“The best investment in our future is the investment in our people. Skills and education drive Europe’s competitiveness and innovation. But Europe is not yet fully ready. I will ensure that we use all the tools and funds at our disposal to redress this balance.”

President Von der Leyen

“Everyone has the right to quality and inclusive education, training and lifelong learning in order to maintain and acquire skills that enable them to participate fully in society and manage successfully transitions in the labour market.”

Principle 1 of the European Pillar of Social Rights
We live in a time of transitions. The twin green and digital transitions are reshaping the way we live, work and interact. The EU’s move to a resource-efficient, circular, digitised and climate neutral economy and the wide deployment of artificial intelligence and robotics are expected to create new jobs while other jobs will change or even disappear. Demographic change will require Europe to draw on all of its talents and diversity. At the same time, it will also generate new job opportunities in the silver and care economies. These transitions show the need for an unparalleled shift in skill sets to reap their full potential.

The COVID-19 pandemic has accelerated the digital transition. While telework and distance learning have become a reality for millions of people in the EU, the limitations of our current digital preparedness were often also revealed. The pandemic has accentuated the digital skills gap that already existed and new inequalities are emerging as many people do not have the required level of digital skills or are in workplaces or schools lagging behind in digitalisation.

The pandemic has also significantly impacted the career opportunities for many people in the EU. The EU’s GDP is currently estimated to fall by over 7% in 2020 and unemployment to reach 9%, up from 6.6% at end 2019 – with some countries being even more affected. Commission estimates show that some sectors are projected to experience the largest losses in real gross value added in 2020, ranging from 20% to 40% compared to 2019 levels. Moreover, specific sectors could see a more than 70% drop in turnover in the second quarter of 2020. Countries and regions where the economy relies strongly on these sectors will face greater difficulties to recover.

To face this challenge and to push forward the twin transitions, the Commission has proposed an ambitious recovery package to build a more sustainable, resilient and fairer Europe for the next generation. As Europe sets off on its path to recovery, the need to improve and adapt skills becomes an imperative. This will also be crucial to enable the EU, as a geopolitical actor, to pursue its leadership towards global recovery.

Now, more than ever, the EU needs a paradigm-shift on skills. One that delivers a bold skills agenda for jobs to drive the twin transitions and ensure recovery from the socio-economic impact of the COVID-19 pandemic and in order to:

- **Strengthen sustainable competitiveness**: Skills and lifelong learning are crucial for long-term and sustainable growth, productivity and innovation and therefore a key factor for the competitiveness of businesses of all sizes, in particular small and medium-sized enterprises (SMEs). Providing people with the right skills allows them to work more effectively and take advantage of advanced technologies, eliminates the major obstacle identified to business investment, prevents labour market mismatches and lays the ground for research and development (R&D) and firm-based innovation. It is only with the right skills that Europe can strengthen its position in global competition and have a sustained economic relaunch geared towards the green and digital transitions. This means, in particular, delivering on the European Green Deal, which is the EU’s growth strategy, and in the strategic sectors and ecosystems identified in the EU’s new Industrial Strategy.

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1. Before the outbreak of the COVID-19 pandemic, it was estimated that 1 million jobs would be created by 2030. Employment and Social Developments in Europe (ESDE), 2019. Similarly, it was estimated that these technologies would create almost 60 million new jobs worldwide in the next 5 years.
2. Identifying the recovery needs; SWD (2020) 98 final.
6. In the European Investment Bank’s Investment Survey 2017, almost 80% of firms cited lack of skilled staff as an obstacle to their investment.
• **Ensure social fairness:** Access to up- and reskilling opportunities is vital for the tens of millions of workers propelled into short-time work or unemployment, no matter their current level of skills or area of qualifications. Europe’s recovery will only be a success if cohesive and no one is left behind. Having the right skills means being able to more easily stay employed and master job transitions. This requires providing equal access to additional up-skilling opportunities for all people, regardless of gender, racial or ethnic origin, religion or belief, disability, age or sexual orientation, and including low-qualified/skilled adults and people with a migrant background. Similarly, all territories should be covered, from big cities to rural, coastal or remote areas across the whole EU.

• **Build our resilience:** the last few months put a number of professions under strong pressure. This is particularly the case of health and care professionals, as well as frontline workers in retail, transport, social or sanitation services and teachers and trainers. Having enough skilled workers in these strategic sectors is crucial to ensure effective access to basic health, social or educational services for citizens in a period of crisis. For the individual, improving resilience through skills means reducing dependence on market conditions and increasing his or her potential to navigate through life and professional transitions. Moreover, the COVID-19 pandemic has also shown the need to be digitally ready to continue educational and business activity. Challenges to IT infrastructure and e-systems have revealed the need to improve our human capacity for cybersecurity preparedness and response.

**To succeed, lifelong learning for all must become a reality in Europe.** All Europeans should have access to attractive, innovative and inclusive learning programmes also because skills become obsolete more quickly. Education at a young age remains fundamental, but is only the beginning of a life full of learning: from early childhood education and care, through primary and secondary schooling, to technical, vocational education and training and tertiary education to adult learning. **Learning throughout life,** including at an older age, is what will make the difference. Yet less than two in five adults participate in learning every year. This is not enough to relaunch our economy and reap all the benefits of the green and digital transitions. Each person in the EU should be empowered and rewarded to up- and reskill.

**Skilling for a job** should be the guiding principle in this endeavour. This means starting from a mapping of each individual’s skill set, delivering targeted training which meets specific up- and reskilling needs, and helping the individual find a job in demand on the labour market.

**Whilst most responsibilities for skills policies remain at the national, regional and local level, Europe has an important role to play.** Many people work for small companies belonging to value chains that span across Europe. In all sectors, from automotive to textile, from pharmaceuticals to energy, there is a European chain of talent. Strengthening this chain will reinforce the Single Market and the resilience of our economy. The EU can encourage and support Member States to enact policies that go in the same direction and effectively address the twin transitions and reinforce the resilience of our economy and society.

**Europe also provides valuable support through its budget.** The Commission’s proposal for a [Next Generation EU](http://www.nextgenerationeurope.eu) harnesses the EU budget to support Member States’ recovery and kickstart the economy. With a revamped long-term budget of 1.1 trillion euro reinforced by a dedicated temporary ‘Next Generation EU’ instrument of EUR 750 billion, the EU is mobilising to invest in a sustainable, inclusive and fair recovery. Investments in skills are at the heart of these proposals. They put at the disposal of Member States unprecedented opportunities for financing skills policies that strengthen the resilience to economic shocks and the ability to bounce back quicker from the current downturn and towards the twin transitions.

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8. COM(2020)441 final/2.
The novel Skills Agenda delivers on the European Pillar of Social Rights and notably its first principle spelling out the right to quality and inclusive education, training and lifelong learning. It is also firmly anchored in the European Green Deal\(^\text{10}\), new Digital Strategy\(^\text{11}\), and the new Industrial and SME Strategies\(^\text{12}\) as skills are key to their success. Moreover, it also supports the proposal for a Council Recommendation on a “Bridge to Jobs – reinforcing the Youth Guarantee” which the Commission has adopted today and takes account of the findings of the recent Report on the Impact of Demographic Change\(^\text{13}\). The New Circular Economy Action Plan and the EU Biodiversity Strategy for 2030 also highlight the key role of skills in the transition to a green economy.

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It inter-links with other policy initiatives that support the lifelong learning approach. It will be followed by further proposals providing a new impetus in the field of education, in particular an initiative making the European Education Area a reality by 2025 through bringing down barriers across the Union to learning and promoting innovative and inclusive education and training for all. The European Research Area also promotes up- and reskilling of talent especially in academia. Together, these initiatives will help build a culture of lifelong learning in Europe, foster a demand-led approach to strengthening cooperation with industry and boost the employability of citizens.

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There is a strong potential in boosting joint action to maximise the impact of skills investment. Skills policies and actions are shared between many actors. Ministries, education and training providers, the industry itself, research organisations, social partners, chambers of commerce and employment agencies are only a number of those who contribute to making up- and reskilling a reality. Concerted efforts can bring clarity to individuals and companies throughout the value chain, reduce costs and focus on priorities.

Action 1: Pact for Skills

The Pact will mobilise a concerted effort for quality investment in skills for all working age people across the Union. The Pact for Skills will bring together all stakeholders, private and public, which share the objective of up- and reskilling Europe’s workforce to enable people to participate in the twin transitions. All these stakeholders will sign a Charter, which will define the key principles that are essential to up- and reskill the workforce, within their organisations but also across their value chain or ecosystem. The Charter will be co-created with stakeholders.

The Pact will facilitate public-private cooperation. In particular, it will set up large-scale partnerships, including at regional level, in strategic industrial ecosystems and priority areas identified in the European Green Deal to achieve ambitious commitments. These partnerships will involve all stakeholders, notably SMEs who struggle with access to skills. Stakeholders will be encouraged to pool expertise, resources (for example training facilities within the value chain) and funding towards concrete up- and reskilling actions with clear commitments that will allow people to keep, change or find new jobs.

The Pact will also facilitate access to information on EU funding instruments for skills by offering a single-entry point at EU level.

The launch of the Pact during the European Vocational Skills Week in November 2020 will involve the European Social Partners, the European Parliament, the Presidency of the Council of the European Union, the European Commission, stakeholders from strategic industrial ecosystem and other stakeholders.

The Pact for Skills will build bridges between pre-existing EU initiatives for cooperation and become, where relevant, the single-entry point for:

- **The Blueprint for Sectoral Cooperation on Skills** to define sectoral skills intelligence, map key occupation needs, define occupational profiles and roll-out training programmes. The idea of skillling for a job is ingrained in the DNA of the Blueprints and they will be upscaled, opened to more sectors and benefit from a reinforced budget. The Blueprints process will be significantly accelerated to ensure that it delivers timely outputs in phase with the skills needs of undertakings and individuals. The revamped Blueprints will also add a link to employment opportunities at the end of the training programme.

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14. These will include anti-discrimination and gender considerations.
15. As indicated in the EU Industrial Strategy adopted in March 2020.
17. Pledges are commitments by private or public organisations to make a direct contribution to reducing digital skills gaps facing Europe, such as committing to providing skills training or placements or access to digital skills development opportunities. They can be found at: https://pledgeviewer.eu/
• The reinforced European Alliance for Apprenticeships. As set out in the Communication on Youth Employment Support: Bridge to Jobs for the Next Generation, it will mobilise new pledges to sustain apprenticeship offers despite the current economic downturn and to develop apprenticeship programmes. The renewed Alliance will launch new national apprenticeship coalitions, giving a voice to apprentices and reinforcing social dialogue.

• The Digital Skills and Jobs Coalition will canvass pledges from Member States, companies, social partners, non-profit organisations and education providers for new training programmes, recruitment or reskilling of the existing workforce to improve digital skills. A recent call for pledges in the context of COVID-19 has received more than 70 new pledges. By strengthening the administrative support to the Coalition, the Commission will provide a one-stop shop allowing sharing digital content, best practices and training opportunities, including for SMEs.

The Pact for Skills is pan-sectoral and open to all stakeholders. It will initially focus on those industrial ecosystems heavily affected by the current crisis and the priority areas identified in the European Green Deal, for which ambitious up- and reskilling strategies will be essential to push forward the recovery, covering other ecosystems and areas later on:

• Health: the COVID-19 pandemic reminded us how much we depend on health workers, who are required to acquire skills and undergo training in infection-containment, quarantine protocols, use of protective gear and clinical management responsibilities. While the health and social care sector makes up 10% of total employment in the EU, estimates forecast an increase by more than 830,000 new jobs, which together with replacement needs means 8 million job openings in the next 10 years. Additionally, to satisfy the needs of healthcare organisations to successfully deploy new digital technologies, such as artificial intelligence, that improve the quality of care and increase efficiency in Member States’ health systems, the demand for basic and advanced digital skills will grow significantly by 2030. This reveals a significant skills gap that will only be aggravated due to demographic ageing and the rise of chronic diseases. Filling this gap is crucial to guarantee a high level of resilience and fairness of national welfare systems across the EU.

• Construction: the COVID-19 pandemic has had an important impact on the sector, mostly composed of small and micro-firms that provide local employment (more than 90% are SMEs). This sector of 12 million workers finds it difficult to attract the young and qualified. Skills gaps are visible in green design, technologies and materials. As recovery starts, upskilling needs to focus on energy- and resource efficiency, decentralised renewable energy solutions, circularity, digitisation, and renovation of existing constructions, complying with accessibility requirements become apparent. The availability of skilled construction workers is key to the success of the European Green Deal’s Renovation Wave.

• Automotive and Transport: the travel restrictions put in place during the COVID-19 pandemic have had a significant impact on the aviation, rail, maritime, inland navigation and road sectors and have strongly affected the transport sector that employs more than 9 million people in the EU. The containment measures also significantly disrupted the automotive industry and its extensive supply chain, with at least 1.1 million jobs affected by factory shutdowns. The automotive sector, which accounts for 7% of EU GDP, was already confronted with major structural changes, and an imperative to invest in digitalisation, green technology (e.g. batteries to bring along electrification of transport and other alternative fuel solutions) and greater connectivity and automation as well as transform existing business models and value chains. The transport and especially the automotive sector needs a clear agenda to boost a range of new skills including big data analysis, software development, artificial intelligence, robotics, chemistry, electronic engineering and a new range of soft skills. The maximization of the use of these skills across the ecosystem and supply chains should be encouraged, for example in the roll out of the electrical charging infrastructure.

• Tourism: the COVID-19 pandemic has reduced activity by 80% and without urgent action 6 million jobs are at risk. Skills needs range from online marketing, recycling and management of waste, water and energy services for the transition to more sustainable tourism, to cross-cultural understanding and communication, as well as new hygiene protocols. Optimising travellers’ experience will be based on a combination of digital data and human service. The existing Blueprint has already identified these skills gaps and new job profiles. It now needs to be upscaled as technological innovation and social trends are changing faster than some companies can keep up with. Staff will need to be able to work in different departments, at different levels and use various tools and applications.

18. CEDEFOP Skills Panorama, Health professionals and associate professionals.
20. OECD, Evaluating the initial impact of COVID-19 containment measures on economic activity, Figure 1
21. In 2017, 94% of companies in construction were SMEs, Eurostat [sbs_sc_con_r2].
22. European Builders Construction, web page on skills.
25. European Automobile Manufacturers Association (ACEA), Employment impact of COVID-19 on the European auto industry
26. A Blueprint project on skills needed for the battery sector ‘ALBATTS’ has been launched which will be important not only for the automotive sector but also for the growing energy storage sector.
Embedding the idea of ‘skills for jobs’, the second building block of the Skills Agenda, is taking a comprehensive approach to up- and reskilling, that covers the whole value chain. It starts with reliable skills intelligence to deliver training relevant for the labour market. This needs to be embedded in national skills strategies and in training and education systems. Individual companies should also develop internal processes to identify skills gaps and measures to address upskilling of their own workforce.

This section sets out the main components of the ‘skills for jobs’ approach, which aims to support the EU’s workforce in taking full advantage of the green and digital transitions.

2.1 Improving skills intelligence: the foundation for up- and reskilling

The first step to make sure people can acquire the skills they need for a current or future job is up-to-date information on skills needs. But often skills intelligence comes too late to inform choices. Accessible, easily understandable, targeted and up-to-date skills intelligence is necessary. Besides graduate tracking surveys and administrative data matching, artificial intelligence and big data analysis have a great potential. AI and big data can be applied to defining new job profiles in different sectors based on the specific skill sets required.

The EU Agency Cedefop has been piloting the use of big data analysis using online job advertisements to examine the skills demanded by employers at regional level, while the Blueprints for Sectoral Skills Cooperation have been looking into skills needs in key sectors. Based on these success stories, renewed efforts are needed to further deepen skills intelligence, considering both regional and sectoral dimensions, bring it together and present it in an accessible way, also for education and training institutions and organisations.

Action 2: Strengthening skills intelligence

To strengthen and disseminate skills intelligence, the Commission will:
- Support the development of new and deepened skills intelligence, including at regional and sectoral levels. Building upon the Cedefop pilot of big data analysis, a permanent online tool will be created where ‘real-time’ information will be published so that all interested stakeholders can use it. Partnerships to use data from private job portals and national skills intelligence will be explored.
- Centralise and widely disseminate skills intelligence through the Pact for Skills, in synergy with the European Research Area.
- Promote the participation of social partners in labour market projections and the identification of training needs to develop skills intelligence.
- Encourage the use of skills intelligence by the public and private employment services and in particular, encourage the public employment services (PES) network to promote the early identification of skills shortages and trends linked to growing job opportunities, including to better draw on the potential of intra-EU mobility and migration from third countries.
- Present skills intelligence information tailored to individuals’ needs in Europass, the EU platform for people to manage their learning and careers. This will assist individuals in their study, training and work choices, and help counsellors and mentors, inter alia in Public Employment Services.

29. https://nexttourismgeneration.eu
31. The online tool will provide granular and up-to-date skills intelligence, especially at regional and sectoral levels, providing a snapshot of labour market skills demand in real-time, that can be repeated within very short intervals and allows to identify trends in skills needs and detect newly emerging skill needs.
2.2 Fostering National Skills Strategies, the role of Employment Services and legal migration

Skilling for a job calls for national skills strategies, involving all stakeholders. National skills strategies, designed and delivered in a whole-of-government approach, align efforts across employment, education, research, industry and regional development policies. They should involve social partners, civil society, education, training and labour market stakeholders and build on existing national skills strategies.

In light of the ongoing crisis and its impact on unemployment, in particular of young people, employment services, both public (PES) and private, in collaboration with education and training public bodies and providers, as well as the national Digital Skills and Jobs coalitions, have a crucial contribution to make to national skills strategies. PES can play a bigger role in guiding people towards more and better up- and reskilling and increasing the labour market relevance of education and training systems. National skills strategies align national and regional policies and investment on commonly agreed major challenges. They also orient Member States in the projects they co-finance with European funds.

Action 3: EU support for strategic national upskilling action

The Commission will support all Member States to prepare holistic, whole-of-government national skills strategies. This will build on the work already done with the OECD in 11 Member States as well as on other existing skills strategies at Member State level. The Commission will support the establishment or review of strategies where needed and help monitor progress in implementing them. The Commission will encourage breaking of gender and other discriminatory stereotypes. It will put a particular focus on the importance of transversal and entrepreneurial skills as well as skills to accompany the digital and green transitions such as those delivered through Science, Technology, Engineering and Mathematics (STEM) studies.

The Commission will join forces with the European Network of Public Employment Services to develop peer learning events to spotlight skills needed on the labour market, in particular for the unemployed and workers in short-time work. Activities will further focus on stepping up the provision of guidance services, also for people in employment and, in particular, vulnerable groups of people, and on closing skills gaps, notably digital skills gaps. Moreover, exploiting fully the opportunities of cross-border cooperation will be explored.

Through the forthcoming Pact on Migration and Asylum, the Commission will aim at enhancing legal pathways to the EU, including through a relaunch of the negotiations on the Blue Card Directive to attract highly skilled workers. The Pact will also provide credible offers of legal migration places as part of new talent partnerships with third countries and explore new legal migration instruments.

Because of the very high percentage of low-skilled adults in one Member State, its National Skills Strategy has shed light on the need to foster a culture of adult learning and improve participation and coherence. As a result, Peter, who works in the hotel and tourism sector, has been able to access a new adult vocational training programme in his home region. The programme puts a new emphasis on the digital skills and transversal skills increasingly required among tourism sector workers.

Having the right skills for the twin transitions and responding to demographic challenges can also be tackled with a more strategic approach to legal migration, oriented towards better attracting and keeping talent. Member States remain competent to decide on how many migrant workers they admit but a strong EU framework can support them in attracting the labour migrants that the EU needs and ensure labour migration benefits all. Channelling legal migration towards regions and occupations experiencing skills shortages requires better matching, and clear procedures. More needs to be done to improve the legal pathways into the EU and the recognition of third-country nationals’ competences on the EU labour market. This should be done in partnership with third countries in order to promote both development and mobility through increased investments in skills. Finally, it is equally important to make a more strategic use of the potential and the skills of third country migrants already residing in the EU. Despite an increasing level of education, they still face on average lower qualification levels, which act as a barrier to long-term inclusion into the labour market.
2.3 Making vocational education and training (VET) future-proof

Organisations providing education and training need to deliver relevant skills along the entire lifelong learning continuum. From the very first days of European cooperation, vocational education and training (VET) has been at the core of the EU project and has since also become part of the wider European cooperation framework for education and training and the European Education Area. Nowadays, around half of young learners in the EU are VET learners, increasingly at higher levels. Europe needs agile, resilient and future-proof VET systems, which can support young people to manage their entry to a changing labour market and ensure that adults access vocational programmes tailored to the twin green and digital transitions.

Action 4: Proposal for a Council Recommendation on Vocational Education and Training for sustainable competitiveness, social fairness and resilience

Today the Commission adopts a proposal for a Council Recommendation on Vocational Education and Training for sustainable competitiveness, social fairness and resilience. The initiative:

- Proposes a modernised EU policy vision for VET, with the view to equipping young people and adults with the skills to thrive in the labour market and supporting the green and digital transitions, including transversal skills, ensuring inclusiveness and equal opportunities, and establishing European VET as a global reference point for skills development;
- Presents principles to implement this vision, including a stronger focus on permeability with other education sectors, increased learning mobility and working in close partnership with employers. It also promotes VET as an attractive choice for women and men alike, and promotes inclusion of vulnerable groups;
- Sets objectives for VET systems to enhance the availability of work-based learning and mobility opportunities and the employability of vocational graduates;
- Puts forward a number of actions to be implemented at EU level to support VET reform in particular on enhancing the digital readiness of VET institutions, including for VET teachers, apprenticeships and Centres of Vocational Excellence linked to smart specialisation strategies and/or regional innovation and growth strategies.

What is a Centre of Vocational Excellence?

Many different types of Centres of Vocational Excellence (CoVE) exist. Notwithstanding this diversity, two broad types of CoVEs can be identified: 1. Centres that are ‘purpose built’ or designated entities as part of national/regional arrangements for vocational excellence, and; 2. Centres that are individual VET providers, functioning for a region, sub-region or sector. They support entrepreneurial initiatives and act as knowledge and innovation hubs for companies, in particular for SMEs. The proposed Recommendation has the ambition to support the establishment of 50 Centres of Vocational Excellence to be world-class reference points for both initial training of young people as well as continuing up- and reskilling of adults.

For example, a VET centre working in the Cultural and Creative Industries (CCI) sector, financed by Erasmus+, is setting up a network of knowledge producers (research and VET providers) and companies with partners in other countries. The network establishes innovation hubs to support sectoral SMEs, qualified professionals, and VET learners. It develops and rolls out a training programme focusing on entrepreneurship, problem solving, critical thinking and process/product innovation, as well as business incubators for VET learners and CCIs staff as well as trainers.

32. VET programmes cut across different levels of education and training. In absolute figures, the largest number of VET learners (8.5 million learners) are enrolled in programmes at upper-secondary level. This compares to 1.5 million learners at post-secondary non-tertiary, 1.2 million learners at short-cycle tertiary, 1.2 million learners at bachelor and 0.7 million learners at master level vocational/professional programmes. Source: Unesco-Oecd-Eurostat (UOE) joint data collection on education and training.

33. With the goal of supporting excellence and internationalisation of VET, European vocational core profiles would define a certain share of a common training content at European level. The profiles – as part of Europass platform and complemented, where possible, by vocational digital learning tools – have a potential to significantly facilitate mobility of learners and workers, automatic recognition of qualifications, and the development of joint vocational education and training curricula, qualifications and micro-credentials.


35. This ambition is based on the Commission’s proposal for the next Multi-annual Financial Framework.

36. This action will be coordinated with the European Research Area.
2.4 Rolling out the European Universities initiative and upskilling scientists

Higher education is an essential vehicle to provide students with the skills they need in the future. Universities generate the advanced knowledge and skills that help society innovate to address its big challenges. They are empowering people with high-level skills that allow them to boost their professional, social and personal development. The fast-changing labour market and societal transitions require a transformation of tertiary education institutions and to improve their alignment with the economic environment to ensure that graduates have the education and skills required by the labour market and especially those that are needed for the twin transitions.

Researchers are at the forefront of science and innovation and require a specific set of skills. More can be done to define this and the core skills they need for a successful career within and outside academia, also to foster mobility of scientists across Europe.

Action 5: Rolling out the European Universities initiative and upskilling scientists

To roll out the European Universities, the Commission, in close cooperation with the stakeholders and the Member States, will:

- **engage in the full rollout of the European Universities initiative under the Erasmus programme (2021—2027) and Horizon Europe, including by removing obstacles to effective and deeper transnational cooperation between higher education institutions and deepening the cooperation with economic operators, in particular to foster the twin transitions. European Universities will set standards for the transformation of higher education institutions across the European Education Area and the European Research Area, also making lifelong learning and talent circulation a reality.**

- **explore options stemming from their research and innovation dimension to help remove obstacles to effective transnational cooperation between higher education institutions, drawing on the lessons learnt during the pilot calls under Erasmus+ and Horizon 2020. The Commission will identify areas of support for Member State action, explore a concrete approach for a “European degree” and the feasibility of a European University statute (to tackle cross-border legal issues) and for a European Recognition and Quality Assurance System.**

- **work together with the European Institute for Innovation and Technology (EIT) and other European Research Area relevant initiatives to bring together leading organisations from business, education and research, in particular through the Knowledge and Innovation Communities to develop innovative teaching and learning, train the next generation of innovators, and accompany the transition of higher education institutions to more entrepreneurial organisations.**

- **bring academia and industry together by testing a new Talents-On-Demand knowledge exchange to meet companies’ research and innovation needs, complementing university-business collaboration.**

To upskill scientists, in close cooperation with stakeholders and the Member States, the Commission will:

- **develop a European Competence Framework for researchers and support the development of a set of core skills for researchers.**

- **define a taxonomy of skills for researchers, which will allow the statistical monitoring of brain circulation and agree with Member States on a set of indicators to allow monitoring and statistical analysis.**

- **develop open science and science management curricula for researchers.**
2.5 Skills to accompany the green and digital transitions in jobs and beyond

The jobs of tomorrow require skills for the twin transitions. The green transition requires investments in skills of people to increase the number of professionals who build and master green technologies, including digital, develop green products, services and business models, create innovative nature-based solutions and help minimise the environmental footprint of activities. In addition, Europe will only become a climate neutral continent, a resource efficient society and a circular economy with an informed population and workforce that understands how to think and act green.

Equally, achieving a human-centric digital transition calls for a step-change in digital skills. Already now, Europeans, men and women alike, need digital skills in life and at work: in some job categories, more than 90% of jobs require specific types of digital skills. The pandemic and its consequences on our lives and economies have highlighted the importance of digitalisation across all areas of the EU economy and society. Indeed, almost 4 in 10 employees started teleworking during the containment measures. Moreover, 40% of new jobs were created in digitally intensive sectors between 2005 and 2016. However, the rapidly growing demand for digital experts cannot be met. For example, there is a gap of 291,000 professionals in cybersecurity.

In addition, deployment of digital technologies across all economic sectors, including in non-tech sectors, will require a more digitally skilled workforce at all skills levels and at all ages. The COVID-19 pandemic and resulting containment measures were a stark reminder that Europe’s workforce - and more widely the whole population - need to rapidly increase their level of digital skills. This was particularly visible in the education sector, for students, teachers and trainers alike.

**Action 6: Skills to support the twin transitions**

The Commission will support the acquisition of skills for the green transition by:

- Defining a taxonomy of skills for the green transition, which will allow the statistical monitoring of the greening of our professions.
- Agreeing with Member States a set of indicators to allow monitoring and statistical analysis of developments in green skills.
- Developing a European competence framework on education for climate change, environmental issues, clean energy transition and sustainable development, which will spell out the different levels of green competence.
- Supporting the development of a core green skills set for the labour market to guide training across the economy with a view to creating a generation of climate, environment and health conscious professionals and green economic operators.
- Helping to integrate environmental and climate considerations into school, higher education, vocational education and training, as well as professional training.

The Commission will support **digital skills for all**, in particular by:

- Updating the Digital Education Action Plan and presenting a vision for improving digital literacy, skills and capacity at all levels of education and training and for all levels of digital skills (from low to advanced). Based on lessons learnt from the COVID-19 crisis in areas such as online learning, the Action Plan aims to support the development of robust digital competences and organisational capabilities in education and training systems (including for distance-learning) while fully harnessing the potential of emerging technologies, data, content, tools and platforms to make education and training fit for the digital age.
- Implementing the Digital Europe programme, which aims to build the strategic digital capacities of the EU, strengthening investments in supercomputing, artificial intelligence, cybersecurity and the development of advanced digital skills.
- Supporting Digital Crash Courses for SMEs and “digital volunteers” programme to upskill the current workforce in digital areas, as already announced in the EU SME strategy. The Commission will also support and interlink SME intermediaries such as clusters, the Enterprise Europe Network and Digital Innovation Hubs to help upskill staff of SMEs, including in the area of sustainability.
- Supporting EU ICT-Jump-Start trainings to provide short-term intensive training to tackle ICT skills shortages, with a focus on gender-balanced participation.

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37. The role out of the EU Bioeconomy Strategy is a good example towards this direction with actions enabling skills development, synergies with education and lifelong learning.
38. ICT for work: Digital Skills in the Workplace: study carried out for the European Commission by Ecorys and Danish Technology Institute, 2017
41. ENISA, Cybersecurity skills development in the EU, March 2020.
42. The Commission’s Digital Economy and Society Index (DESI) monitors on a yearly basis the level of basic as well as advanced digital skills in each Member State and in the EU.
STEM (Science, Technology, Engineering and Mathematics) skills are critical to drive the twin transitions. In a time of fast technological innovation, companies need people with high level skills in STEM subjects. Such skills are necessary to use new technologies, and a high level of STEM skills is crucial to foster innovation in cutting-edge ICT areas such as AI or cybersecurity. However, only one in five young people in Europe graduates from STEM tertiary education, less than two million STEM graduates every year. This number needs to increase, which could be achieved by promoting STEM pathways in particular among young women. Currently, only half as many women as men are graduating in STEM fields in the EU, although with huge variations across Member States. Enrolment in STEM rather than other higher education programmes often depends on performance in secondary schools, but as girls outperform boys in digital literacy, it becomes clear that general social perceptions and attitudes play a role too. There is a need to better explain to young learners, and notably to girls, the opportunities offered by the choice of a STEM pathway.

A significant number of people in Europe have entrepreneurial aspirations, including an increasing trend towards social entrepreneurship. Both foster job creation and contribute to economic growth by increased competition, productivity and innovation. To make these aspirations a reality, a step change is necessary to put a focus on the development of entrepreneurial skills. Career guidance systems and practices should cover properly the entrepreneurial dimension. Raising awareness of social entrepreneurship and other social economy business models can also help increase the appeal of and interest in entrepreneurship. Social economy being a pioneer in job creation, for example linked to circular economy, also supports social inclusion and green transition.

Beyond technical skills, the labour market increasingly needs transversal skills like working together, critical thinking, and creative problem solving. The increasing influence of robots and algorithms on our labour markets further increases the need for uniquely “human” skills such as empathy and adaptation to change in complex environments. These skills are also especially important in view of the growing silver and care economy due to demographic change and are in high demand on the labour market. While schools have a role to play, they are often developed outside formal learning, at work and throughout life. It can be difficult to identify, recognise and communicate those skills, this is why in the next phase of EU action on transversal skills, more needs to be done to capture them.

**Action 7: Increasing STEM graduates and fostering entrepreneurial and transversal skills**

To contribute to the required increase of STEM graduates the Commission will:

- raise the attractiveness of STEM studies and careers, with focused actions to attract girls and women, and by encouraging a cross-disciplinary and innovative teaching and learning approach in schools, VET and higher education.

- as part of the European Education Area Communication, introduce activities for teachers, helping address the shortage of STEM teachers in EU countries and regions.

- foster science education in research and innovation actions such as through the development of key competence and assessment framework; dissemination of research results on science education in partnership with the European School-Net; and use of socially empowered portals bringing together schools from different European countries, notably those that have experience with the open schooling culture.

- promote an integrated framework and learning continuum inter alia between secondary and higher education systems, education and business in partnership with business professionals, and further pursue open schooling and research-based methods, contests, and citizen science.

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44. Data on STEM tertiary graduates from Eurostat [educ_uoe_grad04].
45. OECD, Why don’t more girls choose STEM careers
46. 2018 International Computer and Information Literacy Study (ICILS)
47. European Commission, 2016, Does the EU need more STEM graduates?, section 3.3.1.
Action 7: Increasing STEM graduates and fostering entrepreneurial and transversal skills

To foster entrepreneurial skills, the Commission will launch a European Action on Entrepreneurship Skills, which focuses on development of entrepreneurial mindsets and a more resilient workforce. The action will include:

- leveraging and connecting existing networks to provide a European entrepreneurial support for aspiring entrepreneurs, focusing on young women entrepreneurs and self-employment opportunities in the digital and green economy, and which incorporates a knowledge platform of online resources on entrepreneurial skills and opportunities for collaboration.  
- support in funding programmes for entrepreneurial skills activities, European mobility for entrepreneurs and for systematic use of EntreComp: the European Entrepreneurship Competence Framework.
- promotion of entrepreneurship skills at all levels of education and training - from primary and secondary school education, to VET and higher education to provide students with the knowledge and motivation to encourage entrepreneurial activity.

This action will complement the Commission’s upcoming Action Plan for the Social Economy, which will inter alia promote entrepreneurial opportunities yielded by the social economy, such as helping local communities, striking local green deals and activating vulnerable groups.

To foster transversal skills the Commission will:

- provide a strategic framework for the recognition of transversal skills to support validation practitioners in Europe.
- develop resources to support validation of transversal skills by employers and employment services. This will include exploration of EU-wide online courses and related micro-credentials for validation practitioners, and establishment of a network of validation pioneer organisations that can share best practices.

The annual European Union Contest for Young Scientists (EUCYS) is one of Europe’s premier events for showcasing young scientific talent. It triggers national science competitions (young people between 14 and 20 years of age) and brings together winners to compete with their European counterparts.

The COVID-19 pandemic and the related containment measures have underlined the importance of life skills and our capacity to adapt, manage change, and care for each other as a community. Resilience, media literacy, civic competence, financial, environmental and health literacy are key in this context. Open, democratic societies depend on active citizens who can discern information from various sources, identify disinformation, take informed decisions, are resilient and act responsibly.

The European Agenda for Adult Learning has facilitated European cooperation in this area for the last decade. More needs to be done to support people to acquire these skills, and to reinforce Upskilling Pathways for adults, in particular for those with lower levels of skills and qualifications. This goes beyond skilling for a job but also includes voluntary work and older people who equally need new skills.

Krzysztof, aged 74, enrolled in a digital skills course at his local library. This taught him how to arrange a medical appointment and buy a train ticket online. His new passion is the chat group on local community relations in which he is currently organising a campaign on increasing green spaces.

Action 8: Skills for Life

The Commission, together with Member States, will work on new priorities for the European Agenda for Adult Learning to complement the renewed European cooperation framework in education and training and to support the achievement of United Nations’ Sustainable Development Goals. It will aim towards building comprehensive, quality and inclusive adult learning systems, which reach out to all, including seniors and in particular those most in need of access to learning, including through distance and online learning. It will prioritise non-formal, life-wide learning, intergenerational, intercultural and community learning. Local learning centres, libraries and the wider community and civil society will be supported to work together to motivate and enable adults to learn, thus supporting crisis resilience.

48. The Gender Equality Strategy highlights the support for women’s entrepreneurship by EU cohesion policy
The third building block of the Skills Agenda shall develop the necessary tools to empower everyone, whether employed, unemployed or inactive, to build skills throughout their lives. Skills can help the individual to progress in his/her career and to manage job transitions successfully. It is only by instilling a genuine culture of lifelong learning that we can ensure a competitive economy and cohesive society and bring to life the right to quality and inclusive education, training and lifelong learning, as spelled out in Principle 1 of the European Pillar of Social Rights.

3.1 Enabling everyone to participate in learning: Individual learning accounts

Lack of time for training, the cost of training, as well as lack of awareness of the need for or the opportunities to train are important obstacles to up- and reskilling. Direct incentives for people to train, such as individual learning accounts, can make lifelong learning a reality. They provide financing to adapt to evolving skills needs in a job, or to change occupation or sector, including moving to another Member State. Individual learning accounts could ensure that training entitlements are portable from job to job (or job to unemployment to job) and their introduction could be combined with significant improvements in guidance and validation systems and the quality and transparency of training offers.

Where they exist, the financing of individual learning accounts differs from one country to another, in accordance with strategic choices made at national level. For example, in France they are financed primarily through an employers’ levy, whereas the Netherlands envisage using public financing. In exploring these accounts, the Commission will cover this core element, paying particular attention to ensuring that it is fit for SMEs.

Individual learning accounts could also ensure that sufficient funds for training are available during economic downturns. They allow individuals to accumulate training entitlements over longer periods, so that they can use them during periods of low economic activity, e.g. during short-time work periods when they have more time for train-

Action 9: Initiative on individual learning accounts

The Commission will assess how a possible European initiative on individual learning accounts can help close existing gaps in the access to training for working age adults and empower them to successfully manage labour market transitions.

The Commission will also assess which enabling services and other factors could support individual learning accounts. This could include guidance, validation, and transparency on the quality of training opportunities, as well as educational or training leave provisions. In its work, the Commission will engage in broad consultations with Member States, social partners and all relevant stakeholders.

Based on the data from the EU Adult Education Survey.
ing. This prevents skills depreciation from involuntary inactivity and helps individuals acquire the skills they need for successful job transitions.

3.2 Valuing learning outcomes: Micro-credentials

Empowering workers to up- and reskill throughout their entire lives also means making sure that all learning experiences are properly valued. Increasingly, workers are attending short and tailored training and need to get recognition for that. Such courses can be offered by a variety of education and training providers (e.g. higher education institutions, VET providers, research organisations, industry, social partners, Chambers of Commerce, Industry or Crafts, civil society organisations).

Micro-credentials\(^\text{51}\) recognise the results of such short courses, often in the digital field, and capture their results. They can increase permeability between different education pathways/systems and improve flexibility. They can make learning more adapted to individual needs, thus fostering more innovative and inclusive approaches and facilitating access to the labour market and job transitions. They can also facilitate further learning, as they may be cumulated to obtain a larger credential, allowing individuals to accumulate learning outcomes over time and across institutions, sectors and borders and also online through e-learning schemes. However, to date no European standards exist to support the quality, transparency and take-up of micro-credentials across the EU.

**Action 10: A European approach to micro-credentials**

The Commission will propose a new initiative to support the quality, transparency and take-up of micro-credentials across the EU. In particular, it will:

- Develop, together with all relevant stakeholders (public or private education and training providers, social partners, chambers of commerce, employers) European standards which address minimum requirements for quality and transparency. This will build trust in micro-credentials and facilitate their portability and recognition across the EU.
- Explore the inclusion of micro-credentials in qualifications frameworks, in dialogue with national qualification authorities.
- Make it easier for individuals to store and showcase to employers acquired micro-credentials through Europass and its Digital Credentials.

This initiative builds, among others, on the results of the evaluation of the 2012 Council Recommendation on Validation of non-formal and informal learning, which are published in parallel with this Skills Agenda.

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Ivana is an experienced supermarket stock manager. A new software is opening up possibilities for less waste – if she and her staff can master its use. By following a short, targeted training module provided by her industry federation, she will be awarded a micro-credential as proof of her new skills – ready to put to use with her current or future employer.

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51. Micro-credentials can be defined as documented statements that acknowledge a person’s learning outcomes, which are related to small volumes of learning and that for the user are made visible in a certificate, badge, or endorsement (issued in a digital or paper format).
3.3 Showcasing skills: the new Europass platform

Once the individual has a certificate proving her or his skills, they need to be able to communicate them when applying for a job or further learning. New technology opens up possibilities for communicating skills beyond the traditional CV and for linking people up with learning and job opportunities.

Launched together with the Skills Agenda, the new Europass has been developed to become the EU’s online tool to help people effectively communicate their skills and qualifications and to proactively guide them to a job or learning opportunity. It offers free tools and information in all EU official languages for learners, workers and job seekers to manage each stage of their careers and learning.

Action 11: New Europass platform

The new Europass platform will support people to manage their careers in a fast-changing labour market. With modernised tools and information on learning and working in Europe the upgraded tool will:

• guide users to assess and describe their skills and communicate their qualifications and experience to training providers and employers, so they can take the next step in training or work;
• suggest to Europass users relevant jobs (via EURES and Euraxess jobs portals) and learning opportunities;
• make use of skills intelligence to provide tailored information on skills trends and needs to users when planning a change of career or moving to another country;
• enable education and training institutions to issue digital diplomas and certificates to learners in a European-wide digital format of ‘Europass Digital Credentials’, encouraging easier recognition;
• support a “fast track” to recognition, reducing administrative burden and decreasing fraud by supporting automatic authentication of qualifications by employers and training providers; and
• support legally residing migrants to showcase their skills and qualifications and facilitate their recognition through better information. The EU ‘Skills Profile Tool for Third Country Nationals’ currently used in reception centres and by organisations guiding and supporting the integration of asylum seekers and refugees will be linked to the new Europass.

Daniela has been working in a variety of jobs as a car mechanic since leaving high school and is unsure what to do next with her career. Thanks to the new Europass, Daniela can create a personal Europass profile to record all her skills and experiences and store her diplomas and certificates. Europass will suggest jobs and courses to Daniela and she can access information on guidance services near her, as well as information on studying and working across the EU.

52. EURES is the European Job Mobility Portal that facilitates the free movement of workers across the EU. It provides an online job database and provides a wealth of information on intra-EU mobility for job-seekers and employers. [https://ec.europa.eu/eures/public/homepage](https://ec.europa.eu/eures/public/homepage)

53. EURAXESS - Researchers in Motion [https://euraxess.ec.europa.eu/](https://euraxess.ec.europa.eu/) delivers information and support services to professional researchers, supporting researcher mobility and career development, while enhancing scientific collaboration between Europe and the world.

54. Legally residing migrants continue to face difficulties showcasing their skills and qualifications acquired outside the EU. Cf. JRC (2020) “Foreign Degrees, Region of Birth and Under-utilisation of Tertiary Education in the EU”.

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With this Agenda, the Commission sets out a new and dynamic approach to skills policy at EU level, aiming to guide Member States and help drive the twin transitions and ensure recovery from the socio-economic impact of the COVID-19 pandemic. To succeed, lifelong learning for all must become a reality in Europe, in each Member State and in each region.

In order to deliver, and bearing in mind the momentum imposed by the recovery and the accelerating transitions, the Commission proposes to set quantitative objectives based on existing indicators, to be monitored by 2025.

We need to first of all significantly increase the share of adults participating in learning overall – only this guarantees a lifelong learning approach. In addition, with a view to making sure that the recovery and the twin transitions are socially fair, the Commission also proposes distinct objectives on the participation in learning of low-qualified adults and the unemployed.

- **By 2025, 120 million adults in the EU should participate in learning every year.** This corresponds to 50% of the adult population and around 540 million training activities for this group over the five-year period.
- **By 2025, 14 million adults with low qualifications in the EU should participate in learning every year.** This corresponds to 30% of this group and around 60 million training activities for this group over the five-year period.

Monitoring this indicator, in combination with the actions set out in this Communication, will also positively contribute to reducing the share of low-qualified adults which stands at 22% (2019) and where Europe falls behind its global competitors.

- **By 2025, 2 million jobseekers or one in five should have a recent learning experience.** This corresponds to around 40 million learning activities for this group over the five-year period.

With regards to the content of the learning, a wide variety of skills will be required to ensure recovery and the twin transitions are a success. Exacerbated by the COVID-19 induced containment measures, digital skills are of critical value for working, learning and social interaction. This is why the fourth objective to be monitored is the share of adults with at least basic digital skills.

- **By 2025, 230 million adults should have at least basic digital skills, which covers 70% of the adult population in the EU.**

The green transition needs to be just and has to pay special attention to those workers and regions particularly affected. Skills are crucial for this endeavour. At this stage, no quantitative indicators on green skills exist. The Commission will develop such indicators (Action 6).

Member States, education and training providers, social partners, businesses, learners’ representatives and all relevant stakeholders are called upon to discuss in the context of the European Semester of economic policy coordination how to achieve these objectives.

**Progress towards the objectives will be regularly monitored in the European Semester.** It will be published in the annual Joint Employment Report and serve as the analytical basis for more focused country specific recommendations on skills, education and training. Whenever possible, the Commission will monitor the objectives by gender, geographical areas and for vulnerable groups in addition to the low-qualified and unemployed, such as persons with disabilities.

55. Available indicators often do not allow capturing the qualitative aspect of training. Evidently, this Skills Agenda drives a step-change also in qualitative terms by pushing to the front the principle of ‘skilling for a job’.

56. Assuming an average duration of the learning activities of 3 months.
## Indicators (in %)

<table>
<thead>
<tr>
<th>Objectives for 2025</th>
<th>Current level (latest year available)</th>
<th>Increase (in %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation of adults aged 25-64 in learning during the last 12 months</td>
<td>50%</td>
<td>38% (2016)</td>
</tr>
<tr>
<td>Participation of low-qualified adults 25-64 in learning during the last 12 months</td>
<td>30%</td>
<td>18% (2016)</td>
</tr>
<tr>
<td>Share of unemployed adults aged 25-64 with a recent learning experience</td>
<td>20%</td>
<td>11% (2019)</td>
</tr>
<tr>
<td>Share of adults aged 16-74 having at least basic digital skills</td>
<td>70%</td>
<td>56% (2019)</td>
</tr>
</tbody>
</table>

Moreover, the learning mobility opportunities for VET learners all across the EU should be further boosted, as proposed in the new Erasmus+ and announced by the Council Recommendation on VET, where the Commission proposes to increase EU mobility of VET learners from 6% to 8%.

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57. The four indicators link in with the Social Scoreboard that accompanies the European Pillar of Social Rights. In addition to the two indicators on adult participation in learning during the last 12 months and basic digital skills, which are already in the Social Scoreboard, two more indicators on the participation in education and training of low-qualified and unemployed adults are proposed. These indicators are also well recognised, have been endorsed by the Employment Committee in 2018 (Joint Employment Report 2019) and have been used in the European Semester ever since. The indicator on digital skills is the same used in the Digital Economy and Society Index (DESI).

58. The indicator shows the share of adults aged 25-64 who have participated in at least one formal or non-formal education or training activity (but excluding guided-on-the-job training activities) during the 12 months before the survey interview. The current source of the data for this indicator is the EU Adult Education Survey. As of 2022, the data for this indicator will come from the EU Labour Force Survey.

59. The definition and sources of the indicator are similar to the first indicator on adult participation in learning. The main difference is the focus on low-qualified adults, i.e. those adults who have achieved at most a lower secondary qualification (or below) as their highest formal educational qualification. Thus, the indicator measures the share of low-qualified adults who report having participated in formal or non-formal education and training over a period of 12 months.

60. The data is available from the EU Labour Force Survey. ‘Recent learning experience’ refers to participation in formal or non-formal education and training during the last 4 weeks.

61. The source of the data for this indicator is the EU Community survey on ICT usage in households and by individuals.
Meeting these ambitious objectives by 2025 requires a considerable mobilisation of private and public investment in skills. The overarching adult learning participation goal would come at an estimated additional investment of EUR 48 billion annually.62

Beyond that, implementing the Skills Agenda will also require additional funding to ensure the roll-out of the various actions at the EU, national, regional and local levels.

### 5.1 EU budget to support and unlock investment in human capital63

The Commission’s proposal for Next Generation EU provides significant resources as part of a major budgetary initiative to tackle the economic and social consequences of the crisis. The Commission will ensure that its instruments are put to good use to support and unlock investment in human capital, promoting gender equality and inclusiveness. Member States will be encouraged to use EU financial resources to implement national schemes for the re- and upskilling of the workforce.

In the short term, REACT-EU, financed by Next Generation EU and the proposal for an adapted current financial framework for 2020, will endow cohesion policy funding with EUR 55 billion for 2020-22. This will allow the European Social Fund to direct additional funding towards skilling opportunities accompanying the green and digital transitions.

Moreover, the Recovery and Resilience Facility, powered by EUR 560 billion in grants and loans, provides Member States with ample opportunities to fund up- and reskilling actions. The Commission proposal for country specific recommendations in 2020 focused on the immediate measures to mitigate the socio-economic impact of the pandemic and identified skills, education and training as a short-term priority for 22 Member States. The national recovery and resilience plans that Member States will prepare to access funding from this Facility should reflect skills as a priority for the programming.

Throughout the 2021—2027 period, the European Social Fund Plus, with a proposed budget of EUR 86 billion, will remain an important funding source for national up- and reskilling activities.

In addition, the proposed EUR 24.6 billion of Erasmus+ will contribute to skills development and fund some of the actions outlined above, such as the European Universities, the Centres of Vocational Excellence and the Blueprints for sectoral cooperation on skills. Moreover, Erasmus+ can support a substantial increase in physical and virtual learning mobility across the EU which opens up new learning opportunities that may not be accessible at home.

Horizon Europe will play a key role in the recovery, notably the twin transitions, industry and SMEs, but also by supporting universities, researchers and underpinning brain circulation and mobility. The new Digital Europe Programme will invest in the development of academic offer in digital areas, as well as specialised training opportunities in fields like data, cybersecurity and artificial intelligence, to address the current shortages of these professionals.

Other resources can directly support up- and reskilling the European workforce. Member States’ investments in ‘high social impact infrastructure’ for education and training, including digital infrastructure, can be further supported by the European Regional Development Fund and by InvestEU, which under its Social Investment and Skills window (with a proposed budget guarantee of EUR 3.6 billion) can support, amongst others, investments in critical infrastructure in the area of education and training.

In the context of the green transition, the Commission identified investment in skills for a green transition as a priority for all 27 Member States in the use of the Just Transition Fund and its proposed total budget of EUR 40 billion. The public sector loan facility, under the Just Transition Mechanism, expected to mobilise between EUR 25 and 30 billion, can also invest in skills64. The ceiling of the European Globalisation Adjustment Fund has been proposed to be doubled in the future financial framework to support upskilling for workers and the self-employed who are made redundant in mass industrial restructuring. Other programmes, such as the Modernisation Fund will also fund up- and reskilling programmes to help workers in regions and sectors affected by the green transition.

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62. This estimate is based on the number of additional adult learners needed in each country to reach the 50% participation mark (compared to current participation levels), combined with the country-specific lump-sums per hour of employee training for reimbursements from the European Social Fund from the Commission Delegated Regulation 2019/2170 and assuming an education or training duration of 100 hours per year.

63. Amounts in this section are mentioned in 2018 prices.

64. Proposal for a Regulation on the public sector loan facility under the Just Transition Mechanism, COM(2020) 453 final.
The Commission urges Member States to step up support to up- and reskilling, seize the unique opportunity to mobilise tens of billions of Euros of the future EU budget to this effect and prioritise operations mentioned below, notably reforms that improve the offer and take-up of schemes to build skills.

The Commission will actively engage with national authorities and other stakeholders so as to ensure that adequate EU resources are allocated to support the various aspects of the Skills Agenda set out in this Communication. In particular, the Commission will encourage and support Member States to prioritise investments in skills under the Recovery and Resilience Facility and monitor progress through the European Semester.

A non-exhaustive overview of operations that can be supported with the future EU budget to deliver on the Skills Agenda, including on the Pact for Skills, in particular by making use of the resources of the Next Generation EU, includes:

**Investment in inter-company training centres**, where companies in a value chain can pool resources for tailored staff training.

Full roll-out of upscaled **Blueprints for sectoral cooperation on skills** at national and regional levels.

Development and operation of **skills forecasting systems**, providing information on upskilling and reskilling needs on a national/regional and sectoral level, including for the twin transitions, covering all phases of information collection, analysis and dissemination.

Development and implementation of **National Skills Strategies**, designed and delivered in a cross-government approach, accompanying the twin transitions, aligning efforts across a range of policies and with strong stakeholder involvement including social partners, civil society and labour market actors and the education and training sector.

**Implementing VET and apprenticeships reforms**, which may include investments in curricula reforms for increased labour market relevance, mainstreaming of green and digital skills, flexibility and modularisation, expansion of higher VET programmes, setting up quality assurance and graduate tracking systems, training of teachers and trainers in VET, supporting mobility of VET learners, teachers and trainers and setting up Centres of Vocational Excellence linked to smart specialisation strategies and/or regional innovation and growth strategies.

**Direct subsidies for apprentices in SMEs** including remuneration, recruitment bonuses and temporary social contributions coverage (up to 12 months), as well as trainers’ wages and/or their social contributions to stabilise and increase the supply of quality and effective apprenticeships.

**Investments in digital learning equipment and technologies** and state of the art industry equipment and technologies for education and training providers.

Incentives for the development of **digital learning content and core curricula modules** in line with labour market needs, focusing on digital and green skills, including through on-line training platforms.

Design and delivery of **short courses to reskill workers** towards emerging jobs and new skills requirements related to the green and digital transitions, including the set-up of ICT-Jump-Start trainings and the **Digital Crash courses for SMEs** to provide short-term intensive training to tackle ICT skills shortages.

Design and delivery of **master courses to train digital experts in advanced digital skills** necessary for the digital transformation and **master courses to train experts in green skills** for the green economy.

**Regional and local entrepreneurial skills hubs** to support start-ups, entrepreneurial employees and innovators.

Investment in the **quality, equity and labour market relevance of education and training systems** to ensure that people are equipped with the key competences needed in the labour market and in society.

Investment in **community adult learning centres**, where people of all ages can learn and exchange, building a resilient and cohesive society.

Set-up, experimentation and operation of a scheme to provide **individual learning accounts**.

**Incentives to support participation in training**, e.g. study loans/grants for adults, financing of training leaves, training allowances for the unemployed.

Support **training programmes to accompany short-time work schemes** protecting employees and self-employed in particular against the risk of unemployment.
5.2 Improving the enabling framework to unlock Member States’ and private investments in skills

EU funds can act as a catalyst, but investment in skills needs to be financed by other public and private investments. This pays off: 1 euro invested in up- and reskilling returns at least 2 euros in revenues or savings\(^\text{65}\). To this end, and in addition to concrete funding opportunities through EU programmes, the Commission will carry out a number of actions to support public and private investment in skills and human capital.

**Action 12: Improving the enabling framework to unlock Member States’ and private investments in skills**

To incentivise investment in skills, the Commission will:

- pursue the question of how fiscal frameworks can contribute to building more resilient societies, supporting reforms and investment in human capital and skills as part of the ongoing public debate initiated by the Commission’s review of economic governance and with a view to the recovery, while safeguarding fiscal sustainability;
- seek to enhance reporting on human capital by large companies, including on the skills development of employees. Furthermore, the Commission will also study other ways of increasing transparency of companies’ expenditure on human capital, for example by presenting them more visibly in their accounts;
- work on statistics on public and private investment in adult skills together with national statistical offices, including by developing ‘satellite accounts’ to improve transparency of reporting on skills in national accounts and budgets;
- assess innovative financing mechanisms that can trigger additional investments in skills. The proposed enhanced InvestEU foresees the possibility to finance skills and education and training activities, including through social outcome contracting pilots as a way of leveraging private investment for social goals. Together with the European Investment Bank Group and other implementing partners, the Commission will, therefore, explore the potential of various kinds of social outcome contract schemes, for example social impact bonds, to boost investment in skills.

**What is a social impact bond?**

A social impact bond is an innovative financing mechanism in which governments enter into agreements with social service providers, such as social enterprises or non-profit organisations, and with investors that pay for the delivery of pre-defined social outcomes, for example on skills\(^\text{66}\). The objective is to finance social services. In particular those focused on innovative solutions to social challenges or prevention measures.

Through this mechanism, the government or an intermediary raises funds from private-sector investors, charities or foundations. These funds are distributed to service providers to cover their operating costs. If the measurable outcomes agreed upfront are achieved, the government proceeds with payments to the intermediary organisation or directly to the investors.

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Now is the time to act. With this call to action, the Commission aims to put skills at the heart of the European policy agenda for the next 5 years to make the right to lifelong learning a reality and implement Principle 1 of the European Pillar of Social Rights.

The recovery of our economy, strengthening Europe’s global competitiveness and pressing forward with the twin green and digital transitions, requires a bold skills policy.

For this the Commission will:

- propose to businesses, social partners and other stakeholders to WORK TOGETHER, under an ambitious Pact for Skills;
- develop SKILLS FOR JOBS, thanks to a forward-looking approach to skills development, based on sound skills intelligence and modern and dynamic education and training provision that links directly with labour market and societal needs;
- EMPOWER PEOPLE to build up their skills by developing innovative tools, making learning pathways more flexible and accessible.

To bring this ambition to life, the Commission proposes ambitious quantitative objectives that will allow to measure progress on an annual basis. The Commission is calling on Member States and all stakeholders to help bring about a skills revolution and make full use of the unprecedented opportunities offered by Next Generation EU.