

Green Skills at Vocational Education Training



Intellectual Output O2

Quantitative analysis of the perception of green skills
by VET trainers, VET students, and employers.

Ben Lewis, Niloufar Javadi Abhari & Anjumon Ali
Landward Research Ltd, November 2018

1 Introduction

The project “Green Skills at Vocational Education” (in the field of KA2-Erasmus + program, supported by the European Commission) aims to produce recommendations for the development of a professional curriculum for electricians and builders to make the labour market and economy in these two fields more environmentally friendly.

The following report encapsulates quantitative data accumulated through three online questionnaires with three different target groups: VET educators, employers and learners from various institutions within Italy, Romania, Spain, Turkey and the UK.

A flow chart, presenting the question-trees that respondents were presented with, is provided as Appendix I.

1.1 Report Structure

This report begins with a summary of the number of participants and a general summary of the results. After, the report is split into three sections, one for each target group: educators, employers, and learners. Each section will present a summary of each targeted questionnaire and present the results of each question in full, on both average and country-specific level.

1.2 Survey Participants

A total of 1,752 participants completed all or part of the questionnaire.

In terms of three target groups: 251 educators, 250 employers and 1251 learners took part.

For all questionnaires, Question 1 ascertained which target group the participant belonged to, and took them to that target group’s unique questionnaire. Question 2 asked the participant to optionally provide their organisation or institution.

2 Results Summary

In terms of the four green skills working areas defined by the project and questionnaire, 68% of educators agreed that green skills are taught by their institution, with 64% teaching green skills themselves and 68% believing that their institution could teach green skills. This was somewhat reflected by learner participants – 56% of which believed they were learning green skills – which may be indicative of a difference in understanding of what constitutes ‘green skills’ between teachers and their students. In Turkey, the majority of learners (79%) believed they were not learning green skills.

Across all target groups, *‘expert procedural knowledge on energy, waste, resource efficiency, and sustainable development’* was considered the most important green skill by employers and learners, and second-most important by educators. *‘Being responsible for environmental management’* was the least important aspect of green skill amongst all groups. *‘Environmental awareness’* was considered the most important green skill by educators. Educators that taught green skills were likely to select *‘environmental awareness’* as a green skill that they teach. However only 43% teach *‘expert procedural knowledge’* – the most important aspect amongst learners and employers – possibly suggesting a discrepancy between skills desirability and their provision.

More than two-thirds of total educators believed that there was insufficient resources to teach green skills, the greatest problem being a lack of didactic framework. On average, educators intended on developing green skills education, although 53% indicated that they do not have the opportunities to do so.

Amongst employers, 84% agreed that green skills are or could be relevant in their workplace. On average, 58% consider that their staff need green skills, and a similar percentage (53%) consider that their staff already have green skills – although notably in Turkey 78% of employers consider their staff to not have green skills. Reflecting employer choice for ‘most important green skill’ – *‘expert procedural knowledge’* ranked highly amongst both green skills employer needs and the skills already possessed, suggesting a desire for applicable green skills in practice.

For new employees, 60% of employers prefer applicants to already possess green skills at recruitment stage. Amongst learners, 69% believe that having green skills will help them find a job, four-fifths believing they will use green skills in their working life. Employers in general did not agree that new entrants to the workforce are aware of and suitably qualified in green skills (61% no), particularly in Romania and Turkey. In Spain, however, 71% of employers believed new entrants were aware and qualified.

Results indicate that most training in green skills occurs before employment – on average 69% of employers do not evaluate green skills after recruitment, and 80% do not provide green skills training to their staff.

3 Educators

3.1 Educators Results Summary

In terms of the green skills working areas defined by the project and questionnaire, 68% of educators agreed that green skills were taught by their institution, with 64% teaching green skills themselves. Of the educators who did not consider that they were teaching green skills at their institution, 68% believed that their institution *could* in the future.

Educators were most likely to select ‘*environmental awareness*’ (37%) as the most important aspect of green skills, as well as most likely to teach it (70%). Only 11% of educators deemed ‘*being responsible for environmental management*’ as the most important aspect, but over half of educators that teach green skills teach this skill. At country level ‘*expert procedural knowledge*’ was considered the most important aspect of green skills in Spain and Italy.

Over two-thirds (68%) of total educators believed that there was insufficient resources to teach green skills, a trend seen in all individual countries apart from the UK.

Across most countries, the most commonly identified problem in teaching green skills is a lack of didactic framework. In Italy however, educators most commonly selected ‘*lack of adequate and specific learning facilities*’.

On average, educators intended on developing green skills education, although 53% indicated that they do not have the opportunities to develop. In Turkey, 59% of educators were not intending to develop green skills education, in accordance with the lack of opportunities to develop in the country.

3.2 Educators Survey Participants

A total of 251 participants completed all or part of the educators’ questionnaire. The following table shows a breakdown of participants by partner country.

Country	Total Responses
Spain	46
Italy	52
Romania	51
Turkey	82
UK	11
Unknown	9
Total	251

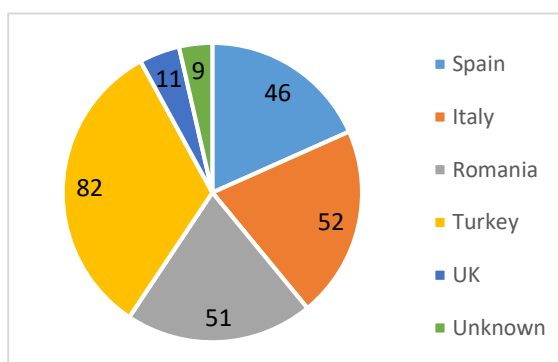


Figure 1 Educator Survey Participants

3.3 Educators Question 3

QUESTION: In this project, we consider green skills to cover the working areas of:

- Environmental awareness
- Expert knowledge on procedures for energy, waste, resource efficiency, sustainable development etc.
- Being practically involved in saving energy, protecting ecosystems etc.
- Being responsible for environmental management

Do you think that green skills are taught by your institution?

3.3.1 Educators Question 3: All Participants

A total of 249 educator participants answered this question.

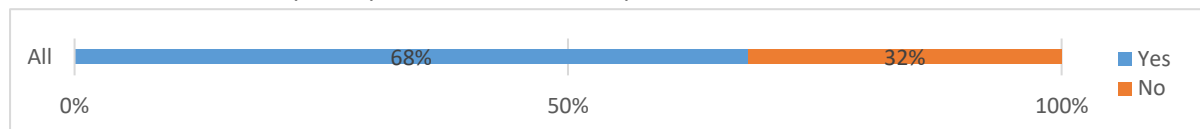


Figure 2 Educators Question 3: All Responses

The majority of educators agreed that green skills, as defined by this project, are taught at their institution.

3.3.2 Educators Question 3: By Country

The following graph and table presents responses for Question 3 at country level.

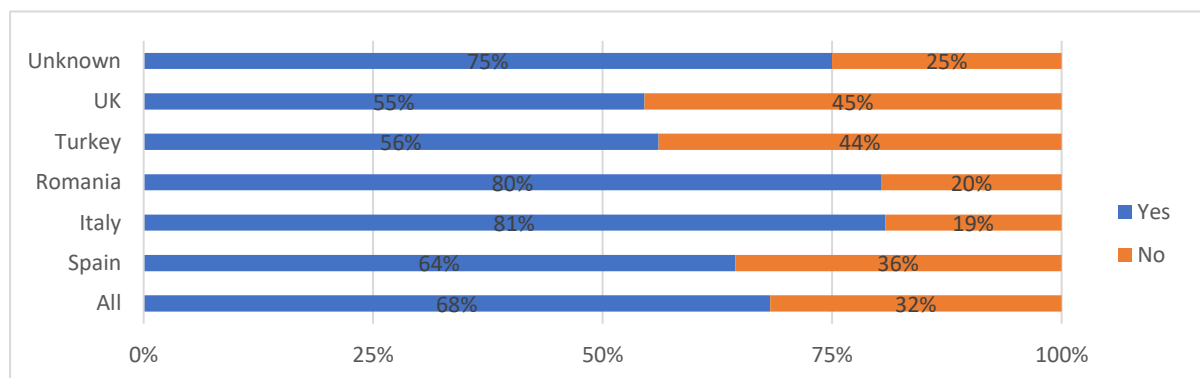


Figure 3 Educators Question 3: By Country

Country	Total Responses	Responses		Percentage	
		Yes	No	Yes	No
All	249	170	79	68%	32%
Spain	45	29	16	64%	36%
Italy	52	42	10	81%	19%
Romania	51	41	10	80%	20%
Turkey	82	46	36	56%	44%
UK	11	6	5	55%	45%
Unknown	8	6	2	75%	25%

Table 1 Educators Question 3

The country-level responses indicate that in all countries, the majority of educators agreed that their institution taught green skills, as per this project's definition. Educators in Romania and Italy were most likely to affirm that their institutions teach green skills.

3.4 Educators Question 4

Participants that answered 'no' Question 3 were asked the following.

QUESTION: Do you think that green skills could be taught by your institution?

3.4.1 Educators Question 4: All Participants

A total of 79 educator participants answered this question.

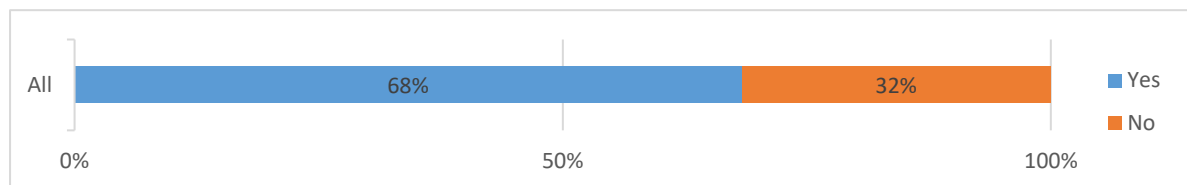


Figure 4 Educators Question 4: All Responses

The majority of educators think that green skills *could* be taught at their institution.

3.4.2 Educators Question 4: By Country

The following graph and table presents responses for Question 4 at country level.

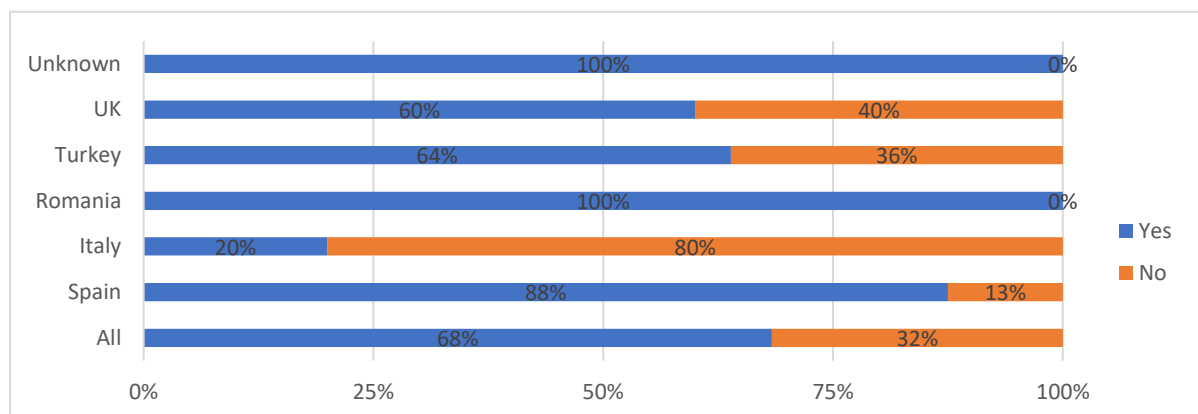


Figure 5 Educators Question 4: By Country

Country	Total Responses	Responses		Percentage	
		Yes	No	Yes	No
All	79	54	25	68%	32%
Spain	16	14	2	88%	13%
Italy	10	2	8	20%	80%
Romania	10	10	0	100%	0%
Turkey	36	23	13	64%	36%
UK	5	3	2	60%	40%
Unknown	2	2	0	100%	0%

Table 2 Educators Question 4

While the majority of educators in the UK, Spain and Turkey believed that their institutions could teach green skills, educators in Italy generally believed that green skills *couldn't* be taught at their institutions. In Romania, 100% of the 10 participants who responded to this question believed that their institution could teach green skills.

3.5 Educators Question 5

Participants that answered 'yes' to Question 3 or Question 4 were asked the following.

QUESTION: What do you consider to be the most important aspect of green skills?

A: environmental awareness

B: expert procedural knowledge on energy, waste, resource efficiency, sustainable development etc.

C: being practically involved in saving energy, protecting ecosystems etc.

D: being responsible for environmental management

E: other

Only one answer could be selected.

3.5.1 Educators Question 5: All Participants

A total of 224 educator participants answered this question.

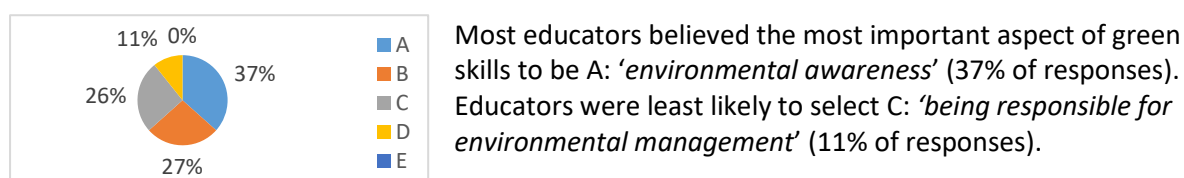


Figure 6 Educators Question 5: All Responses

3.5.2 Educators Question 5: By Country

The following graph and table presents responses for Question 5 at country level.

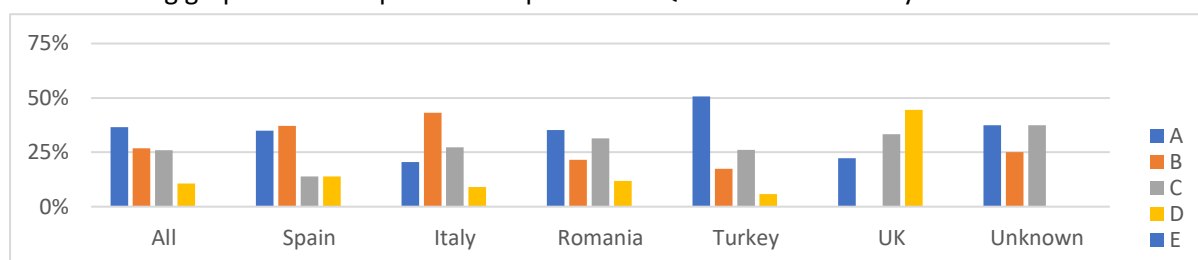


Figure 7 Educators Question 5: By Country

Country	Total Responses	Responses					Percentage				
		A	B	C	D	E	A	B	C	D	E
All	224	82	60	58	24	0	37%	27%	26%	11%	0%
Spain	43	15	16	6	6	0	35%	37%	14%	14%	0%
Italy	44	9	19	12	4	0	20%	43%	27%	9%	0%
Romania	51	18	11	16	6	0	35%	22%	31%	12%	0%
Turkey	69	35	12	18	4	0	51%	17%	26%	6%	0%
UK	9	2	0	3	4	0	22%	0%	33%	44%	0%
Unknown	8	3	2	3	0	0	38%	25%	38%	0%	0%

Table 3 Educators Question 5

Across all countries, A: 'environmental awareness' was considered most or second-most important aspect of green skills, apart from in Italy and Spain, where educators were most likely to select 'B: expert procedural knowledge...', and in the UK, where educators were most likely to select 'D: being responsible for environmental management'.

3.6 Educators Question 6

Participants that chose option E: 'other' in Question 5 were asked to type their response.

QUESTION: Other important aspect of green skills

3.6.1 Educators Question 6: All Participants

No educators provided a response to this question.

3.7 Educators Question 7

QUESTION: Do you teach green skills?

3.7.1 Educators Question 7: All Participants

A total of 223 educators answered this question.

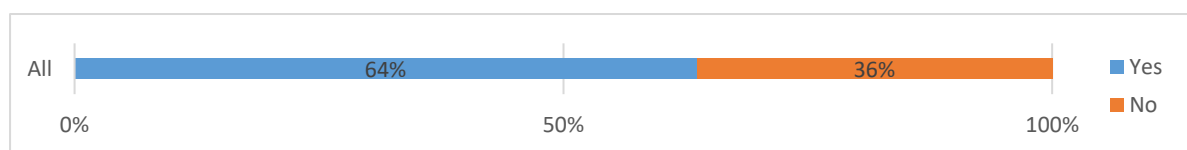


Figure 8 Educators Question 7: All Responses

Amongst educator participants, 64% taught green skills.

3.7.2 Educators Question 7: By Country

The following graph and table presents responses for Question 7 at country level.

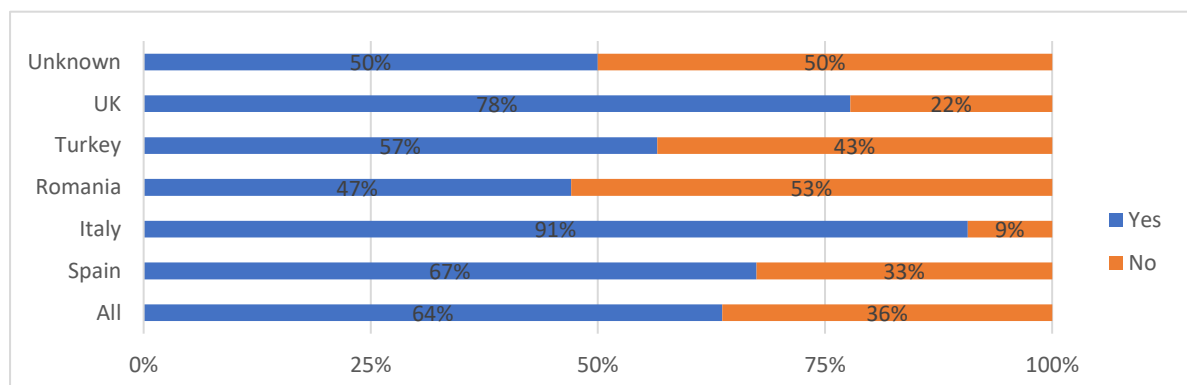


Figure 9 Educators Question 7: By Country

Country	Total Responses	Responses		Percentage	
		Yes	No	Yes	No
All	223	142	81	64%	36%
Spain	43	29	14	67%	33%
Italy	43	39	4	91%	9%
Romania	51	24	27	47%	53%
Turkey	69	39	30	57%	43%
UK	9	7	2	78%	22%
Unknown	8	4	4	50%	50%

Table 4 Educators Question 7

Educators in the UK and Italy were likely to teach green skills, but less likely in Turkey, Spain and Romania.

3.8 Educators Question 8

Participants that answered 'yes' to Question 7 were asked the following.

QUESTION: Which green skills do you teach?

A: environmental awareness

B: expert procedural knowledge on energy, waste, resource efficiency, sustainable development etc

C: practical involvement in saving energy, protecting ecosystems etc

D: responsibility for environmental management

E: other

Participants could select any combination of options.

3.8.1 Educators Question 8: All Participants

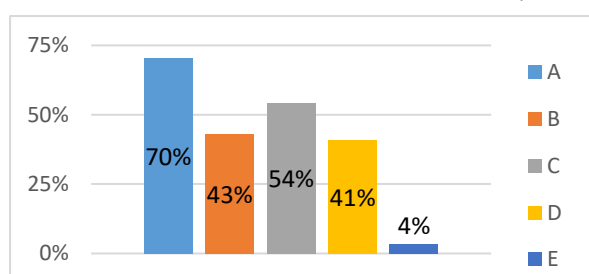


Figure 10 Educators Question 8: All Responses

A total of 142 educators answered this question.

70% of educators who answered the question chose A: 'environmental awareness' as a green skill they teach – the most popular answer overall. Educators who answered this question were least likely to teach D: 'responsibility for environmental management', with 41% of responses including this selection.

3.8.2 Educators Question 8: By Country

The following graph and table presents responses for Question 8 at country level.

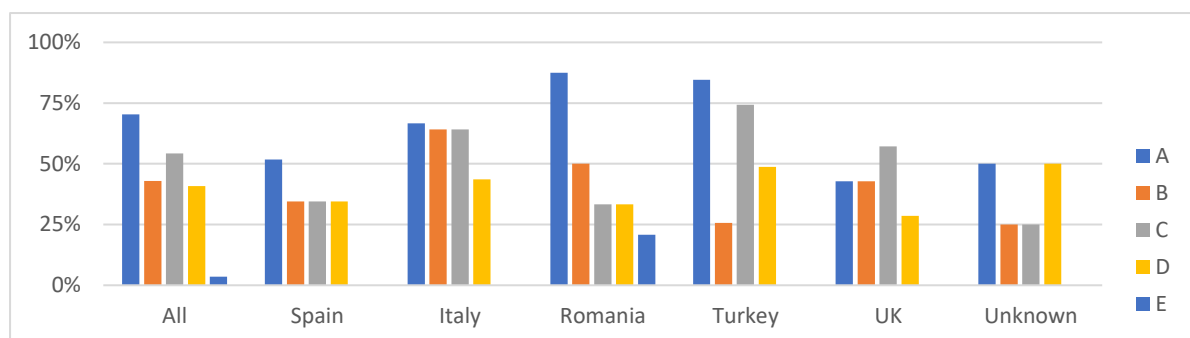


Figure 11 Educators Question 8: By Country

Country	Total Responses	Responses					Percentage				
		A	B	C	D	E	A	B	C	D	E
All	142	100	61	77	58	5	70%	43%	54%	41%	4%
Spain	29	15	10	10	10	0	52%	34%	34%	34%	0%
Italy	39	26	25	25	17	0	67%	64%	64%	44%	0%
Romania	24	21	12	8	8	5	88%	50%	33%	33%	21%
Turkey	39	33	10	29	19	0	85%	26%	74%	49%	0%
UK	7	3	3	4	2	0	43%	43%	57%	29%	0%
Unknown	4	2	1	1	2	0	50%	25%	25%	50%	0%

Table 5 Educators Question 8

In all countries apart from the UK, 'environmental awareness' was the area most likely to be taught by educators. In Romania and Turkey, a very high number of participants included this option

amongst their selections. ‘*Responsibility for environmental management*’, was a less likely selection amongst educators from all countries.

3.9 Educators Question 9

Participants that selected E: ‘*other*’ in Question 8 were asked to type their response.

QUESTION: Other green skills taught

3.9.1 Educators Question 9: All Participants

A total of 5 educators provided an answer for this question, listed here in their original language.

- RO poluarea aerului, solului, apei
- RO cunostinte legate de costuri in utilizarea materialelor de constructii si economisirea resurselor naturale
- RO cunostinte de specialitate privind analiza factorilor de mediu
- RO metode de producere a energiei verzi
- RO aplicarea normelor de protectia mediului specific

3.10 Educators Question 10

QUESTION: Do you think you have sufficient resources to teach green skills?

3.10.1 Educators Question 10: All Participants

A total of 223 educators answered this question.

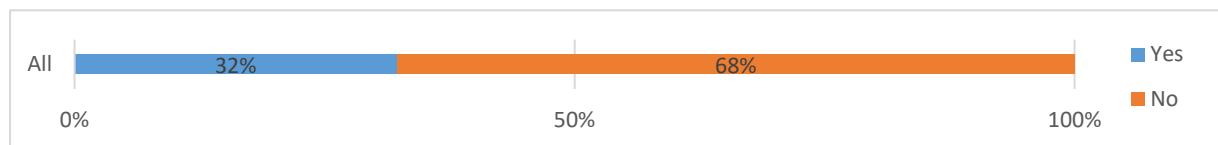


Figure 12 Educators Question 10

The majority of educators believed that they did not have sufficient resources to teach green skills.

3.10.2 Educators Question 10: By Country

The following graph and table presents responses for Question 10 at country level.

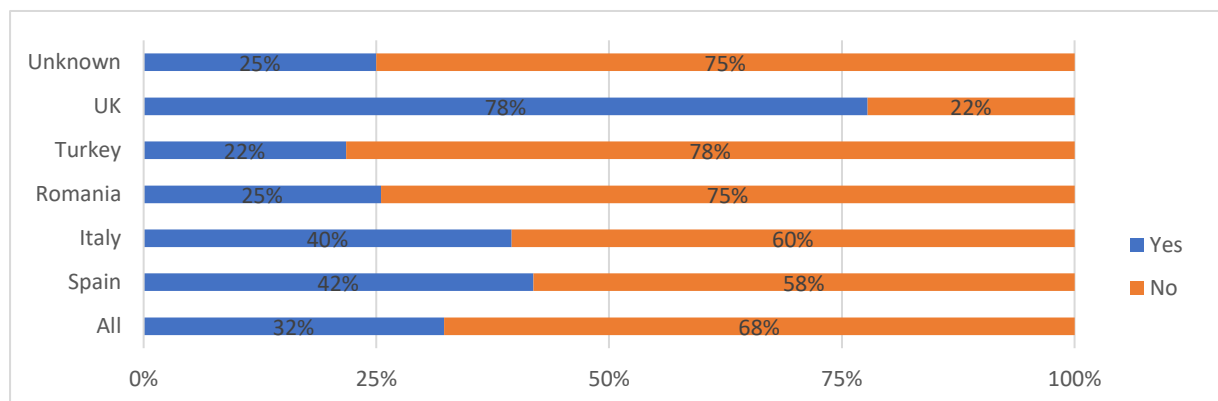


Figure 13 Educators Question 10: By Country

Country	Total Responses	Responses		Percentage	
		Yes	No	Yes	No
All	223	72	151	32%	68%
Spain	43	18	25	42%	58%
Italy	43	17	26	40%	60%
Romania	51	13	38	25%	75%
Turkey	69	15	54	22%	78%
UK	9	7	2	78%	22%
Unknown	8	2	6	25%	75%

Table 6 Educators Question 10

Educators were more likely to say they did not have sufficient resources to teach green skills in Spain, Italy, Romania and Turkey – only in the UK did the majority of educators say they had the sufficient resources.

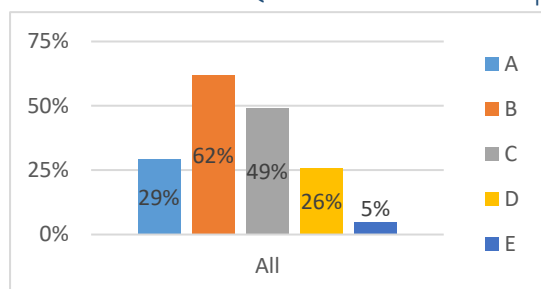
3.11 Educators Question 11

QUESTION: Does your institution encounter any of these problems in teaching green skills?

- A: too few staff have knowledge of green skills
- B: there is no didactic framework for teaching green skills
- C: lack of adequate and specific learning facilities
- D: low student interest in green skills
- E: other

Participants could select any combination of options.

3.11.1 Educators Question 11: All Participants



A total of 212 educators answered this question.

Overall, educators were most likely to select B: 'there is no didactic framework for teaching green skills'. Nearly half (49%) of educators who answered this question selected C: 'lack of adequate and specific learning facilities'.

Figure 14 Educators Question 11: All Responses

3.11.2 Educators Question 11: By country

The following graph and table presents responses for Question 11 at country level.

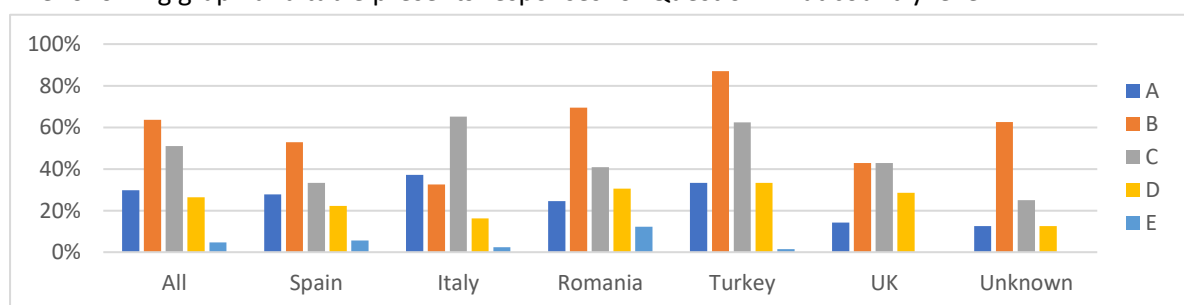


Figure 15 Educators Question 11: By Country

Country	Total Responses	Responses					Percentage				
		A	B	C	D	E	A	B	C	D	E
All	212	63	135	108	56	10	30%	64%	51%	26%	5%
Spain	36	10	19	12	8	2	28%	53%	33%	22%	6%
Italy	43	16	14	28	7	1	37%	33%	65%	16%	2%
Romania	49	12	34	20	15	6	24%	69%	41%	31%	12%
Turkey	69	23	60	43	23	1	33%	87%	62%	33%	1%
UK	7	1	3	3	2	0	14%	43%	43%	29%	0%
Unknown	8	1	5	2	1	0	13%	63%	25%	13%	0%

Table 7 Educators Question 11

In Spain, Romania and Turkey, B: ‘...no didactic framework’ was the most selected problem in teaching green skills. In Italy, C: ‘lack of adequate and specific learning facilities’ was the most commonly identified problem.

3.12 Educators Question 12

Participants that selected E: ‘other’ in Question 11 were asked to type their response.

QUESTION: Other problems encountered teaching green skills

3.12.1 Educators Question 12: All Participants

A total of 8 educators gave an answer to this question, listed here in their original language.

- ES No me corresponde
- RO lipsa manualelor
- RO Materiale didactice potrivite pentru predarea cunostintelor: CD-uri, reviste de specialitate carti.
- RO lipsa aplicatiilor practice, schimbarea periodica a programelor scolare
- RO lipsa materialelor didactice (video, scrise, etc)
- RO prea putini agenti economici care recicleaza
- RO Lipsa unor proceduri, metode , tehnici de respectare a mediului
- TR İdarecilerin konuyla ilgilenmemesi

3.13 Educators Question 13

QUESTION: Do you have opportunities to develop yourself as a green skills VET teacher or trainer?

3.13.1 Educators Question 13: All Participants

A total of 248 educators answered this question.

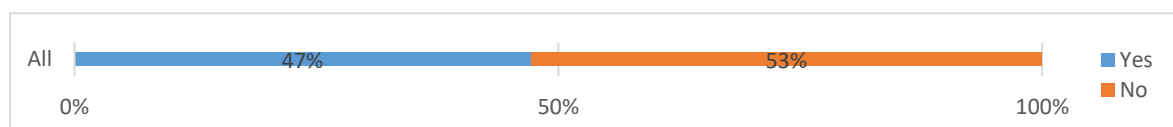


Figure 16 Educators Question 13: All Responses

At 47% Yes to 53% No, it is inconclusive whether there are opportunities for educators to develop themselves as green skills VET teachers or trainers.

3.13.2 Educators Question 13: All Participants

The following graph and table presents responses for Question 13 at country level.

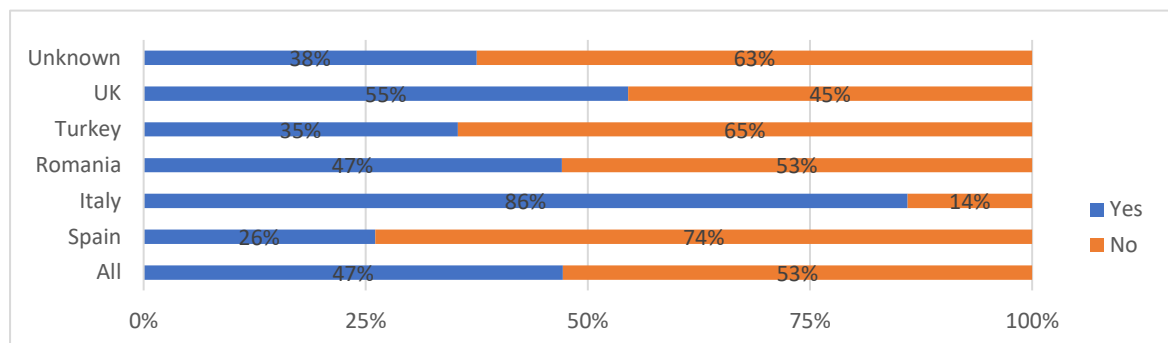


Figure 17 Educators Question 13: By Country

Country	Total Responses	Responses		Percentage	
		Yes	No	Yes	No
All	248	117	131	47%	53%
Spain	46	12	34	26%	74%
Italy	50	43	7	86%	14%
Romania	51	24	27	47%	53%
Turkey	82	29	53	35%	65%
UK	11	6	5	55%	45%
Unknown	8	3	5	38%	63%

Table 8 Educators Question 13

In Italy, 86% of educators who answered this question admitted they do have opportunities to develop themselves as green skills VET teachers or trainers. In the UK, 55% also do. The countries which predominantly don't have the opportunities for educators to develop themselves are Romania (53% no), Turkey (65% no), and notably Spain (74% no).

3.14 Educators Question 14

QUESTION: Do you intend to develop green skills education in the future?

3.14.1 Educators Question 14: All Participants

A total of 224 educators answered this question.

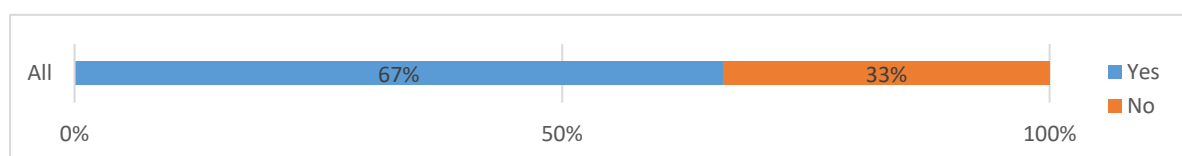


Figure 18 Educators Question 14: All Responses

Educators were more likely to indicate that they do intend to develop green skills education in the future. However, 33% of educators who answered this question indicated that they did not intend to develop green skills education.

3.14.2 Educators Question 14: All Participants

The following graph and table presents responses for Question 14 at country level.

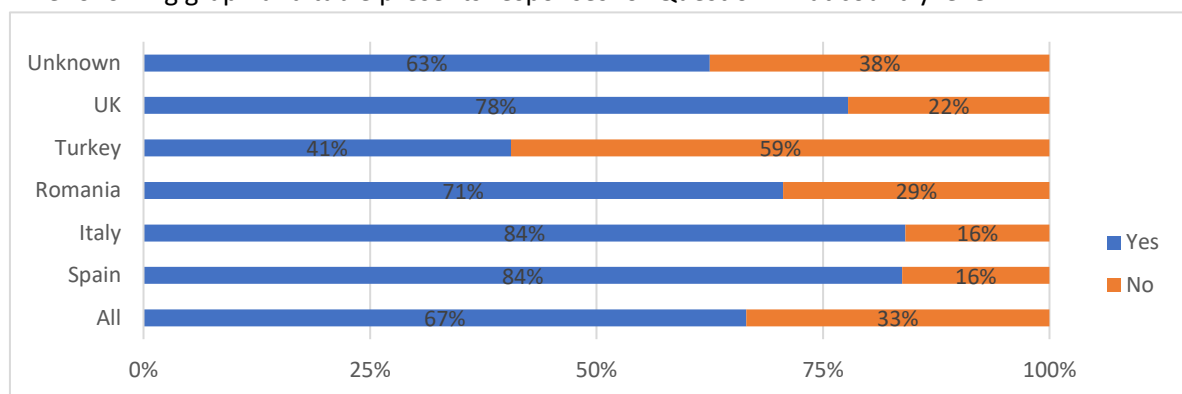


Figure 19 Educators Question 14: By Country

Country	Total Responses	Responses		Percentage	
		Yes	No	Yes	No
All	224	149	75	67%	33%
Spain	43	36	7	84%	16%
Italy	44	37	7	84%	16%
Romania	51	36	15	71%	29%
Turkey	69	28	41	41%	59%
UK	9	7	2	78%	22%
Unknown	8	5	3	63%	38%

Table 9 Educators Question 14

In the UK, Italy, Spain and Romania, educators were likely to acknowledge that they intent to develop green skills education in the future. In Turkey, however, 59% were not intending to develop green skills education.

3.15 Educators Question 15

Participants that answered 'yes' to Question 14 were asked to type their response to the following.

QUESTION: Please tell us how you think green skills education could develop in the future?

3.15.1 Educators Question 15: All Participants

A total of 80 educators answered this question. The answers provided by participants are presented in their original language.

- UK sustainable use of resources
- UK Is must be integrated in vocational education at school level
- UK A broad awareness at L2 & Indepth module/s at L3. Stronger links between Ed manufactures and installers.
- UK Short online wqualifications
- ES Dejando espacio para este tipo de aprendizaje en el curriculum
- ES Este aprendizaje debería ser transversal en todas las asignaturas, materias y módulos que se enseñan en el centro
- ES No lo ae
- ES Cursos teórico prácticos
- ES Coordinando todas las Asociaciones ecologistas para ir todos en la misma dirección evitando duplicidades en todos los campos
- ES Recursos, información y aplicación con los alumnos
- ES Con cursos de especialización a los profesores.
- ES Identificar un problema y buscar soluciones

ES Más concienciacion

ES Teniendo formación y trasladarla a los alumnos y empresa

ES Cursos de formación

ES Que tengan mayor peso en las enseñanzas impartidas y mayor concienciación del alumnado

ES Cursos

ES Con mayor implicacion del Dpto. de Educacion

ES Por competencias

ES Formando a los formadores

ES Concienciando a los alumnos de la procedencia y coste de los recursos naturales y el medio ambiente

ES Haciendo cursos cortos y específicos, q podrían hacerse perfectamente a través de videos en portales educativos.

ES Vistas al medio a menudo

ES Formación - Recursos - Actualización plan de estudios

ES Formación específica

ES Formación especializada y adaptada a las necesidades

ES Cursos

IT Con la pratica

IT Divulgazione scientifica.

IT Specific programs for teacher professional development. Exchange of good teaching practices across EU.

IT Con un coinvolgimento pratico e la consapevolezza di ogni individuo delle conseguenze di ogni azione umana sull'ambiente

IT Supporting teachers when they plan green skills activities and promoting good practices in their schools

IT Attraverso corsi più approfonditi e specifici

IT Approccio didattico

IT Keeping on teaching AND demonstrating all the 4 "green skills" listed above. Our target could and ought to be a joint and integrated one, i.e. made of our students and of professionals as well.

IT Sensibilizzando ed educando alla progettazione e realizzazione di soluzioni di sviluppo sostenibile.

IT Attraverso la formazione specifica

IT Erogare maggiori corsi specifici e disporre di una maggior strumentazione per il trasferimento delle competenze ambientali

IT NELLA LOGICA DEL MINORE IMPATTO POSSIBILE SULL'AMBIENTE

IT Porre maggiore attenzione alle pratiche di rispetto ambientale all'interno della didattica

IT Aumentare i laboratori con esercizi pratici che riguardano la tematica ambientale

IT Bisogna coinvolgere i ragazzi nelle pratiche giornaliere di rispetto ambientale e in seguito trasferire queste nella didattica. C'è bisogno di più consapevolezza, rispetto e interesse nei confronti dell'ambiente nel quale viviamo

IT Maggiore attenzione nello sviluppo di materiali green necessari per ridurre l'impatto ambientale

RO datorita specificului scolii (domeniul electric) s-ar putea dezvolta educatia in ceea ce priveste economisirea energiei, audit energetic.

RO S-ar putea include in programa de la ora de dirigentie

RO constientizarea populatiei privind resursele naturale

RO prin programe de educatie desfasurate in cadrul institutiilor de invatamant

RO introducerea in programa de invatamant de discipline specifice competentelor verzi

RO prin organizarea de activitati extrascolare care au ca tema competentele verzi

RO prin organizarea de activitati extracurriculare care au ca tema competentele verzi

RO prin implicare in mai multe proiecte "verzi"

RO Dezvoltarea unor programe optionale pentru competente verzi

RO vizite la statii de epurare, reciclar, etc.

RO specializarea de profesori in domeniul competentelor verzi

RO cu o programa didactica de predare

RO recompensarea celor care recicleaza

RO prin formarea unor convingeri de conservare a mediului la nivelul populatiei

RO seminarii, mese rotunde, aplicatii practice

RO activitati practice cu elevii

RO Sensibilizarea populatiei

RO prin crearea de facilitati de invatare adecvate si o programa analitica pentru competentele verzi

TR Müfredat değişikliği

- TR Öğretmenlerin eğitimi
- TR Yasalarla tedbir alınarak
- TR Öğretmenlerin eğitimi
- TR Öğretmenlerin eğitilmesi ile
- TR Avrupadaki benzer kurumlarla işbirliği ile
- TR Öğretmen eğitimi
- TR Öğretmen eğitimi ve müfredata ekleyerek
- TR Gerekli tesis ve olanakların arttırılması ve müfredata eklenmesi ile
- TR Eğitim için gerekli tesis ve olanakların sağlanması ile
- TR Müfredata eklenmesi ve bu konular üzerinde uzman bilgilerine göre hareket edilmeli
- TR Uzman eğitimi alarak
- TR Uzman eğitimcilerin çoğalması ile
- TR Öğretmenlerin uzman eğitimi alması ile
- TR Uzman eğitimi alan öğretmenlere yeterli zaman ve olanakların verilmesi ile
- TR Spesifik yeterlilikleri öğretmek için gerekli tesis ve olanakların sağlanması ve uzman eğitimi verilmesi ile
- TR Uzman bilgisi dahilinde oluşturulacak bir müfredat ve gerekli tesisin olanakların sağlanması ile
- TR Müfredata eklenmesi ve uzman kişilerin öncü olması ile
- TR Eğitimcilerin Uzman eğitimi alması ile

4 Employers

4.1 Employers Results Summary

The majority of employers (84%) agreed that green skills, as per this project’s definition of the term, are or could be relevant in their workplace. Almost half (43%) of all employers selected ‘*expert procedural knowledge...*’ as the most important aspect of green skills, with only 6% of all employers indicating that ‘*being responsible for environmental management*’ was the most important

Just over half (58%) of all respondent employers believed that their staff need green skills. Employers were most likely to select option ‘*expert procedural knowledge*’ as a green skills which their staff need, again ‘*being responsible for environmental management*’ being the option employers chose the least.

A similar number (56%) of employers indicated that their staff already have green skills. This was reflected at a country-level in all partners apart from Turkey, where 78% of employers considered that their staff do not have green skills. Overall, employers were most likely to indicate that their staff have ‘*expert procedural knowledge...*’ and ‘*environmental awareness*’.

In general, three-fifths of employers prefer prospective employees to have green skills already, however in Turkey 75% indicated that they did not prefer new employees to already have green skills. Around two-thirds of employers (69%) indicated that they did not evaluate green skills after recruiting new employees, however in Italy around two-thirds indicated that they did evaluate.

Employers in general did not think that new entrants to the workforce are aware of and suitably qualified in green skills (61% no). Country-level analysis shows some discrepancy: in Romania, 98% did not think new entrants were aware of or qualified in green skills, while in Spain 71% believed new entrants were aware and qualified.

Overall, the majority (80%) of employers indicated that they do not provide training for their staff in green skills. Those that do provide training were most likely select ‘*expert procedural knowledge...*’ as the green skill they provide, and least likely to select the training area of ‘*being responsible for environmental management*’.

4.2 Employers Survey Participants

A total of 250 participants completed all or part of the employer’s questionnaire. The following table shows a breakdown of participants by partner country.

Country	Total Responses
Spain	50
Italy	34
Romania	42
Turkey	80
UK	14
Unknown	30
Total	250

Table 10 Employers Survey Participants

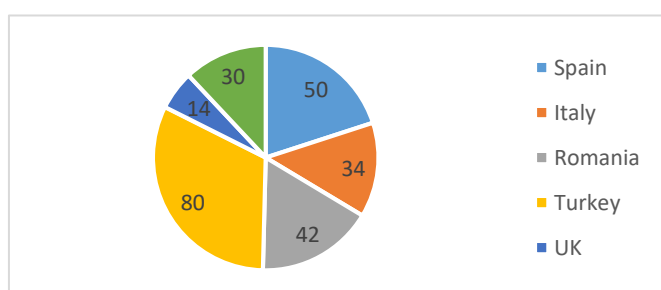


Figure 20 Employers Survey Participants by Country

4.3 Employers Question 3

QUESTION: In this project, we consider green skills to cover the working areas of:

Environmental awareness

Expert knowledge on procedures for energy, waste, resource efficiency, sustainable development etc

Being practically involved in saving energy, protecting ecosystems etc

Being responsible for environmental management

Do you think that green skills are or could be relevant in your workplace?

4.3.1 Employers Question 3: All Participants

A total of 249 employers answered this question.

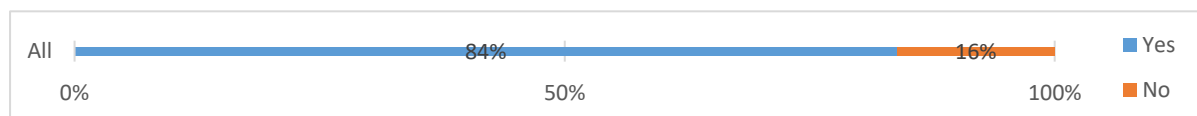


Figure 21 Employers Question 3: All Responses

The majority of employers (84%) agreed that green skills, as per this project’s definition of the term, are or could be relevant in their workplace.

4.3.2 Employers Question 3: By Country

The following graph and table presents responses for Question 3 at country level.

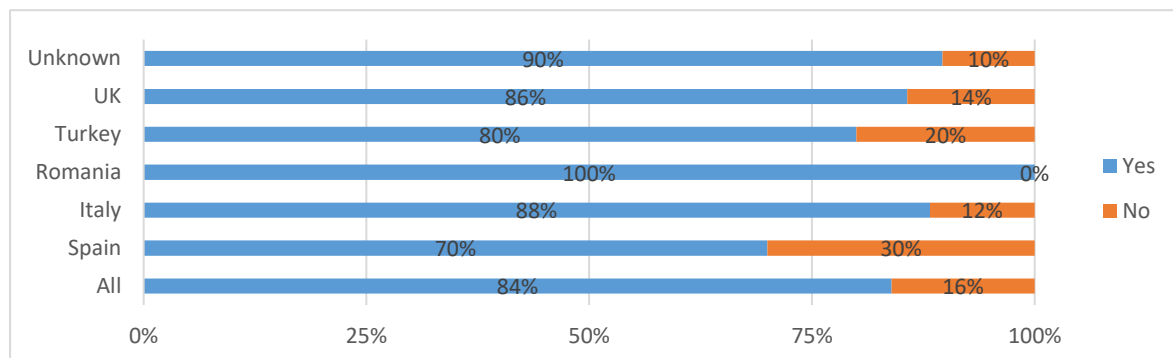


Figure 22 Employers Question 3: By Country

Country	Total Responses	Responses		Percentage	
		Yes	No	Yes	No
All	249	209	40	84%	16%
Spain	50	35	15	70%	30%
Italy	34	30	4	88%	12%
Romania	42	42	0	100%	0%
Turkey	80	64	16	80%	20%
UK	14	12	2	86%	14%
Unknown	29	26	3	90%	10%

Table 11 Employers Question 3: By Country

Results indicate that the majority of employers from all countries think green skills are or could be relevant to their workplace, particularly in Romania where all 42 respondents agreed. The lowest rate of agreement to this statement was in Spain (70% yes).

4.4 Employers Question 4

Participants that responded ‘yes’ to Question 3 were asked the following.

QUESTION: What do you consider to be the most important aspect of green skills in the workplace?

A: environmental awareness

B: expert procedural knowledge on energy, waste, resource efficiency, sustainable development etc.

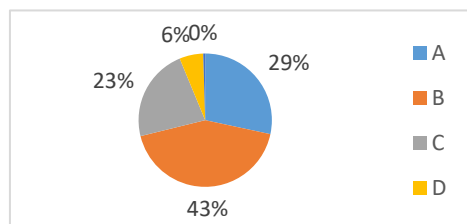
C: being practically involved in saving energy, protecting ecosystems etc.

D: being responsible for environmental management

E: other

Participants could choose only one answer.

4.4.1 Employers Question 4: All Participants



A total of 207 employers answered this question.

Almost half (43%) of all employers who answered this question chose B: ‘expert procedural knowledge...’ as the most important aspect of green skills. Only 6% of all employers thought that D: ‘being responsible for environmental management’ was the most important.

Figure 23 Employers Question 4: All Responses

4.4.2 Employers Question 4: By Country

The following graph and table presents responses for Question 4 at country level.

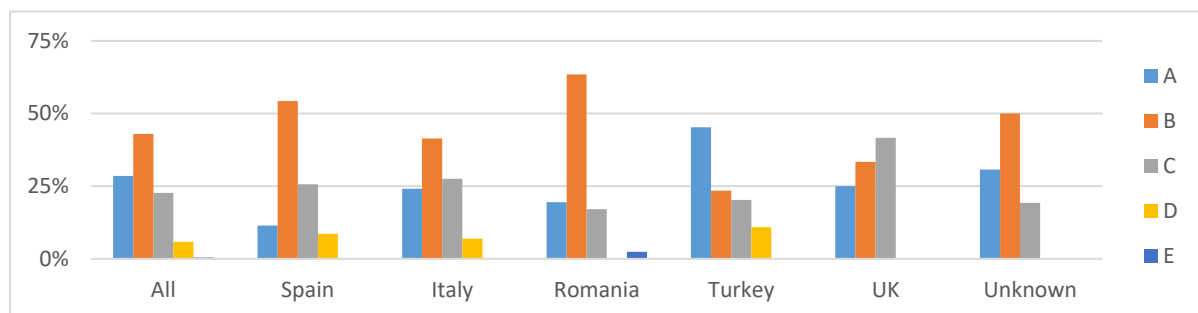


Figure 24 Employers Question 4: By Country

Country	Total Responses	Responses					Percentage				
		A	B	C	D	E	A	B	C	D	E
All	207	59	89	47	12	1	29%	43%	23%	6%	0%
Spain	35	4	19	9	3	0	11%	54%	26%	9%	0%
Italy	29	7	12	8	2	0	24%	41%	28%	7%	0%
Romania	41	8	26	7	0	1	20%	63%	17%	0%	2%
Turkey	64	29	15	13	7	0	45%	23%	20%	11%	0%
UK	12	3	4	5	0	0	25%	33%	42%	0%	0%
Unknown	26	8	13	5	0	0	31%	50%	19%	0%	0%

Table 12 Employers Question 4: By Country

In all countries, D: ‘being responsible for environmental management’ was the least likely to be selected as the most important aspect of green skills. In Spain, Italy and Romania, B: ‘expert

procedural knowledge...’ was the most important aspect of green skills amongst participants, however in Turkey it was option A: *‘environmental awareness’*.

4.5 Employers Question 5

Participants that selected E: *‘other’* in Question 8 were asked to type their response.

QUESTION: The 'other' most important aspect of green skills in the workplace

4.5.1 Employers Question 5: All Participants

A total of 1 employer answered this question. The answer provided by the participant is presented in their original language.

RO solutii sustenabile in proiectare cladirilor

4.6 Employers Question 6

QUESTION: Do your staff need green skills?

4.6.1 Employers Question 6: All Participants

A total of 209 employers answered this question.

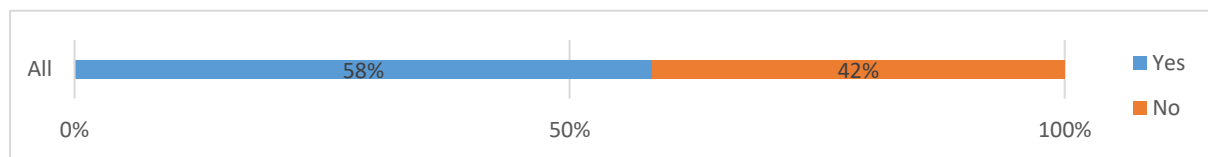


Figure 25 Employers Question 6: All Responses

Just over half (58%) of all respondent employers believed that their staff need green skills.

4.6.2 Employers Question 6: By Country

The following graph and table presents responses for Question 6 at country level

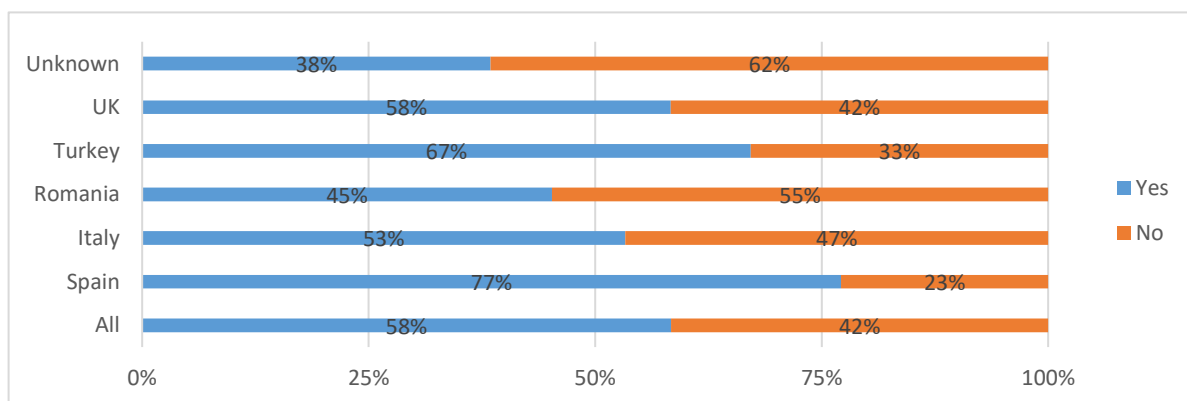


Figure 26 Employers Question 4: By Country

Country	Total Responses	Responses		Percentage	
		Yes	No	Yes	No
All	209	122	87	58%	42%
Spain	35	27	8	77%	23%
Italy	30	16	14	53%	47%
Romania	42	19	23	45%	55%
Turkey	64	43	21	67%	33%
UK	12	7	5	58%	42%
Unknown	26	10	16	38%	62%

Table 13 Employers Question 6

In all countries apart from Romania, more than half of employers believed that their staff need green skills. The highest percentage in agreement was in Spain (77% yes). In Romania more than half (55%) of employers believed that their staff did not need green skills.

4.7 Employers Question 7

Participants that responded 'yes' to Question 6 were asked the following.

QUESTION: Which green skills do your staff need?

- A: environmental awareness
- B: expert procedural knowledge on energy, waste, resource efficiency, sustainable development etc.
- C: being practically involved in saving energy, protecting ecosystems etc.
- D: being responsible for environmental management
- E: other

Participants could select any combination of options.

4.7.1 Employers Question 7: All Participants

A total of 122 employers answered this question.

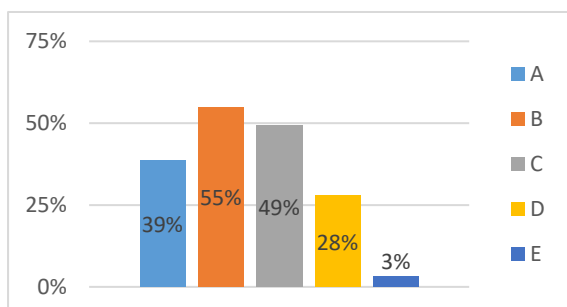


Figure 27 Employers Question 7: All Responses

Overall, employers were most likely to select option B: 'expert procedural knowledge' as a green skills which their staff need. Option D: 'being responsible for environmental management' was the option employers chose the least frequently

4.7.2 Employers Question 7: By Country

The following graph and table presents responses for Question 7 at country level

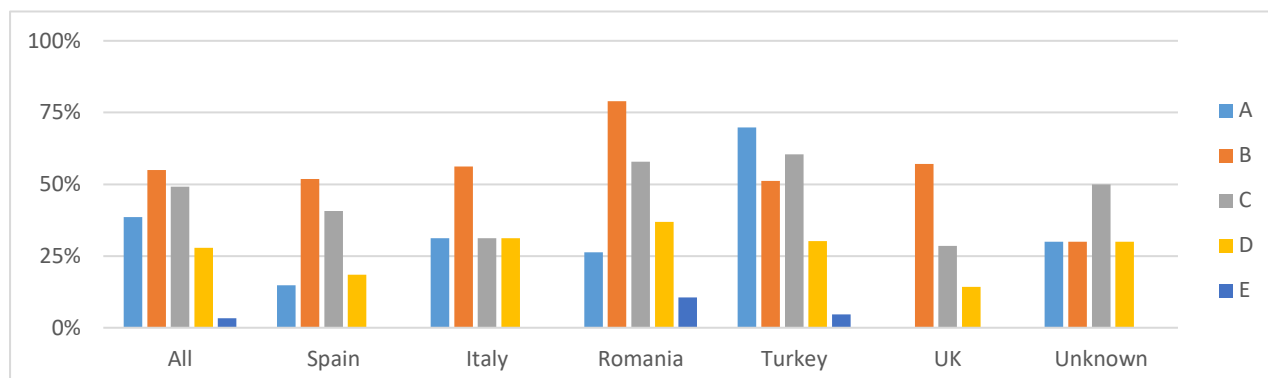


Figure 28 Employers Question 7: By Country

Country	Total
All	
Spain	
Italy	
Romania	
Turkey	
UK	
Unknown	

Country	Total Responses	Responses					Percentage				
		A	B	C	D	E	A	B	C	D	E
All	122	47	67	60	34	4	39%	55%	49%	28%	3%
Spain	27	4	14	11	5	0	15%	52%	41%	19%	0%
Italy	16	5	9	5	5	0	31%	56%	31%	31%	0%
Romania	19	5	15	11	7	2	26%	79%	58%	37%	11%
Turkey	43	30	22	26	13	2	70%	51%	60%	30%	5%
UK	7	0	4	2	1	0	0%	57%	29%	14%	0%
Unknown	10	3	3	5	3	0	30%	30%	50%	30%	0%

Table 14 Employers Question 7

In all countries apart from Turkey, B: 'expert procedural knowledge' was the skill that employers were most likely to select to indicate the green skills their workers need. In Turkey, 'A: environmental awareness' was selected a comparable number of times as option B (66% selected option A, 63% selected option B).

4.8 Employers Question 8

Participants that selected E: 'other' in Question 7 were asked to type their response.

QUESTION: Other green skills your staff need

4.8.1 Employers Question 8: All Participants

A total of 3 employers answered this question. The answers provided by participants are presented in their original language.

- RO sa cunoasca principiile de baza in proiectare sustenabila (materiale eco, solutii de economisire a energiei)
- RO sa cunoasca materialele si tehnologiile pentru proiectarea si executia cladirilor verzi
- TR Çevreye zarar veren diğer unsurlar. Manyetik dalgalar vs. Atık kabloların toplanması

4.9 Employers Question 9

Participants that answered 'yes' to Question 3 were asked the following.

QUESTION: Do your staff have green skills?

4.9.1 Employers Question 9: All Participants

A total of 209 employers answered this question.

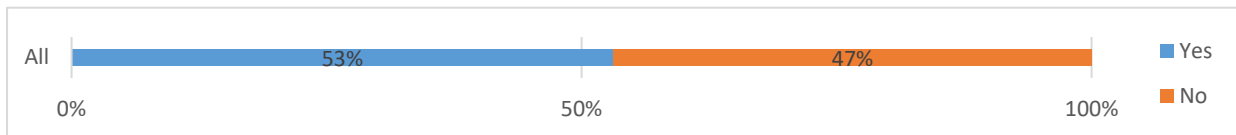


Figure 29 Employers Question 9: All Responses

Just over half (53%) of all employers who responded to this question indicated that their staff have green skills.

4.9.2 Employers Question 9: By Country

The following graph and table presents responses for Question 9 at country level.

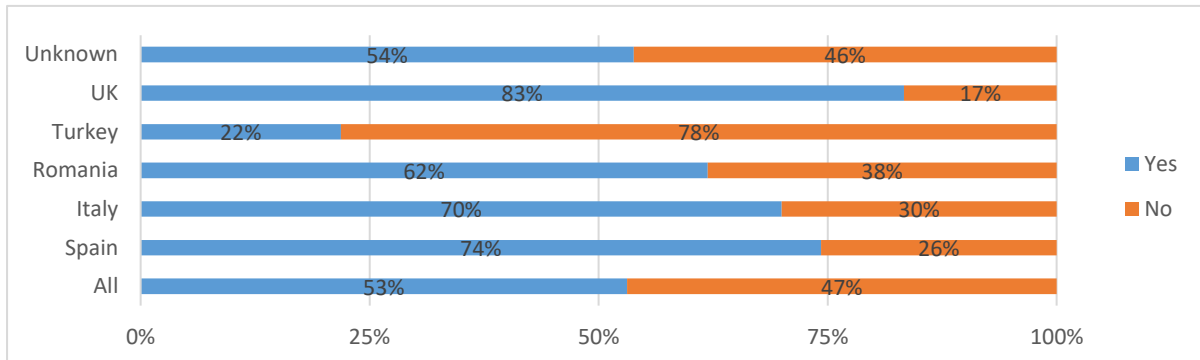


Figure 30 Employers Question 9: By Country

Country	Total Responses	Responses		Percentage	
		Yes	No	Yes	No
All	209	111	98	53%	47%
Spain	35	26	9	74%	26%
Italy	30	21	9	70%	30%
Romania	42	26	16	62%	38%
Turkey	64	14	50	22%	78%
UK	12	10	2	83%	17%
Unknown	26	14	12	54%	46%

Table 15 Employers Question 9

In all countries apart from Turkey, employers were likely to indicate that their staff did have green skills, especially in the UK (83% yes). In Turkey however, 78% of employers considered their staff to not have green skills.

4.10 Employers Question 10

Participants that answered 'yes' Question 9 were asked the following.

QUESTION: QUESTION 10

Which green skills do your staff have?

- A: environmental awareness
- B: expert procedural knowledge on energy, waste, resource efficiency, sustainable development etc.
- C: being practically involved in saving energy, protecting ecosystems etc.
- D: being responsible for environmental management
- E: other

Participants could select any combination of options.

4.10.1 Employers Question 10: All Participants

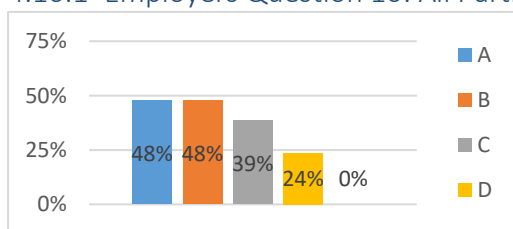


Figure 31 Employers Question 10: All Responses

A total of 109 employers answered this question.

Employers overall were most likely to indicate that their staff have the green skills represented by option B: 'expert procedural knowledge...' (48% of responses) and A: 'environmental awareness' (48% of responses). D: 'being responsible for environmental management' was the least selected option.

4.10.2 Employers Question 10: By Country

The following graph and table presents responses for Question 10 at country level.

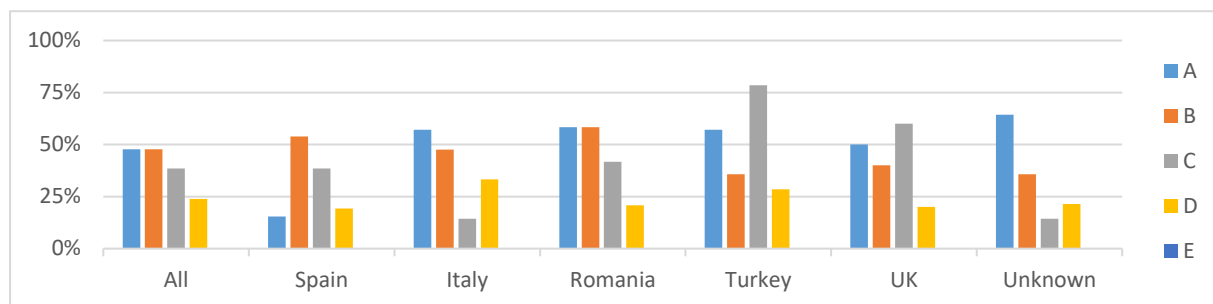


Figure 32 Employers Question 10: By Country

Country	Total Responses	Responses					Percentage				
		A	B	C	D	E	A	B	C	D	E
All	109	52	52	42	26	0	48%	48%	39%	24%	0%
Spain	26	4	14	10	5	0	15%	54%	38%	19%	0%
Italy	21	12	10	3	7	0	57%	48%	14%	33%	0%
Romania	24	14	14	10	5	0	58%	58%	42%	21%	0%
Turkey	14	8	5	11	4	0	57%	36%	79%	29%	0%
UK	10	5	4	6	2	0	50%	40%	60%	20%	0%
Unknown	14	9	5	2	3	0	64%	36%	14%	21%	0%

Table 16 Employers Question 10

In Turkey and the UK, employers were most likely to indicate C: *'being practically involved...'* as a skill that their staff have. In Spain, option B was chosen the most frequently by employers, while in Romania and Italy, options A and B were selected a comparable number of times, by around half of respondents to this question.

4.11 Employers Question 11

Participants that selected E: *'other'* in Question 10 were asked to type their response.

QUESTION: Other skills your staff have

4.11.1 Employers Question 11: All Participants

No employers answered this question.

4.12 Employers Question 12

Participants that answered 'yes' to Question 3 were asked the following.

QUESTION: When you are recruiting new employees, do you prefer that they already have green skills?

4.12.1 Employers Question 12: All Responses

A total of 208 employers answered this question.

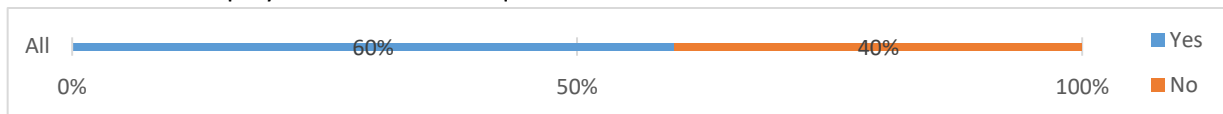


Figure 33 Employers Question 12: All Responses

Three-fifths of employers prefer prospective new employees to already have green skills.

4.12.2 Employers Question 12: By Country

The following graph and table presents responses for Question 12 at country level.

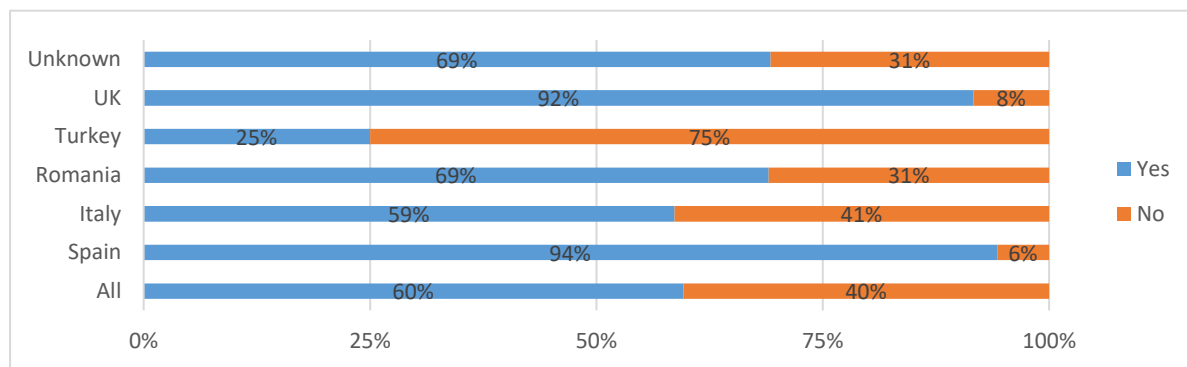


Figure 34 Employers Question 12: By Country

Country	Total Responses	Responses		Percentage	
		Yes	No	Yes	No
All	208	124	84	60%	40%
Spain	35	33	2	94%	6%
Italy	29	17	12	59%	41%
Romania	42	29	13	69%	31%
Turkey	64	16	48	25%	75%
UK	12	11	1	92%	8%
Unknown	26	18	8	69%	31%

Table 17 Employers Question 12

Employers in the UK, Spain, Romania and Italy were likely to agree that they prefer new employees to already have green skills, especially in the UK (92% yes) and Spain (94% yes). In Turkey, however, 75% of employers stated they did not prefer new employees to already have green skills.

4.13 Employers Question 13

Participants that answered 'yes' to Question 3 were asked the following.

QUESTION: After recruiting new employees, do you evaluate their green skills?

4.13.1 Employers Question 13: All Participants

A total of 208 employers answered this question.

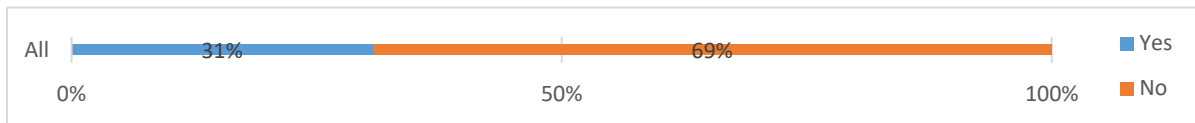


Figure 35 Employers Question 13: All Responses

Around two-thirds of employers (69%) indicated that they did not evaluate green skills after recruiting new employees.

4.13.2 Employers Question 13: By Country

The following graph and table presents responses for Question 13 at country level.

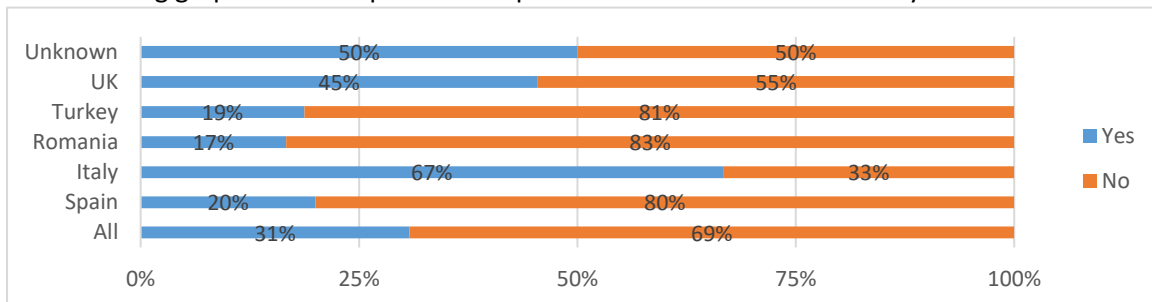


Figure 36 Employers Question 13: By Country

Country	Total Responses	Responses		Percentage	
		Yes	No	Yes	No
All	208	64	144	31%	69%
Spain	35	7	28	20%	80%
Italy	30	20	10	67%	33%
Romania	42	7	35	17%	83%
Turkey	64	12	52	19%	81%
UK	11	5	6	45%	55%
Unknown	26	13	13	50%	50%

Table 18 Employers Question 13

In all countries apart from Italy, employers indicated that they do not evaluate an employee's green skills after recruitment. In Italy however, 67% of employer respondents stated that they do evaluate green skills after recruitment.

4.14 Employers Question 14

Participants that answered 'yes' to Question 3 were asked the following.

QUESTION: Do you think new entrants to the workforce are aware of and suitably qualified in green skills?

4.14.1 Employers Question 14: All Participants

A total of 208 employers answered this question.

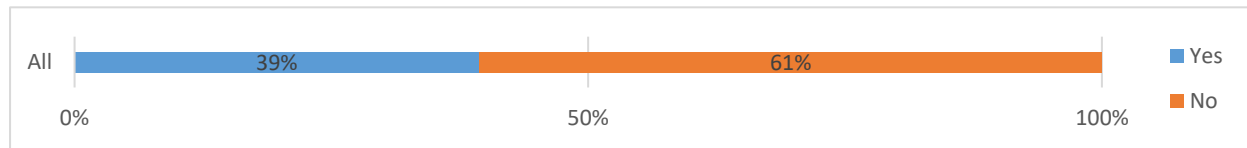


Figure 37 Employers Question 14: All Responses

From all employer respondents to this question, 61% did not think that new entrants to the workforce are aware of and suitably qualified in green skills.

4.14.2 Employers Question 14: By Country

The following graph and table presents responses for Question 14 at country level

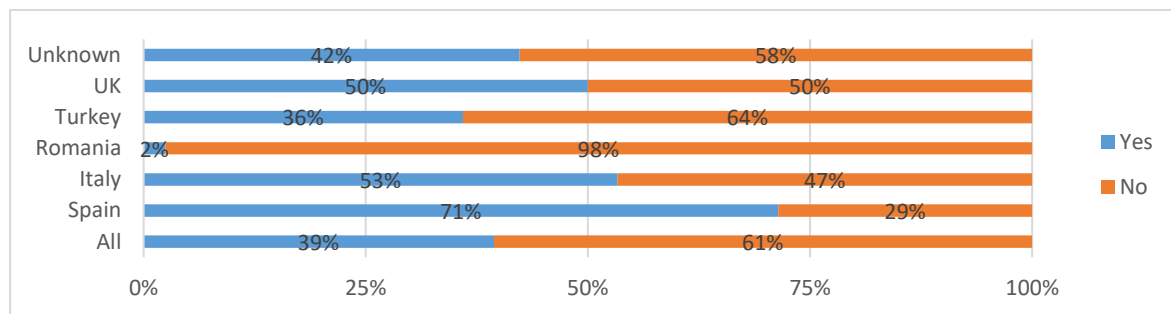


Figure 38 Employers Question 14: By Country

Country	Total Responses	Responses		Percentage	
		Yes	No	Yes	No
All	208	82	126	39%	61%
Spain	35	25	10	71%	29%
Italy	30	16	14	53%	47%
Romania	41	1	40	2%	98%
Turkey	64	23	41	36%	64%
UK	12	6	6	50%	50%
Unknown	26	11	15	42%	58%

Table 19 Employers Question 14

In Turkey and especially Romania (98% no), employers indicated that they believed new entrants to not be aware or suitably qualified in green skills. In Italy and the UK, the divide in opinion amongst employers was close to 50/50, while in Spain 71% believed that new entrants were aware of and suitably qualified in green skills.

4.15 Employers Question 15

Participants that answered 'yes' to Question 3 were asked the following.

QUESTION: Do you provide training for your staff in green skills?

4.15.1 Employers Question 15: All Participants

A total of 208 employers answered this question.

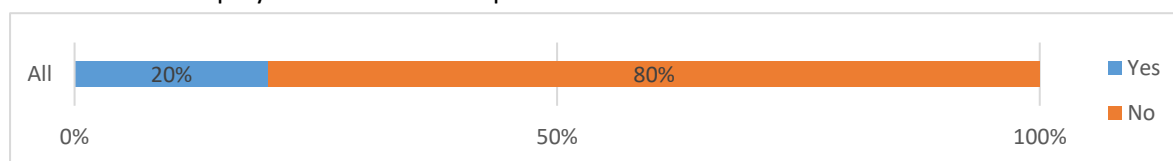


Figure 39 Employers Question 15: All Responses

Overall, the majority (80%) of employers indicated that they do not provide training for their staff in green skills.

4.15.2 Employers Question 15: By Country

The following graph and table presents responses for Question 15 at country level

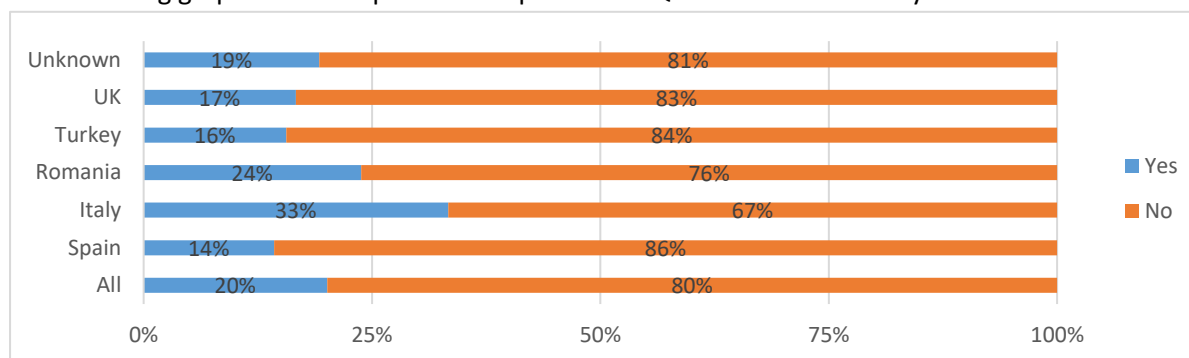


Figure 40 Employers Question 15: By Country

Country	Total Responses	Responses		Percentage	
		Yes	No	Yes	No
All	209	42	167	20%	80%
Spain	35	5	30	14%	86%
Italy	30	10	20	33%	67%
Romania	42	10	32	24%	76%
Turkey	64	10	54	16%	84%
UK	12	2	10	17%	83%
Unknown	26	5	21	19%	81%

Table 20 Employers Question 15

Across all countries, employers indicated that they do not provide training for their staff in green skills. Italy had the highest percentage of employers (33%) indicating that they do provide training.

4.16 Employers Question 16

Participants that answered 'yes' to Question 15 were asked the following.

QUESTION: In which green skills do you provide training for your staff?

- A: environmental awareness
- B: expert procedural knowledge on energy, waste, resource efficiency, sustainable development etc.
- C: being practically involved in saving energy, protecting ecosystems etc.
- D: being responsible for environmental management
- E: other

Participants could select any combination of options.

4.16.1 Employers Question 16: All Participants

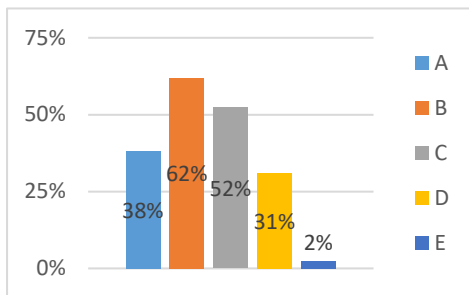


Figure 41 Employers Question 16: All Responses

A total of 42 employers answered this question.

Employers overall were most likely to select B: '*expert procedural knowledge...*' as the green skills that they provide training for to staff. Employers were least likely to select D: '*being responsible for environmental management*'.

4.16.2 Employers Question 16: By Country

The following graph and table presents responses for Question 16 at country level

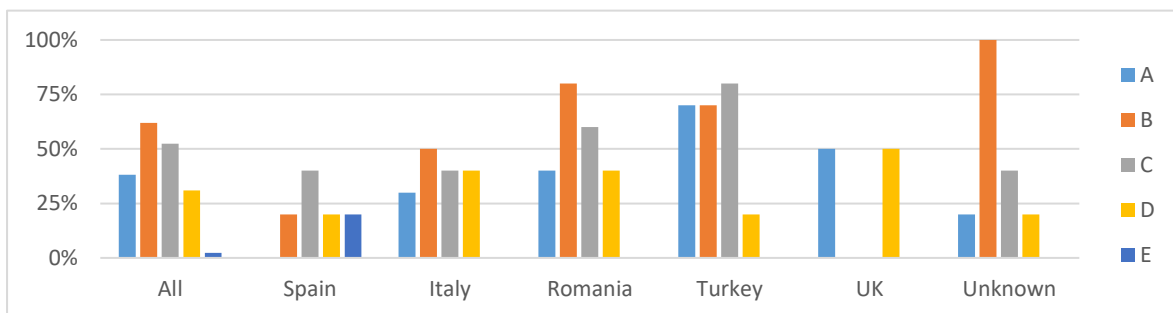


Figure 42 Employers Question 16: By Country

Country	Total Responses	Responses					Percentage				
		A	B	C	D	E	A	B	C	D	E
All	42	16	26	22	13	1	38%	62%	52%	31%	2%
Spain	5	0	1	2	1	1	0%	20%	40%	20%	20%
Italy	10	3	5	4	4	0	30%	50%	40%	40%	0%
Romania	10	4	8	6	4	0	40%	80%	60%	40%	0%
Turkey	10	7	7	8	2	0	70%	70%	80%	20%	0%
UK	2	1	0	0	1	0	50%	0%	0%	50%	0%
Unknown	5	1	5	2	1	0	20%	100%	40%	20%	0%

Table 21 Employers Question 16

No employers in Spain indicated that they provide '*environmental awareness*' training to their staff, however a high percentage of employer respondents to this question in Turkey indicate they do. In Italy and Romania, employers were likely to choose option B as representative of the training they provide.

4.17 Employers Question 17

Participants that selected E: '*other*' in Question 16 were asked to type their response.

QUESTION: Other green skills we provide training in for our staff

4.17.1 Employers Question 17: All Participants

A total of 1 employer answered this question. The answers provided by participants are presented in their original language.

ES ISO 14001

4.18 Employers Question 18

QUESTION: How do you think green skills will develop in the workplace in the future?

4.18.1 Employers Question 18: All Participants

A total of 52 employers answered this question. The answers provided by participants are presented in their original language.

- UK yes as environmental impact awareness is increasing
- UK I hope the term 'green skills' will no longer be necessary in the future as this aspect will be embedded across all areas of work and in all cultures.
- UK Yes
- UK With the collaboration and the awareness of everyone.
- UK As i see the future, green skills have to be developed until they'll become a basic part of everyone's training, where design and other skills are directly based and shaped with the awariness of the needs of our planet. This has to happen before every other type of training, which means giving directly to younger people sense of responsibility and awariness on how to build and work in/for the future, without having to think in a "green way" but already having that integrated in their knowledge and way of doing things.
- UK They will be more and more relevant and taken for granted
- ES Formación
- ES Reutilizacion i reciclaje
- ES Formación
- ES no lo se
- ES Siguiendo normativa
- ES No se
- ES Cursos de formación obligatorios
- ES No lo se
- ES no se
- ES Práctica
- ES Porque el cliente lo pida
- ES Mejora continua
- ES Este necesar ca acestea sa se dezvolté in viitor, insa consider ca va mai trece mult timp pana se va intampla aceasta
- IT Esperienza
- IT Attraverso la frequenza di master, workshop e tavoli tecnici di confronto
- IT In tutte le professioni oltre alle cosiddette "soft skill", come le lingue, è richiesto un certo grado di conoscenza sui temi dell'energia e della sostenibilità perché per le industrie e le imprese italiane i costi energetici sono particolarmente alti e la sensibilità verso l'ambiente è in crescita. È importante realizzare dei veri e propri corsi per poter accrescere la sensibilità ambientale e favorire un maggiore coinvolgimento pratico nelle procedure che riguardano l'apprendimento delle green skills.
- IT Attraverso dei corsi di formazione volti alla sensibilizzazione rispetto ambientale e all'introduzione di buone pratiche
- IT Corsi di formazione specifici
- IT Miglior conoscenza dei materiali ecosistemi vili in fase di progettazione e produzione
- IT Positivamente
- IT Tramite corsi che diano maggiori informazioni sotto l'aspetto ambientale
- IT Il mio parere è che le competenze "green" debbano essere sviluppate a prescindere negli individui, formando la loro coscienza ambientale e il loro senso civico e di appartenenza a questo ecosistema, sin da piccoli. Così facendo non ci sarebbe più bisogno di dover specificare o richiedere competenze "green" in quanto sarebbero già integrate nelle modalità di progettazione di qualsivoglia prodotto, processo o sistema.
- IT Non verranno più sottolineate perché tutti le useranno quotidianamente senza accorgersene
- IT Maggiore informazione
- IT Acquisendo la giusta competenza che contraddistingue ogni professione scientifica.
- IT In modo esaustivo
- RO Prin formarea continua a angajatilor
- RO in masura in care competentele verzi sunt solicitate de domeniu, fiecare firma este responsabila pentru formarea personalului propriu.

RO Ne dorim ca majoritatea angajatilor sa aiba competente verzi
RO Vor fi mai multe formari in competentele verzi
RO Vor creste
RO prin examene si instruiiri periodice
RO prin instruire periodica
RO nu stiu
RO prin cursuri de perfectionare si examinari periodice
RO pregatirea anagajatilor in functie de cerintele proiectelor in executie
RO Ne dorim ca majoritatea angajatilor sa aiba competente in domeniulcompetentelor verzi
RO Vor fi mai multe formari in domeniul competentelor verzi
RO Este necesar ca acestea sa se dezvolte in viitor
TR Farkındalık artacak ve enerji tasarrufu daha önemli hale gelecek.
TR İş yerleri için yasal düzenlemeler gelecektir, ve her iş yeri bu konuda bilinçli olacaktır
TR İş yerleri için önemi daha çok artacak
TR İş yerleri bu konuda denetlenecek, her firma bu kapsamda sorumlu tutulacak, bu konuda kanunlar çıkacak.
TR Yasal düzenlemeler gelecek ve her firma sorumlu tutulacak
TR Kanuni düzenlemeler gelecek, çalışanların bu konuda eğitimi olacağı bir dönem yaşayacağız
TR Kanunlaştırılacak ve herkes için önem arz edecek

5 Learners

5.1 Learners Results Summary

Learners were more likely to say that they are learning green skills (56% yes) than not (44% no) – with especially high percentages of learners studying green skills in Romania (94%) and Spain (80%). In Italy, around half of learners believed that they were learning green skills, however in the UK and Turkey, 62% and 79%, respectively, asserted that they were not learning green skills.

On average, students considered ‘*expert procedural knowledge*’ to be the most important aspect of green skills and ‘*being responsible for environmental management*’ the least important. Individually, Spain, Italy, Romania, and the UK follow this trend, however in Turkey, only 3% chose ‘expert procedural knowledge’, instead a significant percentage (54%) choosing ‘*environmental awareness*’ as the most important aspect.

‘*Environmental awareness*’ was, however, the most popular subject area that this target group are currently studying. ‘*How to be responsible for environmental management*’ was the option least likely to be chosen by students as representative of the green skills they are learning.

The broad majority of learners on average thought that they will use green skills in their working life, and that having green skills will help them find a job. The countries with higher percentages of students thinking they wouldn’t use green skills were Turkey (29% no) and the UK (33% no), which is possibly linked to these countries also having a higher percent of respondents believing that green skills will not help them find a job.

5.2 Learners Survey Participants

A total of 1251 participants completed all or part of the learners’ questionnaire. The following table shows a breakdown of participants by partner country.

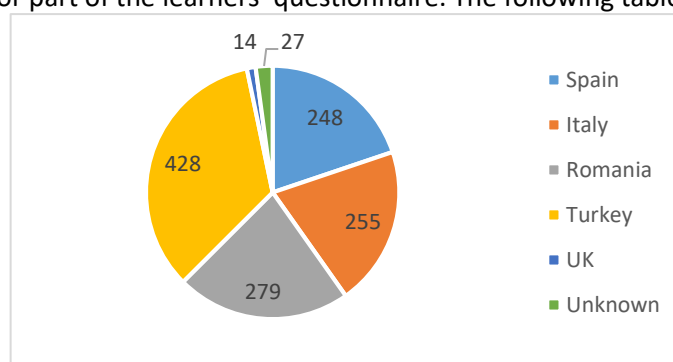


Figure 43 Learners Total Participants

Country	Total Responses
Spain	248
Italy	255
Romania	279
Turkey	428
UK	14
Unknown	27
Total	1251

Table 22 Learners Total Participants

5.3 Learners Question 3

QUESTION: In this project, we consider green skills to cover the working areas of:

- Environmental awareness
- Expert knowledge on procedures for energy, waste, resource efficiency, sustainable development etc.
- Being practically involved in saving energy, protecting ecosystems etc.
- Being responsible for environmental management

Do you think that you are learning green skills?

5.3.1 Learners Question 3: All Participants

A total of 1248 learner participants answered this question

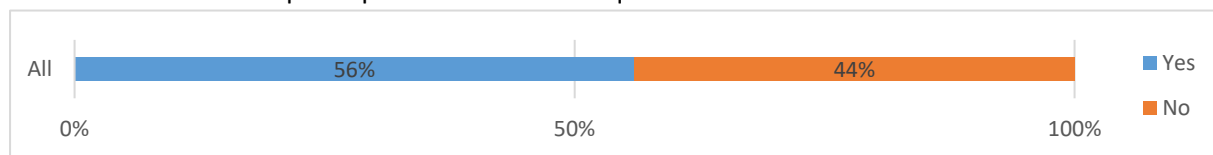


Figure 44 Learners Question 3 All Responses

Learners were more likely to say that they are learning green skills (56% yes) than not (44% no).

5.3.2 Learners Question 3: By Country

The following graph and table presents responses for Question 3 at country level.

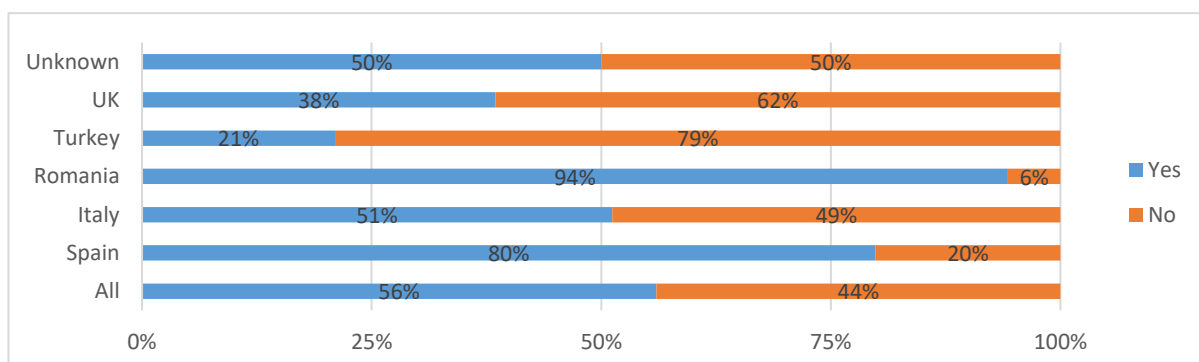


Figure 45 Learners Question 3 All Responses

Country	Total Responses	Responses		Percentage	
		Yes	No	Yes	No
All	1248	699	549	56%	44%
Spain	248	198	50	80%	20%
Italy	254	130	124	51%	49%
Romania	279	263	16	94%	6%
Turkey	428	90	338	21%	79%
UK	13	5	8	38%	62%
Unknown	26	13	13	50%	50%

Table 23 Learners Question 4: By Country

High percentages of learners in Romania (94%) and Spain (80%) believed that they were learning green skills. In Italy, around half of learners believed that they were learning green skills, however in the UK and Turkey, 62% and 79%, respectively, asserted that they were not learning green skills.

5.4 Learners Question 4

Participants that answered 'yes' to Question 3 were asked the following.

QUESTION: What do you believe is the most important aspect of green skills?

A: environmental awareness

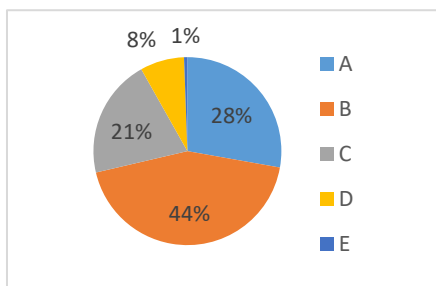
B: expert procedural knowledge on energy, waste, resource efficiency, sustainable development etc

C: being practically involved in saving energy, protecting ecosystems etc

D: being responsible for environmental management

E: other

5.4.1 Learners Question 4: All Participants



A total of 694 learner participants answered this question.

B: 'expert procedural knowledge' was the most important aspect of green skills in amongst learners. D: 'being responsible for environmental management' was considered the least important.

Figure 46 Learners Question 4: All Responses

5.4.2 Learners Question 4: By Country

The following graph and table presents responses for Question 4 at country level.

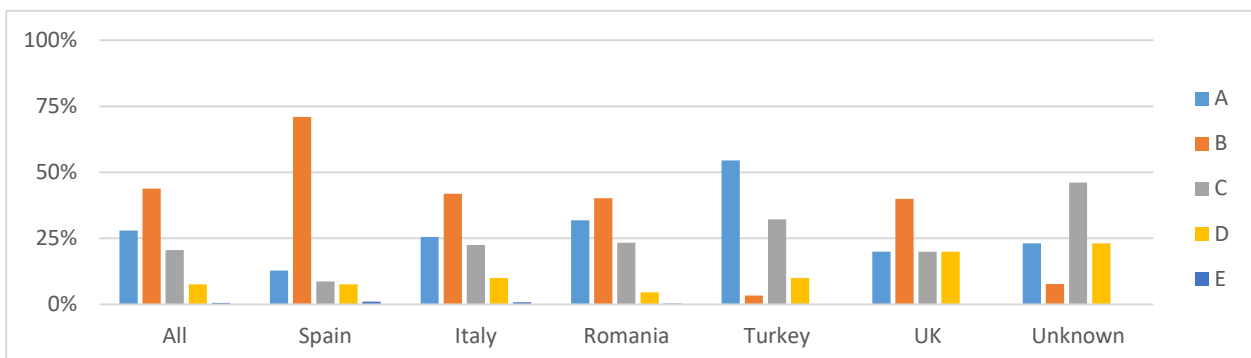


Figure 47 Learners Question 4: By Country

Country	Total Responses	Responses					Percentage				
		A	B	C	D	E	A	B	C	D	E
All	694	194	304	143	53	4	28%	44%	21%	8%	1%
Spain	196	25	139	17	15	2	13%	71%	9%	8%	1%
Italy	129	33	54	29	13	1	26%	42%	22%	10%	1%
Romania	261	83	105	61	12	1	32%	40%	23%	5%	0%
Turkey	90	49	3	29	9	0	54%	3%	32%	10%	0%
UK	5	1	2	1	1	0	20%	40%	20%	20%	0%
Unknown	13	3	1	6	3	0	23%	8%	46%	23%	0%

Table 24 Learners Question 4

In Spain, Italy, Romania and the UK, students find 'expert procedural knowledge' the most important aspect of green skills. In Turkey, however, only 3% chose this option, more often opting for 'environmental awareness' as the most important aspect.

5.5 Learners Question 5

Participants that chose option E: 'other' were asked to type their response.

QUESTION: Other most important aspect of green skills

5.5.1 Learners Question 5: All Participants

A total of 2 learners provided an answer to this question. The answers provided by participants are presented in their original language.

ES Todos igual
ES Educación Ambiental

5.6 Learners Question 6

Participants that answered 'yes' to Question 3 were asked the following.

QUESTION: Which green skills are you learning?

A: environmental awareness

B: expert procedural knowledge on energy, waste, resource efficiency, sustainable development etc.

C: how to be practically involved in saving energy, protecting ecosystems etc.

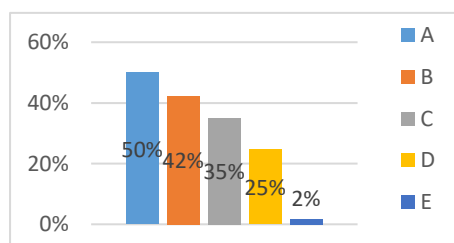
D: how to be responsible for environmental management

E: other

Participants could select any combination of options.

5.6.1 Learners Question 6: All Participants

A total of 697 learners answered this question.



A: 'environmental awareness' was the most popular selection for learners chosen by students as representative of the green skills they are studying. D: 'how to be responsible for environmental management' was the least likely option

Figure 48 Learners Question 6: All Responses

5.6.2 Learners Question 6: By Country

The following graph and table presents responses for Question 6 at country level.

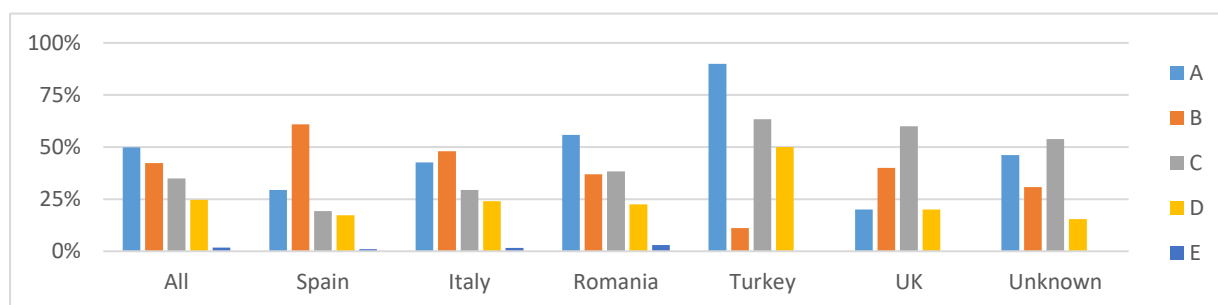


Figure 49 Learners Question 6: By Country

Country	Total Responses	Responses					Percentage				
		A	B	C	D	E	A	B	C	D	E
All	697	348	295	244	172	12	50%	42%	35%	25%	2%
Spain	197	58	120	38	34	2	29%	61%	19%	17%	1%
Italy	129	55	62	38	31	2	43%	48%	29%	24%	2%
Romania	263	147	97	101	59	8	56%	37%	38%	22%	3%
Turkey	90	81	10	57	45	0	90%	11%	63%	50%	0%
UK	5	1	2	3	1	0	20%	40%	60%	20%	0%
Unknown	13	6	4	7	2	0	46%	31%	54%	15%	0%

Table 25 Learners Question 6

In Turkey, learners are very likely to consider ‘*environmental awareness*’ as an aspect that they are learning. In Spain and Italy, ‘*expert procedural knowledge*’ is a common green skill for learners to be learning. In the UK however, learners are were more likely to be learning ‘*how to be practically involved in saving energy*’.

5.7 Learners Question 7

Participants that selected E: ‘*other*’ in Question 6 were asked the following.

QUESTION: Other green skills you are learning

5.7.1 Learners Question 7: All Participants

A total of 6 learners provided an answer to this question. The answers provided by participants are presented in their original language.

- ES Educación Ambiental
- ES Todo
- RO Imi place sa fac cu drag o instalatie a casei
- RO analiza probelor de sol, apa, etc.
- RO ingrijirea apelor, plantelor.
- RO despre reciclare

5.8 Learners Question 8

QUESTION: Do you think you will use green skills in your working life?

5.8.1 Learners Question 8: All Participants

A total of 1246 learners answered this question.

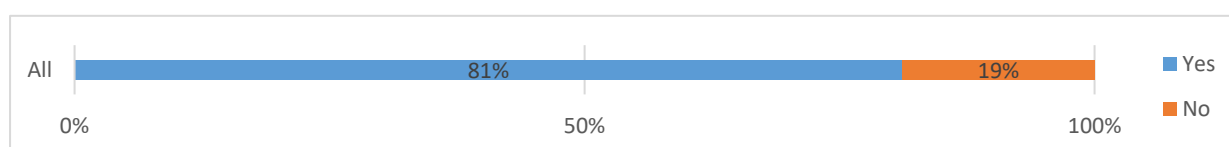


Figure 50 Learners Question 8: All Responses

The majority of learners on average – 81% of all respondents to this question – thought that they will use green skills in their working life.

5.8.2 Learners Question 8: By Country

The following graph and table presents responses for Question 8 at country level.

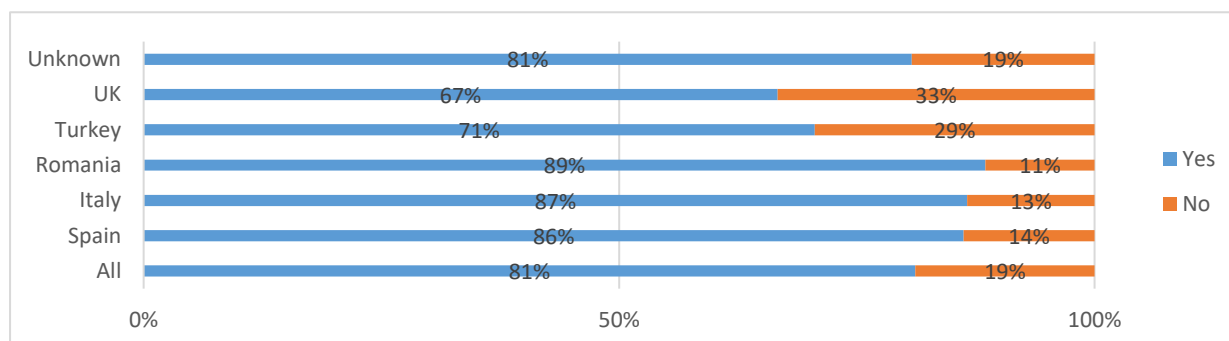


Figure 51 Learners Question 8: By Country

Country	Total Responses	Responses		Percentage	
		Yes	No	Yes	No
All	1246	1011	235	81%	19%
Spain	247	213	34	86%	14%
Italy	254	220	34	87%	13%
Romania	279	247	32	89%	11%
Turkey	428	302	126	71%	29%
UK	12	8	4	67%	33%
Unknown	26	21	5	81%	19%

Table 26 Learners Question 8

Learners from all countries considered that they would use green skills in their working life. The countries with higher percentages of students thinking they wouldn't use green skills were Turkey (29% no) and the UK (33% no).

5.9 Learners Question 9

QUESTION: Do you think having green skills will help you to find a job?

5.9.1 Learners Question 9: All Participants

A total of 1247 learners answered this question.

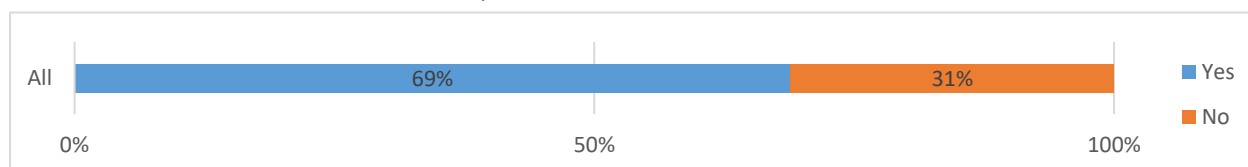


Figure 52 Learners Question 9

The majority of learners answered that they think having green skills will help them find a job.

5.9.2 Learners Question 9: By Country

The following graph and table presents responses for Question 9 at country level.

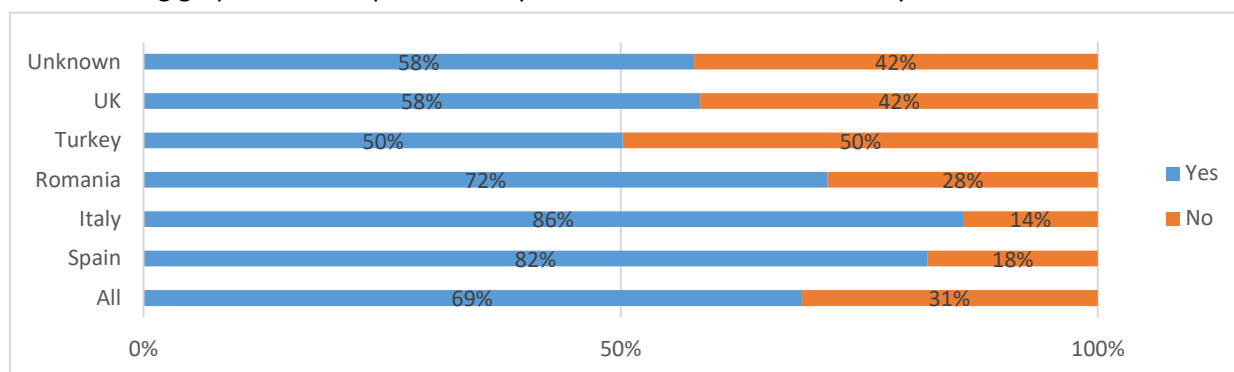


Figure 53 Learners Question 9: By Country

Country	Total Responses	Responses		Percentage	
		Yes	No	Yes	No
All	1247	859	388	69%	31%
Spain	247	203	44	82%	18%
Italy	255	219	36	86%	14%
Romania	279	200	79	72%	28%
Turkey	428	215	213	50%	50%
UK	12	7	5	58%	42%
Unknown	26	15	11	58%	42%

Table 27 Learners Question 9

Results indicate that the majority of learners across all countries do think that having green skills will help them find a job, however as much as 50% in Turkey and 42% in the UK do not agree.

5.10 Learners Question 10

QUESTION: Please tell us how you think green skills could develop in the future?

5.10.1 Learners Question 10: All Participants

A total of 240 learners answered this question, presented here in their original language.

- UK To be onest i think that maybe we could be sourranded by envirometal material and forced to use it for the simple reason that we should must use it, because we don't have other possibilities
- ES Cursos prácticos
- ES Siendo mas responsables
- ES Cero que la clave para mantener un buen ecosistema es un buen sistema de reciclaje, respetar el medio ambiente, y no solo no ensuciar los lugares públicos y naturales, si no dejarlos mas limpios de lo que estaban; yo por ejemplo cada vez que salgo ha dar una vuelta con la bicicleta al campo llevo una bolsa para recoger al menos 3 residuos que encuentre durante el transcurso de mi excursión, es un gesto muy simple pero de gran satisfacción y valor medio ambiental. Creo que ultimamente se habla bastante del tema medio ambiental, pero creo que ni de lejos es suficiente.
- ES Dando más importancia en la educación a este tema
- ES Realizando una asignatura de eco-habilidades en bachillerato, FP o incluso en la universidad

ES Se podrían perfeccionar haciendo campañas de concienciación desde edades muy tempranas y aplicarlas mediante conocimientos más profesionales durante la etapa de estudios obligatorios.

ES Mejorando la formación en los institutos

ES Recibiendo cursos o leyendo más información que hagan que tomemos conciencia

ES Curso formativo de ecoetiquetado

ES CON MAS INFORMACION

ES Formación específica para la producción sostenible, ecodiseño, etc.

ES Con una mayor publicidad y enseñanza en los centros

ES Con más formación

ES Aplicaciones concretas para sectores concretos

ES La educación de los individuos desde la infancia es fundamental

ES Uso de nuevos materiales sostenibles, procesos de producción verdes, uso nuevas tecnologías

ES Más formación

ES Concienciando desde la guardería, incluir como asignatura en el sistema educativo para desarrollar conciencia medioambiental y herramientas disponibles, premiando a las empresas comprometidas de algún modo(reducción de impuestos, subvenciones para poder poner en marcha procesos productivos ecológicos, imponer medidas de prevención igual que se introdujo la prevención de riesgos laborales..). Pero sobretodo educación que obligue al sistema porque lo demanden los consumidores y usuarios a los que se ha educado durante generaciones con conciencia medioambiental.

ES Usando productos reciclables, y productos fabricados cerca del trabajo

ES Estando presentes en toda la formación

ES En clase

ES No se

ES Se hace bien

ES Ni idea

ES Más prácticas

ES Concienciación

ES Charlas

ES Cursos prácticos

ES Dándoles más importancia

ES Práctica

ES No lo se

ES Documentales

ES Trabajando entornos verdes

ES Formación

ES Práctica

ES Más práctica en empresas

ES Con leyes restrictivas que castiguen al que no cumple

ES Concienciación

ES Práctica

ES ???

ES Con expertos

ES En el mundo laboral

ES Profesores expertos

ES Con mucha práctica

ES Conociendo los efectos de no utilizarlas

ES Cursos de concienciación medioambiental desde el colegio y a todos los niveles

ES No son necesarias

ES La sociedad las demandará

ES Más relevancia a estas habilidades

ES Con formación

ES Profesores especializados

ES Ya lo veremos

ES Viendo los resultados que tiene sobre el medio ambiente la utilización de habilidades en este sentido

ES Igual que ahora, en centros de FP

ES Juegos

ES Concienciación

ES Será imprescindible

ES Clases

ES De igual manera

ES Trabajando

ES Mundo laboral

ES Aprendizaje propio

ES Viendo a profesionales

ES Cuando el planeta nos dé un aviso la gente se concienciará

ES Prácticas en empresas

ES Mayor formación especializada

ES No hace falta una formación extra

ES Prácticas en empresas

ES Viendo los resultados

ES Eso deberían comentarlo los profesores

ES No lo se

ES Cursos a medida

ES viendo sus efectos

ES Formación específica

ES Prácticas en empresas

ES No tengo ni idea

ES Sensibilidad hacia la naturaleza y nuestros recursos limitados

ES Profesores especializados

ES Prácticas

ES Concienciación

ES No se

ES Estudiando

ES Pruebas reales de su utilidad

ES Prácticas externas y formación dual

ES Enseñando la utilidad

ES Aprendizaje profesionalizado

ES Aplicaciones móviles

ES En la vida real

ES Mejores profesores

ES Concienciación real en escuelas

ES Con mejores praxis docentes

ES Realidad aumentada

ES Profesores mejor formados

ES Aprendizaje personalizado

IT The world needs new cleaner ways to produce and use energy. I think the energy sector will be the most involved one in the following years, developing towards years reigned by progress, environmental care and energy efficiency.

IT Improving the knowledge of energy, the recycling of waste and the improvement of sustainable development

IT Con una maggiore sostenibilità ambientale e utilizzo consapevole delle risorse energetiche

IT In futuro sarà necessario dare maggiore riconoscimento alle figure che si occupano di ambiente (per esempio con la creazione di un albo) che possano

IT Making people aware of them in everyday situations

IT Maggiore sensibilità ambientale

IT ...

IT "I think that with the everyone's contribution the green skills sector will grow more and more, exploiting the natural resources that we all have available. "

IT I don't know

IT Le competenze green dovrebbero essere a sistema con le pratiche di partecipazione dei cittadini nelle trasformazioni del territorio a partire dai quartieri.

IT Maggiore attenzione in ambito di studio e formazione su questa tematica, anche a livello lavorativo per tenersi in continuo aggiornamento

IT Più uso dell'energia solare come fonte di energia

IT Maggiore responsabilità e parsimonia delle risorse energetiche nell'uso

IT Con la ricerca e l'ultizzo sempre piu di risorse rinnovabili

IT Incrementare la consapevolezza del rispetto ambientale non solo in chi lavora o studia in tale ambito,ma in tutti, da applicare nella vita quotidiana

IT Informazione e buoni esempi sin da piccoli

IT Con maggiore informazione e con buon esempi nel rispetto ambientale

IT Maggiore informazione circa le nuove tecnologie green

IT Sviluppo capacita di progettare

IT È importante informare profondamente la popolazione dell'importanza del consumo consapevole.

IT Ricerca e sperimentazione

IT Avendo più esperienze sul campo

IT Cambando la mentalita delle varie lobby che detengono il potere sulmpetrolio.

IT Non dipende direttamente da noi

IT Potrebbero coinvolgere varie fasi della produzione industriale e far sì che la società di oggi sia cosciente e agevoli l'uso di prodotti e energia green

IT Implementando in modo migliore la consapevolezza ambientale nei media e nelle istituzioni

IT Ricerca di efficienza energetica

IT Con fonti di energia rinnovabile senza consumo di altre fonti di energia come l'energia elettrica

IT "Grazie a ricerche e approfondimenti sulla materia , ma soprattutto a diffondere le conoscenze ai cittadini"

IT Realizzare qualcosa che contribuisca a migliorare la nostra società

IT Verso le energie rinnovabili

IT Nel campo delle costruzioni si dovrebbero fare piu corsi per costruire in maniera sostenibile

IT Buone

IT Maggiore istruzione e infomazione

IT Risparmio delle risorse ambientali

IT "Sviluppo energie rinnovabili"

IT Con uno studio approfondito di vantaggi economici e ambientali che porta alla consapevolezza di una qualità di vita migliore

IT Attraverso una migliore consapevolezza e infomazione degli effetti delle pratiche industriali sull'ambiente

IT Sicuramente andremo incontro ad un futuro più green sia per la consapevolezza comune riguardo i benefici sia grazie alle legislazioni sempre piu proibitive riguardo l'inquinamento

IT Tramite una conoscenza più approfondita sulle procedure all'impiego dell'energia,soprattutto proteggendo l'ambiente

IT Con un coinvolgimento priu pratico e progettuale, e soprattutto integrandolo anche nei piccoli progetti costruttivi

IT Rispettando tutti l'ambiente

IT La consapevolezza del rispetto ambientale deve diventare integrazione tra pensiero acquisito e pratica

IT Potrebbero svilupparsi in positivo solo se inserite obbligatoriamente nel percorso di studi sin dalle prime classi

IT Introducendole anche in corsi di base presenti nei corsi di laurea triennale o come attività formative già a livello di scuola media superiore.

IT Attraverso il riuso

RO Competentele verzi s-ar putea dezvolta daca ar convinge mai multa lume sa participe

RO Competentele verzi s-ar putea dezvolta daca ar convinge mai multa lume sa participe

RO Sa participe mai multe persoane

RO Depinde de oamenii care se alatura proiectului. Cred ca o sa fie cresteri.

RO Prin a face aceasta lume mult mai verde

RO Da

RO N-am idee

RO Prin descoperirea unei noi surse de energie si abandonarea celor vechi

RO Reciclare ; montarea componentelor electrice

RO Folosirea energiei electrice in locul carburantilor

RO Masini electrice; reciclarea deseurilor

RO Mai multe discursuri asupra subiectului

RO Economisirea energiei ;reciclare

RO Ingineri de mediu

RO Accesibile

RO Consider ca competentele verzi ar putea sa se dezvolte pe viitor

RO O competenta verde ce ar putea sa se dezvolte pe viitor este cea de economisire a energiei

RO Competentele verzi s-ar putea dezvolta mai mult in viitor

RO Foarte bine

RO O sa se dezvolte avand in vedere ca ajuta lumea

RO In bine se vor dezvolta

RO Competentele verzi s-ar putea dezvolta mai bine in viitor

RO S-ar putea dezvolta destul de bine

RO S-ar putea dezvolta destul de bine

RO Se vor dezvolta foarte repede

RO Ar trebui ca pe viitor sa se puna accentul pe asta , mai ales in scoli

RO Ar putea sa fie obligatoriu macar un curs

RO Protectiei mediului

RO Prin masinile electrice

RO Competentele verzi ne pot ajuta in viitor deoarece mediul va fi mai curat

RO Eu cred ca in viitor vor exista roboti care vor curata mediul inconjurator

RO Competentele verzi se pot dezvolta prin cunostinte in meseria in care vor lucra

RO Eu consider ca competentele verzi se pot dezvolta in viitor prin adaugarea unor meserii in proiect

RO Cu mai multe informatii si practica

RO Prin adaugarea de legi pentru a proteja mai mult mediul ; imbinarea tehnologiei cu mediul inconjurator

RO In viitor competentele verzi ar putea sa se dezvolte mai bine

RO Masini electrice: energii naturale(eoliana. solara)

RO Prin adaugarea unor legi noi pentru protectia mediului

RO Activitati de curatenie , constientizare etc.

RO cu mai multa implicare din partea autoritatilor

RO mai multa implicare din partea factorilor de decizie, a scolilor si a angajatorilor

RO nu stiu

RO nu stiu

RO nu stiu

RO nu stiu

RO daca ar fi abordate mai serios de toti factorii implicati

RO prin formarea de specialisti in domeniul competentelor verzi

RO prin mai multa educatie privind importanta protezarii mediului

RO prin o mari mare implicare din partea tuturor factorilor

RO prin educatie ecologica

RO prin dezvoltare economica care va contribui la cresterea resurselor financiare ale beneficiarilor, acestia putand plati costurile generate de implementarea competentelor verzi.

RO prin intalniri dintre elvi cu specialisti in competente verzi

RO nu stiu

RO prin implicarea tuturor factorilor

RO prin implicarea tuturor factorilor

RO nu stiu

RO cursuri la televizor pentru toata lumea

RO introducerea in educatia timpurie a informatiilor despre competente verzi prin experimente

RO proiecte educative pentru dezvoltarea competentelor verzi

RO prin mai multa informare la nivelul populatiei privind protectia mediului

RO printr-o implicare mai mare a populatiei

RO printr-o educatie mai serioasa a elevilor in competente verzi

RO prin alocarea de ore de pregatire in competente verzi

RO prin implicarea mai mult a companiilor

RO prin alocarea de ore de pregatire in programa de invatamant

RO initerea in ecologie inca din copilarie

RO sa se puna in programa scolara 1 ora pentru protectia mediului

RO firmele din domeniul electric sa formeze personalul in competente verzi

RO printr-o serioasa implicare a scolilor, factorilor de decizie si a firmelor

RO mai mult timp alocat invatarii competentelor verzi

RO Constientizarea populatiei privind protectia mediului

TR Gelecekte çok önemli olacak ve hayatımızı etkileyecek

TR Önemli iyice artacak ve yaşam şeklimizi etkileyecek

TR Hayatımızın her alanında aktif çevresel farkındalığı benimseyeceğiz.

TR Çevresel farkındalığa sahip bilinçli insan sayısının artması yeterince gelişim sağlayacaktır.

TR Gelecekte çok önemli bir yere sahip olup insanları bu konuda bilinçli hale getirecektir

TR Hayati önem taşıyacak, her bir birey yaşam alanlarımız için önemseyecek ve böylece hayatımızın her alanında uygulayacağız.

TR İzmit Mesleki ve Teknik Anadolu Lisesi

TR Gelecekte de farklı olacağını düşünmüyorum, insanlar yeterince duyarlı değil.

TR Ormanlık alanların artması, çöplerin geri dönüşüme kazanıldığı yerlerin artması, alternatif ve zararsız enerji kaynaklarının kullanımının artması gibi gelişimler olacaktır.

TR Çevre dostu teknolojik gelişmeler sayesinde çok önemli ve dünyamıza yararlı olacaktır

TR Hayatımızın her noktasında önemi artacak ve sorumlu bireyler olarak yeşil dostu toplumlar meydana getireceğiz.

TR İnsanlar için çok önemli olacaktır

TR Yeşil alanların artması, yenilenebilir enerji kullanılması, çevreye zararlı herşeyin azaltılması ve insanları bilinçli hale getirerek geliştirilebilir.

TR Çevreye zarar vermeyi azaltıp, yeşil alanları artırıp, ekosistemi koruyarak geliştirebiliriz

TR Tasarruf etmek, ekosistem döngüsünü korumak, insanların sorumluluk alması ile gelişir

TR Çevresel farkındalığın insanlara aşılması ile gelişecektir

TR İnsanların çevresel farkındalığa duyarlı hale gelmesi ile gelişir

TR Çevresel farkındalığın yaygınlaşması gelişmesine yardımcı olacaktır

TR Farkındalığı artırıp, teknolojiyi olumlu kullanıp bu yönde teknolojiler üreterek

TR Enerji tasarrufu sağlayıp, ekosistemi koruyup, bilinçli toplumu oluşturup, çevreye hayvanlara ve doğaya duyarlı olarak, teknolojik kaynaklar sağlayarak geliştirebiliriz

TR Gelecekte çok önemli olacağı için şimdiden bu farkındalığa toplumları ulaştırmayı sağlayarak geliştirilebilir

TR Kaynakları tasarruflu kullanarak(su, yiyecek, enerji vb), atıkları geri dönüşüme kazandırarak, ekosistem döngüsüne zarar veren durumları ortadan kaldırarak geliştirilebilir

TR Geleceğimiz için çok önemli ve gelişmesi için insanlara bu alanda daha çok eğitim verilmeli

TR Çevresel farkındalığın insanlar üzerinde yaygınlaşması ile

TR Çevresel farkındalığın artması insanların bu yeterlilikler üzerinde ki çalışmalarını etkileyip geliştirmesi ile

TR İnsanların doğaya karşı daha duyarlı olmaları gerekmektedir, bu durum gelişim başlangıcı olacaktır

TR Gelitirmek için insanları eğitmek şarttır, bu sayede zaten insanlar gelecekteki hayat şartları için bununla uğraşacaktır

TR Önemi artar

Appendix: Questionnaire Flow Chart

