

**CURRENT STATE REPORT ON ECO-ENTREPRENEURIAL QUALIFICATIONS AND  
CURRENT STATE REPORT ON ECO-INNOVATION AND ENTREPRENEURIAL TRAINING  
NEEDS AND EXISTING EDUCATIONAL INITIATIVES IN COMPANIES**

**-NATIONAL LEVEL-**

Prepared for:

University of “St. Kliment Ohridski” – Bitola, Faculty of Economics – Prilep and the Agency for promotion of entrepreneurship in the Republic of Macedonia for the purpose of the European Union project: “A knowledge alliance in eco-innovation entrepreneurship to boost SMEs competitiveness (SMecoMP)”

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## INTRODUCTION

The current state report on eco-entrepreneurial qualifications and Current state report for eco-innovation and entrepreneurial training needs and existing educational initiatives in companies is composed of two separate parts, the first part: The current state report on eco-entrepreneurial qualifications and the second part referring to current state for eco-innovation and entrepreneurial training needs and existing educational initiatives in companies.

The current state report on eco-entrepreneurial qualifications of companies in the region is based on results of conducted research, also for the project: “A knowledge alliance in eco-innovation entrepreneurship to boost SMEs competitiveness” (SMecoMP)<sup>1</sup>. The research regarding the Pelagonija region was conducted in April 2018 on a representative sample of companies headquartered in Pelagonija. During the research, 150 randomly selected companies were contacted and they belonged to different industrial zones in Pelagonija, according to their headquarters and the place of operation. Fifty of the 150 contacted companies had replied. The research in the Skopje region was conducted in April 2018 whereof the questionnaire was sent to 55 companies and by 05.05.2018, 12 companies had responded to it. The Questionnaire was structured in three sections: the first section contains three questions about the surveyed company, the second section refers to eco-innovative training needs and it contains 12 questions and the last one, the third section refers to data of the respondent, the person which replies to the questionnaire and it contains 7 questions. The analyses of the obtained replies will deliver an overview of the current situation in relation to eco-innovation and entrepreneurship training in companies in Macedonia, but also of their interest in attending eco-innovation themed training, which would be organized in future, in order for more consistent accepting and implementation of the world trend on incorporating environmental-innovative solutions in everyday operation of companies. The concept of eco-innovations is briefly explained by the syntagma: “When business meets the environment”. The results of each question will be analyzed separately and will be presented in separate charts and graphs

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<sup>1</sup>Annex no. 1 in Annexes to this Report.

and also their relation and correlation will be presented in order to obtain relevant information about the actual condition in this area.

The current state report on eco-innovation and entrepreneurship training needs and existing educational initiatives in companies of the region is based on results from the conducted research, also for the project: "A knowledge alliance in eco-innovation entrepreneurship to boost SMEs competitiveness" (SMecoMP)<sup>2</sup>. The research in the Pelagonija region was conducted in July and August 2018, in a way that 10 companies headquartered in Pelagonija were surveyed. First, 50 companies were contacted and then from the companies which were interested in participating in the interview, 10 companies were chosen. The research conducted in the Skopje region was conducted in December 2018 whereof 12 companies from Skopje participated in the research. The research was conducted by direct interview and an open discussion about certain questions with representatives of the companies in order to obtain a more relevant result for current issues and needs of the companies for developing an appropriate training program which would include all requirements and needs of the business sector. One hour was stipulated for conducting the interview, during which the companies' representatives would reply to 8 questions, some of them are open without offering options and the last question offers three sub-questions. By analyzing the obtained replies an overview of the needs and problems of the business sector will be created in the area of eco-innovations and entrepreneurship and existing educational initiatives, but also results would be of great value for the project team, since they would allow preparing of customized training programs, according to needs of the business sector. Of course the final effect would be to increase the capacities of small and medium sized companies for placing and implementing a green economy.

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<sup>2</sup> Annex no. 3 in Annexes to this Report.

## **FIRST PART Current state report on eco-entrepreneurial qualifications of companies in the region**

### **RESULTS – Section A**

Section A consists of 3 questions-company information. The replies to the questions will give information about the name of the surveyed company (optional), the number of employees in the company and the activity of the company according to the European Classification of Economic Activities NACE<sup>3</sup>.

#### **Question 1: Name of your company? (optional question)**

Thirty and one (31) companies replied to this question – Attached is a list of names of surveyed companies from the Pelagonija region. (Annex no. 2)

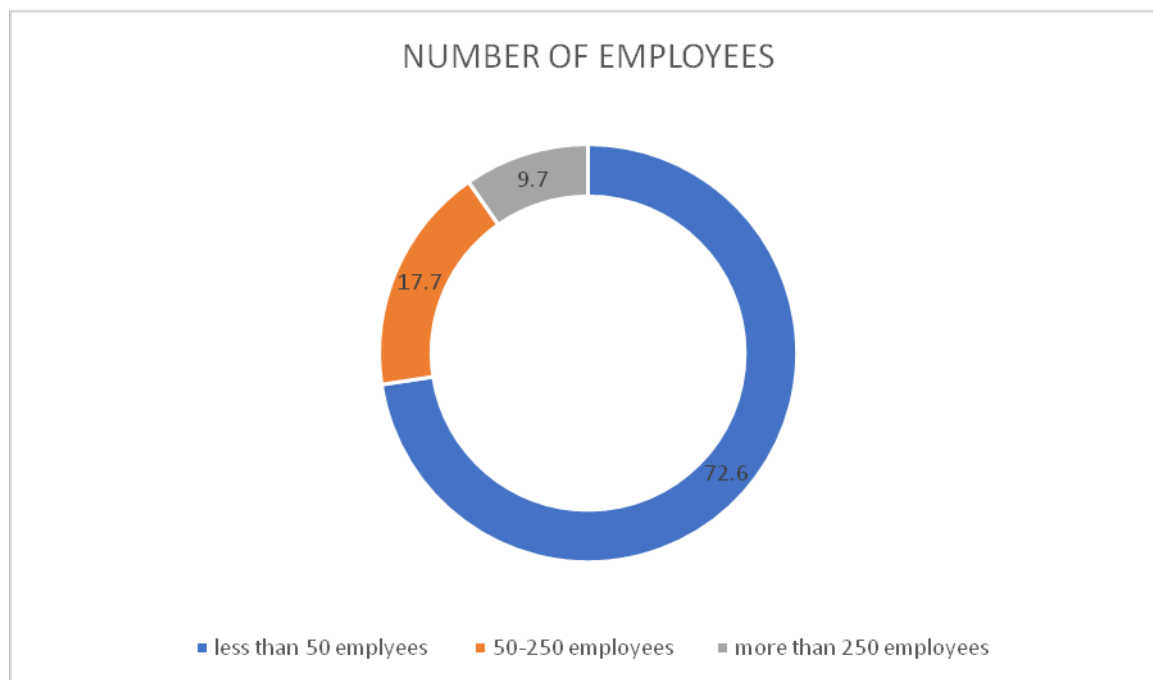
#### **Question 2: How many people are employed in your company?**

From the received replies, 62 of the surveyed companies which perform their activity on the territory of Pelagonija and Skopje region, 45 companies had less than 50 employees or in percentage, 72,6%, 11 of the surveyed companies had 50-250 employees or 17,7% while from the surveyed 62 companies, 6 of them had more than 250 employees or in percentage, 9,7%.

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<sup>3</sup>In the Republic of Macedonia, as of 1.1.2013 the National Classification of Activities – NKD – Rev.2 is implemented which was adopted as a national standard based on the Decision of the Government of the Republic of Macedonia ("Off. Gazette of RM", no. 147/08) and The Law on One-Stop-Shop System and for keeping the Trade register and The Registrar of other legal entities ("Off. Gazette of RM no. 84/05). The National Classification of Activities – NKD – Rev. 2 according to the content and structure fully corresponds to the European classification of activities NACE Rev. 2 (Regulation (EC) No.1893/2006 of European Parliament and Council of 20 December 2006 establishing the statistical classification of economic activities NACE Revision 2 and amending Council Regulation ( EEC) No 3037/90 as well as certain EC Regulations on specific statistical domains OJ L/363).

Chart no. 1



**Question 3: What is the main economic activity of your company, based on NACE classification?**

The surveyed companies had an opportunity to choose a reply which mostly applies to their activity from the offered 21 options.

Chart no. 2

<b>Economic activity</b>		
	number	percentage
Agriculture, forestry, and fishing	2	3,2
Production industry	17	27,4
Construction	3	4,8
Wholesale and retail trade, repair of motorcycles and motor vehicles	19	30,6
Accommodation and hospitality	4	6,4
Informatics and communications	2	3,2
Waste management	4	6,4
Education	1	1,6
Health and social affairs	2	3,2
Other service activities	8	12,9
<b>Total</b>	<b>62</b>	<b>99,7</b>

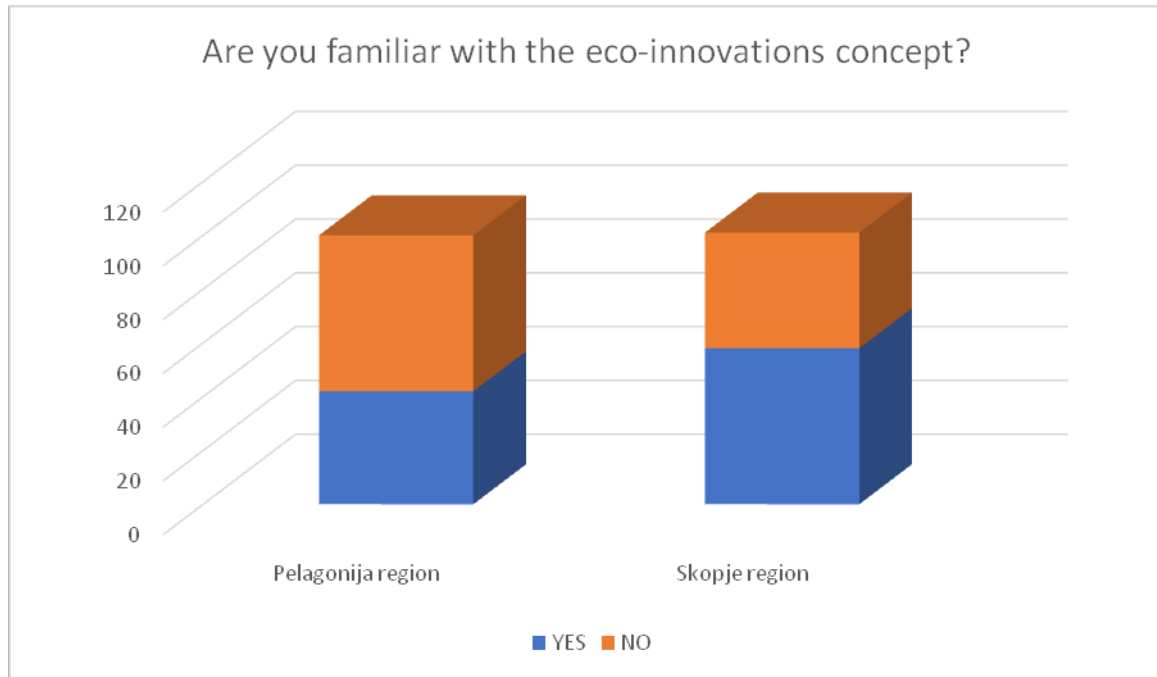
## **RESULTS – Section B**

Section B consists of 12 questions-information about requirements for eco-innovation training of the surveyed companies. The respondents' replies to questions which might determine how much they are familiar with the eco-innovation concept, whether they have attended eco-innovation area training so far, their interest in training, how and whether they are familiar with the benefits of this type of training and how much training would be useful for meeting their needs when implementing the eco-innovation concept. Also, by replying the set questions an evaluation is obtained about the capacity for constant upgrading and improving of the employees in the eco-innovation domain, an evaluation of benefits of implementing various methods of training, as well as their willingness to receive information about the latest trends in eco-innovations related to the company's activity.

### **Question 1: Are you familiar with the eco-innovations concept?**

In the first question, after explaining what the eco-innovations concept refers to, the surveyed companies had a possibility to choose one of two offered options “YES” or “NO”. The results of the research conducted in the Pelagonija region show that 29 of the surveyed people were not familiar with this concept (or 58%) while 21 of the surveyed people were familiar with this concept. The results of the research conducted in the Skopje region show that 5 (or 41.6%) of the surveyed people were not familiar with this concept, while 7 of the surveyed people were familiar with this concept.

Chart no. 3

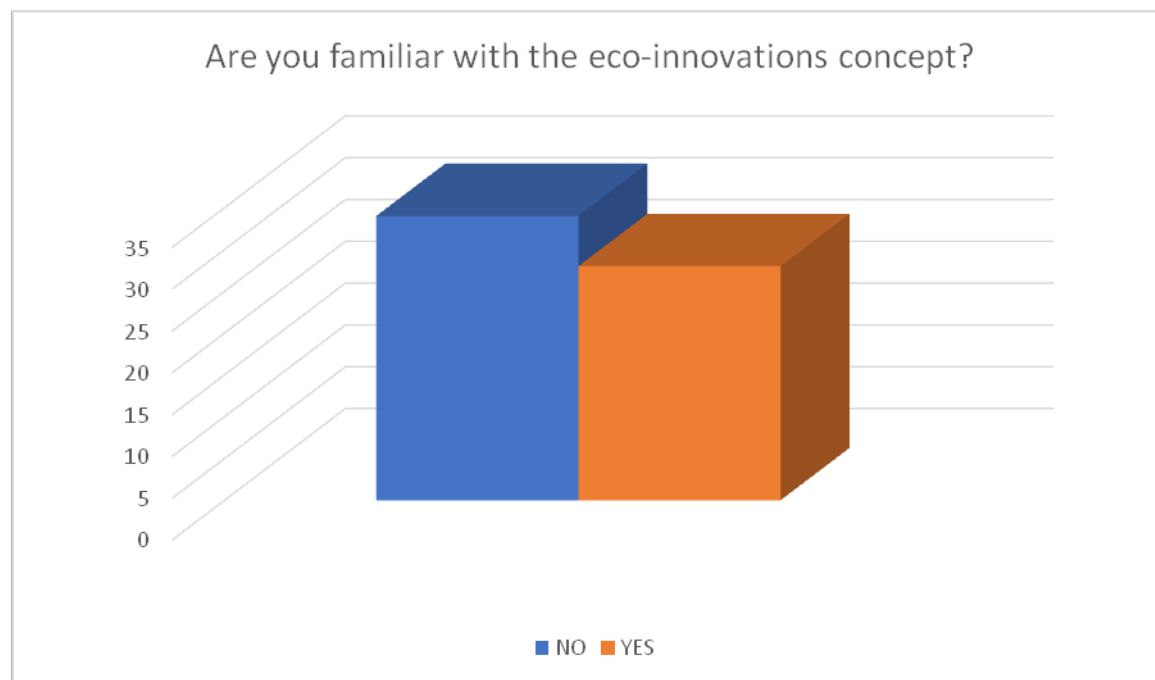


The majority of the respondents in the Skopje region are familiar with the eco-innovations concept, unlike the citizens of the Pelagonija region where the majority were not familiar with the eco-innovations concept.

To summarize, the results of both conducted research are the following:



Chart no. 4



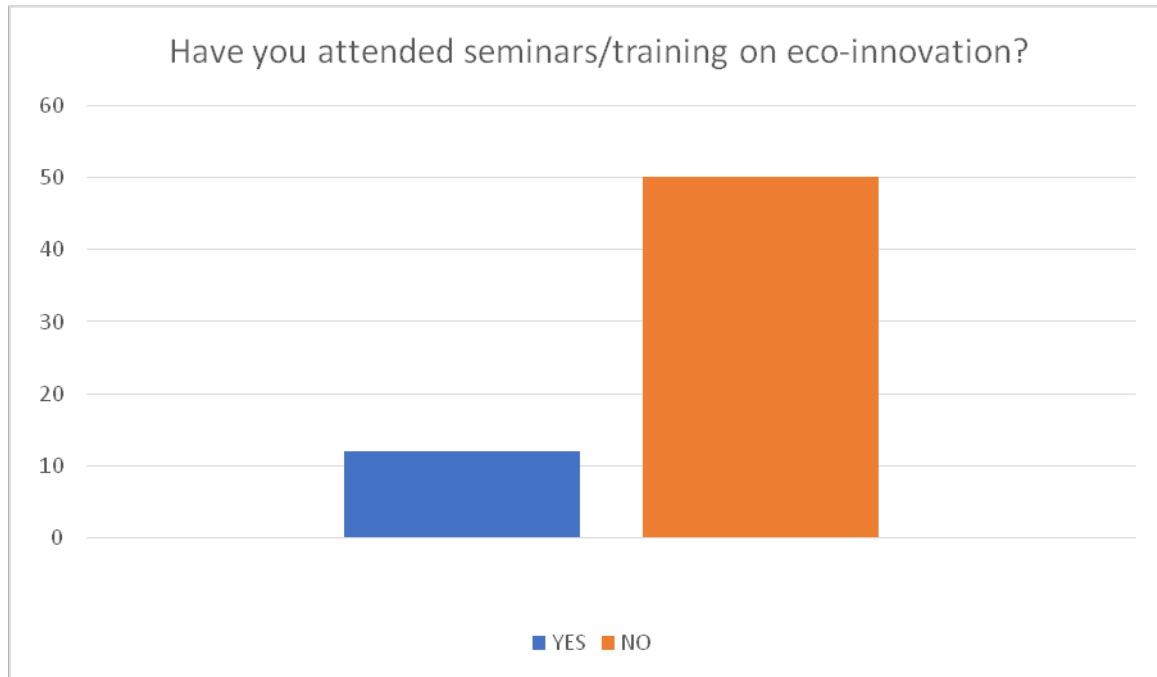
Based on the results of the research, a conclusion can be drawn that 45% of the respondents are familiar with the eco-innovations concept, while 55% of the respondents are not familiar with the eco-innovations concept.

The results of the research show that there is room for action, for introducing the eco-innovations concepts to the respondents, training, seminars and similar for the benefits of implementation of eco-innovation in entrepreneurship.

### Question 2: Have you attended seminars/training on eco-innovation?

To the question of whether you have attended seminar/training for eco-innovation, the results of both research show that 12 respondents replied positively while 50 respondents replied negatively. Of the respondents who replied positively to the question about attending eco-innovation seminar/training, 8 people are from Pelagonija region while 4 are from the Skopje region. In percentage, by regions, 16% of the respondents in the Pelagonija region have attended this type of training/seminar, while 84% of the respondents have not attended this type of training/seminar. In the Skopje region, from 12 respondents, 4 respondents have attended this type of training/seminar (or 33.3%), while 66.6% of the respondents have not attended such type of training/seminars.

Chart no. 5

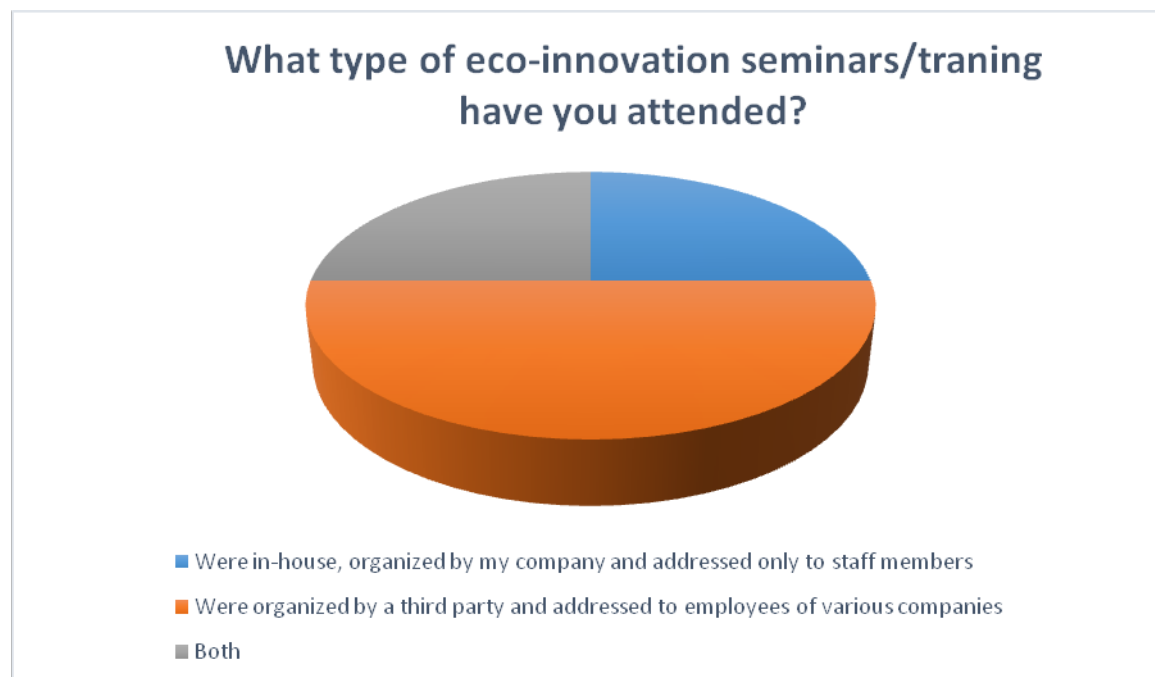


As in the previous question, since less than 20% of the respondents attended this type of training, it can be concluded that there is a lot of room for action and organizing eco-innovation training.

### Question 3: What type of eco-innovation seminars have you attended?

If the respondents had attended eco-innovation seminars/training, they should have replied about the manner of organization and conducting of the seminar/training to the next question by choosing one of the offered options. The first option was whether the seminar was conducted in the company's premises, was organized by the company and was intended only for the employees, the second option was: it was organized by a third party and intended for employees from several companies and the third option was: they had attended seminars/training organized in both above-mentioned ways.

Chart no. 6



The research shows that the respondents mostly attended training organized by third parties and intended for employees in several companies – 6 of the respondents replied that they had attended such training (50%), training was rarely organized in the company and intended only for employees from the same company – 3 of the respondents replied that they had attended such training (25%), also 3 of the respondents replied that they attended seminars/traning organized in both ways (25%). Such results correspond to the fact that the largest part of the active businesses in Macedonia, as much as 79.3% have 1 to 9 employees; 2.9% have 20 to 49 employees and only 0,3% have more than 250 employees.<sup>4</sup> Due to high costs for organizing training intended only for employees of a single company, but also due to the insufficient number of listeners from only one company, in practice, training for employees from different companies are mostly organized.

<sup>4</sup> Number of active business subjects, 2017, the remaining results can be found on [http://www.stat.gov.mk/PrikaziSoopstenie.aspx?Rbrtx=79\[08.11.2018\]](http://www.stat.gov.mk/PrikaziSoopstenie.aspx?Rbrtx=79[08.11.2018])

**Question 4: If you have attended training/seminars on eco-innovation, please state the specific fields they addressed?**

If the respondents had attended seminars/training for eco-innovation, they should have replied to the next question about the specific fields training had addressed. The question contains 3

parts related to fields of eco-innovation training such as The first part refers to training in the sphere of *Environmental technologies and systems*. The second part refers to training in the sphere of *Organizational innovation for the environment* and the third part refers to training in the sphere of *Product and service innovation offering environmental benefits*.

The respondents who attended seminars/training for eco-innovation in the sphere of *Environmental technologies and systems* replied the following to the first part of the question:

**Chart no. 7**

<i>Training in the sphere of Environmental technologies and systems</i>		
	number	percentage
Pollution prevention and control technologies	2	16,6
Cleaning (clean-up) technologies that treat pollution released into the environment	2	16,6
Alternative systems of production and consumption; cleaner process technologies; green logistics; new manufacturing processes that are less polluting and/or more resource efficient than relevant alternatives (eg biological agriculture, renewables-based energy system)	6	50
Waste management equipment	1	8,3
Environmental monitoring and instrumentation	/	/
Green energy technologies	1	8,3
Water supply	/	/
<b>Total</b>	12	99,8

The respondents who visited seminars/training for eco-innovation in the sphere of *Organizational innovation for the environment* replied the following to the second part of the question:

**Chart no. 8**

<i>Training in the sphere of Organizational innovation for the environment</i>		
	number	percentage
Pollution prevention schemes	2	28,6
Environmental management and auditing schemes: formal systems of environmental	3	42,8

management involving measurement, reporting, and responsibilities for dealing with issues of material use, energy, water and waste (eg EMAS, ISO 14001)		
Chain management: cooperation between companies so as to close material loops and to avoid environmental damage across the value chain (from cradle to grave); participation in circular economy initiatives	2	28,6
<b>Total</b>	<b>7</b>	<b>100,0</b>

The respondents who visited seminars/training for eco-innovation in the sphere of *Product and service innovation offering environmental benefits* replied the following to the third part of the question:

**Chart no. 9**

<i>Training in the sphere of Product and service innovation offering environmental benefits</i>		
	number	percentage
New or environmentally improved products (goods) including eco-houses and buildings	2	50
Green financial products (such as eco-lease or climate mortgages green certificates, allowance trading)	/	
Environmental services: solid and hazardous waste management, environmental consulting, testing and engineering, other testing and analytical services	1	25
Services that are less pollution and resource intensive (eg car sharing)	1	25
<b>Total</b>	<b>4</b>	<b>100,0</b>

Of the results obtained it can be concluded that the least attended was training in the sphere of *Product and service innovation offering environmental benefits*, and the most attended was training in the sphere of *Environmental technologies and systems*.

**Question 5: Please indicate the level of your interest in attending training/seminars in the below subjects?**

To the fifth question of the section B, the respondents value the level of interest for attending training/seminars by choosing one of the five offered options: "I am not interested", "I am

slightly interested", "I am neutral", "I am interested" and "I am strongly interested". As in the previous question, the respondents have the possibility to choose training from three fields: "Environmental technologies and systems", "Organizational innovation for the environment", and "Innovations of products and services which benefit the environment ". To determine the highest level of interest in attending the training/seminar in the stated areas, an average has been calculated such as: "I am not interested" is scored with 1, "I am slightly interested" is scored with 2, "I am neutral" is scored with 3, "I am interested" is scored with 4, and "I am strongly interested" is scored with 5.

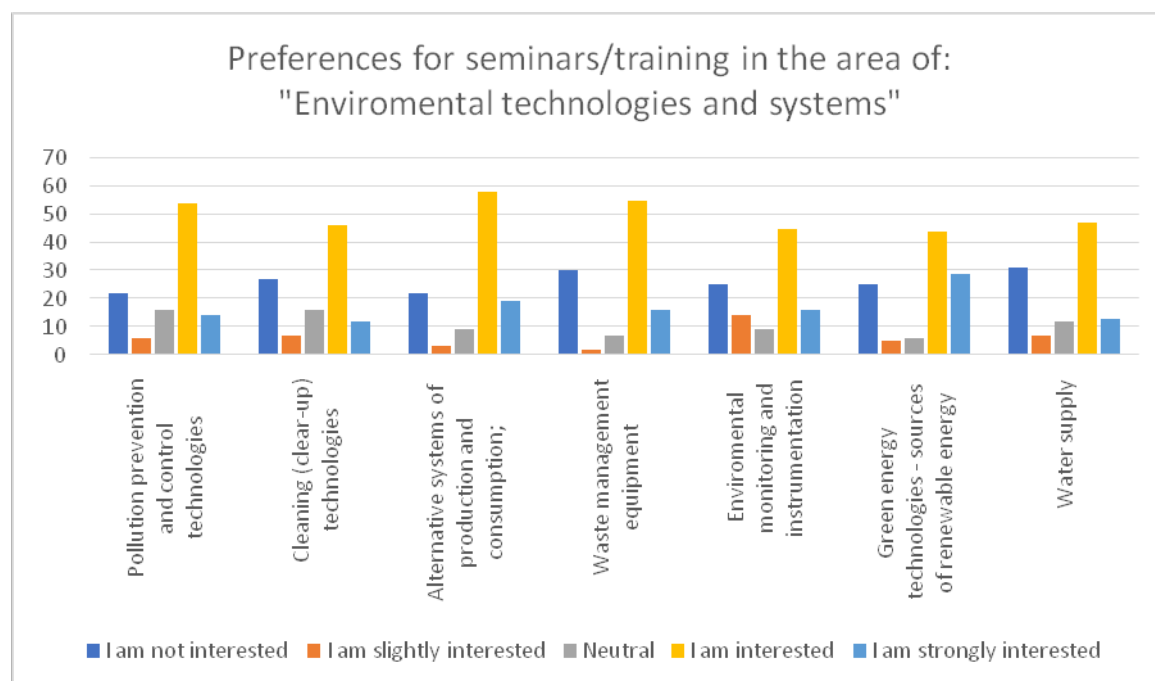
The preferences of the respondents for training/seminars in the first area "**Environmental technologies and systems**" are the following:

Chart no. 10

	I'm not interested	I'm slightly interested	Neutral	I'm interested	I'm strongly interested	average
Pollution prevention and control technologies	22	6	16	54	14	3.28
Cleaning (clean-up) technologies that treat pollution released into the environment	27	7	16	46	12	3.86
Alternative systems of production and consumption; cleaner process technologies; green logistics; new manufacturing processes that are less polluting and/or more resource efficient than relevant alternatives (eg. biological agriculture, renewables-based energy system)	22	3	9	58	19	3.44
Waste management equipment	30	2	7	55	16	3.22
Environmental monitoring and instrumentation	25	14	9	45	16	3.43
Green energy technologies	25	5	6	44	29	3.43
Water supply	31	7	12	47	13	3.03

Graphically, the preferences would look like this:

Chart no. 11



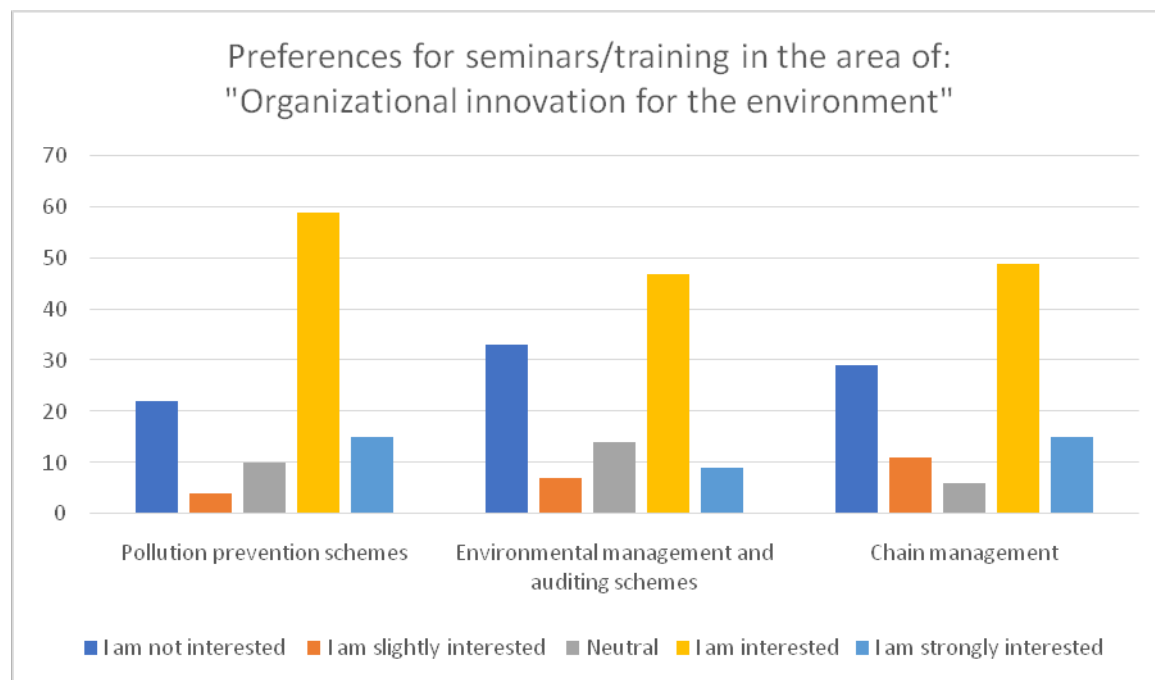
The preferences of the respondents for training/seminars in the second area “**Organizational innovation for the environment**” are the following:

Chart no. 12

	I'm not interested	I'm slightly interested	Neutral	I'm interested	I'm strongly interested	average
Pollution prevention schemes	22	4	10	59	15	3.37
Environmental management and auditing schemes: formal systems of environmental management involving measurement, reporting, and responsibilities for dealing with issues of material use, energy, water and waste (eg EMAS, ISO 14001)	33	7	14	47	9	2.92
<b>Chain management:</b> cooperation between companies so as to close material loops and to avoid environmental damage across the value chain (from cradle to grave); participation in circular economy initiatives	29	11	6	49	15	3.09

Graphically, the preferences would look like this

Chart. No.13



The preferences of the respondents for training/seminars in the third area “*Product and service innovation offering environmental benefits*” are the following:

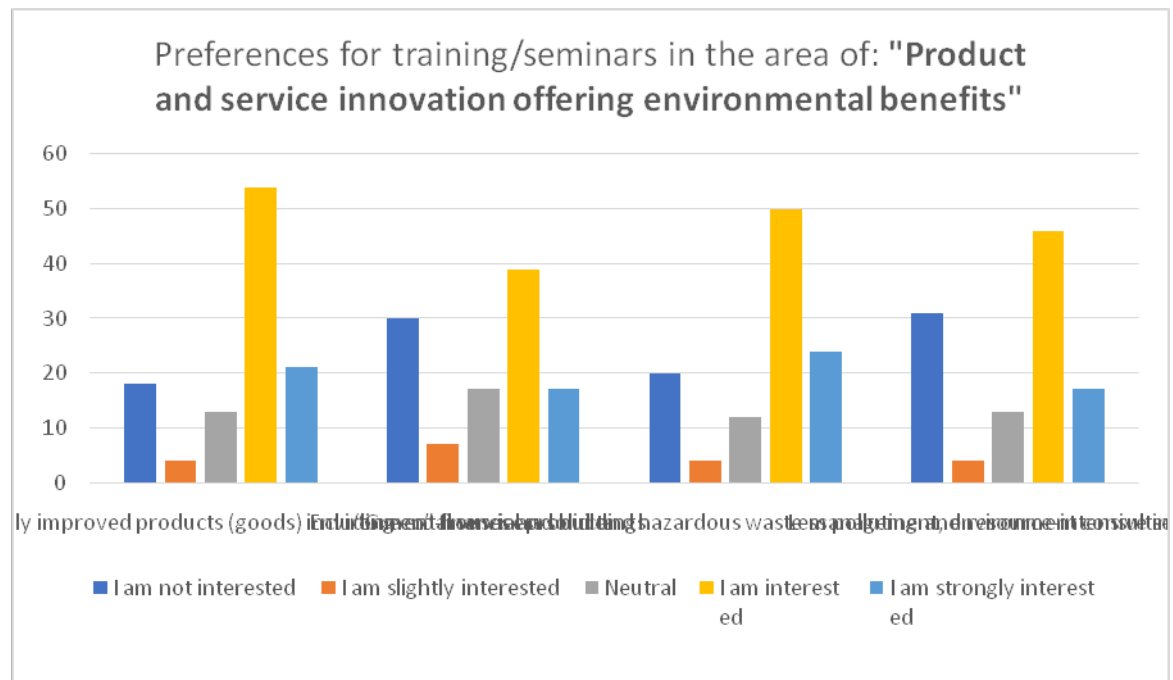
Chart. No 14

	I'm not interested	I'm slightly interested	Neutral	I'm interested	I'm strongly interested	average
New or environmentally improved products (goods) including eco-houses and buildings	18	4	13	54	21	3.5
Green financial products (such as eco-lease or climate mortgages green certificates, allowance trading)	30	7	17	39	17	3.05
Environmental services: solid and hazardous waste management, environmental consulting, testing and engineering, other testing and analytical services	20	4	12	50	24	3.49
Services that are less pollution and resource intensive (eg car sharing)	31	4	13	46	17	3.12

Graphically, the preferences would look like this:



Chart no. 15

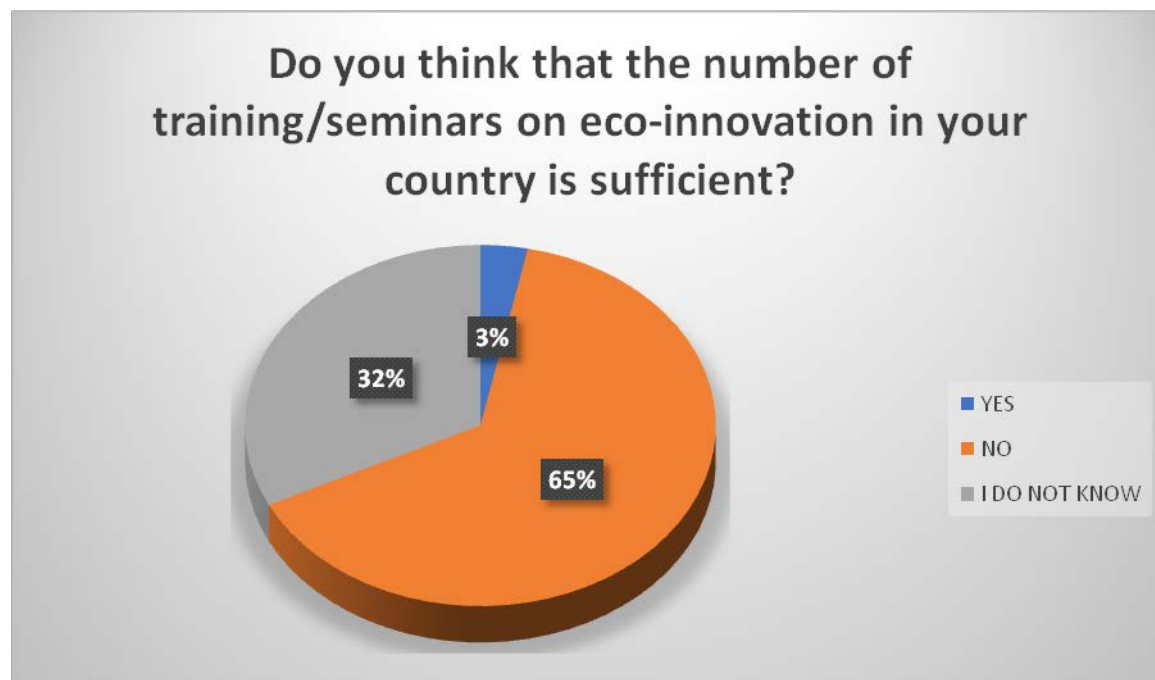


The results of this question would be of great benefit during further activities for the organization and realization of seminars/training, which would meet the needs of both the employees in the companies and the companies.

**Question 6: Do you think that the number of training/seminars offered on eco-innovation in your country is sufficient?**

To the question: Do you think that the number of training/seminars offered on eco-innovation in your country is sufficient, the respondents replied the following: “YES” – 2 respondents, “NO” – 40 respondents and “I DO NOT KNOW” – 20 respondents.

Chart no.16



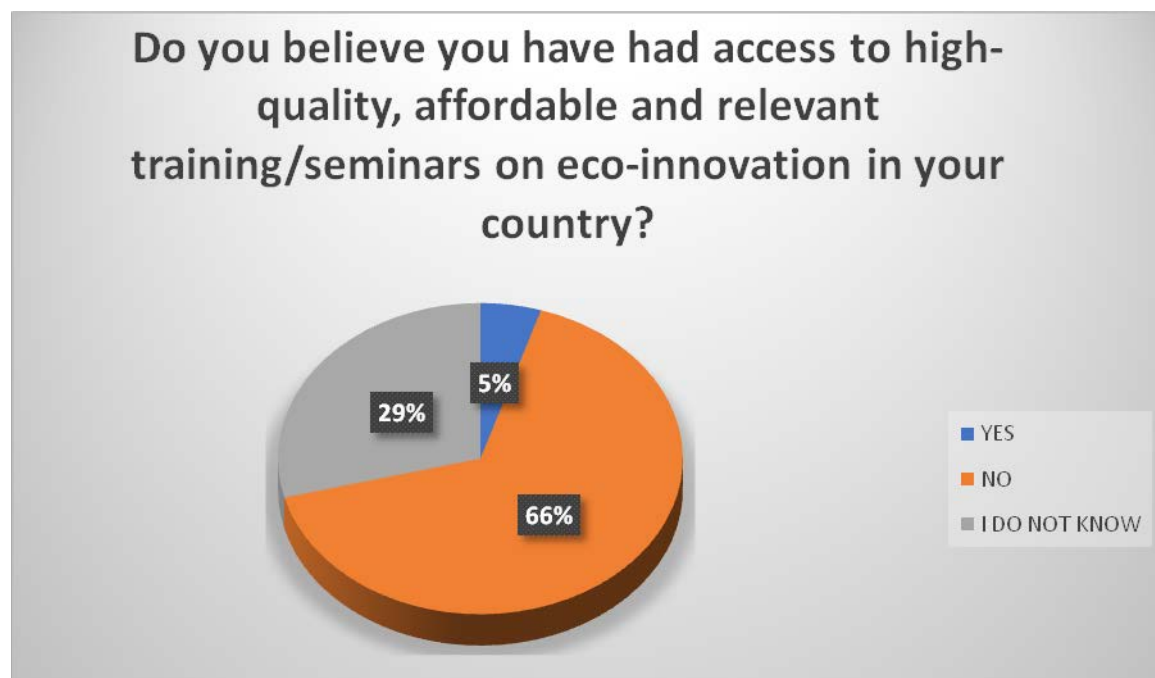
From the analyzed replies it can be concluded that even 65% of the respondents believe that the number of offered training/seminars in the area of eco-innovations is not sufficient, unlike only 3% of the respondents who believe that the number of training/seminars is sufficient, and 32% of the respondents who have no opinion. This information is very important because it presents the situation in this area, which indicates that very few trainings on these subjects in the country are organized or that the respondents have no sufficient information about the organization of training/seminars in the area of eco-innovations.

**Question 7: Do you believe you have had access to high-quality, affordable, relevant training/seminars on eco-innovation in your country?**

To this question, same as to the previous question, the respondents had the opportunity to choose one of the offered three options: "YES", "NO" or "I DO NOT KNOW". Of the respondents, only 3 believe that they have access to affordable and relevant eco-innovation training/seminars, as much as 41 of the respondents believe that they have no access to affordable and relevant eco-innovation training/seminars, and 18 of the respondents replied

that they do not know whether they have access to affordable and relevant eco-innovations training/seminars.

Chart no.17



The results are surprising and show that only 5% of the respondents have had access to high-quality, affordable and relevant training/seminars on eco-innovation in the Republic of Macedonia.

**Question 8: Which of the following competencies do you think that is most important for a corporation to succeed in pursuing eco-innovation?**

To the 8<sup>th</sup> question, the respondents are necessary to assess which of the offered 8 competencies are important for the company to success in implementing eco-innovations. Summed up, the results of both research are the following:

Chart no. 18

	Not important	Somewhat important	Important	Very important	Extremely important	Did not reply	average
Development of new sustainable/circular business models	7	14	43	25	19	4	3.32
In-depth knowledge of economic sectors	6	15	42	29	12	8	3.32
Knowledge about product life cycles	6	6	40	27	25	8	3.51
Design skills of new products	5	6	30	37	27	7	3.71

or/and services							
Knowledge of creative thinking tools	4	8	32	37	23	8	3.45
Innovation management skills	4	4	30	36	22	16	3.70
Marketing skills	4	7	33	39	23	6	3.66
Soft skills (eg problem-solving skills, collaboration, communication)	4	5	33	38	26	4	3.65

**Question 9: Considering that eco-innovation is a mixture of the above competencies (knowledge, skills, and attitudes), do you believe that your company and its employees have such competencies?**

To this question, the respondents should reply whether in their opinion the company where they work and its employees have competencies appropriate for developing the eco-innovation concept. The respondents had the possibility to choose one of the offered three options: "YES", "NO", or "I DO NOT KNOW". Of the respondents, only 36 believe that their company and its employees have appropriate eco-innovations competences, 15 believe that they do not have such competences and 11 replied that they do not know.

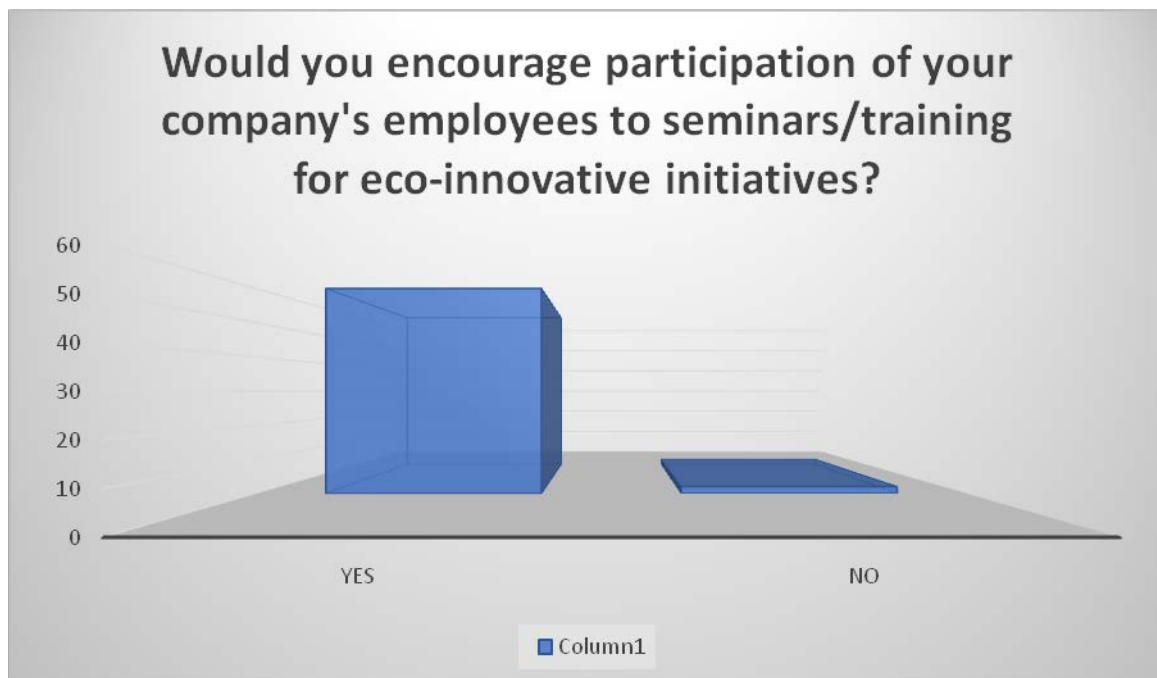
Chart no.19



### Question 10: Would you encourage the participation of your company's employees to eco-innovation training initiatives?

To this question, the respondents should reply whether they would encourage participation of employees to seminars/training for eco-innovative initiatives. The respondents had the possibility to choose one of two offered options: “YES” or “NO”. Of the respondents, 60 would encourage participation of employees to seminars/training for eco-innovative initiatives, while only 2 would not encourage participation of employees to seminars/training for eco-innovative initiatives.

Chart no. 20



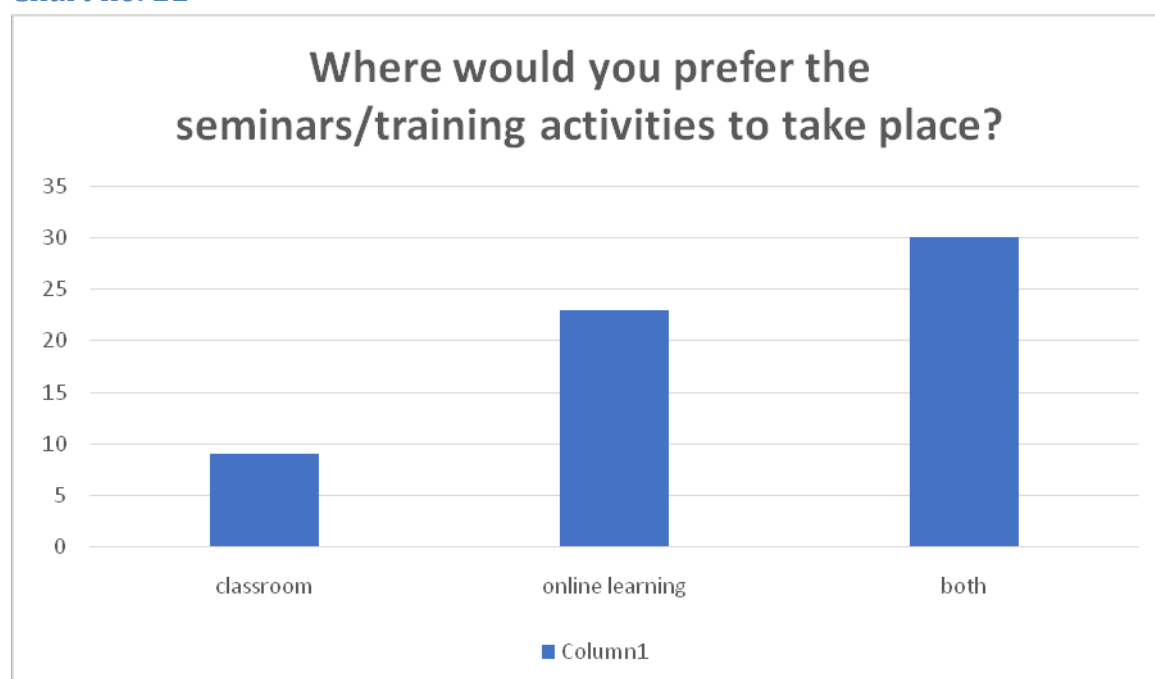
### Question 11: Where would you prefer seminars/training activities to take place?

The respondents who positively replied to the 10<sup>th</sup> question should give their opinion regarding the place where they would like the seminars/training to take place: classroom learning environment, online learning or maybe in both ways.

Chart no. 21

Taking place of seminars/training		
reply	Number of respondents	percentage
Classroom learning environment	9	14.5
Online learning environment	23	37
Both (blended learning environment)	30	48.3
Total	62	99.8

Chart no. 22



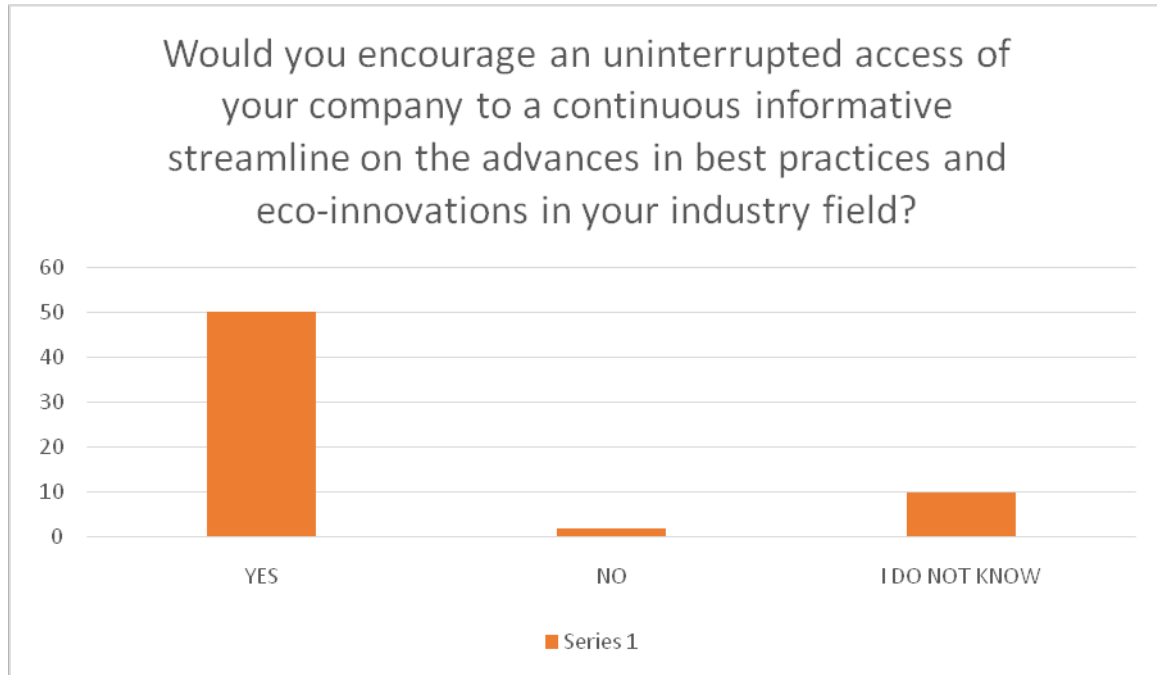
The preferences of the respondents show that the majority of them would prefer training to take place in both classroom and online, and the minority would like to participate in training which would take place in classroom.

**Question 12: Would you appreciate uninterrupted access of your company to a continuous informative streamline on the advances in best practices and eco-innovation in your industry field?**

To this question, the respondents should reply whether they would appreciate uninterrupted access of their company to a continuous informative streamline on the advances in bestpractices and eco-innovation in your industry filed/activity. The respondents had the

possibility to choose one of the three offered options: "YES", "NO", or "I DO NOT KNOW". Of the respondents 50 would uninterrupted access of your company to continuous informing, 2 would not support and 10 replied that they do not know.

Chart no.23



Results show that as much as 80% of the companies are open and interested in getting access to information about the advantages of implementation of best practices and eco-innovation in their field.

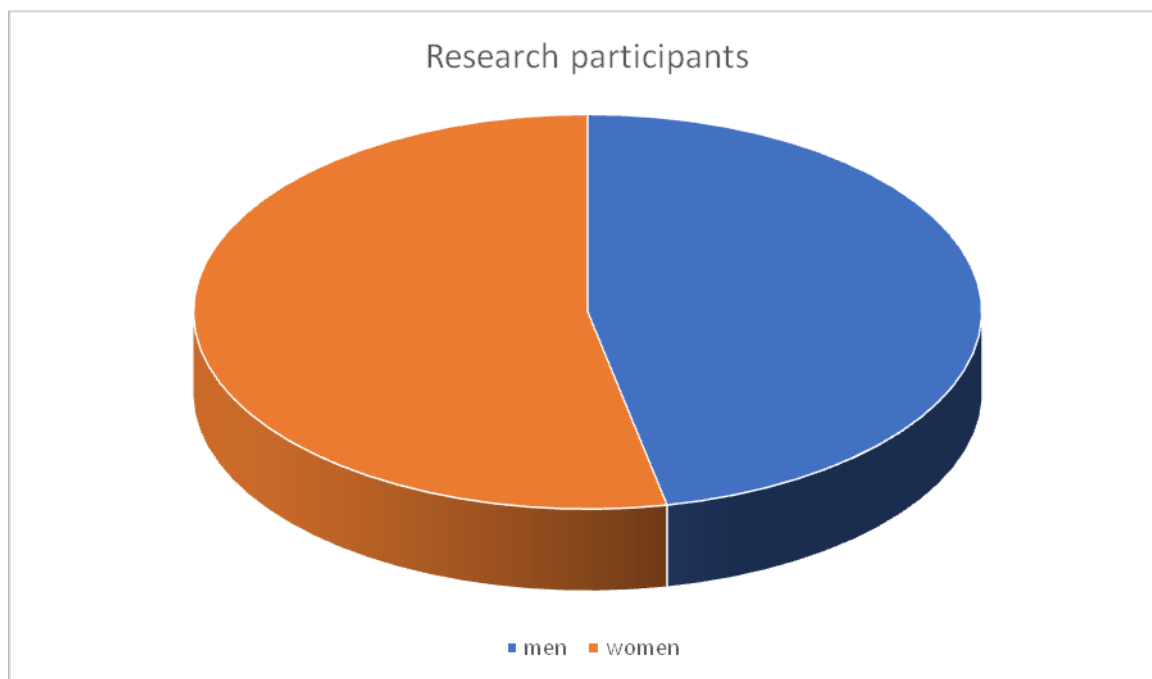
## RESULTS – Section C

Section B is composed of 7 questions-information about the participants in the research. By answering the questions information is obtained about the gender, age, education, work experience of the respondents in the environment or eco-innovations department, their contact data and their will to further participate in further project activities (training, seminars, interviews etc.).

### Question 1: Your gender

The first question, about the gender of the participants in the research, shows that in the Pelagonija research and the Skopje research a total of 29 men and 33 women had participated.

Chart no. 24



### Question 2: Your age

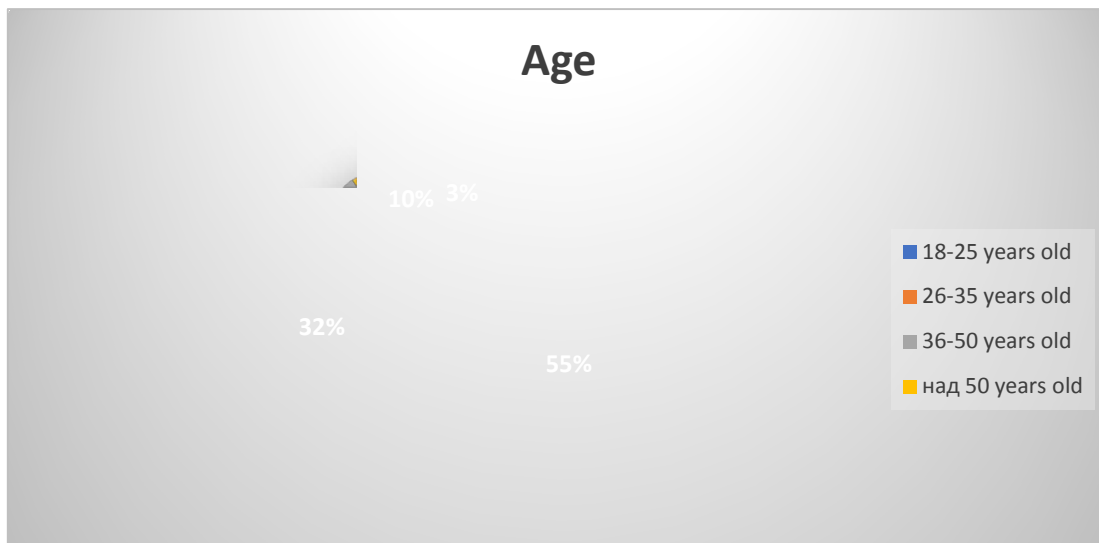
In the second question about the age of the participants in the research, they have an option to choose in which of the 4 offered groups they belong: 18-25 years old, 26-35 years old, 36-50 years old and more than 50 years old. The results are the following:

Chart no. 25

Age		
	Number of respondents	percentage
18 – 25 years old	2	3,2
26 -35 years old	34	54,8
36-50 years old	20	32,3
50+ years old	6	9,7
total	62	100,0



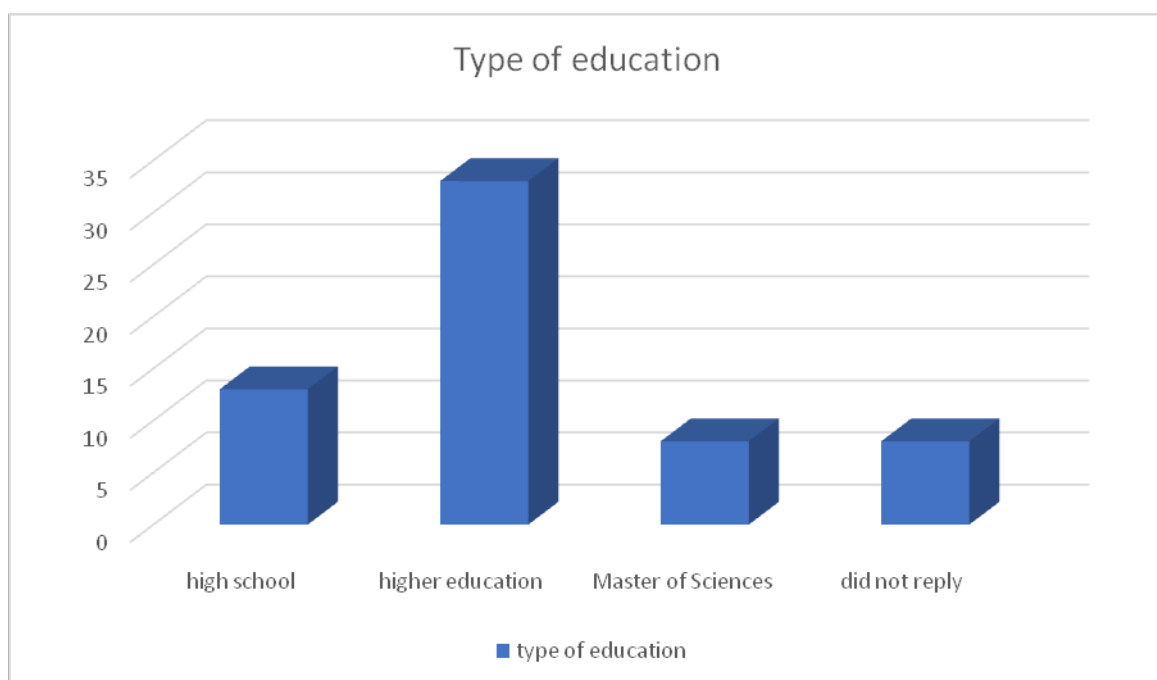
Chart no. 26



### Question 3: Your educational background

According to the obtained research results, most of the participants (53%) had obtained a high education degree, 21% of the people had finished high school, 13% of the people had obtained Master of Science degree while 8 people have not replied to this question.

Chart no. 27



### Question 4: How many years of experience do you have in the environmental sector or/and eco-innovation?

This was an open question, so the respondents could state on their own the work experience they had in the area of environmental protection. The highest number of respondents had no experience at all in the area of environment protection – 71%, 6.4% of the respondents had 1-5 years of experience, 19.3% of the respondents had 6-10 years of experience, and 2 respondents or 3.2% of them had more than 10 years of experience.

Chart no. 28

Experience in the area of environmental protection and/or eco-innovations		
	Number of respondents	percentage
No experience	44	71,0
1-5 years	4	6,4
6-10 years	12	19,3
+ 10 years	2	3,2
total	62	99,9

### Question 7: Would you like to participate in future activities of the Project (for example, training seminars, interviews)?

To the last question: Would you like to participate in future activities of the Project (for example, training seminars, interviews, 48% of the respondents replied positively, while 52% of the respondents replied negatively or that they would not like to participate in future project activities (training, seminars, interviews etc.).

## Conclusion on the results obtained from the conducted research

Based on the conducted research, the current state on eco-entrepreneurial qualifications in the companies in Macedonia is the following:

1. More than half of the surveyed companies are not familiar with the eco-innovations and entrepreneurship concept. Taking into consideration that a few cities in Macedonia are lately ranked on top positions for the most polluted cities in the world, as well as the fact that a lot of measures have been taken on a world level, significant activities of OECD, acts for implementation of the eco-innovation concept have been stipulated etc. it can be concluded that in this area, the country, the companies in Macedonia, entrepreneurs, and employees fall behind in terms of eco-innovation concept information. A far wider application of the eco-innovation concepts is more than necessary in order to preserve and improve the environment.
2. Only 20% of the respondents had attended an eco-innovation seminar or training. This can be considered a result of the small number of companies which are familiar with this concept and its benefits, the low demand for such type of training, but also the low offer of such type of specialized training. On the other hand, there is an initial consent with almost half of the respondents for eco-innovation training or seminar attendance as future activities within the project SMecoMP. The research has shown that respondents mostly attended training organized by third parties and intended for employees in several companies, and that training in the company and only for the companies' employees were rarely organized. Due to high costs for organizing training intended only for the employees of a single company, but also due to the insufficient number of listeners from a single company, in practice, training for employees from different companies is mostly organized.
3. From the results obtained, it can be concluded that the least attended was the training in the sphere of *Product and service innovation offering environmental benefits* and most attended was the training in the sphere of *Environmental technologies and systems*.
4. In the sphere of **Environmental technologies and systems** training, the training for "Cleaning (clear-up) technologies which treat pollution released in the environment" is

the most interesting for the respondents. In the sphere of “**Organizational environment innovation**” the most interesting for the respondents is the training about “Systems (procedures) for preventing of pollution”. In the sphere of “**Product and service innovation offering environmental benefits,**” the most interesting for the respondents was the training for “New or ecologically improved products (goods) including eco-houses and buildings”.

5. The results of the research have shown that the number of eco-innovation training/seminars offered in the country is not sufficient, as much as 65% of the respondents believe that the number of offered training/seminars in the sphere of eco-innovation is not sufficient, unlike only 3% of the respondents who believe that the number of training/seminar is sufficient. In terms of quality, access to affordable and relevant eco-innovation training, results have shown that only 5% of the respondents have had access to quality, affordable and relevant eco-innovation training/seminars in the Republic of Macedonia. This means that Macedonia has a wide open room for offering quality, relevant and affordable eco-innovations training/seminars because they are rare and insufficient for meeting the requirements.
6. According to the respondents, in order for the companies to succeed in implementing eco-innovation, the most important are the following skills: designing new products and/or services and skills for innovation management and the least important are the skills for developing new sustainable/rounded up (cyclic) business models and deep knowledge of economic operators. The highest percentage of the respondents believe that their company and its employees have appropriate competencies for eco-innovation, which is an important prerequisite for implementation of the eco-innovations concept. Based on that, when preparing training/seminars, the fact that training/seminars should provide gaining or improving the skills for designing of new products and/or services and skills for innovation management should be taken into consideration.
7. There is a good will for encouraging employees to participate in such type of training (almost 97% of respondents replied positively). Also, more than 80% of the respondents would support uninterrupted access of their company to advantages of implementation of the best practices and eco-innovation in the field of the industry they operate in.

8. The respondents' preferences show that most of them would prefer training taking place in both classroom and online learning environment and the least of them would like to attend training which would take place in a classroom the whole time.
  
9. Based on the results obtained from both research, it can be concluded that the profile of the respondents is the following: at the age of 26-35 years, higher education obtained and no experience in the area of environment protection and eco-innovation, male or female. Less than half of the respondents would like to continue to participate in further project activities, would like to learn about eco-innovation also by educational materials, brochures, lectures in a classroom or online, by delivering materials etc.. Based on this, it can be concluded that an equal number of young male and female listeners would attend in further training, most of them having obtained higher education, with no experience in the area of environmental protection and/or eco-innovation or small number of them would have several years of experience.

## SECOND PART: Report on current state for eco-innovation and entrepreneurship training needs and existing educational initiatives in companies

### Question 1: What is your position in the company?

To this question, the surveyed individuals had the opportunity to state their work position in the company for which the interview is conducted. During the research conducted in the Pelagodnija region, the largest percentage of the surveyed people were managers (60%), 20% were in charge of accounting in the company, 10% were employed in the logistics department and 10% were lawyers. In the Skopje region, 8 of the respondents were managers, 3 were executive officers and 1 employed in the logistics department. In total, when the results of both researches were collected, the highest percentage of the respondents were managers.

Chart no. 1

<i>position</i>	<i>Pelagonija region</i>	<i>Skopje region</i>	<i>total</i>	<i>Percentage</i>
<i>Manager</i>	6	8	14	63,63
<i>Accounting</i>	2	/	2	9,09
<i>Logistics</i>	1	1	2	9,09
<i>Lawyer</i>	1	/	1	4,54
<i>Executive officer</i>	/	3	3	13,63

### Question 2: What is the main business activity of your company?

To the second question, the respondents should have stated the main business activity of the company they work for, which is important because most often the expectations and issues in the sphere of eco-innovation are different depending on the business activity and industry field of the company. During the research conducted in the Pelagodnija research the highest percentage of the surveyed people worked in companies whose main business activity was production (30%), service sector (30%), 20% came from companies from the agriculture

sector, 10% came from the hospitality sector and 10% from the sales and trade. In the Skopje region, the highest percentage of the surveyed people worked in companies whose main business activity was sales and trade, i.e. waste management (33%), production (27%) and 8% came from companies from the agriculture sector.

Chart no. 2

<i>Main business activity</i>	<i>Pelagonija region</i>	<i>Skopje region</i>	<i>Total</i>	<i>Percentage</i>
<i>production</i>	3	3	6	27,27
<i>service sector</i>	3	/	3	13,63
<i>agriculture</i>	2	1	3	13,63
<i>hospitality sector</i>	1	/	1	4,54
<i>sales and trade</i>	1	4	5	22,72
<i>waste management</i>	/	4	4	18,18

### **Question 3: What are the current needs or issues of your company regarding eco-innovations and eco-management?**

To the third question, the respondents should have stated the current issues or needs which their company is facing in terms of eco-innovation and eco-management so it was necessary to number up to 5 issues/needs. In the research conducted in the Pelagonija region the biggest (most common) stated issue which companies are facing are: the lack of knowledge for contemporary practices and innovation in waste management which is a limiting factor in the desire for recycling higher quantity of waste, and thus increasing the income; the lack of knowledge for production and commercialization of eco-products and organic products in agriculture sector; lack of knowledge or training for minimizing or recycling waste caused by production and theft of material from objects for recycling within the companies.

When stating the needs for eco-innovation training, almost all of the companies in Pelagonija state the need for waste management training and recycling of waste from packaging material, batteries and metals; then companies from agriculture department express their need for training on organic production and eco- friendly products; training for solar energy and its use and training for procedures for applying for grants for eco-innovation and eco-management practices.

In the research conducted in the Skopje region, the most often noted subject for training was technologies for production which less pollute the air and lower energy consumption, green logistics and eco- friendly or organic products, then respondents state the need for training for waste management and recycling of packaging material, batteries and metals waste; then companies express their need for prevention from pollution and control technologies, and finally, training for procedures for applying for eco-innovations grants.

Chart no. 3

	Needs of your company related to eco-innovation and eco-management	Issues of your company related to eco-innovation and eco-management
Skopje region	technologies for production which less pollute the air and lower the energy consumption, green logistics, and eco- friendly or organic products	Need for decreasing the energy consumption, decreasing of high costs, higher competitiveness of eco-friendly products which are rare in this country, and are in accordance with the shift of habits of the consumers to buy such products
	Training for waste management and recycling of packaging material, batteries and metalswaste	The trend for the annual increase in costs for waste collection
	prevention from pollution and control technologies	High air pollution in the whole country, and especially in Skopje, which last winter was on the top of the charts as one of the most polluted cities in the
	training for procedures for applying for eco-innovations grants	Issues and lack of knowledge about the procedures for applying and receiving grants for eco-innovations from both domestic and international funds
Pelagonija region	Training for waste management and recycling of packaging material, batteries and metalswaste	Lack of knowledge for modern practices and innovations in waste management, to increase the quantity of waste for recycling and to increase income. Theft of waste from recycling objects within companies
	training on organic production and eco- friendly products	Lack of knowledge about the production and commercialization of eco-friendly and organic products
	training for solar energy and its use	High costs for electricity
	training for procedures for applying for grants for eco-innovation and eco-management practices.	Lack of knowledge about applying and using of available grants



#### **Question 4: How do you resolve the current needs or issues of the company regarding eco-innovations and eco-management?**

Most often companies resolve eco-innovation needs and issues while respecting the legal framework sector relevant standards; they implement ISO or HACCP standards; they implement intern standards for waste management and recycling; they implement practice for selection and organization of recycling process; they implement eco-innovative solutions in the work process and use eco-stickers. Also, the lack of knowledge in this area, according to the respondents, is replaced with, or they believe that they are replacing it with simple copying of procedures/standards and the "know-how" of other companies, even from the competition. Companies are networking with their foreign partners (suppliers/consumers/professional organizations) and are trying to implement some of their solutions, procedures or standards which have proven to be effective for them. Some of the companies engage foreign consultants, mostly when applying for some of the eco-innovation grants.

During the research, there were replies that they embrace the problems with functioning as inevitable part of their work and that unless forced by the authorities to solve them, they are not trying to find an appropriate solution (for example pollution).

From the above-stated, it can be concluded that most often companies believe that they are implementing eco-innovation just by abiding by the legally stipulated minimums and obligations and standards for the sector while rarely there is a company which is implementing eco-innovative solutions in the work process.

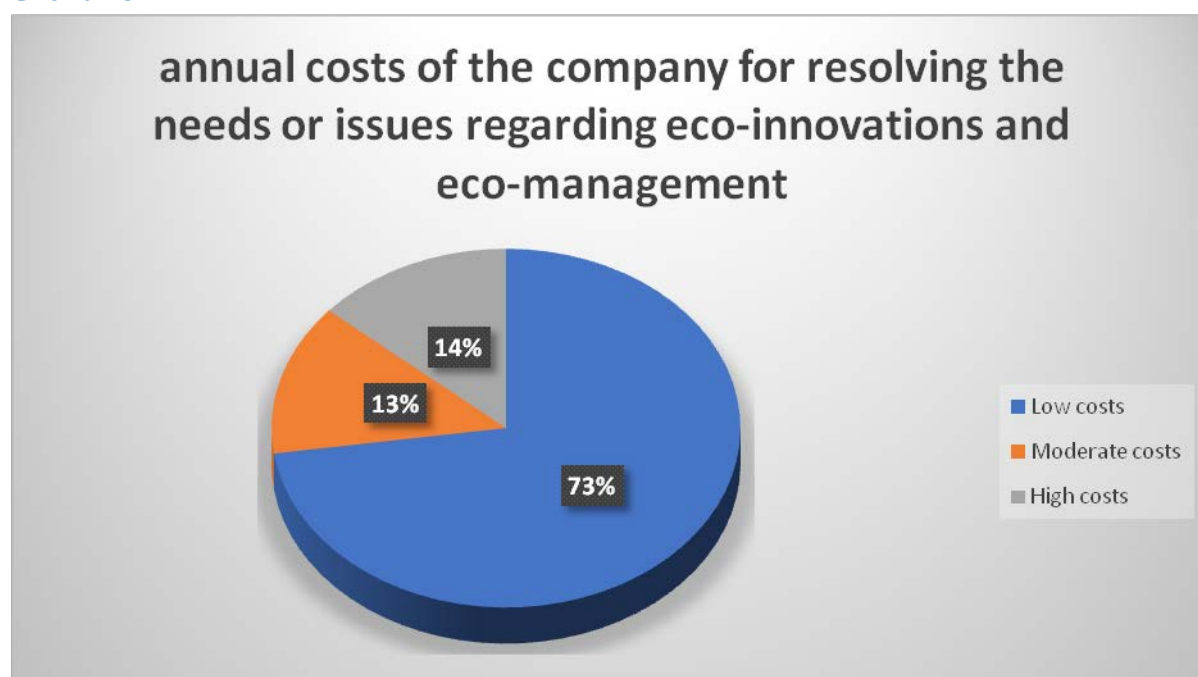
#### **Question 5: What is the current annual costs of the company for resolving the needs or issues regarding eco-innovations and eco-management?**

To this question, the respondents should have replied by giving an absolute number or percentage of the amount of annual costs for the needs or issues which arise from eco-innovation or eco-management. None of the respondents from the Pelagonija region had replied by giving an absolute number of the costs, but all of them replied using the percentage of annual costs, whereof the largest number of respondents during the research in the Pelagonija region (70%) replied that they had low costs (lower than 10% of the annual costs), while 30% of the respondents replied that they had high costs (more than 30-40% of the annual costs).

The respondents in the Skopje region replied that costs for needs or issues which arise from eco-innovation or eco-management are low (9 companies) to moderate (3 companies) within 0.2-2.5% of their annual costs. Only one company which had moderate costs for needs or issues arising from eco-innovation or eco-management replied by giving an absolute number, i.e. replied that current costs for training of their employees amounted to 8-10.000 euro per year (which was 0.3% of the annual costs) and 2.2% of the annual costs were intended for foreign consulting services as a compensation for the lack of knowledge in the area.

Since different methods were used in both types of research for what is low or moderate cost compared to the annual costs of companies, the results from both researches are summed up according to the understanding of the respondents for low, moderate or high costs, and not according to the percentage for participation of these costs in the annual costs. Consequently, the overwhelming majority of the participants from both regions, 16 companies (or 72,72%) had low costs, 13.63% of the companies had moderate costs and also 13.63% of the respondents had high costs, from which it can be concluded that a large number of companies in the country do not have high or do not have eco-innovation investments at all. But all respondents were unanimous that they have a will to increase the costs for this purpose if it would be beneficial for the company, and the environment.

Chart no. 4

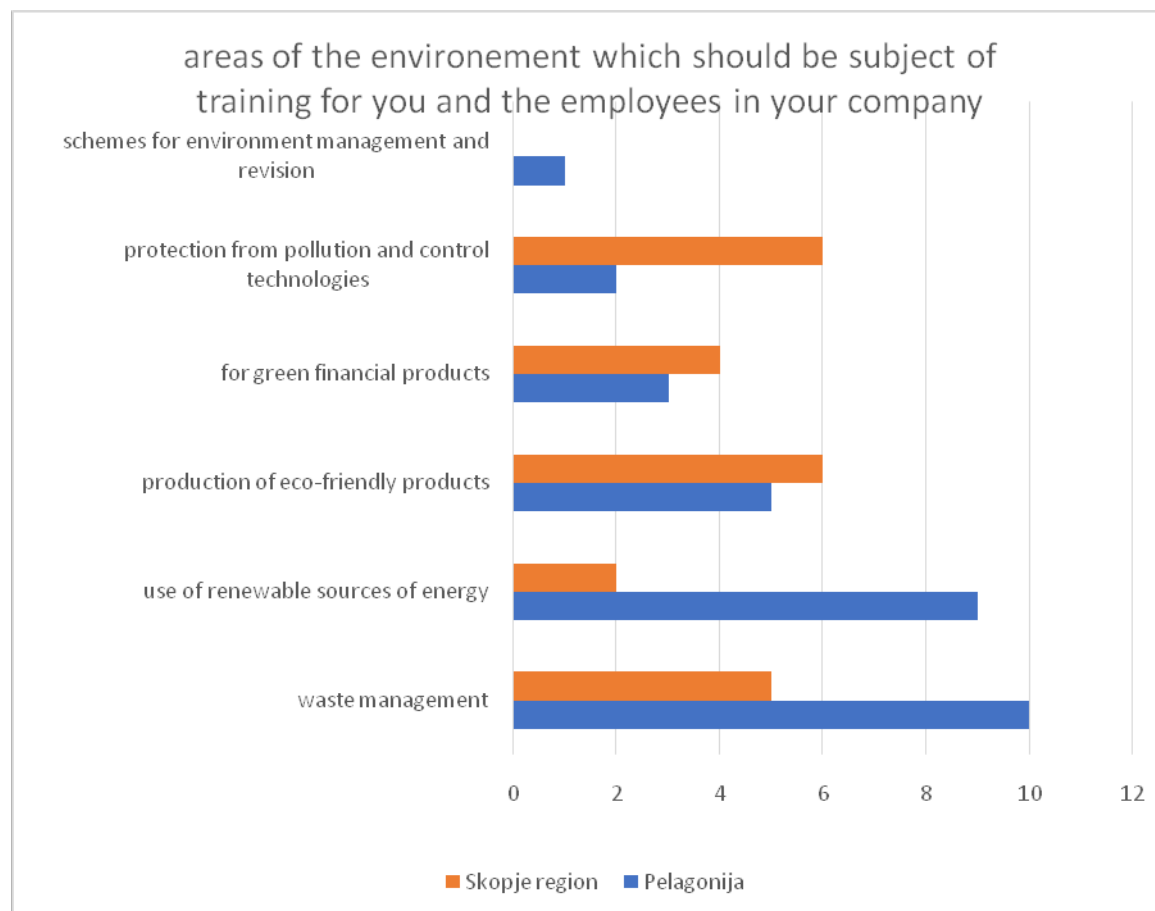


**Question 6: Based on the needs of your company, state at least three and maximum five areas of the environment which should be subject of training for you and the employees of your company in order to resolve the issues related to eco-innovation and eco-management in your company?**

For improving the capacities of the companies for the application of the benefits of eco-innovation and eco-management, the respondents were asked to state the subject of training they would like to attend together with the employees. The respondents had a possibility to freely state and choose areas of the environment which they believed were necessary for improving and higher application of the eco-innovation concept. All respondents from Pelagonija believed that they need training for waste management, then the next preferred training for gaining knowledge by the respondents was training for using renewable sources of energy, then training for production of eco-friendly products, then for green financial products, protection from pollution and control technologies, and they were least interested in schemes for environmental management and revision. The respondents from the Skopje region were mostly interested in training for protection from pollution and control technologies and production of eco-friendly products, then training for waste management, then training for green financial products and finally the renewable sources of energy training.

To summarize, the respondents were most interested in training for waste management, then for training for using renewable sources of energy and least interested in training for schemes for environment management and revision.

Chart no. 5



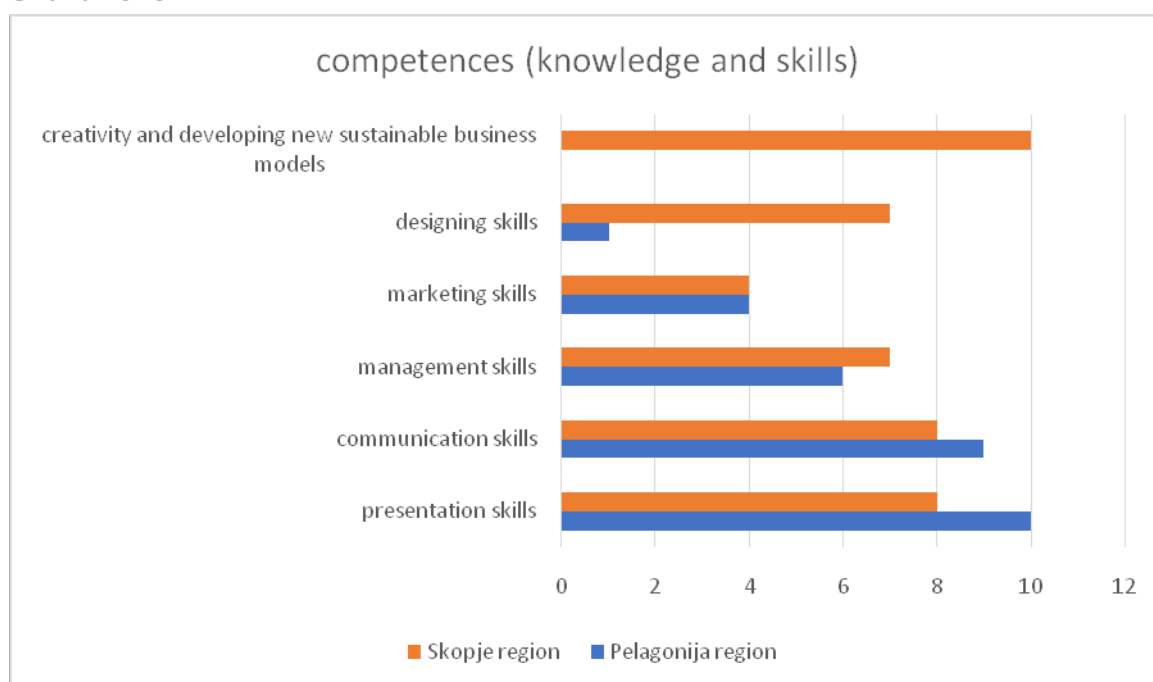
**Question 7: Based on the needs of your company, state what competencies (knowledge and skills) you believe you and your employees should possess so that your company can successfully implement green practices/solutions and/or green products/services?**

The replies to this question would provide an insight into the project team about the type of competencies (knowledge and skills) which people should possess in order to attend future training organized within the project. In this way, results will be obtained about the objectives of the training and the final results. In order to provide training as successful as possible, it is necessary that the listeners who attend training to possess certain skills - inborn or acquired. The respondents had the opportunity to freely state or number competences which according to them are the most important for successful attendance at the training, but also to later on transfer and implement the acquired knowledge in companies' operation.

The respondents from the Pelagonija region replied that the most important for the participants is to have presentation skills, then communication skills, management skills, marketing skills, and the least important were the designing skills.

The respondents from the Skopje region replied that the most important for the employees who attend training is to possess certain skills such as creativity and developing new sustainable business models; to have presentation skills; then communication skills; designing skills for designing new products; management skills, and the least important were marketing skills. When discussing management skills which should be possessed by people included in the process of implementation of eco-innovations, that refers to management/regulation of changes.

Chart no. 6



When results were summarized, the most important for the employees is to possess presentation and communication skills.

## **Question 8: What type of training mostly suits you and the employees of your company?**

To this question, the respondents should have replied to three sub-questions. First, whether they prefer training to be held during the work week or during weekends; second, whether they prefer training to be held in the morning, in the afternoon or all day long (6-8 hours); third, whether they prefer training to take place in a classroom learning environment, online or a combination of both methods.

70% of the respondents from the Pelagonija region replied that they would like the training to be held during weekends, 30% during the work week. 80% of the respondents replied that they would like the training to be held in the morning, 20% in the afternoon. During training, 80% replied that they would like the training to last 3-4 hours, and 10% would like the training to last 2-3 hours, i.e. 4-5 hours.

Regarding the place of conducting the training, 30% of the respondents replied that they would like the training to be conducted in a classroom, 20% online, 50% would like a combination of both methods.

The respondents from the Skopje region identically as the respondents from the Pelagonija region replied that they would most like the training to be held during weekends (67%) and 33% of the respondents replied that they would like the training to be held during the work week. 83% of the respondents replied that they would like the training to be held in the morning, 17% in the afternoon. Regarding duration of the training, 75% replied that they would like the training to last 3-4 hours, 17% would like the training to last 2-3 hours and 8% would like the training to last 4-5 hours. Regarding the manner of conducting the training, 25% of the respondents would like it to be conducted in a classroom, 8% online and 58% as a combination of both methods.

Chart no. 7

Model of training		Pelagonija region	Skopje region	total	percentage
time	work week	3	4	7	32%
	weekend	7	8	15	68%
Time of the day	morning	8	10	18	82%
	afternoon	2	2	4	18%
duration	2-3 hours	1	2	3	14%
	3-4 hours	8	9	17	77%
	4-5 hours	1	1	2	9%
The manner of conducting the training	classroom	3	3	6	27%
	online	2	2	4	18%
	combination of both models	5	7	12	55%

## **Conclusion on the obtained results from the conducted research**

Based on the conducted research, the current state on eco-innovation and entrepreneurship training needs and existing educational initiatives in the companies in Macedonia is the following:

1. The current issues regarding eco-innovation and eco-management which companies are facing in Macedonia can be identified as high costs for using electricity in production; trend for increasing the costs for collecting waste; lack of knowledge for modern practices and innovations in waste management in order to increase the quantity of waste which companies will recycle on their own; theft of waste from the recycling objects within the companies; lack of knowledge for production and commercialization of eco-friendly and organic products; lack of knowledge for procedures for applying and receiving grants for eco-innovation from both domestic and international funds; high air pollution in the whole country; and especially in Skopje which last winter was at the top of the world charts as one of the most polluted cities, the contribution of the companies for increasing the pollution in the environment.
2. The current needs of companies in Macedonia regarding eco-innovation and eco-management are the following: using of production technologies which pollute less and have lower energy consumption, green logistics, and production of eco-friendly or organic products. The lack of knowledge in the area of eco-innovation and eco-management should be resolved by inevitable and primary need for participation in various types of training such as waste management and recycling waste from packaging, batteries, and metals; training for implementation of measures for prevention from pollution and control technologies; training for organic production and eco-friendly products; training for solar energy and its use and training for procedures for applying for grants for eco-innovation and eco-management practices.
3. Currently, under these conditions, companies in Macedonia resolve or think they resolve the current needs or issues in terms of eco-innovation and eco-management by adhering to the legal framework and sector-relevant standards; they implement ISO



and HACCP standards; they implement internal standards for waste management and recycling; they implement practice for selection and organization of the recycling

process; by simple copying of procedures/standards and the "know-how" of other companies, their foreign partners, even from competition, by engaging foreign consultants, mostly when applying for some of the eco-innovation grants. Very few respondents replied that they implement eco-innovative solutions in the work process. Low awareness and ignorance of eco-innovations concept can be also perceived by the fact that some of the respondents embrace the functioning issues as an inevitable part of their work, and that unless they are obliged by the authorities to solve them, they do not try to find the appropriate solutions. Also, ignorance of eco-innovation concept is also perceived by the fact that most often companies believe that they implement eco-innovations by simply adhering to the legally stipulated minimums, obligations, and standards for the sector. Thus, there is a conclusion for higher implementation of eco-innovations by stipulating legal minimum or obligation for every company for implementation of eco-innovation, but the question is how much it will succeed in practice or it would be a burden for the already insufficiently developed small and medium-sized companies which do everything to survive, it has yet to be seen, if such measures are to be stipulated, especially when every novelty, in the beginning, is met with opponents and resistance.

4. The largest number of companies which participated in the research (or 72,72%) had low current costs annually for resolving the eco-innovation and eco-management needs or issues, 13.63% of the respondents stated that they had moderate costs compared to the annual costs and also 13.63% of the respondents stated that they had high costs. Such replies are a result of the fact that a large number of companies in the country do not have high or do not have eco-innovation investments at all. But all respondents were unanimous that they have will to increase the costs for this purpose if it would be beneficial for the company, and the environment.
5. When stating the areas of the environment which should be subject of training for the respondents together with the employees in their company, in order to resolve eco-

innovation and eco-management issues, the respondents were most interested in: training for waste management, then training for use of renewable sources of energy. Then followed: training for production of eco-friendly products, for protection from pollution and control technologies; then training for green financial products and they were least interested in schemes for environment management and revision.

6. When identifying the competencies (knowledge and skills) which the respondents believe they and their employees should possess so that the company can successfully implement green practices/solutions and/or green products/services, respondents believed that the presentation skills are the most important, then the communication skills; management skills; creativity and developing new sustainable business models; marketing skills; and the least important were the designing skills. Replies to this question enabled the project team an insight into the competencies (knowledge and skills) which people who will attend future training organized within the project should possess. In this way, results will be obtained about the training goals and final results.
7. From the obtained results of the last question, a model can be prepared for the type, duration, and manner of organization of training which is most suitable for the companies in Macedonia. The ideal training would be conducted during the weekend, in the morning, would last 3-4 hours and would be composed of a combination of both methods – classroom and online learning environment.

## Annexes

### Annex 1

#### QUESTIONNAIRE

##### For needs of eco-entrepreneurial qualifications

This survey is conducted by the University of “St. Kliment Ohridski” Bitola, Faculty of Economics - Prilep, as a part of the activities of European project ‘A knowledge Alliance in Eco-Innovation Entrepreneurship to Boost SMEs Competitiveness’, which is funded by the Interreg Balkan MED program.

We would like you to spend 10 minutes to complete the questionnaire.

Thank you for cooperation.

#### SECTION A – INFORMATION ABOUT YOUR ENTERPRISE

1. Name of your company (optional question)

2. How many people are employed in your company?

- <50 people
- 50-250 people
- $\geq$  250 people

3. What is the main economic activity of your company, based on NACE classification?  
Please select what is more appropriate for your company.

a) AGRICULTURE, FORESTRY, AND FISHING

b) MINING AND QUARRYING

c) MANUFACTURING

d) ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY

e) WATER SUPPLY; SEWERAGE, WASTE MANAGEMENT, AND REMEDIATION ACTIVITIES

f) CONSTRUCTION

g) WHOLESALE AND RETAIL TRADE; REPAIR OF MOTOR VEHICLES AND MOTORCYCLES

h) TRANSPORTATION AND STORAGE

i) ACCOMMODATION AND FOOD SERVICE ACTIVITIES

j) INFORMATION AND COMMUNICATION

k) FINANCIAL AND INSURANCE ACTIVITIES

l) REAL ESTATE ACTIVITIES

m) PROFESSIONAL, SCIENTIFIC AND TECHNICAL ACTIVITIES

n) ADMINISTRATIVE AND SUPPORT SERVICE ACTIVITIES

PUBLIC ADMINISTRATION AND DEFENCE; COMPULSORY SOCIAL SECURITY

P EDUCATION

Q HUMAN HEALTH AND SOCIAL WORK ACTIVITIES

ARTS, ENTERTAINMENT, AND RECREATION

S OTHER SERVICE ACTIVITIES

ACTIVITIES OF HOUSEHOLDS AS EMPLOYERS; UNDIFFERENTIATED GOODS-  
AND SERVICES-PRODUCING ACTIVITIES OF HOUSEHOLDS FOR OWN USE

U ACTIVITIES OF EXTRATERRITORIAL ORGANISATIONS AND BODIES

## **SECTION B – ECO-INNOVATION TRAINING NEEDS**

1. Eco-innovation refers to products and processes that contribute to the economic, environmental and social pillars of sustainable development. Are you familiar with the concept?

- Yes
- No

2. Have you attended training seminars/activities on eco-innovation?

- Yes
- No

3. If you have attended training seminars on eco-innovation, please select what it is more appropriate for you. The training seminars I have attended:

- Were in-house, organized by my company and addressed only to staff members
- Were organized by a third party and addressed to employees of various companies
- Both

5. If you have attended training seminars/activities on eco-innovation, please indicate the specific fields they addressed: (you may select more than one option)

### Environmental technologies and systems

	Please select the appropriate option(s)
Pollution prevention and control technologies	
Cleaning (clean-up) technologies that treat pollution released into the environment	
Alternative systems of production and consumption; cleaner process technologies; green logistics; new manufacturing processes that are less polluting and/or more resource efficient than relevant alternatives (eg biological agriculture, renewables-based energy system)	
Waste management equipment	
Environmental monitoring and instrumentation	
Green energy technologies	
Water supply	

### Organizational innovation for the environment

	Please select the appropriate option(s)
Pollution prevention schemes	
Environmental management and auditing schemes: formal systems of environmental management involving measurement, reporting, and responsibilities for dealing with issues of material use, energy, water and waste (eg EMAS, ISO 14001)	
Chain management: cooperation between companies so as to close material loops and to avoid environmental damage across the value chain (from cradle to grave); participation in circular economy initiatives	

### Product and service innovation offering environmental benefits

	Please select the appropriate option(s)
New or environmentally improved products (goods) including eco-houses and buildings	
Green financial products (such as eco-lease or climate mortgages green certificates, allowance trading)	

Environmental services: solid and hazardous waste management, environmental consulting, testing and engineering, other testing and analytical services	
Services that are less pollution and resource intensive (eg car sharing)	

5. Please indicate the level of your interest in attending training seminars/activities in the below subjects. Mind the fact that engagement in most of the following initiatives is expected to also benefit the bottom-line of the participating company.

**Environmental technologies and systems**

	I'm not interested	I'm slightly interested	Neutral	I'm interested	I'm strongly interested
Pollution prevention and control technologies					
Cleaning (clean-up) technologies that treat pollution released into the environment					
Alternative systems of production and consumption; Cleaner process technologies; new manufacturing processes that are less polluting and/or more resource efficient than relevant alternatives (eg biological agriculture, renewables-based energy system)					
Waste management equipment					
Environmental monitoring and instrumentation					
Green energy technologies – Renewable Energy Sources (RES)					
Water supply					

**Organizational innovation for the environment:**

	I'm not interested	I'm slightly interested	Neutral	I'm interested	I'm strongly interested
Pollution prevention schemes					
Environmental management and auditing schemes: formal systems of environmental management involving measurement, reporting, and					

responsibilities for dealing with issues of material use, energy, water and waste (eg EMAS, ISO 14001)					
Chain management: cooperation between companies so as to close material loops and to avoid environmental damage across the value chain (from cradle to grave)					

**Product and service innovation offering environmental benefits**

	I'm not interested	I'm slightly interested	Neutral	I'm interested	I'm strongly interested
New or environmentally improved products (goods) including eco-houses and buildings					
Green financial products (such as eco-lease or climate mortgages)					
Environmental services: solid and hazardous waste management, environmental consulting, testing and engineering, other testing and analytical services					
Services that are less pollution and resource intensive (eg car sharing)					

6. Do you think that the number of training seminars offered on eco-innovation in your country is sufficient?

- Yes
- No
- I don't know

7. Do you believe you have had access to high-quality, affordable, relevant training/seminars on eco-innovation in your country?

- Yes
- No
- I don't know

8. Which of the following competencies do you think that is most important for a corporation to succeed in pursuing eco-innovation?

	Not important	Somewhat important	Important	Very important	Extremely important
Development of new sustainable/circular business models					
In-depth knowledge of economic sectors					
Knowledge about product life cycles					
Design skills of new products or/and services					
Knowledge of creative thinking tools					
Innovation management skills					
Marketing skills					
Soft skills (eg problem-solving skills, collaboration, communication)					

9. Considering that eco-innovation requires a mixture of the above competencies (knowledge, skills, attitudes), do you believe that your company and its employees have such competencies?

- Yes
- No
- I don't know

10. Would you encourage the participation of your company's employees to eco-innovation training initiatives?

- Yes
- No

11. Assuming a positive reply in the previous question, would you prefer that the training activities take place in:

- Classroom learning environment



- Online learning environment
- Both (blended learning environment)

12. Would you appreciate uninterrupted access of your company to a continuous informative streamline on the advances in best practices and eco-innovation in your industry field?

- Yes
- No
- I don't know

### **SECTION C–PERSONAL INFORMATION**

1. Please state your gender

- Male
- Female

2. Please state your age

- 18 – 25 years old
- 26 -35 years old
- 36-50 years old
- 50+ years old

3. Please state your educational background:

4. How many years of experience do you have in the environmental sector or/and eco-innovation?

5. Contact telephone number

6. E-mail address

7. Would you like to participate in future activities of the project (eg training seminars, interviews)?

- Yes
- No

Thank you for your cooperation!

## Appendix 2

### List of names of part of the surveyed companies from the research conducted in Pelagonija

Playback
Omnia proekt doo Bitola
Spring Center
Nova Solutions DOOEL Bitola
DADOAN
IzoStaklo DOO Prilep
DOOEL Euromag 21
DOOEL Fil Mars Kom
Leidi
Palma
Koluks
Bagach
Chakrevskikompanii
Porta pro m
Genterm Makedonija DOOEL
TriteksTrejD
DOOEL PloterPrilep
Comfi Angel
Hrizantema
Bela Dona
DOOEL Snupi Bambi
Lingva
Vivido
Prilepskapivarnica A.D. Prilep
KubaPromet
PZU Medika Karta
DOOEL BT Sport
Fortuna
DooelZlatnaKoshuta
DooelAbisinija
MarijaPromet AZ

### Annex 3

## Interview Protocol Form

for identifying the eco-innovation and entrepreneurial qualifications and training needs of enterprises

Thank you for agreeing to participate in this interview session. The interview is a part of the activities of the European project 'A knowledge Alliance in Eco-Innovation Entrepreneurship to Boost SMEs Competitiveness', which is funded by the Interreg Balkan MED programme.

The aim of this activity is to identify the training needs of enterprises related to eco-innovation, eco-management, and entrepreneurship, in order to develop and deliver a series of training addressing these needs.

We would like to inform you that all the information you will provide during the interview will be held confidential and will be used only for the purposes of this project. Your participation is voluntary and you may stop at any time if you feel uncomfortable.

We have planned this interview to last no longer than one hour. During this time, we have several questions that we would like to cover. If time begins to run short, it may be necessary to interrupt you in order to push ahead and complete this line of questioning.

Date: .....

Enterprise: .....

**QUESTION A** - What is your job position in the company?

**QUESTION B**- What is the main economic activity of your company?

**QUESTION C-** What are your company's current needs or problems, related to eco-innovation and eco-management? List up to five major needs /problems.

**QUESTION D-** How do you currently address these eco-innovation and eco-management needs or problems?

(e.g. Eco-label for products/services, the establishment of environmental management systems, such as EMAS or ISO 14001)

**QUESTION E-** What does it currently cost you (in absolute numbers or as a rough % of the total expenditures per year) to address these eco-innovation and eco-management needs or problems?

(If they have difficulties in answering this question, you can provide them the option to answer if this cost is considered as major or minor for their enterprise)

**QUESTION F** – Based on your company's needs, please name three to five environmental fields that you wish you and your employees to be trained on, to address eco-innovation and eco-management problems in your company. Please give more details about what you expect to learn about the fields you chose.

(If they have difficulties in answering this question, you can provide examples of environment fields: pollution prevention and control technologies, environmental management, and auditing schemes, green financial products, eco-friendly products, waste management, renewable energy etc)

**QUESTION G**–Based on your company's needs, what competencies (knowledge & skills) do you think that are necessary for your employees and yourself to have in order to address issues associated with green practices/solutions and/or green products/services of your company?

(If they have difficulties in answering this question, you can provide examples: management skills, development of sustainable business models, design skills, communication/marketing/presentation skills etc)

**QUESTION H**- What kind of training format is most suitable for you and your employees?

Do you prefer a training workshop/seminar to take place during the weekdays or the weekend?

Do you prefer morning, afternoon or full day (6-8 hours) training course?

Do you prefer classroom, online or blended (a combination of the previous) training course?

**Other Comments**