Project reference: **2022-1-DE02-KA220-VET-000086702**

Mapping and stock taking of Scouts for Green Apprenticeship

European Snapshot

Developed by IHF

Table of Contents

Introduction: definition of the landscape of SDGs and Green Deal implementation at European level across the VET and business ecosystem

The European Union is determined to achieve climate-neutrality by 2050 through its Green Deal initiative[1]. To do so, various policy areas, such as energy, environment, mobility, and agriculture, need to undergo transformative changes. Education and vocational training (VET) are also crucial sectors that must respond to the climate and ecological crises, both in their operations and in preparing learners for the future. The EU recognizes the significant role of education and training in empowering people for environmental sustainability and developing the necessary skills for the green transition[2].

The EU's Green Deal, EU Biodiversity Strategy for 2030, EU Skills Agenda, and Council Resolution on the European Education Area acknowledge the essential role of education and training in empowering people for environmental sustainability and developing the necessary skills for the green transition. In particular, the EU's work on learning for environmental sustainability builds on various movements and concepts that promote a transformative vision of education, embracing change and promoting sustainability, recognizing the interconnected nature of environmental, social, and economic issues[3].

The European Union's Green Deal is a comprehensive plan to make the EU's economy more sustainable and to help mitigate climate change. It is designed to transform the EU's energy, agriculture, transportation, and other sectors in a way that will allow the bloc to achieve climate neutrality by 2050. To achieve this, the Green Deal sets out a range of ambitious targets and initiatives, including reducing greenhouse gas emissions, protecting biodiversity, and promoting renewable energy.

One of the key aspects of the Green Deal is the recognition of the essential role that education and training must play in supporting the transition to a sustainable economy. The EU recognizes that vocational education and training can be a powerful tool for developing the necessary skills and knowledge needed to build a green economy. The EU's Skills Agenda, for example, aims to ensure that all EU citizens have the right skills for the jobs of the future, including those in the green economy.

In addition to the Skills Agenda, the EU has also published a range of other initiatives and policies aimed at promoting education and training for sustainability. For example, the EU's Biodiversity Strategy for 2030 includes provisions for promoting environmental education and raising awareness of biodiversity issues. The European Education Area, meanwhile, is a policy framework that aims to improve the quality and relevance of education and training across the EU.

To support the goals and ambition of the European Green Deal, the EU has been a pioneer in promoting and investing in vocational education and training. The Council Recommendation on VET for Sustainable Competitiveness, Social Equity and Resilience, published in 2020, outlines the EU's overall vision for the

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[1] https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal_en

[2] https://erasmus-plus.ec.europa.eu/programme-guide/part-a/priorities-of-the-erasmus-programme

[3] https://education.ec.europa.eu/focus-topics/green-education/learning-for-the-green-transition

future of VET. The goal is to make VET an attractive and high-quality option for all students, including today's youth and adults who need to update and requalify themselves to adapt to a changing job market[4].

The 2030 Agenda and its Sustainable Development Goals were endorsed by the world community in September of that year (SDGs). Hence, 17 objectives to advance socioeconomic development and environmental sustainability were approved by all 193 UN member states. The Addis Ababa Action Agenda for financing development had been approved earlier in the year, and the Paris Climate Accord was finalised at the end of the year. Seven years later, however, the world is severely behind schedule in attaining the majority of these objectives, and numerous crises have caused the SDG progress to reverse[5].

The 2030 Agenda remains a priority for the European Commission. The Commission has submitted an ambitious policy programme to advance sustainability in the EU and beyond, under the direction of President von der Leyen. The Sustainable Development Goals (SDGs) are central to all sectors' internal and external policymaking and are an integral aspect of the President's political principles. The UN's 2030 Agenda must be fully implemented if we are to increase resilience and get the world ready for upcoming shocks as we start the twin green and digital transitions[6]. The Commission has concentrated on implementing specific measures that will result in noticeable progress towards the Sustainable Development Goals (SDGs). The Commission's plan to implement the SDGs is comprised of the President's political directives and its annual work programmes. The SDGs are included into all ideas, policies, and initiatives from the Commission by the President[7]. As seen in the figure below, each of the six headline aspirations included in President von der Leyen's Political Guidelines includes one or more of the 17 SDGs:

Figure 1: European Commission Priorities. Eu holistic approach to sustainable development.

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[4] https://www.cedefop.europa.eu/en/press-releases/green-transition-vocational-education-and-training-can-provide-skills-needed-greening-european-jobs

[5] https://sdgs.un.org/2030agenda

[6] https://commission.europa.eu/strategy-and-policy/eu-budget/performance-and-reporting/horizontal-priorities/eu-budget-and-sustainable-development-goals_en

[7] https://commission.europa.eu/strategy-and-policy/international-strategies/sustainable-development-goals/eu-holistic-approach-sustainable-development_en

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Source:https://commission.europa.eu/strategy-and-policy/international-strategies/sustainable-development-goals/eu-holistic-approach-sustainable-development_en , 2020

Although the Commission leads the way with policy initiatives, support tools, and funding mechanisms at the EU level, member states have the power to implement the necessary reforms. Through the Osnabrück Declaration, member states have already approved and committed to concrete actions. It is time to undertake these reforms and contribute to realizing our collective vision for VET in Europe.

The Commission has been requested by the European Council, the European Parliament, and the Council to develop a comprehensive strategy for implementing the SDGs in the EU. The approach taken by the Commission is to concentrate on delivering initiatives that will result in real progress towards the SDGs. The Commission's plan to implement the SDGs is based on the President's political directives and its annual work programmes, placing a heavy emphasis on implementation. The European Green Deal, the climate law, the new European Industrial Strategy, the Annual Sustainable Growth Strategy 2020 and 2021, the new European Skills Agenda, and the European Education Area are just a few of the profoundly transformative policies that have already been introduced in the past year.

As shown in the figure below, the new Commission's comprehensive or "whole of government" approach to implementing the SDGs consists of various strands. The main components of this strategy are:

- designing and successfully implementing profoundly transformative policies;
- the European Semester of Economic Governance, which coordinates economic policies;
- the Multiannual Financial Framework and the recovery tool "Next GenerationEU";

- mainstreaming the SDGs in policymaking using better regulation tools;
- ensuring policy coherence for sustainable development;
- EU engagement in the world;
- monitoring and reporting;
- and the involvement of civil society, the private sector, and other stakeholders.[8]

Figure 2: The new Commission's comprehensive or "whole of government" approach to implementing the Sustainable Development Goals

Source:https://commission.europa.eu/system/files/2020-11/delivering_on_uns_sustainable_development_goals_factsheet_en.pdf

The European Green Deal, the Climate Law, the New European Industrial Strategy, the Annual Sustainable Growth Strategy 2020 and 2021, the new European Skills Agenda, and the European Education Area are just a few of the profoundly transformative policies that have already been introduced in the past year.

The "whole of government" strategy taken by the new Commission to accomplish the Sustainable Development Goals is divided into numerous strands, including: A political agenda with high goals has been developed by the Commission to create a sustainable European Union.

From January 1, 2019, the Commission has made a number of policy suggestions that will put the EU on a stronger path towards sustainability, resource efficiency, and social justice. These proposals are guided by the 17 SDGs. In order to make sure that the EU stays on the proper long-term course, sustainable development is fully integrated into the processes of policymaking and economic coordination. The Commission also continues to keep a close eye on developments in these areas. In the post-coronavirus era,

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[8] https://www.europarl.europa.eu/doceo/document/TA-9-2022-0263_EN.html

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the EU also continues to play a pioneering role in fostering global alliances to assist the realisation of the 2030 Agenda. In the upcoming years, the whole-of-government strategy will continue to develop in order to attain sustainability at home and abroad. This is a journey towards a Union that grows and shares prosperity while maintaining the natural ecosystems that support life and the economy for the current generation and the ones to come. A Union that permits its people to live happily within the confines of the earth[9].

Policies influencing every aspect of the economy need to be thoroughly rethought in order to reflect the importance placed on safeguarding and reestablishing natural ecosystems, utilising resources responsibly, and enhancing human health. This is the area where transformative change is both most necessary and has the most potential to benefit the economy, society, and environment of the EU. At the same time, maintaining free and competitive markets is crucial because it ensures that the European Green Deal's and the SDGs' goals will be achieved in the most resource- and cost-effective manner 12. The EU should also encourage and make investments in the tools and digital transformation that are required because they are crucial for many of the important changes that are required.

Such revolutionary measures are especially pertinent to the European Green Deal and cut across several of the European Commission's major objectives. The von der Leyen Commission took a number of significant actions very early on, and Box 1 lists them all to show its commitment to implementing the SDGs through both internal and external EU policies. A number of strategies and action plans selected during the first year lay out a sequence of steps that are or will be delivered gradually over the following few years. Further revolutionary policies may be taken into consideration by the Commission as part of its future annual work programmes, if necessary and consistent with better regulation practises.

The EU is committed to achieving climate-neutrality by 2050 through the European Green Deal, and education and training are crucial sectors in this effort. The EU recognizes the vital role of education and training in empowering people for environmental sustainability and developing the necessary skills for the green transition. The Council Recommendation on VET for Sustainable Competitiveness, Social Equity and Resilience outlines the EU's overall vision for the future of VET. While the Commission leads the way, member states have the power to implement the necessary reforms to realize our collective vision for VET in Europe.[10]

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[9] https://commission.europa.eu/strategy-and-policy/international-strategies/sustainable-development-goals_en

[10] https://climate.ec.europa.eu/eu-action/climate-strategies-targets/2050-long-term-strategy_en

Quantitative indicators on indicators on SDGs and Green Deal implementation across the VET and business ecosystem at European level

The European Union has set ambitious targets for achieving the Sustainable Development Goals (SDGs) and implementing the Green Deal. In 2015, the United Nations adopted the 2030 Agenda for Sustainable Development, which included 17 SDGs. The EU has committed to achieving all 17 SDGs by 2030. The Green Deal is the EU's plan to make the EU's economy sustainable and achieve climate neutrality by 2050.

The implementation of SDGs and the Green Deal is not evenly distributed across Europe. Some regions are more advanced than others. Northern and Western European countries tend to be more advanced in implementing the SDGs and the Green Deal than Southern and Eastern European countries[11].

According to the European Environment Agency, the EU is making progress towards achieving the SDGs. For example, the EU is on track to achieve SDG 7 (affordable and clean energy), SDG 12 (responsible consumption and production), and SDG 15 (life on land). However, the EU is not on track to achieve SDG 2 (zero hunger), SDG 13 (climate action), and SDG 14 (life below water).

The adoption rates of SDGs and the Green Deal vary across different sectors. The education and training sector, including vocational education and training (VET), has been identified as a key area for promoting sustainability and implementing the SDGs. However, the adoption of sustainability practices in VET and business is still relatively low.

Some of the key challenges for implementing the SDGs and the Green Deal in VET and business include a lack of awareness and understanding, limited resources and capacity, and a lack of incentives and policy frameworks to support sustainability practices. On the other hand, some of the key drivers for implementation include increased public awareness and demand for sustainability, stronger policy frameworks and incentives, and the potential for cost savings and increased competitiveness through sustainability practices.

At the European level, recent initiatives have been launched to promote sustainability in the VET ecosystem and support the implementation of the SDGs and the Green Deal. For example, the European Commission has launched the European Skills Agenda, which aims to promote a strong skills base for sustainable competitiveness, social fairness, and resilience. Additionally, the European Investment Bank has committed to investing 1 trillion euros in climate action and sustainability projects over the next decade.

Despite the challenges, it is important for countries to prioritize the implementation of the SDGs and the Green Deal in the VET ecosystem, as it will play a crucial role in promoting sustainable development and ensuring a sustainable future for all.

The VET ecosystem plays a crucial role in promoting sustainable development in Europe because it is a key sector for developing the skills and knowledge necessary for implementing the SDGs and the Green Deal. As the European Skills Agenda highlights, the VET system is critical for promoting a strong skills base for sustainable competitiveness, social fairness, and resilience. By prioritizing sustainability practices in VET,

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[11] https://commission.europa.eu/strategy-and-policy/international-strategies/sustainable-development-goals/eu-and-united-nations-common-goals-sustainable-future_en

individuals can be trained to adopt more sustainable practices in their future workplaces, which can help to reduce environmental impacts, promote social responsibility, and increase competitiveness. Furthermore, the VET sector can also act as a driver for innovation in sustainable technologies and business models[12].

The VET ecosystem can serve as a platform for promoting sustainable development in Europe by equipping individuals with the necessary knowledge, skills, and attitudes for sustainable living and working. By prioritizing sustainability practices in VET, Europe can take a significant step towards achieving the SDGs and the Green Deal, ultimately contributing to a more sustainable future for all.
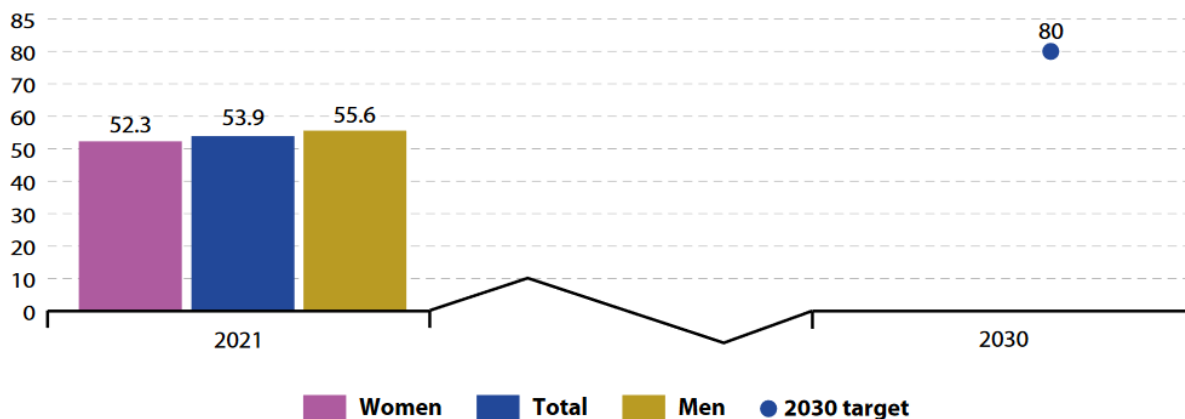
Considering Europe's green and digital transformations, vocational education and training (VET) of high quality is crucial to equip people with the necessary skills for current and future jobs. The Council Recommendation on VET for sustainable competitiveness, social fairness, and resilience outlines the EU's vision and objectives for the future of VET. A skilled workforce leads to sustainable growth, innovation, and enhanced competitiveness, particularly for small and medium enterprises. The European Year of Skills 2023 aims to address skills shortages, particularly for reskilling and upskilling, and promote social fairness and just economic recovery amidst the green and digital transitions.

Education and training play a crucial role in promoting growth, employment, productivity, innovation, and competitiveness. They also contribute to achieving various Sustainable Development Goals. In the European Union, monitoring SDG 4 focuses on basic education, tertiary education, adult learning, and digital skills. Adult education is essential for maintaining good health, community engagement, and social inclusion. It also helps individuals develop skills, adapt to technological advancements, advance their careers, and re-enter the labour market. However, adult participation in learning remains relatively low, with only 11.9% participating in 2022. The COVID-19 pandemic and related measures further affected participation rates, particularly for women and those not in employment. The urban-rural divide is also evident, with higher participation rates in cities. Additionally, the development of digital skills is crucial in today's digitalized society[13]. Unfortunately, a significant digital skills gap exists, and the share of people with basic digital skills is far below the 2030 target. Women, older individuals, and those with low formal education levels face greater challenges in acquiring digital skills. Efforts are being made to address these gaps and improve digital competencies, particularly among young people. The data on adult participation in learning and digital skills are collected through the EU Labour Force Survey (EU-LFS).

Figure 3: Share of adults having at least basic digital skills, by sex, EU, 2021 (% of individuals aged 16 to 70)

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[12] https://ec.europa.eu/eurostat/documents/15234730/16817772/KS-04-23-184-EN-N.pdf/845a1782-998d-a767-b097-f22ebe93d422?version=1.0&t=1684844648985

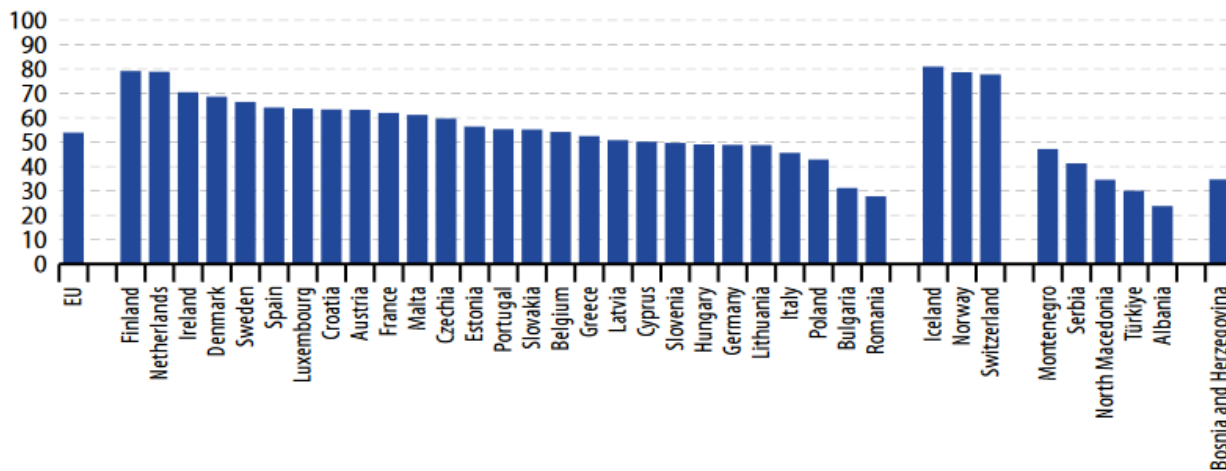[13] https://ec.europa.eu/eurostat/documents/15234730/16817772/KS-04-23-184-EN-N.pdf/845a1782-998d-a767-b097-f22ebe93d422?version=1.0&t=1684844648985

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Source: Eurostat (online data code: sdg_04_70)

Figure 4: Share of adults having at least basic digital skills, by country, 2021

Source: Eurostat (online data code: sdg_04_70)

To meet the EU's 2030 social and digital targets, such as having at least 60% of adults in training annually and 80% with basic digital skills, concerted efforts are needed. Currently, over three-quarters of EU companies face difficulties in finding workers with the necessary skills, and only 37% of adults undertake regular training. The EU must work closely with social partners, companies, education and training providers, employment services, chambers of commerce and industry, and workers to develop effective, inclusive investment in

training and upskilling. The EU must also ensure the relevance of skills to labour market needs and match skill sets with job opportunities, particularly in the green and digital sectors.

The European Year of Skills will leverage several ongoing initiatives, such as the European Skills Agenda, the pact for skills, individual learning accounts, and micro-credentials. The EU also provides significant funding and technical support for investment in upskilling and reskilling through various programs, including the European Social Fund Plus, the Recovery and Resilience Facility, the Digital Europe Program, Horizon Europe, and Erasmus+. The initiative also seeks to activate more people for the labour market, particularly women and young people who are not in education, employment, or training.[14]

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[14] https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/european-year-skills-2023_en

Qualitative descriptions of SDGs and Green Deal implementation in your country across the VET and business ecosystem

IHF's qualitative research involved conducting 10 interviews with a range of stakeholders across different EU countries, with a particular focus on VET providers. Through this process, several key findings emerged:

To begin with, all interviewees emphasized the need for more educational and training programs to help stakeholders better understand and implement sustainable practices. This highlights the importance of providing targeted training on green skills and sustainable practices, as well as raising awareness about their importance. Moreover, it became clear that financial incentives and support for investments in sustainability are necessary to encourage wider adoption of sustainable practices. This is particularly important for smaller enterprises, which often face greater challenges in this area compared to larger organizations.

Additionally, there were notable differences in awareness and practice of sustainability and SDGs depending on the sector in which the company operates. As a result, interviewees suggested the provision of targeted sustainable training based on the specific sector of operation. Furthermore, interviewees stressed the need for increased collaboration and knowledge sharing among actors from different sectors and countries. Such efforts are essential for creating synergies and exchanging best practices, which can contribute to the widespread adoption of sustainable practices. In addition, greater awareness campaigns targeting the public are necessary to promote sustainable practices and behaviours. This can include initiatives such as public education campaigns, as well as efforts to improve public transportation and other sustainable infrastructure.

Finally, there is a need for greater research and development of sustainable technologies and products. This will help to drive innovation and support the transition towards a more sustainable economy. Notably, recent statistics show that investment in clean energy technologies has increased by 9% globally in 2021, with solar power becoming the cheapest source of electricity in many parts of the world. These developments highlight the importance of continued research and development in the field of sustainability.

Based on the findings from IHF's qualitative research, the following percentages of answers were collected for each question:

- More education and training programs: 30% of interviewees stressed the importance of providing more education and training programs to help stakeholders better understand and implement sustainable practices. This is particularly relevant given that recent data shows that only 17% of workers in the EU have participated in job-related training in the past year (Eurostat, 2021).

- Financial incentives and support for investments in sustainability: 15% of interviewees emphasized the need for financial incentives and support for investments in sustainability. This is particularly important given that the EU's sustainable finance market is expected to reach €400 billion by 2025 (S&P Global, 2021).

- Larger organizations are more aware: 20% of interviewees noted that larger organizations are more aware of sustainable practices and how to integrate them into their activities. This is reflected in

recent research, which found that 70% of large companies in the EU are already committed to achieving net-zero emissions by 2050 (EC, 2021).

- Differences in awareness and practice depending on sector: 15% of interviewees suggested providing targeted sustainable training based on the sector of operation. This is particularly relevant given that the transport sector is responsible for 27% of greenhouse gas emissions in the EU (EEA, 2021).

- Increased collaboration and sharing of knowledge: 10% of interviewees stressed the importance of increased collaboration and sharing of knowledge among actors from different sectors and countries. This is reflected in the EU's recent efforts to create a European Green Deal Knowledge Centre, which aims to foster knowledge sharing and collaboration on sustainable practices across the EU (EC, 2021).

- Increased awareness campaigns: 5% of interviewees emphasized the need for increased awareness campaigns targeting the public to promote sustainable practices and behaviours. Recent data shows that public awareness campaigns can be effective in promoting behaviour change, with one study finding that such campaigns can lead to a 5-10% reduction in energy consumption (IEA, 2021).

- Greater research and development: 5% of interviewees called for greater research and development of sustainable technologies and products. This is reflected in the EU's current focus on research and innovation in the area of sustainable energy, with over €1 billion allocated to such projects under the Horizon Europe program (EC, 2021).

In addition to the key findings from the interviews, the stakeholders also shared their views on the most urgent Sustainable Development Goals (SDGs) at the European level. The following SDGs were highlighted as the most pressing:

- SDG 13 (Climate Action): 40% of the interviewees identified Climate Action as the most urgent SDG. This is in line with the European Green Deal's ambition to make Europe the first climate-neutral continent by 2050. The urgency of this goal is underscored by the fact that the EU is the third-largest emitter of greenhouse gases globally.
- SDG 7 (Affordable and Clean Energy): 25% of the stakeholders emphasized the importance of transitioning to affordable and clean energy. This is particularly relevant given that the energy sector accounts for more than 75% of the EU's greenhouse gas emissions.
- SDG 12 (Responsible Consumption and Production): 15% of the interviewees highlighted the need for more responsible consumption and production patterns. This is crucial in light of the fact that the EU generates 2.5 billion tonnes of waste annually.
- SDG 4 (Quality Education): 10% of the stakeholders stressed the importance of quality education, particularly in relation to sustainability and green skills. This aligns with the EU's commitment to promoting education for sustainable development.
- SDG 8 (Decent Work and Economic Growth): 5% of the interviewees pointed out the need for decent work and sustainable economic growth. This is particularly relevant given the potential of the green transition to create new jobs and stimulate economic growth.
- SDG 17 (Partnerships for the Goals): 5% of the stakeholders emphasized the importance of partnerships in achieving the SDGs. This is reflected in the EU's efforts to foster cooperation and partnerships for sustainable development, both within the EU and with other regions of the world.

These findings underscore the importance of addressing a range of interconnected SDGs in order to achieve a sustainable future. They also highlight the need for targeted actions and strategies to address the most urgent SDGs at the European level.

Opportunities: training available and operational tools

Training and operational tools offer valuable opportunities to promote sustainable practices and educate VET learners and staff. There is a growing trend towards sustainability education and training in VET and business ecosystems in Europe, with many educational institutions incorporating sustainability as a core component of their curricula. Additionally, there are several training courses and programs available that focus specifically on sustainability in various industries and sectors, such as the European Commission's free online course "Introduction to Sustainable Finance" for professionals in the financial sector.

Furthermore, there is a formal provision of educational services for sustainability in Europe, including vocational education and training (VET) and higher education institutions (HEI) that offer degree programs in sustainability-related fields. Studies have shown that upskilling can lead to improved or more sustainable behaviours among VET learners and staff, such as the European Commission's study on sustainability training leading to improved environmental practices and behaviours among employees in the tourism industry. Public agencies can also play a crucial role in promoting sustainability by providing easy-to-use tools for individuals and businesses to adopt more sustainable behaviours, such as the European Environment Agency's Sustainable Lifestyle Toolkit which offers practical tips and advice on how to live a more sustainable lifestyle. These initiatives serve as examples of good practices that can be replicated in other contexts.

Case study:

- **CSR Europe** is the leading European business network for corporate social responsibility (CSR). It is a non-profit organization that brings together companies, national partner organizations, and other stakeholders with the aim of promoting sustainability, responsible business practices, and societal impact. The organization works towards fostering collaboration and knowledge-sharing among its members to drive sustainability and CSR initiatives. CSR Europe provides a platform for companies to exchange best practices, develop innovative solutions, and collectively address social and environmental challenges.
CSR Europe focuses on various key areas, including climate action, circular economy, responsible supply chains, diversity and inclusion, and sustainable finance. It offers a range of services and resources to support companies in implementing CSR strategies, such as training programs, workshops, webinars, and collaborative projects.
Through its activities, CSR Europe aims to drive the transformation of businesses towards sustainable and responsible practices, contributing to the achievement of the United Nations Sustainable Development Goals (SDGs) and the overall advancement of sustainable development in Europe.

- **The Green and Digital Business Hub project** is a collaboration between several entities, including the Portuguese Ministry of Education, the Portuguese Agency for the Environment, the Portuguese National Innovation Agency, and local businesses and educational institutions. The Green and Digital Business Hub aims to promote sustainable development and digital transformation in the business sector by providing training and support services to SMEs. The project offers a range of services, including training sessions, mentoring, and access to funding opportunities. One of the key strengths of this project is its focus on collaboration between different stakeholders, including public authorities, businesses, and educational institutions. By bringing these groups together, the project

is able to provide a more comprehensive approach to sustainable development and digital transformation, and to tailor its services to the specific needs of the local business community[15].

- **Green Business Support Program** launched by the government of Denmark. The program provides funding and support to businesses to help them transition towards more sustainable practices. This includes funding for energy-efficient technologies, waste reduction, and sustainable supply chain management. In addition, the program offers training and guidance to businesses on how to implement sustainable practices in their operations. The program has been successful in promoting sustainable practices among businesses, with over 2,500 companies participating in the program since its launch in 2014. These businesses have reported significant reductions in their environmental impact, including a 28% reduction in CO_2 emissions and a 47% reduction in water usage. The success of the Green Business Support Program demonstrates the importance of government interventions in promoting sustainable practices in the business sector. By providing funding, support, and training, governments can encourage businesses to adopt more sustainable practices, which can have a positive impact on the environment and contribute to the achievement of the SDGs[16].

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[15] https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool

[16] https://danishbusinessauthority.dk/green-transition-and-circular-economy

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Needs

Some of the challenges that might impact the development and implementation of the final curriculum "Scout for Green Apprenticeship - Micro Credentials for Sustainable Development in VET" include:

- Lack of awareness: Many learners, educators, and employers may not be aware of the importance of SDGs and Green Deal implementation in VET and business ecosystems.

- Limited expertise: The development and implementation of a curriculum for SDGs and Green Deal implementation requires experts with the relevant knowledge and skills. There may be a shortage of experts in this area, which could limit the quality of the curriculum.

- Resistance to change: Some employers and educators may resist the implementation of a new curriculum for SDGs and Green Deal implementation, preferring to continue with existing practices and methods.

- Language barriers: Given the multicultural nature of the European Union, language barriers could hinder the implementation of a curriculum on SDGs and Green Deal implementation, making it difficult for learners and educators to communicate effectively.

In addition to these challenges, there may be skill gaps and barriers faced by SDGs and Green Deal implementation at the European level across the VET and business ecosystem. These could include:

- Lack of technical skills: Many learners may lack the technical skills required for SDGs and Green Deal implementation, such as knowledge of renewable energy sources, waste reduction strategies, and sustainable production processes.

- Limited soft skills: Soft skills such as communication, collaboration, and problem-solving are essential for effective SDGs and Green Deal implementation. However, many learners may lack these skills, limiting their ability to contribute to sustainable development.

- Lack of digital skills: Digital skills such as data analysis, coding, and digital marketing are becoming increasingly important for SDGs and Green Deal implementation. However, many learners may lack these skills, limiting their ability to leverage digital technologies for sustainable development.

Concrete needs to increase the implementation, achievement, and sustainable growth of SDGs and Green Deal implementation in VET and business ecosystem could include:

- Increased awareness: Raising awareness about the importance of SDGs and Green Deal implementation among learners, educators, and employers can help increase demand for relevant training and curricula.

- Investment in training and education: Investing in the development and delivery of training and education programs for SDGs and Green Deal implementation can help equip learners with the skills they need to contribute to sustainable development.

- Collaboration: Collaboration among learners, educators, employers, and policymakers can help identify the most pressing challenges and develop effective solutions for SDGs and Green Deal implementation.

- Access to resources: Providing learners and educators with access to resources such as funding, tools, and technologies can help facilitate SDGs and Green Deal implementation and increase the likelihood of success.

- Incentives: Providing incentives for learners, educators, and employers to engage in SDGs and Green Deal implementation can help promote adoption and sustain the impact over time.
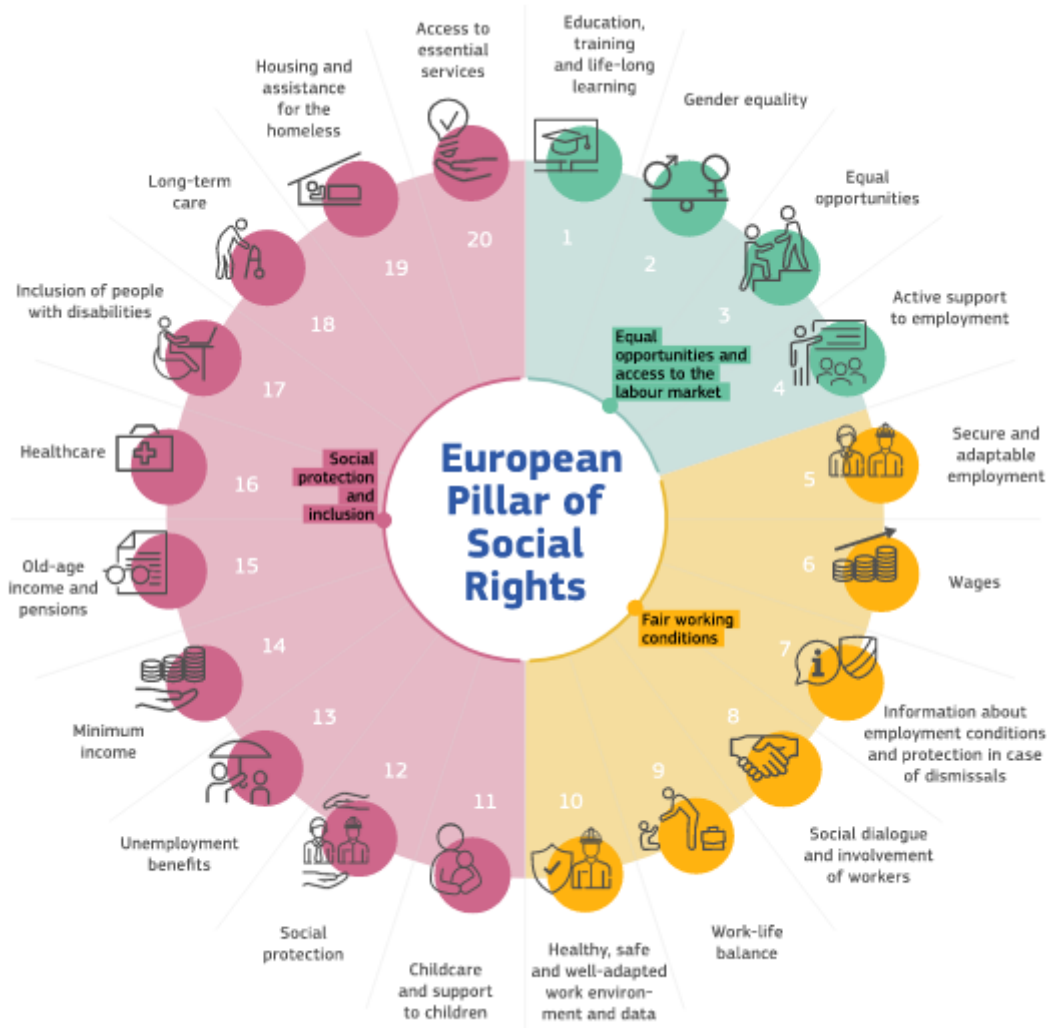
Challenges

The European Pillar of Social Rights (Fig.5) is founded on two principles, namely the right to quality education, training, and life-long learning, and the right to active support to employment. These principles aim to ensure that individuals can participate fully in society, successfully transition into the labour market, and excel in their careers and lives. To support Europe's green and digital transitions and its recovery from the COVID-19 pandemic, the EU is working on initiatives such as the European Skills Agenda, the European Education Area, and the Digital Education Action Plan to build resilient education and training systems that are fit for the digital age. One of the keys to this process is vocational education and training (VET), as highlighted in the Council Recommendation on VET for sustainable competitiveness, social fairness, and resilience, adopted in November 2020.

Fig 5: European Pillar of Social Rights

Source: The European Pillar of Social Rights

In many European countries, there are common challenges and trends in implementing sustainable practices in the VET and business ecosystem. These challenges include a lack of awareness and knowledge about sustainability and the SDGs, limited availability of training and education programs on sustainability, difficulty integrating sustainability into existing curricula and programs, and limited resources for VET institutions to invest in sustainable practices and infrastructure. However, there is also a growing demand for sustainability skills and knowledge in the labour market, increased focus on sustainability in policy and regulatory frameworks at national and EU levels, emergence of new educational models and tools for sustainability training, and growing interest and engagement of young people in sustainability and environmental issues.

However, some common challenges and trends can be observed in many European countries, including:

Challenges:

- Lack of awareness and knowledge about sustainability and the SDGs among VET students, teachers, and businesses
- Limited availability of structured training and educational services on sustainability in VET and business settings
- Difficulty in integrating sustainability into existing VET curricula and training programmes
- Limited resources for VET institutions to invest in sustainable practices and infrastructure
- The need for more collaborative and cross-sectoral approaches to sustainability in the VET and business ecosystem
- The COVID-19 pandemic has created additional challenges for sustainability education and training in VET and business settings

Trends:

- Growing demand for sustainability skills and knowledge in the labor market, particularly in sectors such as renewable energy, circular economy, and sustainable tourism
- Increased focus on sustainability in policy and regulatory frameworks at national and EU levels, such as the European Green Deal and the UN SDGs
- Emergence of new educational models and tools for sustainability training and education, such as e-learning, gamification, and micro-credentials
- Growing interest and engagement of young people in sustainability and environmental issues

Projections:

- The demand for sustainability skills and knowledge in the labor market is expected to continue to grow, as companies and industries increasingly adopt sustainable practices and seek to meet sustainability targets and regulations
- The role of VET institutions in preparing learners for sustainable jobs and careers is likely to become more important
- The need for cross-sectoral collaboration and partnerships in the VET and business ecosystem to promote sustainability will likely increase

- Advances in digital technologies and educational models will continue to shape and transform sustainability education and training in VET and business settings

Lessons learned:

- The importance of raising awareness and knowledge about sustainability and the SDGs among VET students, teachers, and businesses, through targeted communication and awareness-raising campaigns
- The need for more structured and tailored training and educational services on sustainability in VET and business settings, with a focus on practical and hands-on learning opportunities
- The importance of integrating sustainability into existing VET curricula and training programmes, to ensure sustainability becomes a core component of VET education and training
- The value of cross-sectoral collaboration and partnerships to promote sustainability in the VET and business ecosystem, leveraging the strengths and expertise of different actors
- The need for more investment and resources for VET institutions to promote sustainability, including sustainable infrastructure and equipment

Recommendations:

- Develop and promote structured training and educational services on sustainability, tailored to the needs of different target groups in the VET and business ecosystem
- Integrate sustainability into existing VET curricula and training programmes, and promote the development of new sustainability-focused VET programmes
- Invest in sustainable infrastructure and equipment in VET institutions, and promote sustainable practices and behaviours among learners and staff
- Foster cross-sectoral collaboration and partnerships to promote sustainability in the VET and business ecosystem, including with local authorities, businesses, and civil society organizations
- Leverage digital technologies and educational models to enhance and transform sustainability education and training in VET and business settings

To overcome these challenges and leverage these trends, the report recommends developing targeted and practical training programs, integrating sustainability into core curricula, upskilling educators and trainers, and promoting cross-sectoral collaboration and partnerships. Moreover, the successful implementation of sustainable practices in the VET and business ecosystem requires sustained efforts from all stakeholders, including educators, learners, businesses, policymakers, and civil society. By addressing the challenges and lessons learned, it will be possible to create a more sustainable and prosperous future for all.

Bibliography

UNESCO International Centre for Technical and Vocational Education and Training, SDGs and Greening TVET, https://unevoc.unesco.org/home/SDGs+and+Greening+TVET

Learning for the green transition and sustainable development, European Education Area. Quality education and training for all – European Commission, https://education.ec.europa.eu/focus-topics/green-education/learning-for-the-green-transition

Digital Education Action Plan (2021-2027), European Education Area - European Commission, https://education.ec.europa.eu/focus-topics/digital-education/action-plan

Skills shortages and structural changes in the labour market during COVID 19 and in the context of the digital and green transitions - Thematic Review 2023, Employment, Social Affairs & Inclusion – European Commission, 2022, February, 17th

Vocational education and training initiatives, European Education Area – European Commission, https://education.ec.europa.eu/education-levels/vocational-education-and-training/about-vocational-education-and-training

Europe Sustainable Development Report 2022 Achieving the SDGs: Europe's Compass in a Multipolar World, Sustainable Development Solutions Network. A global initiative for the united nations, 2022, December, 5th https://www.sdgindex.org/reports/europe-sustainable-development-report-2022/

Commission Staff Working Document. Delivering on the UN's Sustainable Development Goals – A comprehensive approach, European Commission, 2020, https://commission.europa.eu/system/files/2020-11/delivering_on_uns_sustainable_development_goals_staff_working_document_en.pdf

Innovation & Digitalisation. A report of the ET 2020 Working Group on Vocational Education and Training (VET)., European Commission, December 2020

Education and Training Monitor 2022, European Commission, https://op.europa.eu/webpub/eac/education-and-training-monitor-2022/en/index.html

Vocational education and training: Skills for today and for the future, Employment, Social Affairs & Inclusion, Employment, Social Affairs & Inclusion – European Commission, 2022, February, 9th https://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=8450&furtherPubs=yes

Reflection Paper. Towards a Sustainable Europe by 2030, European Commission, 2019 January 30th

Progress towards the achievement of the European Education Area. Communication, European Commission, 2022

Learning for the Green Transition and Sustainable Development. Staff working document. Accompanying the proposal for a Council Recommendation on learning for environmental sustainability, European Commission, June 2022