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Towards an EU strategy for enhancing green skills and competences for all

OPINION

European Economic and Social Committee

Towards an EU strategy for enhancing green skills and competences for all
[own-initiative opinion]

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1. **Conclusions and recommendations**

- 1.1 The EESC emphasises that **environmental responsibility is an obligation of everyone**. Sustainable environmental development requires a drastic social change, including individual and collective changes to our mentality, behaviour, lifestyles, as well as in the social, political and economic organisation of our countries and societies.
- 1.2 The EESC urges the Member States to set up effective national strategies with the involvement of social partners and relevant stakeholders to make steps towards urgent implementation of the **UN Sustainable Development Goals (SDGs)**, which call on countries to take action on inclusive and equitable quality education (SDG 4) and on climate change (SDG 13). In particular, target 13.3 aims to: "[i]mprove education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning". Target 4.7 aims to "ensure that all learners acquire the knowledge and skills needed to promote sustainable development", which is not only envisaged as a way of enhancing skill sets and boosting the economy, but also of furthering the aims of **global citizenship and peace**. Education plays a crucial role in that change, which goes beyond solely addressing the environmental issues in a curriculum.
- 1.3 The EESC calls on the European Commission and Member States to implement the first principle of **the European Pillar of Social Rights (EPSR)**, which is to make quality and inclusive education, training and lifelong learning (LLL) a right for all in Europe, to apply it to improve provision of green skills and competences for environmental protection and professional skills for all to support the implementation of this principle with sustainable public funding agreed with the social partners and civil society.
- 1.4 The EESC believes that green skills, environmental responsibility and sustainable development should be integrated transversally within the learning outcomes (knowledge, skills, attitudes and values) of the formal, informal and non-formal learning of all age learners in every educational sector, in apprenticeships, and in employee training schemes within and beyond the green sectors.
- 1.5 The EESC reminds the European Commission and Member States to better connect environmental policies to employment and education policies. This should also help to focus on the skills anticipation and skills development of the unemployed or of people in work whose training should cover environmental responsibility and have a specific focus on green skills. Thus it is essential to ensure that climate change in learning and teaching is aligned with democratic school culture and with a learning environment of "green culture" that is experiencing the **creation of green schools**, which by having adequate climate-aware and environment-preserving infrastructure, are run sustainably in partnership with all school stakeholders and prepare pupils for combating climate change as active citizens and in their future jobs.
- 1.6 The EESC calls on the European Commission to conduct an **EU-level research** on green skills and competence development within Member States and base its policy strategy on such research. Schools are a crucial source of information on environmental issues for students

especially in the era of the know-it-all internet, of social media and fake news. However, more information is needed on the policies of the EU Member States on integrating climate change awareness, environmental responsibility, and sustainable development, as green skills and competences, within education policies and education curricula of early childhood education, general education and higher education. Such research should also focus on social and professional green skills and competences in the vocational education and training (VET) sector, initial education and training (IVET) sector and continuous education and training (CVET) sector, and upskilling and reskilling training of the unemployed and the workers.

- 1.7 The EESC reminds that green skills and competences are necessary for all citizens, young and old ones. Therefore there should be more attention to implement them in line with implementing the **Key Competence Framework**¹ for all types of education and use it to improve citizenship competence, which is needed to take responsibility for the environment and the "mathematical competence and competence in science, technology, engineering", which need to support environmental sustainability, in particular as regards scientific and technological progress. In addition, green skills and environmental responsibility issues should be integrated in all subjects, in particular in geography, ethics, and philosophy.
- 1.8 The EESC welcomes that the new European Commission's European Skills Agenda² (2020) focuses on green skills but regrets that it does not provide a target to countries on the share of adults' participation in quality and inclusive training on at least basic green skills and competences while it suggests a target on participation in adult training on basic digital skills.
- 1.9 The EESC welcomes the fact that the European Green Deal³ (2019) presents a comprehensive EU strategy on fighting climate change and for environmental protection in order to achieve EU climate neutrality by 2050 and that it announced different strategies which will be followed up by upcoming regulations, funds, and national reforms. The EESC calls the Member States to set up national policies which also focus on education on environmental responsibility and green skills, and **pro-active upskilling and reskilling** to facilitate the just transition to a green economy for all, particularly for workers in declining sectors. The EESC reminds that such reforms shall take place within effective social dialogue with teachers' and workers' trade unions, the employers and in consultation with relevant civil society organisations.
- 1.10 The EESC welcomes the suggestion of the European Green Deal to set up a "**European competence framework**" and recommends to the Commission to develop this to be applicable to **formal, informal and non-formal** learning under the "Open Method of Cooperation" that would involve representatives of ministries of education, social partners from the education and training sectors, and other relevant stakeholders such as youth and educational NGOs.

1 [OJ C 189, 04.06.2018, p.1.](#)

2 [COM/2020/274 final.](#)

3 [COM/2019/640 final.](#)

- 1.11 The EESC welcomes the fact that the European Parliament adopted a resolution on the European Green Deal⁴ and underlined that **industrial strategy** must include the impacts on the workforce, as well as **training, reskilling and upskilling of workers**⁵ and the EESC supports regional dimension of this strategy and strong governance with social dialogue. The EESC underlines that businesses also need to develop strategies on environmental protection, for which skills development for the employers is also needed.
- 1.12 The EESC calls on future EU presidencies and the European Commission to step up cooperation between the **Education Council, Employment Council and Environment Council** so that decision-makers at the highest level link the fight against climate change and the importance of providing green skills and competences for all ages in each form and type of the education and training sector.
- 1.13 The EESC calls for a **comprehensive EU level strategy**, such as a Council recommendation, on improving education and training on green skills and competences, developing green school strategies, and providing upskilling and reskilling to adults at and beyond the workplace in the skills needed for protecting the environment, for society and for greening the economy. We suggest that such a Council recommendation could follow up the suggestions of the new European Skills Agenda to focus on how to develop green attitude of everyone, making environmental responsibility as a transversal competence within education and training within the European Education Area, and focus on equality on green skills development for all ages and especially for socio-economically disadvantaged groups. Implementing the strategy in this way should also require that this improvement to education and training be accompanied by sustainable and adequate technical, financial and staff resources and funded by the public budget.
- 1.14 The EESC believes that Member States should put in place comprehensive policies and funding to **support teachers' and trainers' initial and continuous professional development on environmental protection** as a transversal topic for teachers across all subjects and levels and types of education and training, as well as specific training on green skills and competences. Member States should also ensure the provision of adequate professional support for teachers and trainers and provide them with relevant, up-to-date teaching materials, tools, methods and instructional practices on this topic.
- 1.15 The EESC reminds that the acquisition of green skills in the workplace would increase the resilience and adaptability of workers, managers and stakeholders, while contributing to green growth. The EESC calls for supporting collaboration and pooling resources between companies (especially SMEs) to meet training needs in relation to soft and hard green skills and competences.

⁴ [European Parliament resolution of 15 January 2020 on the European Green Deal.](#)

⁵ Our emphasis.

- 1.16 The EESC calls to ensure **EU funding for green skills and competence of environmental protection**, e.g. Erasmus+, the ESF+, the Recovery Package, and the Just Transition Fund should focus on providing financial support to green skills development of all age learners.
- 1.17 The EESC calls for **greening the European Semester**⁶ and requests the Commission to work with the ministries of education, relevant social partners and civil society organisations in defining Country Specific Recommendations to EU Member States on enhancing provision of green skills and competences in all levels and types of education and training sectors, starting with **early childhood education and going up to higher education and adult learning**, taking into consideration effective support to adults in and beyond workplaces.

2. General comments

- 2.1 Tackling climate change has an enormous impact on social conditions, education, employment and the labour market. Particularly important citizen mobilisations marked the year 2019 in Europe, in particular by students, asking public authorities to take urgent and ambitious action to tackle climate change. Environmental responsibility and green skills are needed by everyone, consumers and citizens at large, and also by policymakers, businesses, workers. It is necessary for every sector and activity, both in work-life (covering tasks from strategic planning and innovation to the grassroots level work in factories and services) and in everyday life (regarding e.g. home, transport and consumption) mainly as an integrated part of each profession, although some jobs can be considered as "environmental specialist" jobs.
- 2.2 Disruptions to economies caused by the COVID-19 pandemic should not make climate policy a lower priority for governments and people across Europe. Europe's politicians, companies, lawmakers and activists have called on its leaders to provide green investment in order to restart growth after the coronavirus pandemic. The assumption behind this is that fighting climate change and promoting biodiversity contribute to rebuilding stronger economies. Post COVID-19 fiscal stimulus packages will provide an opportunity for initiating a transformational and green recovery with the creation of green jobs.
- 2.3 In parallel, several countries have seen widespread protest resulting from fiscal and social reforms perceived as unfair by part of their populations. These recent developments show the urgency and need for ambitious and significant climate policies that should be inclusive and supportive for the most vulnerable regions, sectors, workers and citizens in general. These climate policies naturally **impact formal, informal and non-formal learning of all age learners** and green skills environmental responsibility and sustainable development should be integrated transversally within the learning outcomes (knowledge, skills, attitudes and values) of each education sectors, apprenticeships, and employee training provision within and beyond the green sectors. Green skills and competences should be understood as those which are needed to the society and the economy in relation to environmental requirements. Environmental issues cover a wide range of issues from climate change and pollution to natural resources and biodiversity.

⁶ [Environment Council, 5 March 2019.https://www.consilium.europa.eu/en/meetings/env/2019/03/05/](https://www.consilium.europa.eu/en/meetings/env/2019/03/05/)

- 2.4 Education plays a crucial role in raising awareness of environmental challenges and shaping the attitudes and behaviours that can make a difference. While many 15-year olds feel pessimistic about their future from the environmental standpoint⁷, according to the OECD⁸, numerous countries have already incorporated **environmental topics into their curricula** and are looking at issues such as recycling, daily consumption patterns and sustainable behaviours. Schools are a crucial source of information on environmental issues for students and a place to prepare responsible and critically-thinking citizens with awareness and understanding of the causes and consequences of environmental problems, as well as with the knowledge, skills and attitudes needed to find more sustainable solutions. However, more information is needed on the policies of the EU Member States on integrating climate change awareness, environmental responsibility, and sustainable development, as green skills and competences, within education curricula of early childhood education, general education, and higher education.
- 2.5 Green skills and competences are necessary for all citizens, young and old. Green skills is a transversal term and relate to the ability to integrate environmental aspects with other skills. This requires sufficient understanding and knowledge on environmental issues but at the same time a solid basis of general skills and work-related skills. Key Competence Framework⁹ mentions that the *mathematical competence and competence in science, technology, engineering* need to support environmental sustainability, in particular as regards scientific and technological progress and Citizenship competence is needed to take responsibility for the environment. STEM competences are an important basis to understand environmental issues and also to develop solutions for problems. Competences like critical thinking, creativity and collaboration/teamwork are also important to enable environmentally conscious and active citizenship.
- 2.6 According to the OECD, while in most countries only a minority of schools have courses dedicated to the environment, the issue is often discussed as part of other core curricula, and many schools offer out-of-school activities that focus on the environment¹⁰. However, there is still no dedicated **international research** on national strategies and curricula on environmental science, environmental attitudes and the specific development of green skills provision and assessment of such skills. Thus, the EESC calls the European Commission to enforce research on green skills and competence development within Member States and base its strategy on such research.
- 2.7 Greening the economy means producing products and services with less energy, fewer raw materials and with reduced carbon emissions. It applies to all economic activities in all sectors and includes workers and consumers in its scope¹¹. The shift to a low-carbon economy implies structural changes across sectors and occupations as new green occupations arise or grow in demand. However, it is the greening of existing ones that is mostly required. This translates into

⁷ OECD (2019), Avvisati, F., [Is there a generational divide in environmental optimism?](#), PISA in Focus, No 95.

⁸ OECD (2014), [Trends shaping education 2014 Spotlight 4](#).

⁹ [OJ C 189, 04.06.2018, p.1](#).

¹⁰ OECD (2012), [How "green" are today's 15-year-olds?](#) PISA in Focus, No 15.

¹¹ Eurofound (2011), [Industrial relations and sustainability: the role of social partners in the transition towards a green economy](#).

new skill sets that necessitate curriculum updates or even new qualifications across education and training levels.

- 2.8 Every profession has its specific environmental aspects to be considered. While the greening of the economy creates skills needs, particularly in specific sectors such as energy and resource efficiency, construction or manufacturing, moving towards a circular economy creates green skills needs across a broad range of industries. Such new skillsets need to be also reflected in different education sectors, including vocational education and training (VET) delivery, ranging from initial education and training (IVET) to continuous education and training (CVET), as well as apprenticeships curricula. These new green skills can range from very technical and job-specific skills to "softer" ones, such as responsible use of resources, which can be relevant across occupations, levels of hierarchy and sectors¹².
- 2.9 There is still no **comprehensive EU level strategy**, such as a Council recommendation, on improving education and training on green skills and competences, developing green **school** strategies, and providing upskilling and reskilling to adults at and beyond the workplace on skills needed for protecting the environment, for society and for greening the economy. The EESC welcomes that the new European Commission's European Skills Agenda¹³ (2020) focuses on green skills but regrets that it does not provide a target to countries on the share of adults having at least basic green skills and competences, while it suggests a target on participation in adult training on basic digital skills. We propose that a Council recommendation could follow up the suggestions of the new European Skills Agenda to focus on how to develop green attitude of everyone, making environmental responsibility as a transversal competence within education and training within the European Education Area, and focus on equality on green skills acquisitions for all ages, genders and socio-economically disadvantaged groups.
- 2.10 Moving to a circular and low-carbon economy will inevitably alter sectoral and occupational structures and bring about opportunities but also challenges, including declining sectors and sectors facing recruitment bottlenecks. From this perspective, tailored approaches to more vulnerable groups of adults, such as the low-skilled¹⁴, would garner additional socio-economic benefits.
- 2.11 Comprehensive policies and funding should be put in place to support teachers' and trainers' initial and continuous professional development on environmental protection as a transversal topic for teachers across all subjects and levels and types of education and training, as well as specific training on green skills and competences. The provision of adequate professional support for teachers and trainers and relevant, up-to-date teaching materials, tools, methods and instructional practices on this topic should also be ensured.

¹² Cedefop (2019), [Skills for green jobs: 2018 update](#). European synthesis report. Cedefop's research discusses developments in Germany, Denmark, Spain, Estonia, France and the UK.

¹³ [COM/2020/274 final](#).

¹⁴ See Cedefop (2020), [Empowering adults through upskilling and reskilling pathways](#), Volume 1: adult population with potential for upskilling and reskilling, for a comprehensive overview of low-skilled adults in the EU 27 and the UK.

2.12 According to recent research¹⁵, training programmes for the skills development of the unemployed or of people in work generally rarely have a specific focus on green skills, although sector organisations and charitable/not-for-profit organisations are sometimes active in developing such skills. This may reflect the weak link identified between environment-relevant policies and those dealing with employment and skills, including skills anticipation. In the countries examined, green skills and jobs are rarely the sole focus of regulations, policies and strategies. At the same time, subsidies and incentives targeted at companies for green skills development are rare.

3. Specific comments

3.1 The EESC points out that the **UN Sustainable Development Goals (SDGs)** demand countries take action on inclusive and equitable quality education (SDG 4) and on climate change (SDG 13). In particular, Target 13.3 aims to: "[i]mprove education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning". Target 4.7 aims to "ensure that all learners acquire the knowledge and skills needed to promote sustainable development", which is not only envisaged as a way of enhancing skill sets and boosting the economy, but also of furthering the aims of **global and active democratic citizenship and peace**.

3.2 The EESC emphasises the need to implement the first principle of **the European Pillar of Social Rights (EPSR)**, which is to make quality and inclusive education, training and lifelong learning (LLL) a right for all in Europe within the context of improving provision of green skills and competence for all and to support the implementation of this principle with sustainable public funding agreed with the social partners and civil society.

3.3 The EESC welcomes the fact that the European Green Deal¹⁶ published on 11 December 2019 presents a comprehensive EU strategy on fighting against climate change and for environmental protection in order to achieve EU climate neutrality by 2050 and that it announced different strategies which will be followed up by upcoming regulations, funds, and national reforms. The EESC is particularly pleased that the European Green Deal puts an emphasis on the fact that: "Schools, training institutions and universities are well placed to engage with pupils, parents, and the wider community on the changes needed for a successful transition." The European Green Deal also underlines the importance of pro-active upskilling and reskilling to facilitate the just transition to a green economy for all, particularly for workers in declining sectors.

3.4 The European Green Deal announces the European Commission's plan to prepare a "**European competence framework** to help develop and assess knowledge, skills and attitudes on climate change and sustainable development. It will also provide support materials and facilitate the exchange of good practices in EU networks of teacher-training programmes." The EESC welcomes this suggestion and recommends that the Commission develop the kind of competence framework that would be applicable to **formal, informal and non-formal** learning

¹⁵ Cedefop (2019), [Skills for green jobs: 2018 update](#). European synthesis report. This research discusses developments in Germany, Denmark, Spain, Estonia, France and the UK.

¹⁶ [COM/2019/640 final](#).

under the Open Method of Cooperation that would involve representatives of ministries of education, social partners from the education and training sectors, and other relevant stakeholders such as youth and educational NGOs.

- 3.5 From a formal learning perspective, green skills and a focus on climate change in learning and teaching go together with making the running of schools more democratic, and with a learning environment of "green culture" that is leading to the **creation of green schools**, which by having adequate climate-aware and environment-preserving infrastructure, are run in a sustainable way in partnership with the whole school community and prepare pupils for combating climate change as active citizens and in their future jobs.
- 3.6 Green skills need to be developed within national **active education/training and skills strategies**, in cooperation with relevant actors, as part of effective social dialogue and in consultation with the relevant civil society organisations – including students, youth, teachers, and parents organisations – in order to promote a low-carbon, resource-efficient and socially inclusive economy. These strategies also need to be shaped and kept up to date by drawing on an effective skills anticipation and matching system¹⁷ that incorporates all relevant stakeholders, in particular the social partners and youth and educational NGOs, and takes into consideration other policy goals, such as those relevant to education, employment, environmental protection, the circular economy and migration. This would allow for timely and targeted delivery of education and training on green skills that would meet the needs of society and the economy. In terms of seeing the transition to a circular economy as a strategic goal for Member States, fostering the delivery of green skills should also be aligned with national growth strategies to ensure that education and training initiatives meet national strategic goals.
- 3.7 Besides formal education, non-formal settings contribute to education for Environmental Citizenship by providing the opportunity and conditions that enable young people to acquire the body of knowledge as well as the skills, values, attitudes and pro-environmental actions necessary to become an Environmental Citizen. "In addition, an Environmental Citizen is empowered and motivated to participate in society as an agent-of-change in the direction of solving contemporary environmental problems, preventing the creation of new ones, and achieving sustainability and restoring our (human) relationships with nature. Pedagogies including place-based education, civic ecology education, ecojustice pedagogy, action competence and socio-scientific inquiry-based learning can contribute to building young peoples' competencies for the deep civic participation necessary to realise environmental and social change."¹⁸ It is therefore vital to support **non-formal educational programmes and organisations using these upskilling methods**, as they complement formal education in schools.

¹⁷ For more information on skills anticipation and matching under a comprehensive skills governance system, see Cedefop's [web page on Anticipating and matching skills](#). For the importance of skills anticipation targeting green skills, see Cedefop (2019), [Skills for green jobs: 2018 update](#).

¹⁸ Paraskeva-Hadjichambi D. et al. (2020) Educating for Environmental Citizenship in Non-formal Frameworks for Secondary Level Youth. In: Hadjichambis A. et al. (eds) Conceptualising Environmental Citizenship for 21st Century Education. Environmental Discourses in Science Education, vol. 4. Springer, Cham.

- 3.8 Following the example of the first-ever **Joint Council meeting** between the EU's finance and education ministers in 2019¹⁹, the Committee calls on future EU presidencies and the European Commission to step up cooperation among the Education, Employment and Environment Council so that decision-makers at the highest level link the fight against climate change and the importance of providing green skills and competences for all ages.
- 3.9 The EESC also welcomes the fact that the European Parliament adopted a resolution on the European Green Deal²⁰ in which it "underlines that the **industrial strategy** must include due consideration for the impacts on the workforce, as well as **training, reskilling and upskilling of workers**²¹; calls on the Commission to closely look at the regional dimension of this strategy, ensuring that no one and no region is left behind; insists that the strategy must include a social dialogue in which workers are fully involved." The EESC underlines that businesses also needs to develop strategies on environmental protection, for which skills development for the employers is also needed.
- 3.10 Environmental responsibility starts with providing information to people on which technical solutions to start using for the greening of the economy, private lives, households. For that, it is crucial that measures are put in place, so that more technological green solutions are given into the hands of companies, public bodies, households, along with training how to use those technological solutions via learning by doing. Thus, the Just Transition Strategy²² should **support competence and skills development of adults of all ages** in and beyond workplaces and so help them in making career choices and transitions and in following a sustainable mindset in life.
- 3.11 The first principle of the EPSR needs to be made a reality to ensure that all adults have equal access to quality and inclusive training and LLL both in workplaces and beyond in relation to green skills, competences, green technologies, and the hard and soft green skills of particular professions which leads to recognition of training to improve the level of qualifications. Effective support for improving the provision of training on green skills and skills for green jobs should be given to workers at any skills level and in any size of company, regardless of the sector and the geographical area they work in. Such support need to be developed as national and sectoral strategy with the involvement of Sectoral Skills Councils and the social partners with special attention to the quality of training of the providers.
- 3.12 The EU needs to boost its investment to reduce its carbon emissions and footprint through projects that can also create quality jobs. **Funding for green skills and competence of environmental protection** is essential as part of **Erasmus+** to support youth and educational cooperation projects in the fight against climate change, mobility and exchange of students, youth and staff on learning, developing green schools and teacher training. The EESC notes that

19 [Joint session of Education and Finance Ministers.](#)

20 [European Parliament resolution of 15 January 2020 on the European Green Deal.](#)

21 Our emphasis.

22 Just Transition Mechanism is part of the European Green Deal Investment Plan and will mobilise at least €100 billion of investments to provide additional targeted support to the regions most impacted by the transition towards a climate-neutral economy and with less capacity to deal with the challenge.

the Commission has been working to provide Member States with new financial resources to make school buildings and operations more sustainable with the aim of leveraging EUR 3 billion in investment in school infrastructure in 2020. We support that other EU funds, such as the ESF+, the Recovery Package, and the Just Transition Fund to focus on provide financial support to green skills development of all age learners. At the same time sustainable public investment to education and training need to be ensured²³.

- 3.13 Support for the training to adults is an important gain for the individual, the employer and the whole economy within a fundamental **transformation of the world of work**, mainly driven by climate change. **Financing of upskilling and reskilling** of the workforce with the assistance of ESF+, other European funds, national PES support and the employers' contribution is of the utmost importance and should be backed up by effective reskilling and upskilling strategies. Supporting collaboration and pooling resources between companies to meet training needs can be especially helpful for SMEs that lack the time and resources to provide training on their own²⁴. The acquisition of green skills in the workplace would increase the resilience and adaptability of workers, managers and stakeholders, while contributing to green growth.
- 3.14 The EESC welcomes the fact that the Environment Council met on 5 March 2020 and discussed the Green Deal and **Greening the European Semester**²⁵ and requests the Commission to work with the ministries of education, relevant social partners and civil society organisations in defining Country Specific Recommendations to EU Member States on enhancing provision of green skills and competences in all levels and types of education and training sectors, starting with early childhood education and going up to higher education and adult learning, taking into consideration effective support to adults in and beyond workplaces.

Brussels, 2 December 2020

Christa SCHWENG

The president of the European Economic and Social Committee

²³ [OJ C 262, 25.7.2018, p. 1.](#)

²⁴ Cedefop (2019), [Skills for green jobs: 2018 update](#). The research discusses developments in Germany, Denmark, Spain, Estonia, France and the UK.

²⁵ [Environment Council, 5 March 2019.https://www.consilium.europa.eu/en/meetings/env/2019/03/05/](https://www.consilium.europa.eu/en/meetings/env/2019/03/05/)