL fees should be provided to individuals, similar to those provided for participation in adult education and training, and grants should be available to adult education and training providers that offer RPL services.</p> <p>2.8. Ease access to adult basic education and expand basic education opportunities for learners in other education and training programmes. MES should make adult basic (primary) education for low-skilled adults available free of charge in a wide range of educational institutions in Bulgaria that provide adult education and training, including general education schools, VET gymnasiums, VET colleges, universities and tertiary colleges, VET centres, and community cultural centres (<i>chitalishta</i>). Furthermore, adult basic education should be made more modular and flexible so that learners can combine basic education modules simultaneously with other reskilling and upskilling opportunities. Furthermore, enrolment requirements for CVET should be adjusted to include not only those with a fourth-grade equivalent education level but also those currently enrolled in adult basic education. Furthermore, the government should begin collecting data on participation in adult basic education to inform future policy actions in this area.</p>

Opportunity 3: Improving the quality and relevance of adult education and training for adults and employers

Table A C.6. Policy recommendations for making education and training more flexible and accessible for adults and employers

Policy Directions	Recommendations
Improving the quality of adult learning opportunities	<p>2.9. Strengthen <i>ex ante</i> assessment of adult learning providers and develop a system for independent, <i>ex post</i> monitoring and assessment of adult learning quality and outcomes. NAVET should strengthen <i>ex ante</i> assessment of adult learning providers by, for example, establishing quality labels and providing them to adult education and training providers that exceed minimum certification requirements. NAVET should further establish an <i>ex post</i> assessment process of adult learning providers, including those only providing partial qualifications (see Recommendation 2.6) with an external evaluation team. NAVET, in collaboration with MES and training providers, should collect relevant data on graduate outcomes from VET schools and centres and individuals who go through the RPL process to better monitor the quality of adult education and training. The data should be used to guide learners toward quality providers and to create healthy competition among providers in order to ensure the supply and take-up of high-quality and relevant adult education and training (see Recommendation 2.12).</p> <p>2.10. Strengthen initial and continuing professional development for adult learning trainers. MES, in collaboration with NAVET, should encourage the upskilling of adult educators through a combination of policy measures, including subsidising costs for adult education and training instructors to participate in training in andragogy and raising awareness about these subsidised courses among education and training providers. In addition, softer support should be offered to trainers and adult education and training providers on how to best instruct adults, including information, guidance, peer-learning opportunities, and sharing best practices.</p>
Making adult learning more relevant to learners' and labour market needs	<p>2.11. Increase the involvement of employers in the design of adult education and training programmes. MES, MLSP and the Ministry of Innovation, in collaboration with NAVET, should incentivise greater collaboration between employers or employers' organisations and adult education and training providers in designing education and training programmes relevant to employers' skills needs. This can be done by establishing dedicated structures, such as sectoral skills councils (see Chapter 5 of the full report) and/or regular meetings of employers with VET centres, VET colleges, higher education institutions and other adult education and training providers. These local stakeholders should be brought together to discuss local skills needs and the learning programmes that should be expanded or created to meet these needs.</p> <p>2.12. Develop a list of prioritised areas for adult education and training to inform differentiated public subsidies for adult learners in areas of skills shortages and/or of strategic economic importance. The MLSP, MES and NAVET should establish a list of prioritised areas of adult education and training of national and/or regional importance. Evidence to inform the list should include the skills assessment and anticipation outlined in Chapter 5 of the full report, current employment forecasting projections and the list of "protected specialities" and "priority professional fields" used to determine financial incentives in secondary education. In addition, Bulgaria should increase the value of existing training vouchers (see Recommendation 2.3) for learning opportunities in areas of skills shortages and/or of strategic economic importance. Thus, the value of training vouchers should differ based on learner characteristics and the relevance of training programmes to skills needs. The list of priority areas should be updated to ensure its continued relevance. However, it should be stable over the medium term (e.g. for a three-to-five-year period) to ensure that institutions have enough time to invest in developing programmes that meet labour market needs.</p>

Priority 3: Using skills effectively in the labour market and at work (Chapter 4 of the full report)

Opportunity 1: Activating the skills of vulnerable groups in the labour market

Table A C.7. Policy recommendations for activating the skills of vulnerable groups in the labour market

Policy Directions	Recommendation
Connecting more vulnerable adults to public employment services	<p>3.1. Strengthen incentives for unemployed and inactive adults from vulnerable groups to register with the National Employment Agency (NEA) and participate in active labour market policies by making benefits more accessible and generous. Bulgaria should continue to make unemployment insurance and social assistance benefits conditional on registering with the NEA. However, it should lower the six-month waiting period, increase the level of social assistance benefits, and consider temporarily providing minimum (social) health coverage to encourage more unemployed and inactive adults from vulnerable groups to register with the NEA. Bulgaria should also seek opportunities to get more unemployed adults from vulnerable groups receiving unemployment benefits for longer and at higher benefit rates, for example, by tweaking unemployment insurance eligibility criteria. In both cases, Bulgaria should require, support and monitor training and/or job-search activity by benefit recipients (see Recommendations 3.3 and 3.4).</p> <p>3.2. Evaluate the efficacy of Bulgaria's existing outreach programmes for unemployed and inactive adults from vulnerable groups and expand the most effective programmes. Bulgaria should conduct counterfactual evaluations of the impacts of its programmes that seek to reach out to unemployed and inactive adults from vulnerable groups. This should include ensuring the implementation of interventions that aim to improve the evaluation of NEA's policies, outlined in the OPHRD (2021-2027). Based on the results of these evaluations, Bulgaria should expand those programmes that are most effective at getting unemployed and inactive adults from vulnerable groups registered with the NEA and Social Assistance Agency. As part of this, Bulgaria should consider increasing the number and scope of activators and mediators who reach out to these groups, including youth and Roma activators/mediators.</p>
Expanding and tailoring employment services for vulnerable groups of adults	<p>3.3. Increase the frequency and intensity of National Employment Agency caseworker interactions with unemployed adults from vulnerable groups to help more of these adults access training and jobs. To make this possible, Bulgaria should first seek to free up existing NEA resources. It should expand the NEA's online services for clients with sufficient digital skills (registration, guidance, courses, etc.), thereby reducing the time caseworkers spend on these clients. It should also seek to allocate caseworkers' time more efficiently to the clients who need it most, as part of relevant measures in the OPHRD (2021-2027) targeting the digital transformation of the NEA. It could do this by developing and utilising a more modern statistical profiling tool, for example, one that predicts clients' unemployment duration. In addition, Bulgaria should consider expanding the number of caseworkers in the NEA to at least return caseloads to their pre-pandemic levels, and ideally below that, to allow more intensive and personalised support for unemployed adults from vulnerable groups. Reliable data and information on skills needs generated by improved skills assessment and anticipation activities (see Chapter 5 of the full report) should feed into the advice given by NEA caseworkers to unemployed adults from vulnerable groups.</p> <p>3.4. Place more unemployed adults from vulnerable groups into tailored and labour-market-relevant National Employment Agency training programmes by increasing the supply and demand for these programmes. Bulgaria should increase the supply of training tailored to the individual needs of unemployed adults from vulnerable groups (especially youth, Roma and low-educated/low-skilled adults) within the context of current active labour market policies (ALMPs) and those planned in the OPHRD (2021-2027). Caseworkers should seek to increase clients' interest in and demand for these programmes by conducting in-depth assessments of clients' skills and training needs and promoting relevant training to them (see Recommendation 3.3). The NEA should offer a range of training to meet the learning needs of unemployed adults from vulnerable groups. This should include training targeting basic skills (e.g. literacy, numeracy, digital) and socio-emotional skills, in addition to job-specific/technical skills, whether non-formal or formal education and training. The results of this training should be monitored over time to ensure its relevance to the labour market and to allow ongoing improvements. To facilitate this increased supply, Bulgaria should increase the share of ALMP expenditure dedicated to training programmes to EU average levels and stabilise funding over time. It could do this first by rebalancing existing ALMP expenditure away from direct job creation towards programmes that upskill and reskill job seekers. It should also consider expanding its overall investments in training ALMPs as a percentage of GDP to get closer to international averages. Finally, individuals who complete a training ALMP should subsequently be required, incentivised and supported to search for a job that utilises their newly acquired skills.</p>

Opportunity 2: Fostering return emigration and skilled immigration to Bulgaria

Table A C.8. Policy recommendations for fostering return emigration and skilled immigration to Bulgaria

Policy Directions	Recommendations
Prioritising return emigration and skilled immigration in Bulgaria's skills agenda	<p>3.5. Develop a comprehensive, ambitious vision and strategy for return emigration and skilled immigration. Bulgaria should explicitly articulate the potential benefits of and a positive vision for return emigration and skilled immigration, especially for achieving the country's development goals. It should also set ambitious and concrete goals for return emigration and skilled immigration (including for international students in Bulgaria), such as quantifiable targets for migration flows. The government should do this in any action plans developed under the current national strategies on migration concerning Bulgarian citizens, as well as in all future policies and strategies related to migration, employment and skills. The ministries of employment, education, interior, economy and others, as well as social partners, should co-ordinate to develop this comprehensive and ambitious vision and strategy, ensuring it is aligned with Bulgaria's current and anticipated skills needs. This process should include clearly allocating responsibility for achieving goals and targets (see Recommendation 3.6) and developing a comprehensive suite of programmes and measures for fostering return emigration and skilled immigration (see Recommendations 3.7 and 3.8).</p> <p>3.6. Assign clear responsibility and adequate resources for fostering return emigration and skilled immigration, both at the level of strategic councils and national agencies. Bulgaria should make fostering return emigration and skilled immigration a priority objective of the Council for Working with Bulgarians Abroad and the State National Council on Migration, Borders, Asylum and Integration, respectively. It should expand the remit and resources of the State Agency for Bulgarians Abroad to be responsible and resourced for fostering return emigration, and specifically for achieving the related goals of a renewed Bulgarian vision and strategy for return emigration (Recommendation 3.5). An existing or new body should similarly be responsible and resourced for fostering skilled migration, especially in areas of skills shortages. These bodies should be responsible for developing a suite of targeted measures for emigrants and skilled immigrants (Recommendations 3.7 and 3.8). They should also co-ordinate on areas of service overlap. This could include an online portal promoting Bulgaria, job opportunities, recognition of qualifications, support services, etc. and support services for the (re-)integration of returning emigrants and skilled immigrants into the labour force and life in Bulgaria. The bodies with responsibility for fostering return emigration and skilled immigration should also co-ordinate formally with other agencies with responsibilities for migration and/or labour market integration (e.g. the NEA). The renewed State Agency for Bulgarians Abroad and the body responsible for fostering skilled migration should report on their activities and achievements to the State National Council on Migration, Borders, Asylum and Integration and the Council for Working with Bulgarians Abroad. These councils should co-ordinate with a new Skills Policy Council (see Recommendation 5.1 in Chapter 5 of the full report).</p>
Reaching and supporting return migrants and skilled immigrants	<p>3.7. Develop a comprehensive suite of measures for reaching out to Bulgarian emigrants and potential skilled immigrants, including an online portal promoting their migration to Bulgaria. Bulgaria should consider developing an online platform targeting Bulgarian workers abroad and potential skilled immigrants, promoting their relocation to Bulgaria. The platform should provide relevant information, foster communications and allow for the development of online communities. The platform should include information on Bulgaria's strengths and opportunities in terms of employment, investments, quality of life, schooling, etc., consistent with the key motivations of return emigrants and skilled immigrants. The platform should also be used to collect more and better data on the characteristics of Bulgaria's diaspora (e.g. registration data or online surveys). The platform design could build upon the existing, smaller-scale platforms for emigrants developed by different NGOs in Bulgaria. The suite of measures should also include virtual and in-person networking events and job fairs, particularly focused on key destination countries for emigrants (e.g. Germany, Spain and the United Kingdom) and key source countries for immigrants (e.g. Balkan and Slavic language countries). Importantly, these efforts should also target international students in Bulgaria. The measures should be promoted through existing institutions and agencies focused on the diaspora and investment attraction.</p> <p>3.8. Develop a comprehensive suite of services to help returning emigrants, skilled immigrants and international students find suitable work, start businesses and integrate into Bulgarian society. The NEA should create specific support services to help return migrants and skilled immigrants (including international students) find well-matched jobs, consistent with the objectives in the OPHRD (2021-2027). These could include information sessions and job-search matching services between migrants and enterprises, as well as referrals to institutions that can recognise prior learning from abroad (see Recommendation 2.7 in Chapter 3 of the full report). Ministries and agencies involved in innovation and entrepreneurship should also provide information, guidance and networking opportunities to returning emigrants and skilled immigrants to help them apply their skills, use their networks acquired abroad and start new businesses in Bulgaria. This could include short courses in entrepreneurial skills, such as creating a business plan, financial planning, navigating bureaucratic requirements, etc. Bulgaria should also provide tailored information to return emigrants and skilled immigrants on renting/buying, schools and kindergartens, tax obligations, etc. As part of this, it should provide feedback to responsible agencies on how to streamline these processes for return migrants and skilled immigrants. Information on these services and topics could also be included in an online platform targeting Bulgarian workers abroad and potential skilled migrants (see Recommendation 3.7).</p>

Opportunity 3: Supporting enterprises to utilise workers' skills more effectively

Table A C.9. Policy recommendations for supporting enterprises to utilise workers' skills more effectively

Policy Directions	Recommendations
Raising awareness of effective skills use in Bulgarian workplaces	<p>3.9. Develop a clear vision and strategy for skills use and high-performance workplace practices in Bulgarian enterprises as part of a broader Action Plan for Skills. In its Action Plan for Skills, Bulgaria should explicitly articulate the potential benefits and a vision for implementing HPWPs and effectively using skills in Bulgarian workplaces. It should set concrete goals and targets for skills use and HPWPs and collect data from employers to monitor the achievement of these goals. The ministries of employment, education, economy and others, as well as social partners, should co-ordinate to develop these goals for skills use and HPWPs to ensure their suitability and coherence with other strategies and goals (e.g. the National Strategy for SMEs [2021-2027]). This process should include clearly allocating responsibility for achieving goals and targets and developing a comprehensive suite of programmes and measures to support employers in implementing HPWPs (see Recommendations 3.11 and 3.12).</p> <p>3.10. Raise awareness of the concepts, benefits and support for skills use and high-performance workplace practices among Bulgarian employers by leveraging existing employer networks and business portals. Bulgaria should improve data on skills use and HPWPs in workplaces, for example, by participating in the Survey of Adult Skills (PIAAC) and/or running its own surveys. The Bulgarian Small and Medium Enterprise Promotion Agency (BSMEPA), other agencies with responsibilities for enterprises and innovation, and social partners should co-ordinate to raise awareness among enterprises of skills use at work and HPWPs. Bulgaria should disseminate information on the concepts and benefits of skills use and HPWPs, good practices from enterprises, and available support from the government for HPWPs (see Recommendations 3.11 and 3.12) to all groups and sectors of employers. They should centralise this information on the existing one-stop-shop portal for SMEs and update existing resources (such as the Business Guide for Small and Medium-Sized Enterprises) with this information. These actors should consider developing a campaign that includes recognising/awarding high-performing companies and promoting skills use at work and HPWPs on social media channels.</p>
Supporting employers to improve skills use and adopt high-performance workplace practices	<p>3.11. Develop events and networking opportunities for enterprises to learn about high-performance workplace practices from peers and professionals. Bulgaria should create opportunities for enterprises, particularly SMEs, to meet and learn about good practices for implementing HPWPs. The ministries responsible for enterprises, innovation and skills should partner with employer associations and training unions to develop peer-learning conferences, seminars and workshops. These should allow firms to learn from other Bulgarian and international firms in their sector or supply chain who have proven experience implementing HPWPs. The ministries should subsidise these events, including having international experts attend to present on different areas of HPWPs. These events should be promoted as part of broader awareness-raising initiatives on skills use at work and HPWPs (see Recommendation 3.10) and be used to point enterprises to available support for implementing HPWPs (see Recommendation 3.12).</p> <p>3.12. Pilot subsidised advisory services on implementing high-performance workplace practices for small- and medium-sized enterprises to overcome time and cost barriers to HPWPs. Bulgaria should pilot public subsidies for consultants, mentors or coaches to provide tailored, one-on-one advice to SMEs about implementing HPWPs. This could be achieved through a voucher scheme or other financial scheme. The ministries responsible for enterprises, innovation and skills should partner with employer associations and training unions to develop these services, building upon existing advisory services being offered to enterprises (e.g. in the areas of ICT and export market development). Alternatively, Bulgaria could consider making these services part of advisory services to enterprises to assess their skills and training needs (see Chapter 3 of the full report). The results of the pilot should be closely monitored, and the service should be improved as needed in light of the pilot results.</p>

Priority 4: Improving the governance of the skills system (Chapter 5 of the full report)

Opportunity 1: Developing a whole-of-government and stakeholder-inclusive approach to skills policies

Table A C.10. Policy recommendations for developing a whole-of-government and stakeholder-inclusive approach to skills policies

Policy Directions	Recommendations
Developing a whole-of-government approach to skills policies	<p>4.1. Improve whole-of-government leadership, oversight and co-ordination of the skills system by creating a permanent Skills Policy Council for Bulgaria. The Skills Policy Council should bring together ministries, agencies, regional and municipal representatives and key non-government actors with a stake in skills policies. The council should oversee the skills system and ensure the achievement of Bulgaria's skills policy objectives, for example, by monitoring and reporting on skills policy implementation and outcomes. This should include oversight of existing skills bodies (e.g. the National Agency for Vocational Education and Training, NAVET) and those that are planned (e.g. sectoral skills councils). Finally, the Skills Policy Council should also oversee and publicly report on initiatives to improve stakeholder engagement (see Recommendations 4.3 and 4.4), skills needs information (see Recommendations 4.5 and 4.6), policy evidence (see Recommendation 4.7), resource allocation (see Recommendations 4.8 and 4.9) and cost sharing (see Recommendation 4.10), and any others that are defined in Bulgaria's proposed Action Plan for Skills.</p> <p>4.2. Identify and strengthen the most important bilateral inter-ministerial relationships for skills policies, including through joint projects and other formalised co-ordination actions. The Bulgarian Government should identify bilateral inter-ministerial relationships critical for effective skills and related policies and seek to strengthen these relationships. This would include relationships between ministries, departments and agencies responsible for delivering whole-of-government priorities, such as boosting economic growth and productivity, managing the digital and green transitions and improving equity. These key bilateral relationships are likely to include, for example, the relationship between MES and the Ministry of Innovation and Growth (MIG) on innovation policies, and between MES and the MLSP on employment and skills forecasting. These ministries should engage in active co-ordination measures, beginning with regular bilateral meetings at the minister and technical level, joint working groups and developing into joint projects and funding. The proposed Skills Policy Council should oversee, monitor and encourage stronger bilateral relationships between the ministries, departments and agencies involved in skills policy (see Recommendation 4.1 above).</p>
Engaging stakeholders effectively for skills policy making	<p>4.3. Strengthen and extend the Consultative Council for Vocational Education and Training to become a formal committee that works across and supports the whole skills system, reporting to and advising the Skills Policy Council. The broadened Consultative Council should include key social partners, academic experts and delivery institutions, and agencies from across the whole skills system. It should cover not only initial VET but also tertiary education and adult learning, including for out-of-work adults. The broadened Consultative Council should be responsible for supporting and advising the Skills Policy Council on policy development and implementation through information and evidence gathered from its members.</p> <p>4.4. Ensure the planned sectoral skills councils include all relevant stakeholders and that they support the skills system as a whole. Bulgaria should expand the membership of SSCs to include not only MES but several ministries with responsibilities for skills. It should also consider expanding the remit of SSCs to cover issues other than VET, for example, tertiary education and adult learning, including for out-of-work adults. SSCs should be encouraged to articulate broader sectoral skills needs rather than focusing on narrower issues of curriculum, qualifications, etc. The proposed Skills Policy Council at the national level (see Recommendation 4.1) should oversee SSCs and involve them in Skills Policy Council meetings, to ensure their effective performance.</p>

Opportunity 2: Building and better utilising evidence in skills development and use

Table A C.11. Policy recommendations for building and better utilising evidence in skills development and use

Policy Directions	Recommendations
Improving the quality and use of skills needs information	4.5. Develop a more comprehensive and consolidated skills assessment and anticipation approach for use by all key actors in the skills system. MES, the MLSP, NEA, other relevant ministries and agencies, subnational authorities and social partners should collaborate to define which data and information they need from SAA initiatives. The proposed Skills Policy Council, strengthened and more broadly focused Consultative Council for Vocational Education and Training (CCVET) and sectoral skills councils (see Recommendations 4.1, 4.3 and 4.4) should support this process. Based on this assessment, these actors should commission experts to improve and consolidate Bulgaria's SAA methods. For example, this should include expanding existing quantitative tools to provide more sectoral, occupational, educational, demographic, regional and temporal insights on skills supply and demand, as required by end users. It should also involve drawing on qualitative insights from consultation with employers and potentially from foresight techniques. Finally, Bulgaria should promote and monitor the use of improved SAA information by career guides/counsellors for youth in formal education (Chapter 2 of the full report), adults in education and training (Chapter 3 of the full report) and NEA caseworkers and unemployed adults (Chapter 4 of the full report), as well as by advisors assessing enterprises' skills and training needs (Chapter 3 of the full report) and providing other business support services.
Improving the quality and use of performance data and evaluation evidence in skills policy	4.6. Create a cross-government data and evidence centre responsible for collating and improving skills data and evaluation evidence. The government should create a centre to integrate, undertake and/or commission primary and secondary data collection, analysis and evaluation for skills policy. It should identify opportunities to improve information and evidence based on the needs defined by the government and non-government actors involved in skills policy (e.g. see Recommendation 4.5). The centre should be staffed with a small team that is supported with secondments from the ministries involved in skills policy. It should also establish formal and informal networks with experts from academia, research institutes, social partners, non-government organisations and the private sector. The centre should be governed by and report to the proposed Skills Policy Council (see Recommendation 4.1), potentially forming part of a secretariat for the council. Information and data collected and maintained by the centre should be relevant and accessible to the diverse actors with a stake in skills policy, including ministries and agencies in government, including the CCVET, the planned sectoral skills councils, municipal authorities and others (see Opportunity 1 above).

Opportunity 3: Ensuring well-targeted and sustainable financing of skills policies

Table A C.12. Policy recommendations for ensuring well-targeted and sustainable financing of skills policies

Policy Directions	Recommendations
Increasing and reallocating spending on skills development and use	<p>4.7. Set medium- and longer-term targets for increasing expenditure on skills development in the new Action Plan for Skills. Targets should be set for different elements of the skills system, e.g. VET, higher education, adult learning, ALMPs and supporting high-performance work practices (HPWPs). These targets should also define the desired spending contributions from different sources, including European funds, state funds, employers and individuals.</p> <p>4.8. Evaluate existing spending across the skills system with the aim of reallocating resources to the activities offering the greatest returns. The proposed cross-government data and evidence centre should systematically evaluate and analyse the return on investment of Bulgaria's expenditure on skills development and use (see Recommendation 4.6). Funding should be gradually reallocated to areas with the highest returns, e.g. to SAA, career guidance and business support services, and from job creation to training in ALMPs. This funding allocation should be defined in Bulgaria's new action plan for skills.</p>
Effectively sharing the costs of skills development	4.9 Define and find agreement on a clear overarching division of responsibility for funding skills development – between government (local and national), employers and individuals. This agreement should clarify where and how government (at the national and municipal levels), employers and individuals should co-invest in education and training. This agreement should be developed by state and social partners and codified in a tripartite agreement. The agreement should also seek to articulate how stable funding will be ensured over time, even with the use of European project-based funding. Such a tripartite agreement could be instigated, co-ordinated and overseen by the proposed Skills Policy Council (see Recommendation 4.1), with support from the strengthened CCVET (see Recommendation 4.3) and other bodies, including the proposed data and evidence centre (see Recommendation 4.6).

OECD Skills Studies

OECD Skills Strategy Bulgaria

ASSESSMENT AND RECOMMENDATIONS

REPORT SUMMARY

Skills are the key to shaping a better future and central to the capacity of countries and people to thrive in an increasingly interconnected and rapidly changing world. Megatrends such as digitalisation, globalisation, demographic change and climate change are reshaping work and society, generating a growing demand for higher levels and new sets of skills.

OECD Skills Strategy projects provide a strategic and comprehensive approach to assess countries' skills challenges and opportunities and help them build more effective skills systems. The OECD works collaboratively with countries to develop policy responses that are tailored to each country's specific skills needs. The foundation of this approach is the OECD Skills Strategy Framework, which allows for an exploration of what countries can do better to: 1) develop relevant skills over the life course; 2) use skills effectively in work and in society; and 3) strengthen the governance of the skills system.

The report, *OECD Skills Strategy Bulgaria: Assessment and Recommendations*, identifies opportunities and makes recommendations to improve youth skills, improve adult skills, use skills effectively in the labour market and at work, and improve the governance of the skills system in Bulgaria.