



Your Green Career is Our Future:

Green Jobs Career Readiness for Young People

WP2: Green Skills Response Strategies for Job Career Readiness Report

FINAL REPORT



Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them







Content

- I. Introduction
- II. Demographic questions
- III. General knowledge of the participants about green jobs
- IV. Green skills in educational environments
- V. Conclusions







I. Introduction

This document reports the results of the survey implemented within the Erasmus+ project

2022-1-DE04-KA220-YOU-000085086

Your Green Career is Our Future: Green Jobs Career Readiness for Young People "Green Read" in the project countries: Germany, Turkey, Spain, Italy, and Poland.

In the first part of the national reports, each partner carried out a short research to highlight the policies and initiatives on green jobs and green skills implemented in each partner country. We summarise the findings from the different researches as follows.

Initiatives on Green Jobs and Green Skills in Germany

National Action Plan on Green Jobs: In 2019, the German government launched the National Action Plan on Green Jobs (NAP-GJ) to integrate sustainability into the labour market. The plan aims to create new green jobs, enhance the green skills of the existing workforce, and support a just transition to a low-carbon economy. Through strategic partnerships with industries and and vocational training institutions, NAP-GJ seeks to align skills development with emerging green technologies and sectors.





Renewable Energy Education and Training Initiatives: Germany has invested significantly in renewable energy education and training programs. Organisations like the German Renewable Energy Federation (BEE) and the German Association for Wind Energy (BWE) collaborate with universities and vocational schools to offer specialised courses and certifications in renewable energy technologies. These initiatives equip the workforce with the necessary expertise to drive the expansion of renewable energy industries.

In conclusion, Germany's initiatives on green jobs and green skills demonstrate the country's commitment to sustainable development and environmental responsibility. By taking a holistic approach and fostering public-private partnerships, Germany has made significant strides in creating a skilled workforce for a green economy. However, challenges such as inclusivity and adequate funding need to be addressed for the initiatives to reach their full potential.

Initiatives on Green Jobs and Green Skills in Poland

The current educational needs in Poland are slightly different from the needs of previous generations for which lessons about ecology were just being implemented as a "novelty". In this situation, it is necessary to redefine the basic and key competences that will meet the needs of those adults and the challenges ahead of them.





These days green skills are supporting the development of creativity.

While in April 2021, the Polish Council of Ministers adopted the National Reconstruction Plan (KPO, Krajowy Program Odbudowy), which is the basis for the payment of money from the EU Reconstruction Fund, the highest which Poland has received in its history in the UE, where key position has transformation towards a "green" economy, innovation and green transport - going green became a Polish national priority.

An analysis of the educational offerings indicates that there are quite a wide range of opportunities for the training of green professional competences at the higher education level. At the same time, there is a shortage of green skills on the Polish labour market, which is a serious challenge for both the lifelong learning system, as well as for companies. With insufficient training in the school education system in the field of green professions and competences, it is necessary to create these competences within the framework of extracurricular education, e.g., through courses or training. Eliminating the competence deficit in this area should be considered one of the important aspects of systemic preparation for the calls related to adaptation to climate change.





Initiatives on Green Jobs and Green Skills in Spain

Spain has been taking significant strides in promoting policies on green jobs to foster sustainable economic growth and address environmental challenges. As part of its commitment to combat climate change and transition to a low-carbon economy, the Spanish government has implemented a range of initiatives and regulations aimed at encouraging the industries development of green and promoting environmentally friendly employment opportunities. These emphasise the importance policies of development, renewable energy adoption, and sustainable practices across various sectors, positioning Spain as a leader in the pursuit of a greener and more resilient economy.

Initiatives on Green Jobs and Green Skills in Turkey

In parallel with international improvements, development policies in Turkey have considered

the interaction of economy, environment and society, which are the three pillars of sustainable development. Before the 1992 Rio Conference, environmental policies in the Five- Year Development Plans (FDPs) were based only on the objectives of eliminating the pollution that emerged, later on pollution prevention policies and finally with the 7th FDP, policies for the integration of environment and economy were prioritised in line with the sustainable development approach.





Since the 2000s, environment became a separate topic, and since the importance of environmental policies in terms of production and employment increased, it became important to integrate the issue with economic and social policies. For instance, the sustainability goal has been an integral part of the 8th (2001-05), 9th (2007-13), 10th (2014-18) and 11th (2019-23) National Development Plans (NDPs). In the 9th NDP the protection of the environment and improving infrastructure was associated with the objective of increasing the competitiveness of the Turkish economy. Besides, the stated goal of the National Action Plan for Climate Change is to climate-change objectives into development policies and promote renewable and energy efficiency.

In addition to increasing productive employment and protecting the environment, which are

among the main objectives, similar issues were included among the priority areas in sectoral targets. Since then, the development plans have included policies to ensure sustainable use and conservation of resources, to expand the use of renewable energy resources, to increase energy efficiency, to develop sectors that will create high added value, to increase the employment of qualified labour force and to apply and disseminate new technologies in a way to increase employment. In incentive policies, it is also stated that priority will be given to developing new employment opportunities,





environmental protection and R&D. Therefore, in Turkey there is a tendency to apply new skill development strategies for green jobs.

Initiatives on Green Jobs and Green Skills in Italy

In Italy, the government and private organisations have recognized the importance of educating the younger generation about environmental issues and sustainable practices. As a result, there have been efforts to integrate green jobs and environmental education into the school curriculum. Here are a few initiatives:

Eco-Schools Programme: The Eco-Schools Programme is an initiative promoted by the Italian Ministry of the Environment, in collaboration with the Foundation for Environmental Education. It involves schools of all levels, providing support for the implementation of concrete actions for environmental sustainability. The programme encourages schools to carry out projects related to green jobs, such as waste management, efficient energy use, sustainable mobility, and the promotion of eco-sustainable behaviour.

Green Skill Academy' project: The 'Green Skill Academy' project is an initiative promoted by Legambiente, an Italian environmental organisation. The initiative aims to involve high school students in training activities on the skills needed for green jobs.





Through workshops, laboratories and internships, students can acquire specific skills in the field of renewable energy, sustainable agriculture, waste management and other areas related to sustainability.

Impresa in Azione' programme: 'Impresa in Azione' is a programme promoted by the Italian Accenture Foundation in collaboration with the Italian Ministry of Education. It offers training courses for high school students, focusing on topics such as technological innovation, sustainable entrepreneurship, and green jobs. Students can develop entrepreneurial skills in the context of sustainability and to realise projects related to green jobs.

Competitions and prizes: Numerous competitions and awards are organised in Italy to encourage students to develop innovative projects and ideas in the field of green jobs. For example, the 'Premio Scuole Stellari' promoted by ENEA, the national agency for new technologies, energy, and sustainable economic development, offers awards to schools that stand out for their initiatives related to sustainability and green jobs.





Through workshops, laboratories and internships, students can acquire specific skills in the field of renewable energy, sustainable agriculture, waste management and other areas related to sustainability.

Impresa in Azione' programme: 'Impresa in Azione' is a programme promoted by the Italian Accenture Foundation in collaboration with the Italian Ministry of Education. It offers training courses for high school students, focusing on topics such as technological innovation, sustainable entrepreneurship, and green jobs. Students can develop entrepreneurial skills in the context of sustainability and to realise projects related to green jobs.

Competitions and prizes: Numerous competitions and awards are organised in Italy to encourage students to develop innovative projects and ideas in the field of green jobs. For example, the 'Premio Scuole Stellari' promoted by ENEA, the national agency for new technologies, energy, and sustainable economic development, offers awards to schools that stand out for their initiatives related to sustainability and green jobs.





II. Demographic questions

In this section are summarised the characteristics of the participants by country concerning the categories gender, age, educational background, and institutions of the respondents.

Germany

In Germany 11 participants took part in the survey. Q1 shows that 63.3% (7 participants) are female, and 36.4% (4 participants) are male. Q2 provides the age distribution: 2 participants are 18-24 years old, 3 are 24-34, 4 are 35-44, and 2 are 45-54 years old. Q3 reveals the educational background: 7 participants have a Master's/PhD degree, 3 have a Bachelor's degree, and 1 has a High School degree. Q4 describes the institutions of the participants: 4 are from VET institutions, 4 from adult education, 1 from higher educational institutions, and 2 didn't specify their institution or field.

Poland

A total of 46 respondents participated in the activity in Poland. The majority of participants were men, constituting 71.74% (33 out of 46), while women represented 28.26% (13 out of 46) of the respondents.

In terms of age, the participants were divided into two groups.





The first group, aged 18-24, comprised 65.22% (30 out of 46) of the respondents, while the second group, aged above 24, constituted 34.78% (16 out of 46).

Regarding educational background, 54.35% (25 out of 46) of the participants had secondary (high school) education, 10.87% (5 out of 46) held a BSc degree, and 34.78% (16 out of 46) had a graduate degree (MSc./PhD.). The remaining participants were representatives of Higher Education Institutions (HEIs) and Vocational Education and Training (VETs).

The breakdown of participants' institutions showed that 67.39% (31 out of 46) were from Youth Employment Centers (YECs), 26.09% (12 out of 46) were from Higher Education Institutions (HEIs), and 6.52% (3 out of 46) were from Vocational Education and Training (VETs).

Spain

The survey in Spain involved a total of 47 participants. In terms of gender, 42.6% (20 out of 47) were male, while 57.4% (27 out of 47) were female. The participants' ages were distributed as follows: 23.4% (11 out of 47) were in the 18-24 age group, 12.8% (6 out of 47) in the 24-34 age group, 38.3% (18 out of 47) in the 35-44 age group, 10.6% (5 out of 47) in the 45-54 age group, 14.9% (7 out of 47) in the 55-64 age group, and there were no participants aged 65 or older.





Regarding educational background, none of the participants had only a High School education. 25.5% (12 out of 47) held a Bachelor's degree (BSc.), while 74.5% (35 out of 47) possessed a Graduate degree (MSc./PhD.).

Regarding the sector of organisation, no participants were from Youth Employment Centers (YECs) or Technical and Vocational Education and Training Centers (TVETs). 34% (16 out of 47) of the participants were affiliated with Vocational Education and Training Centers (VETs), 42.6% (20 out of 47) were associated with Higher Education Institutions (HEIs), and 23.4% (11 out of 47) were from other sectors.

Spain

The survey in Spain involved a total of 47 participants. In terms of gender, 42.6% (20 out of 47) were male, while 57.4% (27 out of 47) were female. The participants' ages were distributed as follows: 23.4% (11 out of 47) were in the 18-24 age group, 12.8% (6 out of 47) in the 24-34 age group, 38.3% (18 out of 47) in the 35-44 age group, 10.6% (5 out of 47) in the 45-54 age group, 14.9% (7 out of 47) in the 55-64 age group, and there were no participants aged 65 or older.





Turkey

In Turkey, the survey involved 50 participants, with 27 of them being male and 23 of them being female.

In terms of age distribution, 70% of the participants were between 18 and 30 years old, 15% were between 31 and 40, 10% were between 41 and 50, and 5% were between 51 and 60.

Regarding educational background, 37 participants had a Bachelor's degree, 11 had a Master's degree, and 2 had a PhD. Institutions represented by the participants were as follows: 35 participants were from Higher Education Institutions (HEIs), 8 were from Vocational Education and Training Centers (VETs) and Technical and Vocational Education and Training Centers (TVETs), 5 were from both HEIs, and 2 were from Youth Employment Centers (YECs).

Italy

The survey in Italy involved 45 participants, with 55.6% (25 out of 45) being male, 42.2% (19 out of 45) being female, and 2.2% (1 out of 45) preferring not to disclose their gender.

In terms of age, the participants' distribution is as follows: 42.2% (19 out of 45) are between 18 and 24 years old, 17.8% (8 out of 45) are between 24 and 34, 17.8% (8 out of 45) are between 15 and 17 years old, 4.4% (2 out of 45) are between 35





and 44, 8.9% (4 out of 45) are between 45 and 54, 6.7% (3 out of 45) are between 55 and 64, and 2.2% (1 out of 45) are older than 65.

Regarding educational background, 35.6% (16 out of 45) have a Bachelor's degree, 20% (9 out of 45) have a Master's degree, 17.8% (8 out of 45) have a high school diploma, 8.9% (4 out of 45) are attending high school, 8.9% (4 out of 45) identify as "students," and 8.9% (4 out of 45) have earned a lower secondary (middle school) diploma.

Regarding the institutions represented, 44.4% (20 out of 45) of the participants are from universities, 42.2% (19 out of 45) are from Vocational Education and Training (VET) or Technical and Vocational Education and Training (TVET) institutions, 13.3% (6 out of 45) are from Youth Employment Centers (YECs), and 2.2% (1 out of 45) is from a high school (Liceo).





III. General knowledge of the participants about green jobs

In this section are reported the results of the question Q5 in which the participants were asked to state their general knowledge about green skills and green jobs.

Germany

In Germany, 2 respondents out of 11 (18,2%) stated that they have a good knowledge and competences about green jobs. 5 respondents (45,5%) have an average knowledge about green jobs, 2 (18,2%) an insufficient knowledge, and 2 (18,2%) don't have any competence.

This result highlights that in Germany the knowledge on this topic is widespread but there is still room for improvements.

Poland

Polish respondents when asked about their level of knowledge on green skills were rather moderately informed (21 / 46 (45.65%) or inadequately informed (18 / 46 (39.13%). Only 3 / 46 (6.52%) respondents stated that they are well informed, while 4 / 46 (8.7%) stated they are not informed at all. This brings to the assumption that Poles are not knowledgeable enough about green jobs.





Spain

The participants' knowledge about Green Jobs in Spain varied significantly. None of them reported being "Not Informed at all." The majority, 42.6%, felt "Inadequately Informed" or "Moderately Informed." Only a small percentage, 10.6%, considered themselves "Well Informed," and an even smaller group, 4.3%, described themselves as "Highly Informed." Overall, there is room for improvement in increasing awareness and understanding of Green Jobs among the participants.

Turkey

Concerning the knowledge and competences about the green jobs in Turkey, 16 respondents out of 50 (32%) stated that they have a good knowledge about the topic. 25 respondents (50%) have an average knowledge about green jobs, 5 (10%) an insufficient knowledge, and 4 (8%) don't have any competence.

Italy

In Italy, 16 out of 45 respondents (35,6%) declare themselves moderately informed about green jobs; 13 of them (28,9%) think they are well informed; 8 respondents feel very well informed, while 5 of them believe they are not adequately informed.





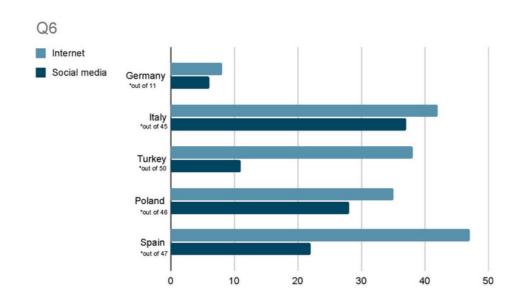
Finally, 3 respondents declare themselves not at all informed on green competences.

IV. Green skills in educational environments

This part of the questionnaire we have submitted was dedicated to better understand the situation and knowledge about green skills in the educational environment, being the project addressed mainly to this type of organisation.

Q6 Choose three (3) primary sources of information about green jobs.

In this question we wanted to understand which are the main sources of information about green skills in the participating countries. It has emerged that in general there is a tendency in finding this information on the internet and on social media in all the involved countries.







It is peculiar to highlight that in Spain the second most used source to gain information about green jobs are dedicated events (40 out of 47 responses).

Q7: Interest of your institution for environmental regulations, green skills development, green jobs, and career preparedness for green jobs

The participants were asked to rate the interest of their institution for the above listed topics on a scale from 1 (not considered at all) to 5 (very closely considered)

Environmental regulation

In Germany , out of 11 respondents, half believe that in their institution such issues are given due consideration -2 responded with 5/5 (18.2%) and 4 with 4/5 (36.4%). 3 respondents (27.3%) believe that in their institution such issues are partly considered, 1 (9.1%) that they are insufficiently considered, and 1 (9.1%) that they are not considered at all. In Italy 33 out of 45 respondents state that environmental policies are considered, or very closely considered by their institutions. It happens the same in Turkey, where 39 out of 50 respondents stated with 4 - 5, meaning that their institution is interested in the development of environmental regulations and in providing environmental solutions.





The tendency appears to be the opposite in Poland, where the majority of the respondents asserted that the effectiveness of their institution's reaction to environmental regulations was very low.

Spain obtained the following results:

1 (Not prioritised): 2 (4.3%)

2:10 (21.3%)

3: 35 (74.5%)

4:0 (0%)

5 (Highly prioritised): 0 (0%)

Green skills development

Regarding the green skills development, in Germany 2 (18.2%) answered 5 out of 5, 2 (18.2%) 4 out of 5, 5 (45.5%) 3 out of 5, finally 1 respondent scored 2 out of 5 (9.1%), and 1 (9.1%) only 1 out of 5, indicating that green skills are not considered at all in their institution.

In Italy 29 out of 45 respondents state that green skills and competences are considered, or very closely considered by their institutions.

In Turkey the responses are averagely 3/5, then 15 out of 50 respondents stated that with 4/5 and their institutions have focused green skills and competences in any course which has been conducted by them.

Again we have a different tendency in Poland where the





respondents asserted that the involvement of their institution in the development of green skills was very low.

Spain:

1 (Not prioritised): 7 (14.9%)

2:13 (27.7%)

3: 27 (57.4%)

4:0 (0%)

5 (Highly prioritised): 0 (0%)

Green Jobs and green jobs career readiness

In Germany half of the respondents answered that green jobs and green career readiness are well considered in their institution, while the other half declared the opposite.

In Italy 31 out of 45 respondents state that green jobs are considered, or very closely considered by their institutions. Same numbers for the green career readiness with 30 out of 50.

Same tendency in Turkey, where most of the respondents stated that their organisations considered green jobs and green career readiness well; 20 out of 50 participants answered 5 out of 5, 12 give 4 out of 5, 10 give 3 out of 5.

Poland appears to have again a completely opposite tendency, with very low ranking on both the topics.





Spain:

Green Jobs	Green career readiness
1 (Not prioritised): 10 (21.3%)	1 (Not prioritised): 37 (78.7%)
2: 20 (42.6%)	2: 3 (6.4%)
3: 10 (21.3%)	3: 7 (14.9%)
4: 7 (14.9%)	4: 0 (0%)
5 (Highly prioritised): 0 (0%)	5 (Highly prioritised): 0 (0%)

Q8 Please indicate on a scale from 1 to 5 the importance your institution places on enhancing the skills of instructors, trainers, and workers in order to meet the needs of a greening economy. 1—Not Prioritised at all and 5—Highly Prioritised.

In Germany it has been observed a positive tendency in the importance that the institutions give to the enhancing of teachers, trainers and workers' skills. The average of 7 out of 11 respondents answered positively. On the other hand, the respondents noticed that their institutions considered less relevant keeping their professional updated to green issues. In Italy half of the respondents answered positively to the skills enhancement of their institutions' professionals and the updating over green issues; the other half answered the opposite.





In Turkey we can observe the opposite trend, having the majority of the participants answering that keeping their professionals updated on green issues, and enhancing their green skills isn't a priority for their institutions. The same happens in Poland, 7 / 46 (15,1%) answered that they are not prioritised at all.

Spain:

Green upskilling	Green upskilling	Green upskilling
of teachers and	of youth	of academic
trainers	workers:	staff:
1 (Not prioritised): 7 (14.9%) 2: 39 (83%) 3: 1 (2.1%) 4: 0 (0%) 5 (Highly prioritised): 0 (0%	1 (Not prioritised): 6 (12.8%) 2: 24 (51.1%) 3: 20 (42.6%) 4: 7 (14.9%) 5 (Highly prioritised): 0 (0%)	1 (Not prioritised): 30 (63.8%) 2: 10 (21.3%) 3: 7 (14.9%) 4: 0 (0%) 5 (Highly prioritised): 0 (0%)

Q9 Listed below are several assertions regarding various areas of green skills. How strongly do you agree or disagree with each assertion?

This is what emerged in Germany:





- In the last three years, the green economy and environmental concerns have influenced the development of our projects.
- Green skills and green jobs are critical to transforming the new prospects created by clean and sustainable technologies into real economic growth.
- The transition to a greener and greener economy has a significant impact on the labour market.
- New courses/programs have been developed to train students in "green" skills.
- The statements that received more than half of negative responses are:
- In our institution, an assessment of the skills required for green employment is conducted on a regular basis.
- In our institution, steps have been taken with the goal of developing a set of green competencies for a particular occupation.
- In my institution, a comprehensive certification system for "green" standards has been developed.

On the other hand, the statements whose responses are highly controversial, with about half of the responses positive and half negative or most undecided are:

- We are aware of supporting initiatives aimed at balancing supply and demand for green jobs.
- We understand how "green" skills can be integrated with green jobs.





- Comprehensive standards for "green" skills have been developed at my institution.
- In this institution, "green" content is taught primarily in "general" subjects.
- In this institution, "green" content is taught mainly in specialised technical subjects.

Italy:

The statements respondents have agreed upon the most are:

- Over the past three years, the green economy and environmental concerns
- have influenced the development of our projects and/or the teaching of teachers in our schools/ institutes;
- Green skills and jobs are essential to convert the new perspectives generated by clean and sustainable technologies into genuine economic expansion;
- The transition to a greener and more sustainable economy has a substantial effect on the European labour market;
- We are aware of initiatives to support the matching of supply and demand for skills in the green employment sector;
- In my institution/school, 'green' content is mainly learnt in specialised technical subjects.

The statements respondents have disagreed upon the most are:





- In our organisation/ school/ institution, a periodic assessment of the skills required for green jobs is carried out;
- Comprehensive green skills standards have been developed in my school/institution;
- A comprehensive certification system for green standards has been developed in my institute/ school/ institution;
- In my institution/school, 'green' content is mainly learnt in specialised technical subjects.

Turkey

Questions answered positively by most or the vast majority of respondents are:

- Over the last 3 years, green economy and environmental issues has influenced development of our programs
- Our institution is involved in initiatives with green jobs and economy that influence development of training programs for required skills
- Green skills and green jobs are instrumental in translating the new opportunities created by clean and sustainable technologies into actual economic growth.
- We are aware of how green skills can be integrated in green jobs.
- We are aware of the role of our organisation/institution in addressing the green skills needs
- New courses/programs have been developed to train students in "green" skills





- Institution needs to develop a full approach to adjust training to needs of greening economy
- My institution's policies and practices are very effective in developing the "green" skills and knowledge of our students so they are up to date to meet industry demands

Poland

Regarding the assertions to whom respondents were asked to agree or disagree the majority of them can neither disagree nor agree to the statements they were asked to assert. This comes from the poor preparation of not only workplaces but education and their lack of motivation to seek for information themselves.

When asked if green economy and environmental concerns have influenced the evolution of projects in the last 3 years, only 3/46 (6.5%) respondents stated 'strongly agree' and 19/46 (41.3%) that they 'agree', while 20/46 (43.5%) that they 'Neither disagree nor agree' – and similar balance in answers (showing low knowledge, low preparation of organizations and low understanding) was in all the statements.

Only 1 statement was more 'distinct' since 10/46 (21.7%) respondents 'strongly agreed' that the transition to a greener and more sustainable economy has a substantial effect on the European labor market.

14/46 (30.4%) of respondents can state that their institution has experienced opening up of new courses related to climate change and environment in the last year.





Spain:

In the past three years, green economy and environmental concerns have influenced the evolution of our projects:

• Strongly Disagree: 2 (4.3%)

• Disagree: 5 (10.6%)

• Neither disagree nor agree: 40 (85.1%)

• Agree: 0 (0%)

• Strongly Agree: 0 (0%)

Green skills and green jobs are essential for converting the new prospects generated by clean and sustainable technologies into genuine economic expansion:

• Strongly Disagree: 2 (4.3%)

• Disagree: 45 (95.7%)

Neither disagree nor agree: 0 (0%)

Agree: 0 (0%)

• Strongly Agree: 0 (0%)

In our organisation, a regular assessment of the skills required for green employment is conducted:

• Strongly Disagree: 7 (14.9%)

• Disagree: 35 (74.5%)

• Neither disagree nor agree: 5 (10.6%)

• Agree: 0 (0%)

• Strongly Agree: 0 (0%)

The transition to a greener and more sustainable economy has a substantial effect on the European labour market:

• Strongly Disagree: 3 (6.4%)

• Disagree: 4 (8.5%)





• Neither disagree nor agree: 40 (85.1%)

• Agree: 0 (0%)

• Strongly Agree: 0 (0%)

We are aware of the supporting initiatives for matching green employment skills supply and demand:

• Strongly Disagree: 33 (70.2%)

• Disagree: 14 (29.8%)

• Neither disagree nor agree: 0 (0%)

Agree: 0 (0%)

Strongly Agree: 0 (0%)

We understand how green skills may be incorporated into green jobs:

Strongly Disagree: 44 (93.6%)

• Disagree: 3 (6.4%)

• Neither disagree nor agree: 0 (0%)

• Agree: 0 (0%)

• Strongly Agree: 0 (0%)

In our institution, steps have been taken to develop a set of green skills capabilities (knowledge and skills) unique to a particular occupation:

• Strongly Disagree: 4 (8.5%)

• Disagree: 40 (85.1%)

• Neither disagree nor agree: 3 (6.4%)

• Agree: 0 (0%)

• Strongly Agree: 0 (0%)





New courses/programs have been developed to train students in "green" skills:

• Strongly Disagree: 10 (21.3%)

• Disagree: 30 (63.8%)

• Neither disagree nor agree: 7 (14.9%)

• Agree: 0 (0%)

• Strongly Agree: 0 (0%)

Comprehensive "green" skills standards have been developed in my institution:

• Strongly Disagree: 25 (53.2%)

• Disagree: 15 (31.9%)

Neither disagree nor agree: 7 (14.9%)

Agree: 0 (0%)

• Strongly Agree: 0 (0%)

A comprehensive certification system for "green" standards has been developed in my institution:

• Strongly Disagree: 40 (85.1%)

• Disagree: 3 (6.4%)

• Neither disagree nor agree: 4 (8.5%)

• Agree: 0 (0%)

• Strongly Agree: 0 (0%)

In this institution, "green" content is mainly learnt in "general" subjects:

• Strongly Disagree: 7 (14.9%)

• Disagree: 11 (23.4%)

• Neither disagree nor agree: 29 (61.7%)

• Agree: 0 (0%)





• Strongly Agree: 0 (0%)

In this institution, "green" content is mainly learnt in specialised technical subjects:

• Strongly Disagree: 7 (14.9%)

• Disagree: 7 (14.9%)

• Neither disagree nor agree: 33 (70.2%)

• Agree: 0 (0%)

• Strongly Agree: 0 (0%)

Q10 In the last 12 months, has your institution.....

In Germany, 7 out of 11 respondents have noted the need to teach new skills related to climate change or environmental issues in their institution.

7 out of 11 respondents have also noted the need to integrate jobs related to climate change management or environmental issues and inclusive growth into the learning process of their institution.

Almost all respondents, 10 out of 11 respondents have detected the need to review current training programmes and courses offered by their institutions, to acquire new skills related to climate change or environmental issues.

Finally, 7 out of 11 respondents have noted the need of creating new courses related to climate change and the environment in their institutions and schools.





In Italy In the last 12 months, 37 out of 45 respondents have noticed the need to train/ teach new skills related to climate change or environmental issues in their institution.

Also, 31 out of 45 respondents have noticed the need to integrate jobs related to climate change management or environmental issues and inclusive growth into the learning environment of their institution.

Moreover, 35 out of 45 respondents have noticed the need to review current training programmes and courses offered by their institutions, to acquire new skills related to climate change or environmental issues.

And, 23 out of 45 respondents have noticed the need of creating new courses related to climate change and the environment in their institutions/ schools, while 14 of them haven't noticed this need, and 8 cannot say.

Turkey:

In the last 12 months, 31 out of 50 respondents have noted the need to teach new skills related to climate change or environmental issues in their institution.

26 out of 50 respondents have also noted the need to integrate jobs related to climate change management or environmental issues and inclusive growth into the learning process of their institution.

Almost all respondents, 29 out of 50 respondents have detected the need to review current training programmes and courses offered by their institutions, to acquire new skills





related to climate change or environmental issues.

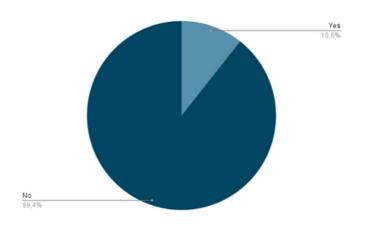
Finally,18 out of 50 respondents have noted the need of creating new courses related to climate change and the environment in their institutions and schools.

In Poland it was revealed that Polish institutions need to train trainers/teachers in new skills related to dealing with climate change or environmental issue, as well as to integrate jobs related to dealing with climate change or environmental issues and inclusive growth into learning environment. There is also a need to revise training programmes and current courses in in new skills related to dealing with climate change or environmental issues.

14/46 (30.4%) of respondents can state that their institution gas experienced opening up of new courses related to climate change and environment in the last year.

Spain

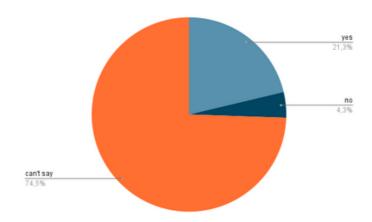
Needed to train trainers/teachers in new skills related to dealing with climate change or environmental issues:



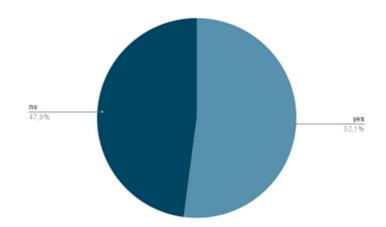




Needed to integrate jobs related to dealing with climate change or environmental issues and inclusive growth into the learning environment:



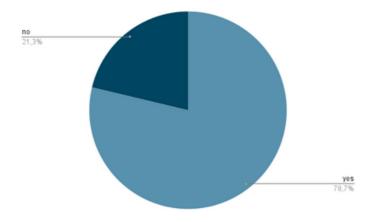
Needed to revise training programs and current courses in new skills related to dealing with climate change or environmental issues:





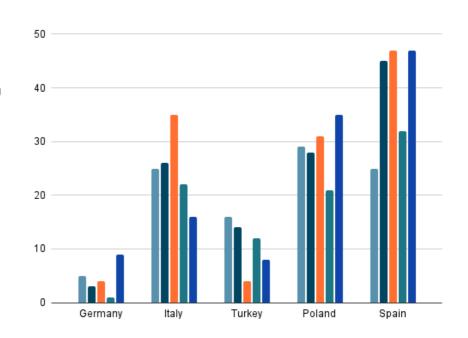


Experienced opening up of new courses related to climate change and environment:



Q10 What are your organization's most important strategies for responding to green skills? Please check all boxes that apply. (50 respondents per country, Germany had 11)

- Modifications to present-day green skills training programmes
- Green economy-related modifications to the learning environment
- Changes in working environment
- A summary of vocations producing demand for ecocompetences
- Initiation of the response greening organizational approach for skills development







Q11 Please indicate and rank the efficiency of the following teacher training approaches at your school

In Germany seminars have been considered the most effective way to train teachers on the topics, followed by reverse mentoring by young teachers. The least effective appear to be online courses, with only 4 out of 11 votes of effectiveness, but 5 respondents declared that they are not used in their institution.

In Italy we find the opposite tendency, with online courses stated as the most effective training approach, followed by seminars and reverse mentoring. In general all the approaches have been more or less indicated as effective, there weren't any of them totally seen as ineffective.

In Turkey online courses and external training received the majority of votes for their effectiveness. It is interesting to see that individual training by more experienced teachers has been indicated as not used in their institutions by 25 out of 50 respondents.

In Poland when asked about the efficiency of the teacher training approaches at their schools, it seems that the most effective are:





- Instructor from outside the institution: 5/46 (10.9%) very effective, 36/46 (78.3%) effective
- Seminars and classes taught by the professors themselves: 2/46 (4.3%) very effective, 30/46 (65.2%) effective

The least effective is reverse mentoring by young teachers.

Online courses were also recognized by respondents as somewhat effective 14/46 (30.4%) or effective 28/46 (60.9%)

.

In Spain online courses have been rated as not effective, but seminars have been considered somewhat effective. Again reverse mentoring appears to be the least used approach in the institutions, together with external instructors.





V. Conclusions

In this section we briefly report the conclusions drawn from the national reports of the partner organisations.

At the end of this section we will make an analysis of the general situation in all the countries involved in this research.

A total of 199 respondents participated in the questionnaire divided as follows according to different countries:

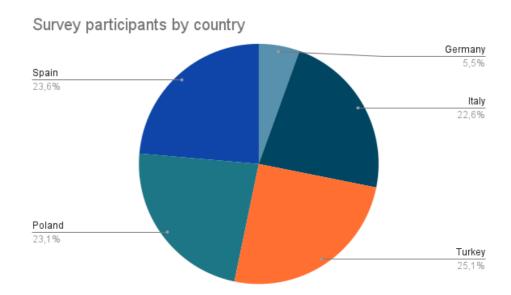
• Germany: 11 respondents

• Poland: 46 respondents

• Spain: 47 respondents

• Turkey: 50 respondents

• Italy: 45 respondents







As evidenced by the number of respondents in the various countries, the number of respondents was uniform with the exception of Germany where it was more difficult to find respondents willing to answer the questionnaire.

The situation of green skills for green job careers presents many points in common in all the countries involved. For instance, the need to implement green skills especially in education emerges in all countries. In some countries, this need is even more strongly felt, as is the case in Poland. In other countries where this topic has been considered in school curricula for some time, like in Germany (at least in part), there is still some uncertainty about the meaning of green skills in education. The overall findings undoubtedly highlight the necessity of implementing measures related to green skills and the corresponding demand from young individuals and educators.

In general the overall results emphasise the significance of educational institutions giving greater importance to environmental issues, updating their curricula, and implementing effective methods to nurture green skills among teachers and students. Furthermore, the study highlights the need for institutions to prioritise environmental concerns and green career preparation to meet the increasing demand.





Spain:

The Green Read Survey in Spain revealed varying levels of knowledge and awareness of green jobs and environmental initiatives among participants. Respondents felt inadequately informed about green jobs, but they emphasised the importance of enhancing the skills of instructors and workers to meet the demands of a greening economy. Most participants ranked green skills development as a top priority for their institutions. The survey highlighted the effectiveness of different teacher training approaches, such as seminars taught by professors themselves.

Poland:

Research in Poland found that Poles lack knowledge about green jobs and mostly rely on digital media to learn about green skills. Institutions are not adequately prepared for the transition to green practices, and there is a need to train and revise training programs. Diverse training approaches, including online courses and external instructors, are appreciated.

Germany:

The Green Read project in Germany had a limited response rate, but it suggested that awareness of green jobs and related skills is widespread and considered at the institutional level.





However, many respondents found it difficult to express opinions on the topic, indicating a need for increased awareness. The findings emphasised the importance of prioritising environmental issues in educational <u>institutions</u>, updating curricula, and providing effective strategies for fostering green competencies among educators and students.

In <u>Turkey</u>, the overall results emphasise the significance of educational institutions elevating the importance of environmental concerns, maintaining current curricula, and offering efficient methods for fostering ecological skills among both educators and students. Furthermore, the research underscores the need for these institutions to prioritise environmental issues and the preparation for environmentally focused careers in response to the growing demand.

<u>Italy</u>:

The survey in Italy involved participants from universities and VET institutions. Respondents showed strong interest in green jobs, and educational institutions were making efforts to integrate green jobs into policies and curricula.





General conclusions:

- Across the surveyed countries, there is a need to raise awareness and educate on green skills to promote green jobs for a sustainable future.
- Educational institutions need to prioritise environmental issues, update curricula, and provide effective strategies for cultivating green skills among teachers and students.
- There is a demand for institutions to place greater emphasis on environmental concerns and green career preparation to meet the requirements of a greening economy.
- Various training approaches, including seminars, online courses, and external instructors, are appreciated and can contribute to the development of green skills.
- Organisations should focus on incorporating green skills into their training programs and curricula to meet the challenges and opportunities of a green economy.
- Overall, the surveys underline the importance of promoting green jobs and skills across educational institutions to ensure a skilled workforce for a more sustainable and ecofriendly future.