



# *Think Green for the world*

## 2021-1-DE04-KA220-YOU-000029209

### Environmental-climate sensitivity analysis reports (1)

Leading partner: preunec GmbH, Germany.

Also collaborated:

- University of Paderborn, Germany.
- E-digital Software, Turkey
- Doganin Cocuklari Ceroki Ekolojik Yasam Dernegi, Turkey
- Associação BioLiving, Portugal
- Asociatia Share Education. Impartasim Educatiein Craiova, Romania



Berlin, Germany  
2023

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## Project

Environment and climate change are directly related to people's quality of life, as detailed in the EU's 2030 long-term strategy and in the ERASMUS 2021-27 strategy. Sustainability of climates is important in terms of ensuring that future generations can use and benefit from natural resources. All countries should pay special attention to the five sectors based on Green and Renewable Economy in the Field of Environmental Literacy.

These are; Renewable energy, sustainable transport, green construction, sustainable tourism, energy efficiency and management, etc. It is extremely important for the EU and the world to raise generations of entrepreneurs who think green for these sectors.

The 2030 strategy of the EU is a binding set of legislation to ensure that it achieves its climate and energy targets. The progress of the EU towards a low carbon economy and fulfilment of the commitments under the Paris Agreement will ensure green growth and raising green-minded generations.

Our aim with our partners involved in the project is to raise greenthinking generations in our countries and regions and to create awareness in the field of climate-environmental literacy. According to the results of the Concern Survey for Environmental Problems we have conducted in our regions, the most important problem experienced in the environment and climate is the insensitivity of the new generation and their lack of green entrepreneurship knowledge and vision. In order to solve this situation, some data should be obtained first. These data are important in determining the direction in which we should continue our studies and research on the subject. These data can only be reached by performing a situation analysis. Efforts to prevent environmental problems before they occur will only be realized by raising generations that have environmental literacy and green thinking.

Environmental education is a systematic and lifelong process for all institutions.

This process is very important for a liveable EUROPE. Thanks to the situation analysis to be made, we will have developed a regional (with partner countries) European situation document describing the situation of our project in the EU. Each partner will discuss the issue according to the following headings and will produce a report. Responsible preunec GmbH will combine the situation analysis reports from other partners and prepare a common and general document.

With this study, we will x-ray the environmental-climate awareness and sustainability of our Regions and countries. Some of the work we have done before the project will be further developed with the situation analysis and by ensuring that all partners do this, it will enable our project partners to focus on the most important and necessary issues. Innovation elements, on the other hand; With the work we will do, not only environmental-climate awareness, but also there will be the employment areas of green entrepreneurship, the use of green energy, environmental literacy, etc.

## The content of the analysis report:

### PART ONE

#### Introduction to The Topic

#### 1-Determining the number of existing enterprises / NGOs / public / youth groups / schools

		Aveiro's region
Enterprises (non-financial)		43.527 (2020) <a href="https://www.pordata.pt">https://www.pordata.pt</a>
Public (Councils, Parishes, Intermunicipal Community)		86 <a href="https://www.regiaodeaveiro.pt">https://www.regiaodeaveiro.pt</a>
Youth groups		
NGOs	Total	991 (2013) <a href="https://cdn.gulbenkian.pt/wp-content/uploads/2017/07/Quadros_finais_v3.pdf">https://cdn.gulbenkian.pt/wp-content/uploads/2017/07/Quadros_finais_v3.pdf</a>
	ENGOS	3 (2021) <a href="https://www.pordata.pt">https://www.pordata.pt</a>
Schools	Total	512 (2021) <a href="https://www.pordata.pt">https://www.pordata.pt</a>
	Public	369 (2021) <a href="https://www.pordata.pt">https://www.pordata.pt</a>
	Private	143 (2021) <a href="https://www.pordata.pt">https://www.pordata.pt</a>

#### 2-Determination of youth age groups of institutions

In Portugal, there is only one formal way of determining the youth age groups of institutions. That is the case of the youth associations, which, according to Law No.

57/2019 of 7 August, are those with more than 80% of members aged 30 or less, in which the executive body is made up of 80% of young people aged 30 or less and led by a young person aged 30 or less on the date of their election. Thus, unless you use the arithmetic average, it is not possible to determine the youth age groups of institutions.

Nevertheless, some statistics regarding youth participation in several institutions can be found [here](#) and [here](#).

### **3-The number of institutions with environmental-climate studies**

Aveiro's region – 1 public university (University of Aveiro); and 6 R&D centers (University of Aveiro)

### **4-What percentage of young people in institutions can be reached with the project**

2% (biology students of University of Aveiro)

### **5-How many young people can be trained in green youth centers**

100 young people

### **6-How many NGOs / public / youth groups / schools can be given seminars in green youth centers**

4 NGOs / 5 public entities / 10 youth groups / 10 schools

### **7-Number of universities / businesses and young people who can come together for green employment in the green youth center**

1 university / 5 business people and 15 young people

## PART TWO

Specification of the elements to learn under this topic including learning tasks:

### 8-Impact areas of environment-climate awareness

Politics / Decision-making

Marketing

Science (R&D)

Nature conservation

Daily life

### 9-Analysis of access routes to finance for Green Entrepreneurs

In Portugal there are different types of financing:

- Grants
- Public support (e.g. through IEFPP programs, Portugal 2020 and Portugal 2030)
- Loans
- Mutual guaranteed credit
- Crowdfunding
- Equity crowdfunding
- Peer-to-peer lending
- Other private investment

## PART THREE

Best practices we have in our institution, in our city or country even in the partners' countries

### 10-Green Entrepreneurship Culture in the regional area

Associação BioLiving is a good example of Green Entrepreneurship, because our association was created by young people whose objectives were, among others, to promote sustainability through the engagement in environmental citizenship and public participation for the protection of nature while boosting the social economy and fostering inclusion, peace and solidarity, using education, natural resources and the protection of nature as leitmotiv. It started with 2 collaborators and a few volunteers working locally and after 6 years we count with 7 collaborators and more than 20 volunteers that are involved in more than 5 regional and international projects.

## PART FOUR

Links to videos and further reading sources for the content of module

<https://www.regiaoodeaveiro.pt/pages/589>

[BioWaste](#)

[Lower Vouga Lagoon Primary Defense System](#)

see part 1.1 and 1.2

## PART FIVE

The importance of the module in Youth Education

It is important for young people to have this kind of information so that they know who to approach if they want to develop an environmental project, environment-climate



project or to develop a business idea.

Understand the state of the art regarding Environmental-climate sensitivity and what steps should be taken to improve the situation.

## PART SIX

You can include a self-Check for the learner at the end, a checklist about competences they have got from the module.

	Fully acquired	Reasonably acquired	Not acquired	N/A
General competences	-	-	-	-
Analytical ability				
Initiative				
Motivation				
Decision-making				
Strategic thinking				
Strategic networking				
Critical thinking				
Specific competences	-	-	-	-
I know how to identify the different institutions of my region				
I know how and where to find environmental information in my region				
I am able to identify access routes for financing Green Entrepreneurship				
I can identify and assess				

best practices				
I comprehend the importance of youth awareness and participation				
I am able to identify ways of involving youth people participation				

## PART SEVEN

### Conclusion

Considering the surveys conducted by some partners, the most important problems experienced in the environment and climate field is the insensitivity of the new generation and their lack of green entrepreneurship knowledge and vision; the main aim of the project, which is to raise greenthinking generations in our countries and regions and to create awareness in the field of climate-environmental literacy; and the institutions and young population on the Aveiro's region, we believe that there is a great potential in this region to have a greenthinking center, to reach to a bigger number of trainees.

## REFERENCES

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## Annexes

### Çorum

#### Contents

*1- Number of existing employment agency/ NGO / public / youth groups / schools*

*1.1.A-Range of Associations According to their Field of Activities (TURKEY Countrywide):*

*1.2.A-Schools in Turkey*

*1.1-Associations / NGOs / Youth groups*

*1.2-Schools*

*Secondary Schools (Public)*

*1.2.B-In Corum*

*3. Number of institutions dealing with the environment-climate issue*

*5.How many young people can be trained in Green Thinking Centres (Estimated)*

*6.How many NGOs / public / youth groups / schools can participate in the seminars to be held in green thinking centres (Estimated)*

*7.Number of universities / businesses and young people who can come together for green employment in the green think tank (Estimated)*

*8. Environmental-climate awareness areas*

*9.Analysis of access to funds for green entrepreneurs*

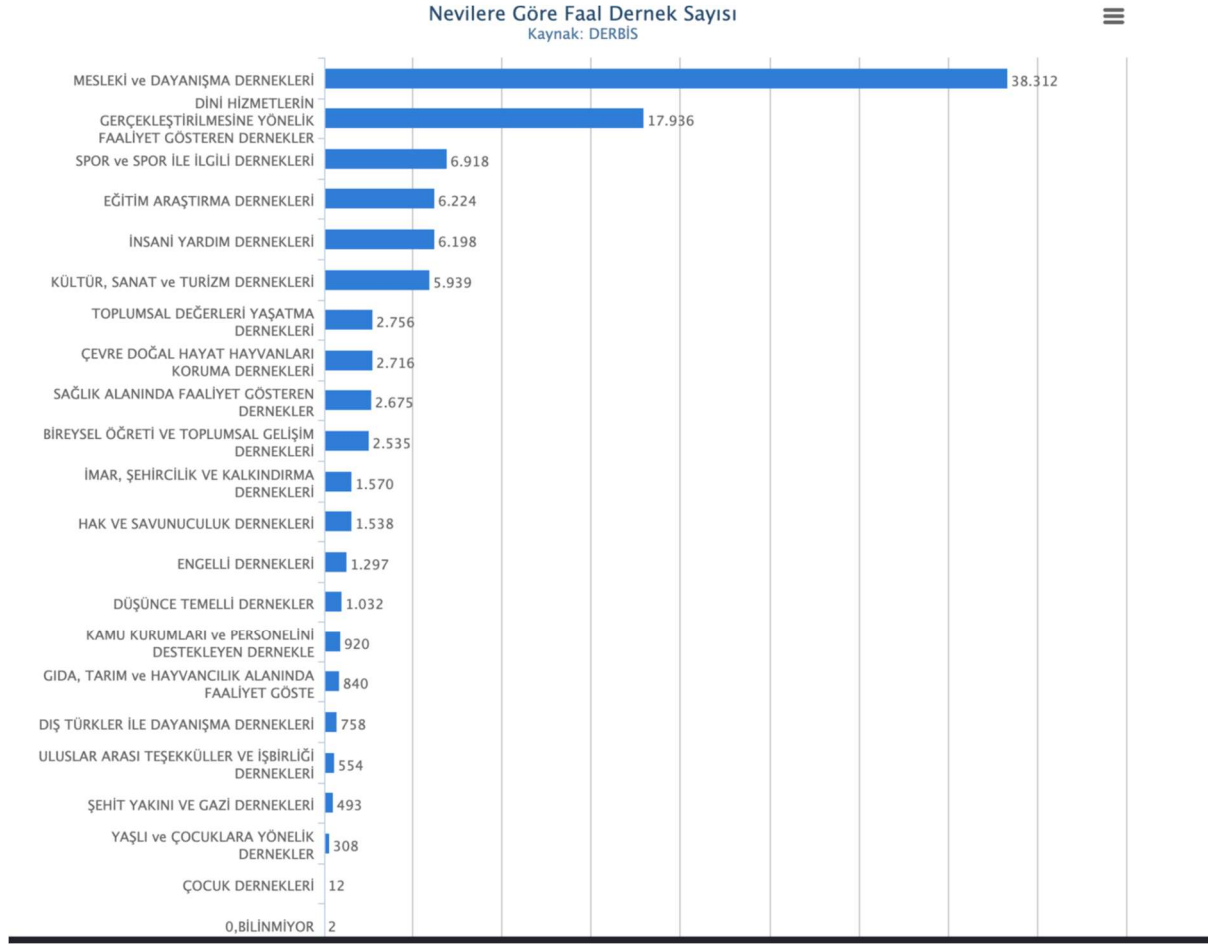
*10. Green Entrepreneurship Culture at Regional Area*

1- Number of existing employment agency / NGOs / public / youth groups / schools

;

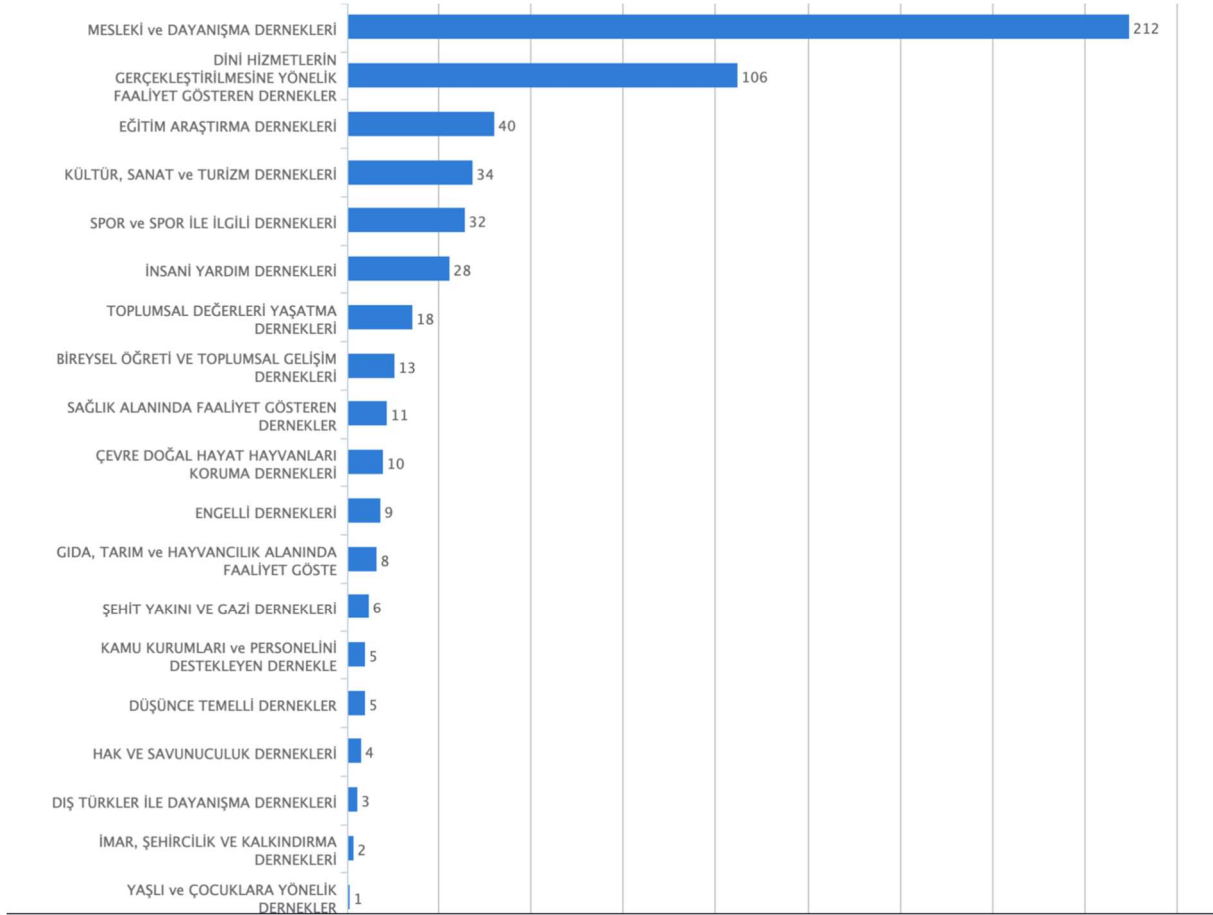
1.1- Associations/ NGO / Youth Groups ;

1.1.A- Range of Associations According to their Field of Activities  
(TURKEY,Countrywide): 98817



*Number of associations by type (Source, DERBİS)*

### *1.1.B- Number of Associations in Corum: 547*



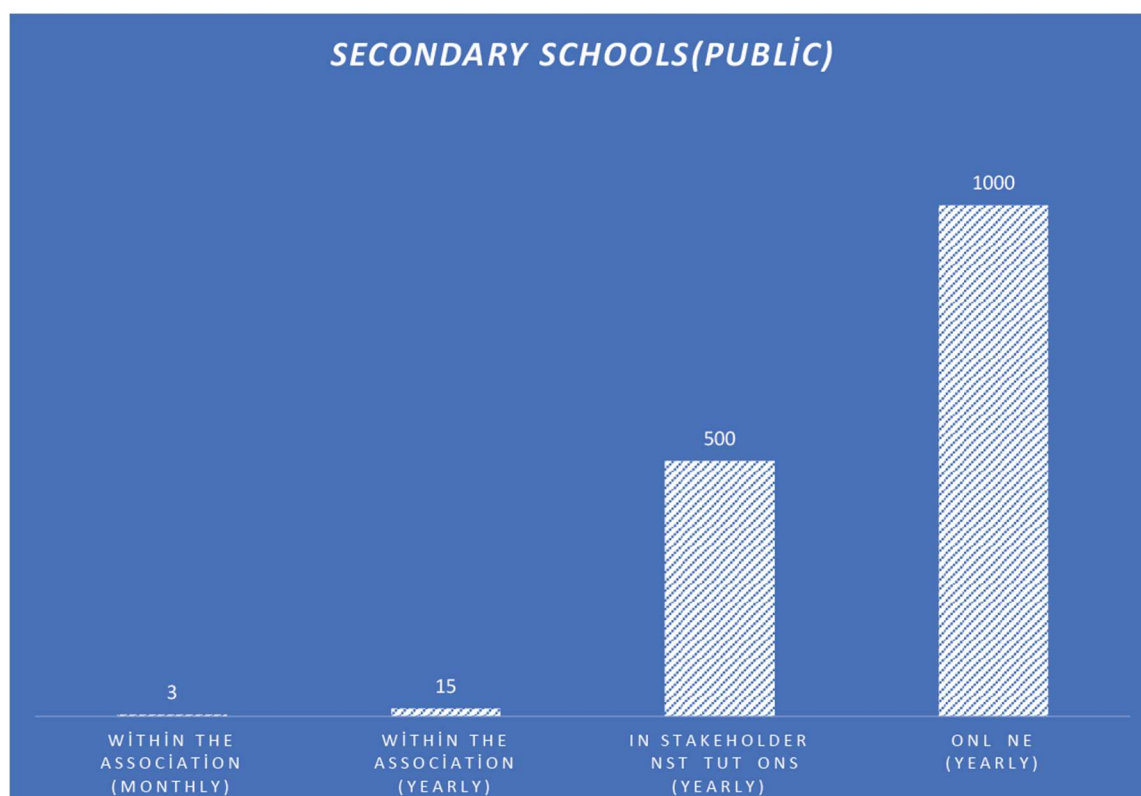
There are 2,716 environmental and wildlife conservation associations in Turkey, while there are 18 in the Çorum province. There are numerous environmental and nature conservation associations operating at international, national, and local levels in our country. The Ministry of Youth and Sports, General Directorate of Education, Culture, and Research, carries out a program called "Young Volunteers" where young people can engage in voluntary activities in the categories of education, environment, sports, culture and tourism, health and social services, as well as disaster and emergency situations. Genç TEMA, founded in 1992 by Hayrettin Karaca and A. Nihat Gökyiğit, is a volunteer unit composed of university students within TEMA Foundation. Genç TEMA aims to create environmentally conscious individuals among young people and encourage them to take an active role in solving the problems of their environment, contributing to their development of an ecological perspective. In addition to these, there are non-governmental organizations (NGOs) operating in the field of environmental conservation such as the Turkish Nature Conservation Society, Youth Tourism Association, Erasmus+ Program, Wildlife Conservation Society, Nature Association,

YUVA, Foundation for the Protection of Natural Living, Global Environment Organization, Environmental Protection and Research Foundation, Marine Cleanliness Association / TURMEPA, Turkish Foundation for Environmental Education - TÜRÇEV, and Turkish Environmental Protection and Afforestation Agency.

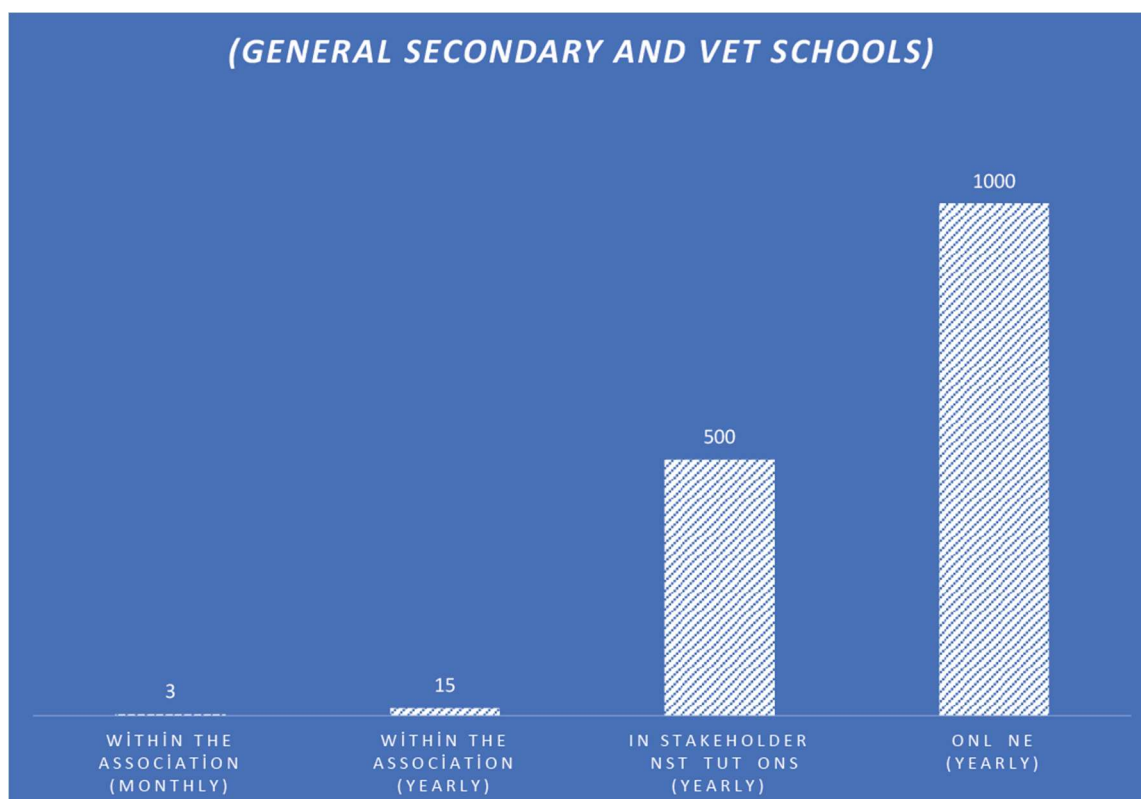
## **1.2-Schools**

### **1.2.A- In Turkey ;**

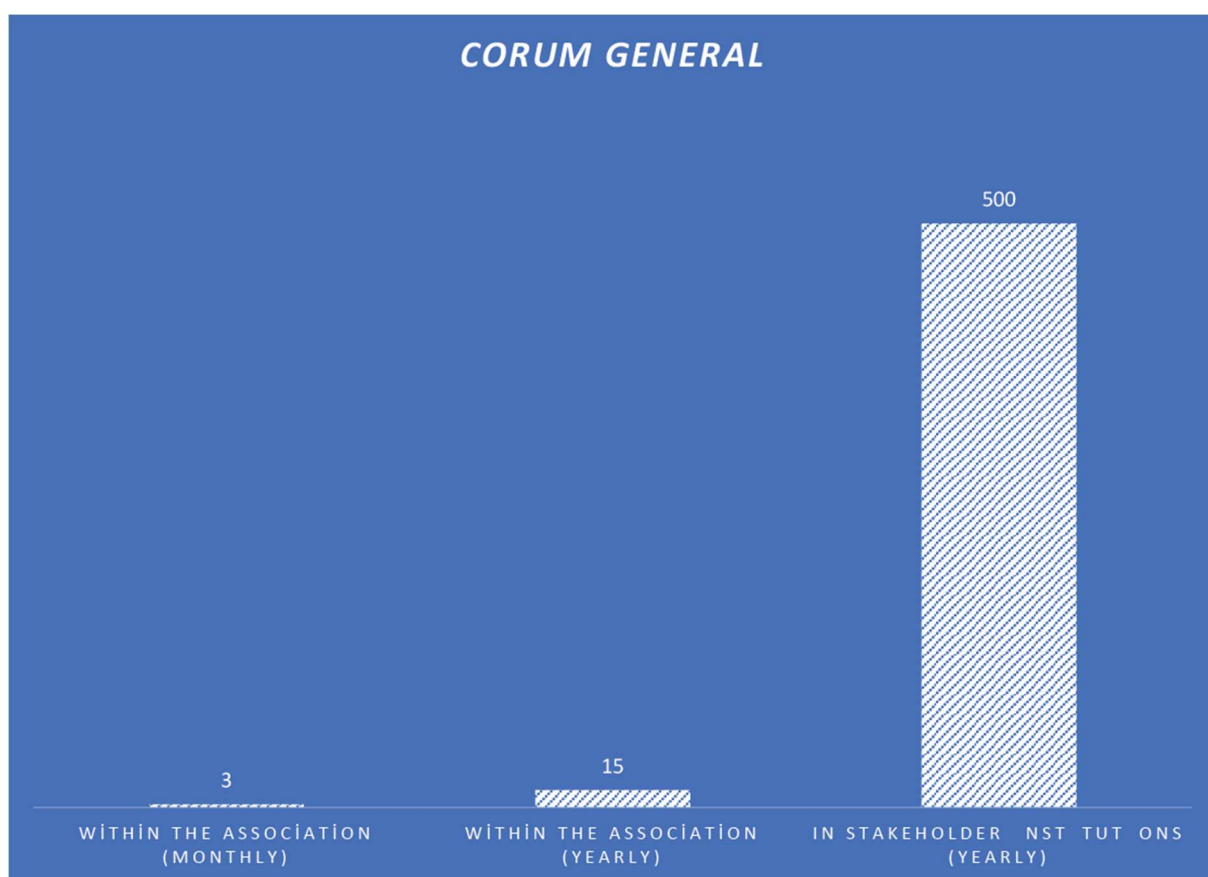
#### **Secondary School (Official)**



**(General Secondary and VET Schools)**

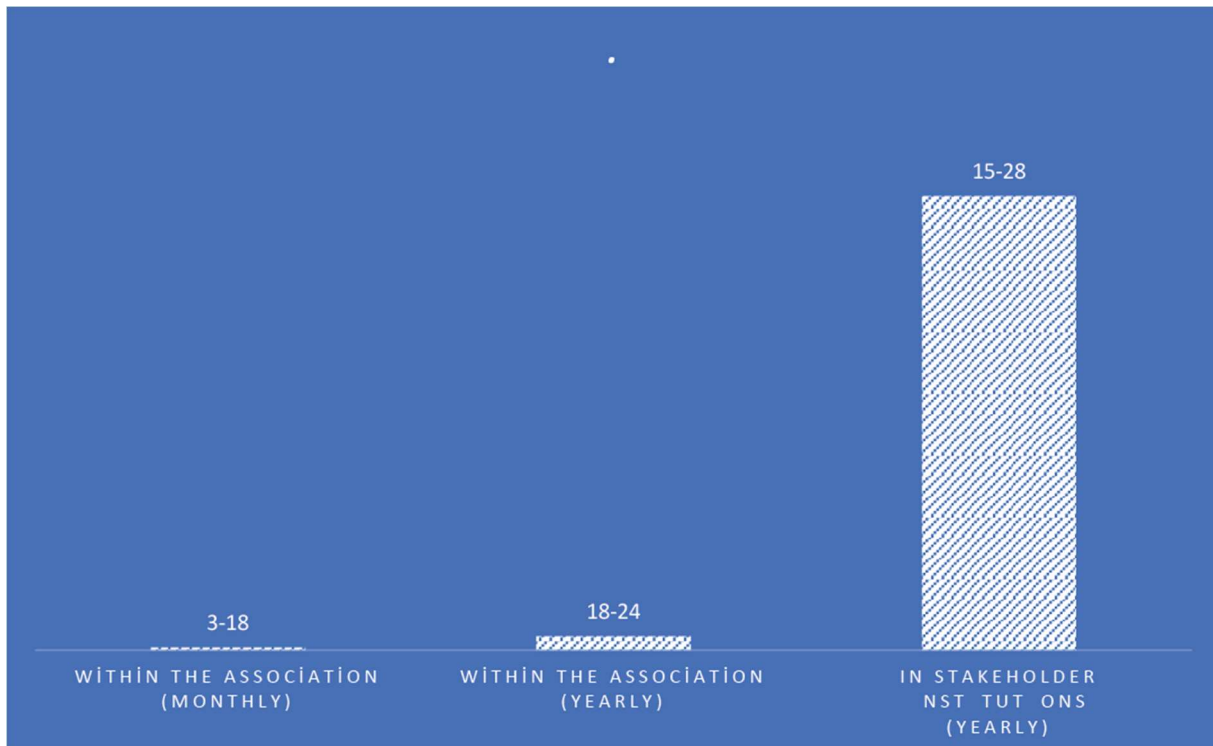


### 1.2.B-Çorum General;





## 2-Determination of youth age groups of institutions ; NUMBER OF SCHOOLS TOTAL NUMBER

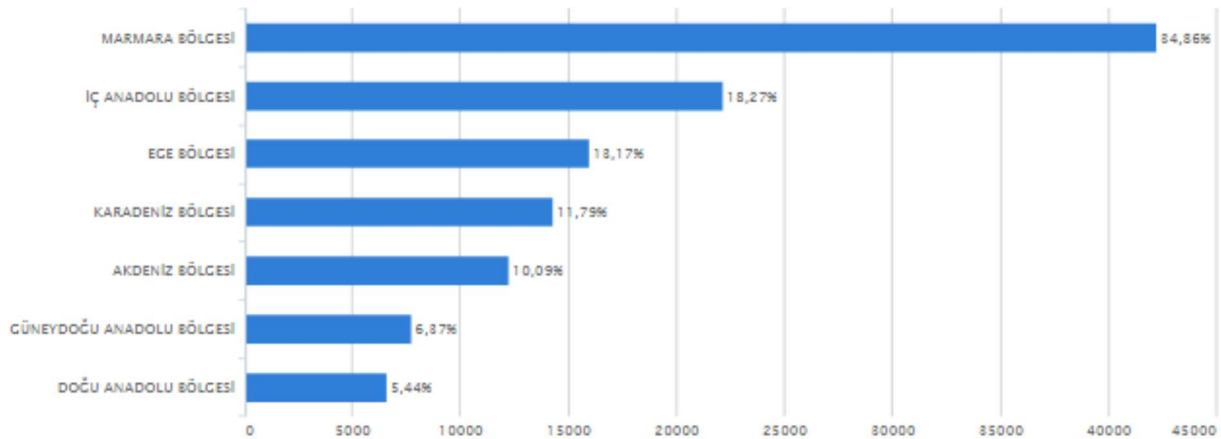


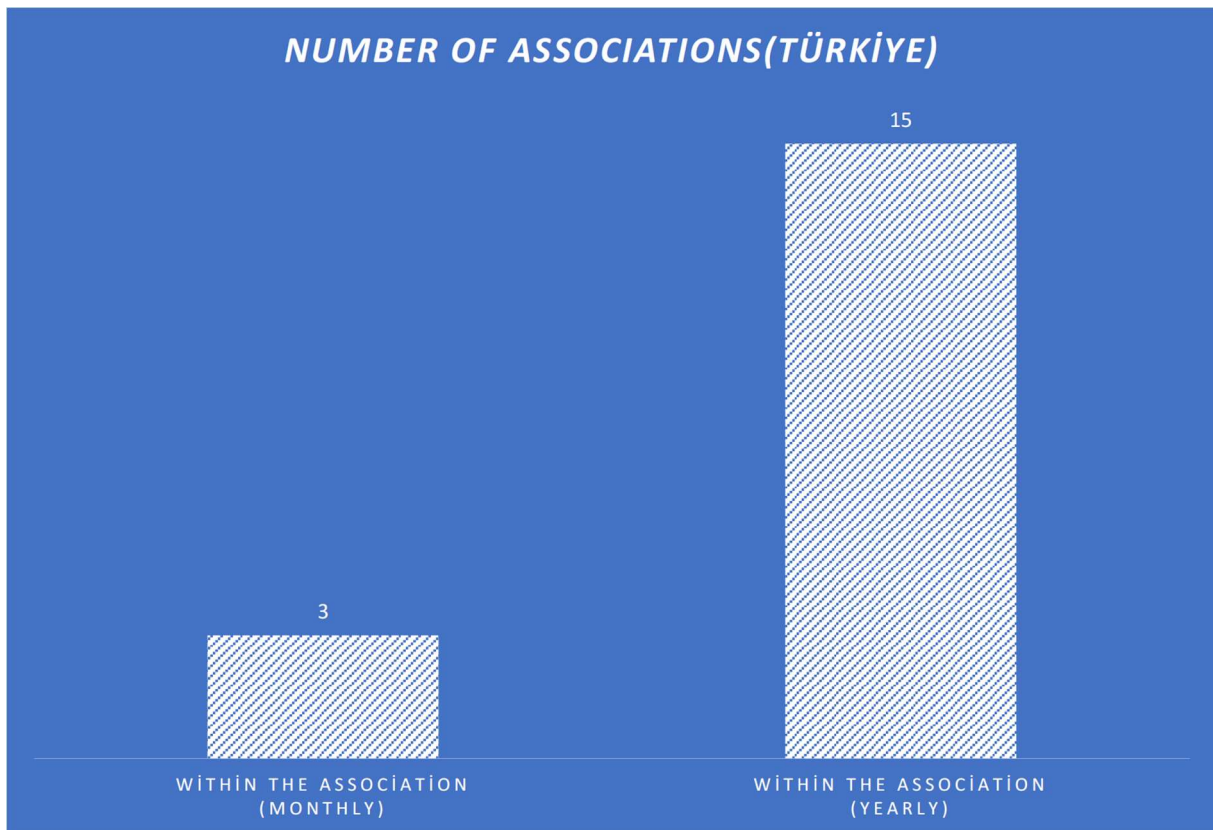
The European Union (EU) and the Council of Europe are the two most important institutions investing in the youth field in terms of institutional support. The collaboration between these institutions has been ongoing since 1998. The European Knowledge Centre for Youth Policy (EKCYP) was established under this collaboration to support youth policy and research-related work across Europe. The EKCYP Communication Network is managed by a representative in each European country and publishes country reports on topics such as youth participation, volunteering, and better understanding of youth. In addition, within the same collaboration framework, a second initiative called the "Pool of European Youth Researchers" (PEYR) was established in 2011 to increase the visibility and dissemination of youth research and facilitate knowledge exchange through country representatives. Turkey also has representatives in both centers. This collaboration is not limited to the EU and the Council of Europe, of which Turkey is a member. The Council of Europe and the EU have implemented significant transformations in the youth field by converting cross border activities into programs and providing various opportunities for young people and youth workers. The White Paper on Youth (2001), the European Youth Pact (2005), the EU 2010-2018 Youth

Strategy, and the activities gathered under the title "Youth on the Move" within the framework of the Europe 2020 Strategy are considered fundamental building blocks of the EU's youth policies.

### ***3. Number of institutions dealing with the environment-climate issue ;***

Environmental and climate issues are addressed by associations, non-governmental organisations, public institutions and other organizations within institutions. Youth groups and schools are among the institutions that are interested in this issue.





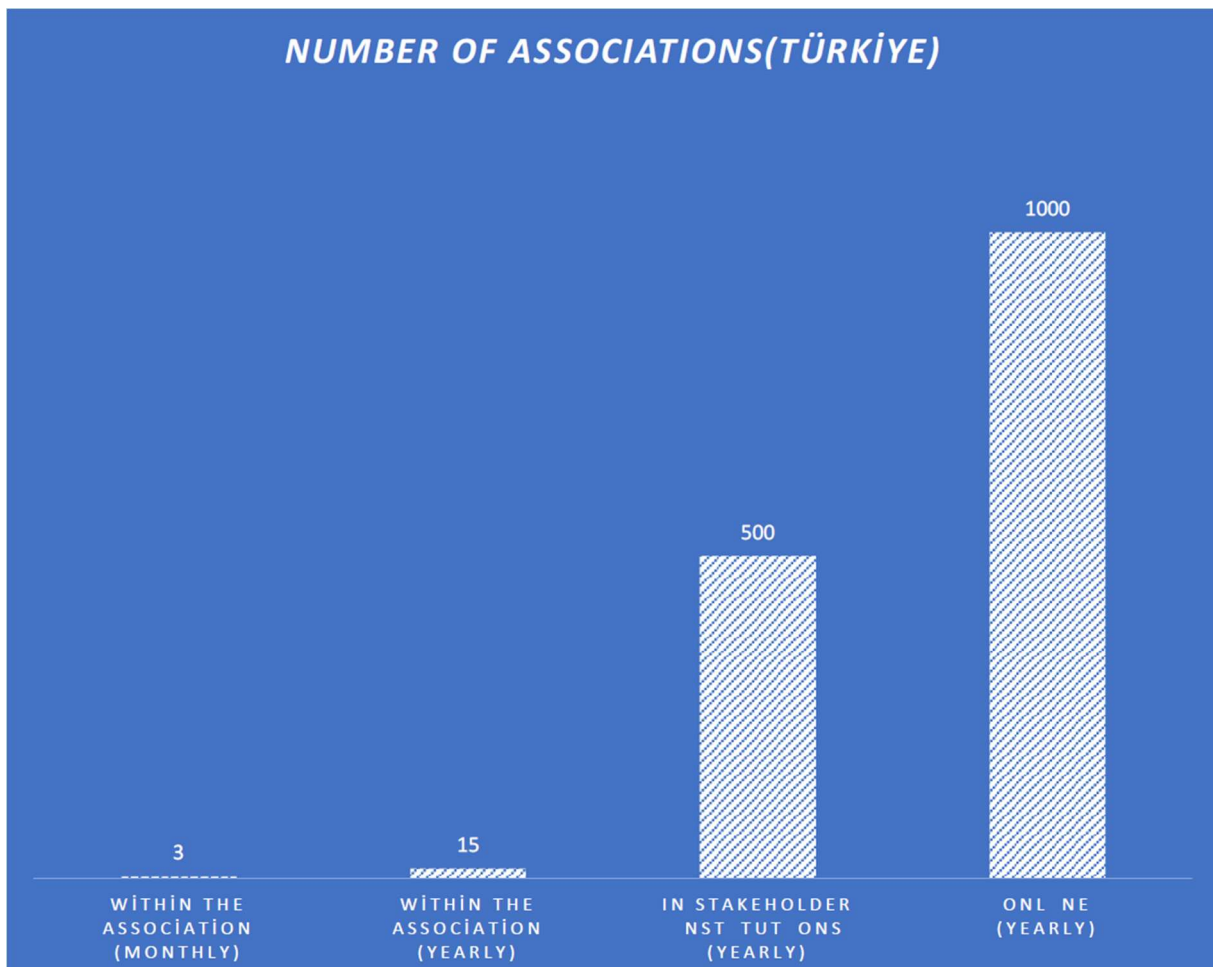
Looking at the number of clubs operating in Turkey from year to year, the number of clubs is increasing every year and the number of active clubs in 2020 is 120,241. .

#### ***4. What percentage of young people in institutions can be reached with the project;***

We hope to reach thousands of people for our work through social media, the project website, and outreach efforts that effectively engage the partners involved in the project. In this project, youth activities are carried out within the framework of "out-of-school" education, focusing on young people and their voluntary participation in promoting social and personal development through non- formal and non-formal learning. Social, cultural and educational activities are organized to increase opportunities for young people to integrate and participate in society. As the diversity in the European context shows, the organization and framework of youth activism is based primarily on social and educational practices at the level of financial and political contributions. This means that historical, cultural and political contexts set the framework for youth activities at the national level.

**5. How many young people can be trained in green thinking centers (Estimated);**

Trainings and seminars are organized locally within the association in cooperation with institutions or online through the Green Thought Center established within the association.

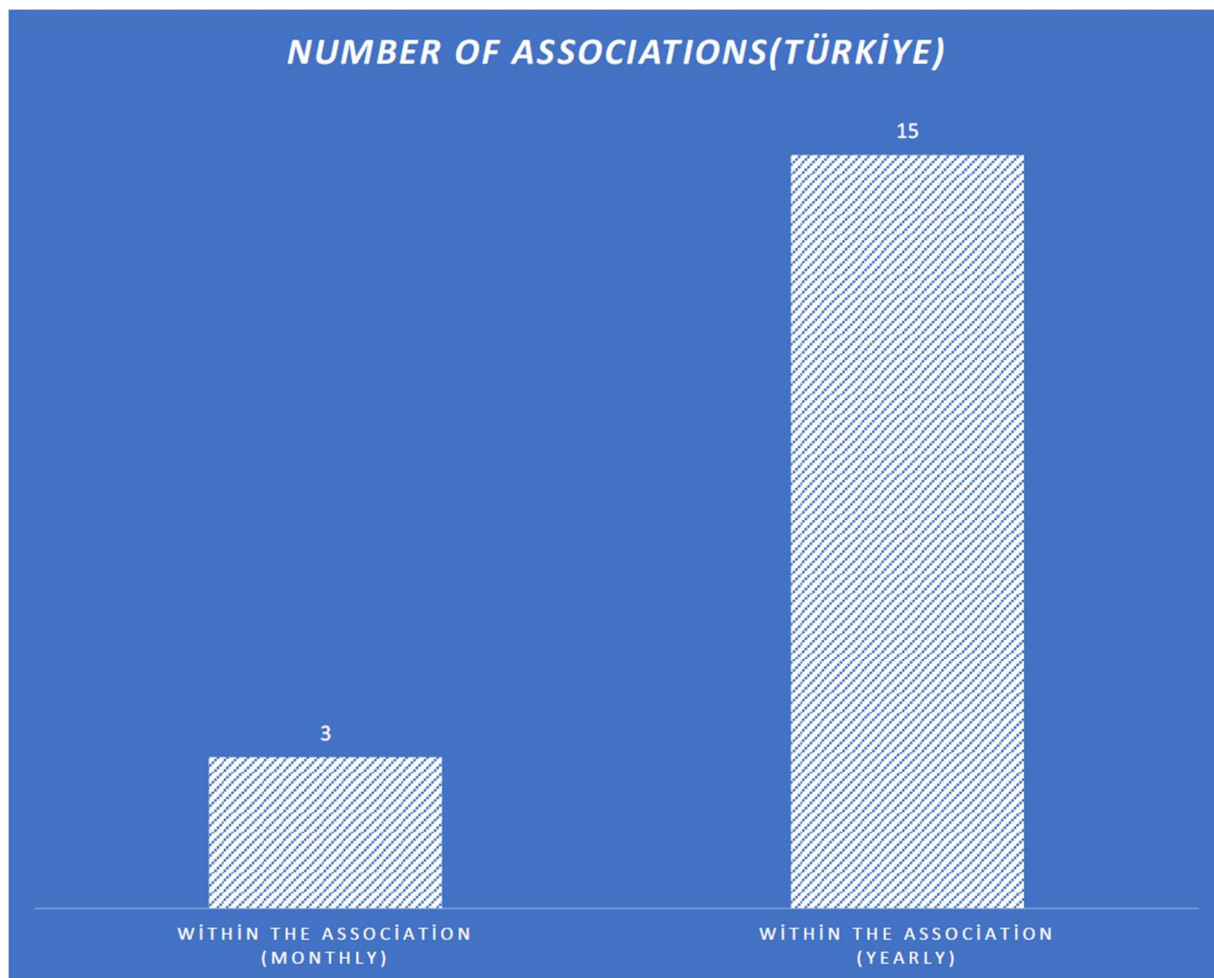


*Environmental problems threaten human life and make our world uninhabitable. One way to stop this catastrophe is for people to abandon their usual thoughts and actions, now and in the future. For this reason, people should do their part to find solutions to these environmental problems without wasting time. Today, environmental problems cannot be solved by technology or laws alone. This is only possible by changing*

*individual behaviors. Changing behavior requires changing attitudes, knowledge, and value judgments. Environmental education enables the formation of positive attitudes and value judgments about the environment. Environmental education contributes to the development of environmental awareness in all areas of society, to the acquisition of environmentally sensitive, permanent and positive behavior changes, to the protection of nature, history, culture, social and aesthetic values, and to active participation and participation in society. can be defined as engagement. Answer to a question. The main aim of environmental education is to help those who go through an education and training process become citizens with the knowledge, skills and value judgments to strengthen and promote responsible behavior in environmental issues.*

***6. How many NGOs / public / youth groups / schools can be in the seminar to be given in green thinking centers (Estimate);***

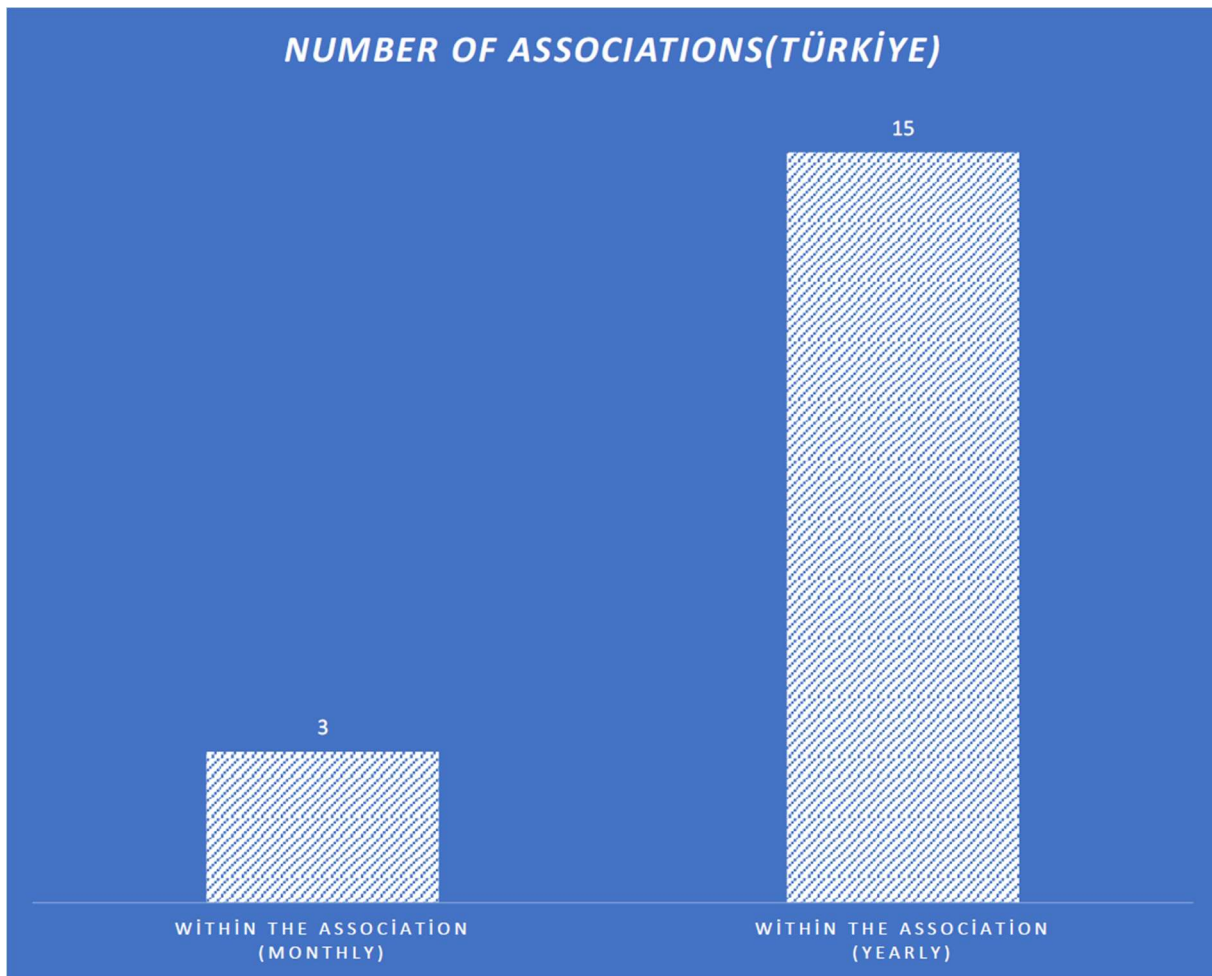
We are planning to organize trainings and seminars locally in cooperation with the Green Thinking Center to be established within the association.



***7. Number of universities/businesses and youth that can come together for green thinking center green employment (Estimated);***

As part of the association, negotiate green employment opportunities and opportunities with local businesses and universities.





While green economy approaches aim to minimize and eliminate risks such as climate change, water scarcity and ecosystem loss, they also pave the way for the emergence of new jobs and economic activities. A new field of activity called 'Brown Jobs' aims to change many occupational groups with different risks to the environment and is called 'Green Jobs'. Transitioning to a green economy has many potential consequences, both positive and negative. Investments in environmentally friendly goods and services require new equipment and infrastructure to meet growing demand. This will increase the number of existing industries and entrepreneurs. In this way, the demand for labor will increase and the number of green jobs will increase, especially in the green sector. In addition, the increase in inter-sectoral connections in the expanding industry will create additional employment opportunities in many sectors such as insulation, cement production, steel and carbon production that provide input to the green sector. One of the positive aspects of green jobs is the redistribution of income from these additional activities through expenditure, additional investment and consumption (ILO, 2012). Addressing structural changes and potential adverse effects for vulnerable households such as energy, water, waste, construction, agriculture, forestry and traditional industries as well as economic growth, reduced pollution and more efficient use of resources. they are born as part of it. It's about managing new jobs. Focus (UNEP, 2010a). These new job sectors, known as green jobs, will emerge in agriculture, construction, energy, forestry and transportation. However, in sectors

where natural capital has decreased significantly, such as the fishing industry, job and income losses may be experienced in the short and medium term to restore natural capital. At the same time, various investments may be required to acquire or acquire new skills for industry workers. The effective use of energy in buildings is very important in terms of preventing damage to the environment and creating new employment areas. Buildings are responsible for approximately 30-40% of total energy use, greenhouse gas emissions and waste.

### ***8. Environment-climate awareness areas;***

Direct expenditures can be made in public buildings, schools, hospitals and university buildings to use energy more efficiently. In addition, tax incentives can be introduced for private businesses and households to encourage the insulation of buildings. In order to ensure sustainable transportation, governments should create greener transportation models and infrastructure that use energy more efficiently, expand public transportation and use more environmentally friendly vehicles, and should be encouraged by international financial institutions. The increased production of low-emission vehicles is estimated to create approximately 3.8 million new jobs (UNEP, 2009: 7). This increase in employment will continue to increase as it stimulates the secondary industry. In the field of sustainable energy, especially developed countries should provide financial support to ongoing clean energy projects. Developing economies, on the other hand, need to implement practices for the deployment of small-scale, off-grid energy systems. Governments have an important responsibility to add value in sustainable agriculture and clean drinking water, prevent water loss from conventional irrigation, and improve water capacity and quality. The agriculture sector is still the largest sector in the world with billions of employees. At the same time, the poorest majority live in the agricultural sector. Sustainability issues in the agricultural sector are closely related to water supply. Meanwhile, the worldwide supply of clean drinking water is seriously threatened. According to an OECD report, 40% of the world's population will have difficulty finding clean drinking water by 2050 (OECD, 2012). In a 2012 report from the International Labor Organization (ILO), a number of studies said the transition to a green economy would create between 15 and 60 million new jobs in all sectors around the world. It is also pointed out that especially developing economies have great advantages in creating green jobs. Many reports suggest that annual international investment of \$30 billion to prevent deforestation could provide 8 million full-time jobs in developing countries (ILO, 2012: 7).

### ***9. Analysis of access to finance for green entrepreneurs;***

Entrepreneurs' access to financial resources in Turkey is generally provided through two channels: free market and public resources. From a free market perspective, the banking system is the primary source of finance. In addition to the banking system, private venture capital firms are also considered important sources of funds for entrepreneurs. Some of the state aids provided from public resources are provided as activity support (support for the activities of entrepreneurs and SMEs), while the other part is provided as capital support (credit guarantees, loan interest subsidies, etc.). On



the other hand, there are incentives (taxes, social insurance premiums, etc.) provided by each ministry to companies and investors. over and over again. In addition, we indirectly support entrepreneurs in the establishment and operation of public institutions, such as İŞGEM, TEKMER, with cash/in-kind contributions. Therefore, direct and indirect financial supports provided to entrepreneurs and SMEs from public resources are very diverse (Ministry of Development, 2014: 32). Credit interest support provided by KOSGEB based on public incentives, capital support provided to techno companies by the Ministry of Science, Technology, Industry and Technology to support new and innovative initiatives, new entrepreneur support provided by KOSGEB and Ministry of Science Capital support Ministry of Industry and Technology, Ministry of Economy, TUBITAK, KOSGEB, TTGV, development agencies etc. There is operational support provided by agencies (Ministry of Development, 2014: 32-35). As in most countries, banks are the main source of financing for SMEs in Turkey. Since SMEs face greater problems in accessing bank credit than large firms, various assistance programs are implemented to the public to improve these firms' access to credit. This support can take many forms, such as the implementation of suitable term (low interest, long-term, etc.) loan programs in line with political priorities, the creation of loan guarantee programs and micro loan programs. In recent years, developed countries have preferred less intrusive market measures such as: B. Development of credit guarantee systems and improvement of macroeconomic and financial systems (Yüksel, 2011: 2). Depending on the size of the SME and the business environment in which it operates, the nature and extent of the difficulties it faces in obtaining bank financing will vary. Small and early stage companies often find it difficult to obtain and calculate loans under any circumstances. SMEs may face difficulties due to lack of credit or unfavorable conditions in developed countries and access to credit in developing countries. This is usually due to the underdeveloped financial systems in developing countries, low liquidity and the inexperience of banks and their reluctance to lend to SMEs. In recent years, the banking system has specialized in small business loans, but the situation is far from what it should be. There has been an increase in venture capital-related activities in Europe, especially since the 1980s. Various studies have found that venture capital investments in Europe are positively impacted by European Union member states' own regulations and partner programmes. A European Central Bank study dating back to 2007-2012 showed a downward trend in venture capital investment since 2008. There are many reasons for this, but the most important one is the economic crisis that started in the USA in 2007, spread to the international markets in 2008 and increased its impact since 2009. In 2013, total venture capital investment in Europe increased by 5% compared to 2012 and reached 3.4 billion Euros. More than 3,000 companies received venture capital funding in the same year.

### ***10. Green Entrepreneurship Culture in the Regional Area;***

Environmental issues are becoming more and more important. Because the environment is constantly being destroyed and economic activities are the cause of many environmental problems. Environmental destruction jeopardizes the future of humanity. One of the factors that can help stop environmental destruction is green entrepreneurship. Green entrepreneurship has the potential to be a catalyst for positive change in both economic and environmental fields. Seeing the environmental dimension as an opportunity, not an obstacle, Green Entrepreneurs offers a wide range of environmentally friendly, socially responsible and economically rewarding businesses. In short, green entrepreneurs are looking for better ways to make the world cleaner and greener. There is much to learn about green entrepreneurship and the main purpose of this study is to define green entrepreneurship and try to show the barriers and their importance for the economy and society. The environmental challenges we face today can be turned into economic opportunities by green entrepreneurs. For example, green entrepreneurs can create environmentally innovative products and services such as new products made from recycled waste and green technology services (such as renewable energy) to meet growing economic demand and meet environmental service needs. Green entrepreneurial activities include activities such as ecotourism, recycling, energy efficiency, sustainable mobility, organic agriculture and renewable energy, and green entrepreneurs contribute to the increase of green employment associated with these activities. Green entrepreneurship requires a combination of innovation and entrepreneurship. Green entrepreneurship is important for environmental innovation. Because environmental innovation is the future competitive advantage of companies and countries. If companies and countries want to be successful in the international market in the future, new and innovative environmental technologies, services and processes will be a much more important source of competitive advantage than low cost (McEwen, 2013). : 270).

**Resource;**

Uluslararası Ekonomi ve Yenilik Dergisi

<https://www.siviltoplum.gov.tr/>

<https://corum.meb.gov.tr/>

Yalova Journal of Social Sciences

***Mersin*****The content of the Analysis Report****PART ONE-** Introduction to The Topic

- 1- Determining the number of existing enterprises / NGOs / public / youth groups / schools
- 2- Determination of youth age groups of institutions
- 3- The number of institutions with environmental-climate studies
- 4- What percentage of young people in institutions can be reached with the project
- 5- How many young people can be trained in green youth centres
- 6- How many NGOs / public / youth groups / schools can be given seminars in green youth centres
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**PART TWO-** Specification of the elements to learn under this topic including learning tasks:

- 1-Impact areas of environment-climate awareness
- 2-Analysis of access routes to finance for Green Entrepreneurs

**PART THREE-** Best practices we have in our institution, in our city or country even in the partners' countries

- 1-Green Entrepreneurship Culture in the regional area

**PART FOUR-** Links to videos and further reading sources for the content of module**PART FIVE-** The importance of the module in Youth Education**PART SIX-** A self-Check for the learner at the end, a checklist about competences in green skills**Conclusion****References**

## **PART ONE- Introduction to The Topic**

### **Environmental-climate sensitivity analysis reports**

#### **Foreword**

Environment and climate change are directly related to people's quality of life, as detailed in the EU's 2030 long-term strategy and in the ERASMUS 2021-27 strategy. Sustainability of climates is important in terms of ensuring that future generations can use and benefit from natural resources. All countries should pay special attention to the five sectors based on Green and Renewable Economy in the Field of Environmental Literacy.

These are; Renewable energy, sustainable transport, green construction, sustainable tourism, energy efficiency and management, etc. It is extremely important for the EU and the world to raise generations of entrepreneurs who think green for these sectors.

The 2030 strategy of the EU is a binding set of legislation to ensure that it achieves its climate and energy targets. The progress of the EU towards a low carbon economy and fulfilment of the commitments under the Paris Agreement will ensure green growth and raising green-minded generations.

Our aim with our partners involved in the project is to raise green thinking generations in our countries and regions and to create awareness in the field of climate-environmental literacy. According to the results of the Concern Survey for Environmental Problems we have conducted in our regions, the most important problem experienced in the environment and climate is the insensitivity of the new generation and their lack of green entrepreneurship knowledge and vision. In order to solve this situation, some data should be obtained first. These data are important in determining the direction in which we should continue our studies and research on the subject. These data can only be reached by performing a situation analysis. Efforts to prevent environmental problems before they occur will only be realized by raising generations that have environmental literacy and green thinking.

Environmental education is a systematic and lifelong process for all institutions. This process is very important for a liveable EUROPE. Thanks to the situation analysis to be made, we will have developed a regional (with partner countries) European situation document describing the situation of our project in the EU. Each partner will discuss the issue according to the following headings and will produce a report. Responsible prEUneec GmbH will combine the situation analysis reports from other partners and prepare a common and general document.

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Mersin is a city located on the southern coast of Turkey and is known for its natural beauty. Green entrepreneurship refers to an approach or business idea that promotes environmentally friendly and sustainable practices. In Mersin, there are policies and exemplary entrepreneurial institutions that focus on green entrepreneurship, which are outlined below:

1. Mersin Techno park: Mersin Techno park is a business development centre that supports technology-based entrepreneurs. It provides a platform for start-ups working on eco-friendly technologies and sustainable business models.
2. Mersin Innovation and Entrepreneurship Centre (MIGEM): MIGEM is a centre established by Mersin University. It offers innovation, education, and consultancy services to support green technology and eco- friendly entrepreneurs.
3. Mersin Environmental Association (MERÇED): MERÇED is an association operating in Mersin and its surroundings to raise environmental awareness and support sustainability-focused projects. It encourages and supports green entrepreneurship ideas to promote the adoption of sustainable solutions.

4. Mersin Ecological Agriculture Cooperative: This cooperative supports farmer who embrace ecological farming methods. By promoting sustainable agricultural practices, it enables farmers to produce in an environmentally friendly manner.

5. Mersin Nature Conservation Association: This association works to protect natural habitats in Mersin and raise environmental awareness. It focuses on sustainable tourism projects to preserve natural areas.

These institutions and organizations in Mersin support green entrepreneurship ideas and encourage the adoption of environmentally friendly practices. They contribute to the growth of businesses that prioritize sustainability and environmental consciousness.

## 1-DETERMINING THE NUMBER OF EXISTING ENTERPRISES / NGOS / PUBLIC / YOUTH GROUPS / SCHOOLS

### 1.1. Distribution of Associations by Activity Areas (NATIONWIDE IN TURKEY): 121,607

Type of NGOs	Numbers of NGOs
Professional and Solidarity Associations	38.057
Sports and Sports Related Associations	27.145
Associations for the Realisation of Religious Services	18.480
Education Research Associations	6.196
Culture, Art and Tourism Associations	6.031
Humanitarian Aid Associations	5.570
Associations Operating in the Field of Health	2.722
Associations for the Preservation of Social Values	2648
Associations for Individual Doctrine and Social Development	2615
Environment, Wildlife, Animal Protection Associations	2572
Zoning, Urbanisation and Development Associations	1649
Rights and Advocacy Associations	1506
Disability Associations	1403
Thought Based Associations	1110
Associations Supporting Public Institutions and Personnel	1044
Associations Operating in the Field of Food, Agriculture and Livestock	807
Associations for Solidarity with Foreign Turks	667
International Organisations and Cooperation Associations	629
Martyr relatives and Veterans Associations	471
Associations for the Elderly and Children	323
Child Associations	12
<b>Total</b>	<b>121.607</b>

Kaynak: <https://www.siviltoplum.gov.tr/derneklerin-faaliyet-alanlarina-gore-dagilimi>



We can observe that there are numerous types of associations operating in Turkey. Professional and solidarity associations form the category with the highest total number of associations, while sports-related associations and associations engaged in religious services also house a significant number of associations. These data indicate that associations operating in various fields play an important role in society, bringing people together through associations according to their different needs and interests

### ***1.1.2-Number of Associations in Mersin: 2572***

It is understood that there are 2,572 associations for environmental and wildlife conservation nationwide in Turkey, **with 70 associations specifically in Mersin.**

Turkey has numerous associations dedicated to environmental and nature conservation at international, national, and local scales. The Ministry of Youth and Sports, General Directorate of Education, Culture, and Research, operates a program called "Youth Volunteers," which enables young people to engage in voluntary activities related to education, environment, sports, culture and tourism, health and social services, and disaster and emergency categories. Genç Tema, initiated by Hayrettin Karaca (known as "Toprak Dede" or "Grandfather Earth") and A. Nihat Gökyiğit in 1992, is a volunteer organization composed of university students.

Genç Tema aims to raise awareness among young people about environmental issues, actively involve them in addressing these problems, and contribute to their development as individuals with an ecological perspective. Additionally, there are other non-governmental organizations in Turkey such as the Turkish Foundation for the Conservation of Nature, Youth Tourism Association, Erasmus+ Program, Society for the Protection of Natural Life, Nature Association, YUVA, Natural Life Preservation Foundation, Global Environment Organization, Foundation for Environmental Protection and Research, Marine Environment Protection Association/TURMEPA, Turkish Foundation for Environmental Education-TÜRÇEV, and Turkish Environmental Protection and Afforestation Agency.



## 2-DETERMINATION OF YOUTH AGE GROUPS OF INSTITUTIONS

### 2.1 Throughout Turkey;

During the education and training period in Turkey, a total of 19,155,571 students received formal education at the preschool, primary, and secondary education levels. According to the data, out of the total number of students, 9,928,304 were male and 9,227,267 were female, with 15,839,140 students attending public schools, 1,578,233 students in private schools, and 1,738,198 students enrolled in distance education institutions.

Among the students in public schools, there were 8,147,339 male students and 7,691,801 female students. In private schools, there were 864,762 male students and 713,471 female students. As for distance education, there were 916,203 male students and 821,995 female students.

The majority of students were enrolled in secondary education, with 1,885,004 in preschool education, 5,433,901 in primary education, 5,293,067 in middle school, and 6,543,599 in secondary education.

Out of the 6,543,599 students in secondary education, 4,092,604 were in general high schools, 1,833,717 in vocational and technical high schools, and 617,278 in religious vocational high schools.

The number of students in vocational education centers increased from 159,773 in the previous year to 400,219 in the 2021-2022 academic year.

The proportion of students in private educational institutions was 9% of the total formal education. This percentage was 19% for preschool education, 5.7% for primary education, 6.5% for middle school, and 11.3% for secondary education. The corrected net enrollment rates were 95.81% for primary education, 95.40% for middle school, and 89.68% for secondary education. The enrollment rate for children aged 5 and above in preschool education increased from 61.22% in the 2020-2021 academic year to 92.17% in the 2021- 2022 academic year. The net enrollment rates based on age groups regardless of the education level were determined as follows: 44.71% for ages 3-5, 56.77% for ages 4-5, 83.41% for age 5, 98.44% for ages 6-9, 98.38% for ages 10-13, and 92.03% for ages 14-17.

Female teachers were in the majority, with a total of 1,139,673 teachers working in formal education during the 2021-2022 academic year. Among these teachers, 975,698 worked in public schools, and 163,975 worked in private schools. The number of male teachers was 455,294, while the number of female teachers was 684,379.

Out of the total number of teachers, 63,142 taught in preschool education, 310,477 in primary education, 376,747 in middle school, and 389,307 in secondary education.

In the 2021-2022 academic year, there were a total of 70,383 schools providing formal education, including 56,200 public schools, 14,179 private schools, and 4 open education schools. These schools consisted of 14,124 preschools, 24,519 primary schools, 18,936 middle schools, and 12,804 secondary schools.

A total of 749,454 classrooms were used for formal education, with 608,903 classrooms in public schools and 140,551 classrooms in private schools.

Education Level	Total Students	Male	Female	Public School	Private School	Distance Education
Preschool Education	19,155,571	9,928,304	9,227,267	15,839,140	1,578,233	1,738,198
Primary Education	-	-	-	-	-	-
Middle School	-	-	-	-	-	-
Secondary Education	-	-	-	-	-	-
Education Level	Public School		Private School		Distance Education	
Preschool Education	-		-		-	
Primary Education	-		-		-	
Middle School	-		-		-	

Education Level			Public School	Private School	Distance Education	
Secondary Education			-	-	-	
Education Level	Male	Female	General High School	Vocational and Technical High School	Religious Vocational High School	
Preschool Education	-	-	-	-	-	
Primary Education	-	-	-	-	-	
Middle School	-	-	-	-	-	
Secondary Education	-	-	-	-	-	
Education Level			Public School	Private School	Distance Education	
Preschool Education			-	-	-	
Primary Education			-	-	-	
Middle School			-	-	-	
Secondary Education			-	-	-	
Education Level				Male	Female	Total
Preschool Education				-	-	-
Primary Education				-	-	-
Middle School				-	-	-
Secondary Education				-	-	-
Age Group			Net Enrollment Rate			
3-5			44.71%			
4-5			56.77%			
5			83.41%			
6-9			98.44%			
10-13			98.38%			
14-17			92.03%			

Gender	Total Teachers	Public School	Private School
Male	455,294	-	-
Female	684,379	-	-

Education Level	Total Teachers	Public School	Private School
Preschool Education	63,142	-	-
Primary Education	310,477	-	-
Middle School	376,747	-	-
Secondary Education	389,307	-	-

Type of School	Total Schools	Preschools	Primary Schools	Middle Schools	Secondary Schools
Public School	56,200	-	-	-	-
Private School	14,179	-	-	-	-
Open Education	4	-	-	-	-

Type of School	Total Classrooms	Public School	Private School
Public School	608,903	-	-
Private School	140,551	-	-

Resource: <https://www.meb.gov.tr/>

### 2.1.1-In Mersin;

#### *FACULTY-COLLEGE-INSTITUTE AND STUDENT NUMBERS*

	Vocational School	College	Faculty	Institute	Student Numbers
Mersin University	11	8	17	5	41570
Tarsus University	3	1	7	1	3557
Çağ University	1	1	3	1	2960
Toros University	2	1	4	1	2882
Taşucu M.Y.O (Selçuk University)	1				1086
<b>Total</b>	<b>18</b>	<b>11</b>	<b>31</b>	<b>8</b>	<b>52.055</b>

### *SCHOOL-CLASSROOM-STUDENT AND TEACHER NUMBERS*

	March 2023
Number of Schools	1301
Number of Classrooms	15628
Number of Students	393233
Average Number of Students per Classroom	25
Number of Teachers	23993

### **2.2- Determination of Youth Age Groups in Institutions;**

	AGE GROUP RANGES
High School	14-18
University	18-24
Youth Associations	15-28

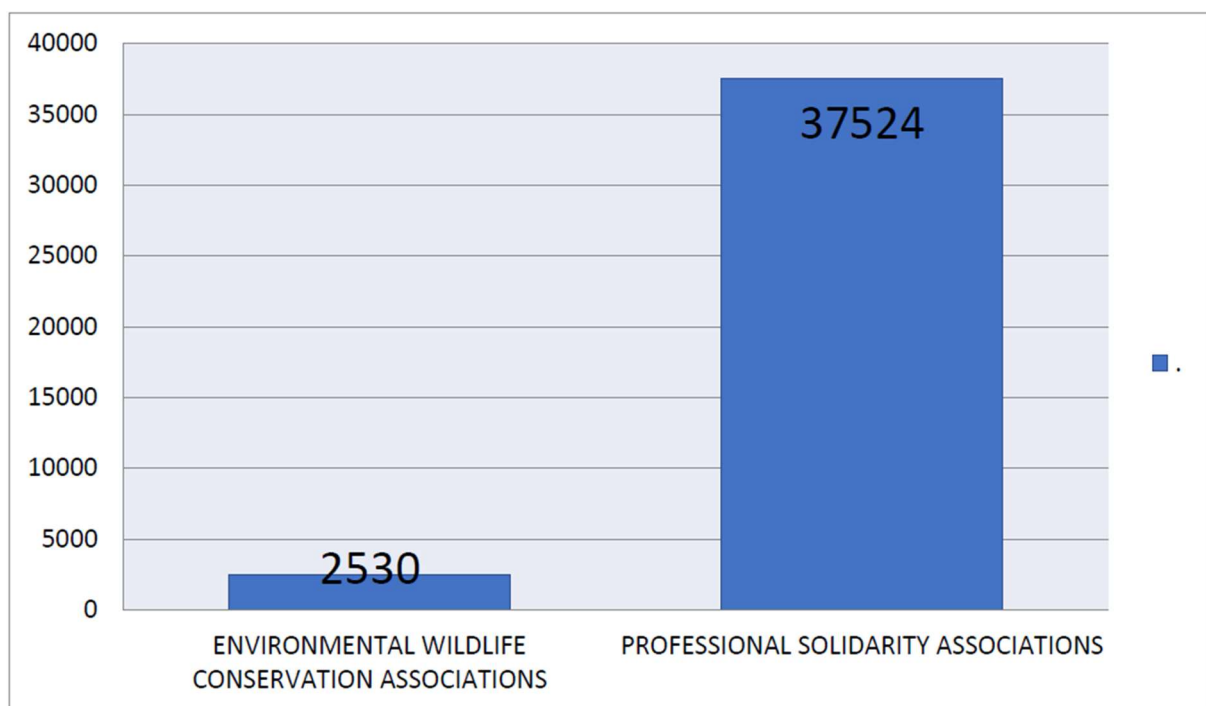
The two most significant institutions that have been investing in the youth field from a corporate perspective under the cooperation initiated by the European Union (EU) and the Council of Europe since 1998 have created a substantial literature. The European Youth Policies and Research Centre (EKCYP), established within this cooperation, focuses on the development and dissemination of research, policies, and practices related to youth policies and research throughout Europe. Within this framework, the EKCYP Communication Network prepares and publishes country reports on youth participation, volunteering, and better understanding of youth, with legal representatives from each European country. Additionally, another formation established under the same cooperation in 2011 is the "Pool of European Youth Researchers" (PEYR). Within this context, youth researchers work through national representation to increase and disseminate scientific studies conducted in the youth

field and ensure the flow of information. Turkish representatives have been serving in both centers since their establishment.

Beyond this cooperation, the various opportunities provided by both the EU and the Council of Europe, of which Turkey is a member, have led to significant transformations for young people and those working with young people, especially through the conversion of cross-border work into programs within Europe. The White Paper on Youth (2001), the European Youth Pact (2005), the EU 2010-2018 Youth Strategy, and the inclusion of Youth on the Move in the Europe 2020 Strategy (also known as the National Agency Youth Initiative) are perhaps the most important building blocks of this direction within the EU.

### 3-THE NUMBER OF INSTITUTIONS WITH ENVIRONMENTAL-CLIMATE STUDIES

Associations, Non-Governmental Organizations (NGOs), Public Institutions, and institutions within institutions are involved in the Environmental Climate issue. Youth groups and schools are also among the organizations involved.



When the number of associations operating nationwide in Turkey is examined over the years, it is observed that the number of associations has increased over time. In 2020,

there were 120,241 active associations, with an increase of 1,900 associations compared to the previous year.

It is understood that there are 2,572 associations for environmental and wildlife conservation nationwide in Turkey, **with 70 associations specifically in Mersin.**

#### **4-WHAT PERCENTAGE OF YOUNG PEOPLE IN INSTITUTIONS CAN BE REACHED WITH THE PROJECT**

With the activities we will carry out, including social media, the project website, and dissemination efforts involving project partners, we anticipate reaching thousands of people. The project will focus on young people and their voluntary participation in the context of "non-formal" education in order to promote social and personal development through widespread and inclusive learning. Social, cultural, and educational activities will be organized to increase young people's chances of integration and participation in society. As demonstrated by the diversity within the European context, the organization and framework of youth work rely not only on social and educational practices but also on financial and political contributions. This means that historical, cultural, and political contexts define the framework of national-level youth work.

#### **5-HOW MANY YOUNG PEOPLE CAN BE TRAINED IN GREEN YOUTH CENTERS**

Through the green thinking centers established within the association, training and seminars will be provided both locally through collaborations with institutions and online.

How many young people can be trained in Green Thinking Centers



- Within the Association, Monthly: 15
- Within the Association, Yearly: 150
- With Stakeholder Institutions, Yearly: 500
- Online, Yearly: 1000

Environmental issues not only threaten human existence but also make our world uninhabitable. One way to stop this great disaster is for people to abandon conventional thinking and behaviors, both now and in the future. Therefore, people must take action without wasting any time to find solutions to these environmental problems. Today, environmental problems cannot be solved solely through technology or laws. It can only be achieved through a change in individual behaviors. Changing behaviors necessitates a change in attitudes, knowledge, and values. The development of a positive attitude and values towards the environment is possible through environmental education.

Environmental education can be defined as developing environmental awareness throughout all sectors of society, imparting environmentally sensitive, sustainable, and positive behavior changes, and preserving natural, historical, cultural, and socio-aesthetic values while actively promoting participation and taking on roles in problem-solving. The fundamental aim of environmental education is to help individuals who have gone through the education and learning process to become equipped with knowledge, skills, and values that enable them to exhibit responsible behaviors concerning the environment.

## **6-HOW MANY NGOS / PUBLIC / YOUTH GROUPS / SCHOOLS CAN BE GIVEN SEMINARS IN GREEN YOUTH CENTERS**

Number of institutions planned to collaborate for local trainings and seminars through the establishment of a green thinking center within the association:

- Monthly: 3 institutions



- Annual: 15 institutions

## **7-NUMBER OF UNIVERSITIES / BUSINESSES AND YOUNG PEOPLE WHO CAN COME TOGETHER FOR GREEN EMPLOYMENT IN THE GREEN YOUTH CENTER**

Through discussions with local businesses and universities, the association aims to identify green employment areas and opportunities. These areas are expected to contribute to minimizing and eliminating risks such as climate change, water scarcity, and ecosystem losses, while also creating new occupational fields and economic activities. The term "green jobs" refers to the new areas of activity that are envisioned to replace various occupational groups, known as "brown jobs," which pose risks to the environment. The transition to a green economy entails both positive and negative potential effects.

Investments and increased demand for green goods and services will require the introduction of new equipment and infrastructure elements. Consequently, the expansion of existing industries and the number of entrepreneurs will be stimulated. This, in turn, will lead to an increased demand for labor in green sectors and an increase in the number of green jobs. Furthermore, the expanding industries' inter-industry relationships will create additional employment opportunities in various fields that provide inputs to the green sectors, such as insulation materials, cement production, steel, and carbon production. One of the positive aspects associated with green jobs is that the income generated from these additional activities will be redistributed through spending, additional investment, and consumption. This redistribution is considered a favorable outcome of green jobs (ILO, 2012). Significant attention is given to the new employment areas that emerge within the framework of managing structural changes, including energy, water, waste, construction, agriculture, forestry, traditional economic sectors, and potential side effects on vulnerable households, in line with economic growth, reduced pollution, and more efficient resource utilization (UNEP, 2010a). These new employment areas, referred to as green jobs, will emerge in sectors such as agriculture, construction,

energy, forestry, and transportation. However, in sectors where natural capital has significantly diminished, such as the fishing industry, there may be short and medium-term occupational and income losses in order to restore natural stocks.

Additionally, various investments may be necessary to retrain the workforce and acquire new skills.

Efficient energy use in buildings, prevention of environmental damage, and the emergence of new employment areas are of utmost importance. Buildings account for approximately 30-40% of energy consumption, greenhouse gas emissions, and total waste.

## **PART TWO- SPECIFICATION OF THE ELEMENTS TO LEARN UNDER THIS TOPIC INCLUDING LEARNING TASKS**

### **1-Impact areas of environment-climate awareness**

Governments can directly invest in public buildings and schools, hospitals, and university buildings to use energy more efficiently. Additionally, tax incentives can be introduced for private companies and households to promote the widespread adoption of building insulation. To ensure sustainable transportation, governments need to be incentivized by international financial institutions to develop and promote more energy-efficient and environmentally friendly transportation models and infrastructure, improve public transportation, and increase the use of green vehicles. The increase in the production of low-emission vehicles is estimated to create new employment opportunities for approximately 3.8 million people (UNEP, 2009:7). This employment growth will further stimulate secondary sectors. In the field of sustainable energy, particularly in developed countries, they should support the financing of ongoing clean energy projects. Developing economies, on the other hand, should implement applications for the widespread adoption of small-scale and off-grid energy systems. In the areas of sustainable agriculture and clean drinking water supply, governments have important responsibilities to create added value, prevent water losses in traditional irrigation, and improve water capacity and quality. The agricultural sector continues to be the largest sector worldwide with billions of workers, and it is also home to the majority of the poorest people. The issue of sustainability in the agricultural sector is closely related to water supply. On the other hand, clean drinking water supply is also seriously threatened globally. According to a report by the OECD, by 2050, 40% of the world's population will face difficulties in finding clean drinking water (OECD, 2012).

The International Labour Organization (ILO) published a report in 2012 stating that many studies indicate the emergence of new employment opportunities for 15-60 million people globally during the transition to a green economy in all sectors. It is also mentioned that developing economies have significant advantages in the emergence of green jobs. According to many reports, an annual international

investment of \$30 billion to prevent deforestation will result in 8 million people in developing countries finding full-time employment (ILO, 2012:7).

## **2-ANALYSIS OF ACCESS ROUTES TO FINANCE FOR GREEN ENTREPRENEURS**

In Turkey, entrepreneurs generally access financial resources through two channels: the free market and public sources. From the perspective of the free market, the banking system is the most important provider of financial resources. Apart from the banking system, private venture capital firms can also be considered as significant financial resource providers for entrepreneurs. Government assistance provided through public sources includes both activity support (support for activities to be carried out by entrepreneurs and SMEs) and capital support (credit guarantees, credit interest support, etc.). Additionally, there are various incentives provided by different ministries to businesses and investors, such as tax incentives and social security premium incentives. Furthermore, the public sector indirectly supports entrepreneurs through cash and in-kind contributions to the establishment and operation of structures such as business incubators (İŞGEM) and technology development centers (TEKMER).

Therefore, the direct and indirect financial support provided to entrepreneurs and SMEs through public sources in Turkey exhibits a great variety (Ministry of Development, 2014: 32). Among the public support programs, there are capital supports such as credit interest support provided by the Small and Medium Enterprises Development Organization (KOSGEB), Techno-Entrepreneurship Capital Support provided by the Ministry of Science, Industry and Technology to support new and innovative ventures, and New Entrepreneur Support provided by KOSGEB. Additionally, there are activity supports provided by institutions such as the Ministry of Science, Industry and Technology, Ministry of Economy, TUBITAK, KOSGEB, TTGV, Development Agencies, etc. (Ministry of Development, 2014: 32-35). Like in

most countries, banks are the most important source of financing for SMEs in Turkey. Due to the greater difficulties small businesses face compared to large businesses in accessing bank loans, various support programs are implemented by the government to increase their access to credit. These support programs can take different forms, such as implementing conditional (low-interest, long-term, etc.) credit programs and establishing credit guarantee systems and microcredit systems, in line with policy priorities. In recent years, developed countries have preferred less interventionist policies such as developing credit guarantee systems and making improvements to the macroeconomic and financial systems (Yüksel, 2011: 2). The nature and extent of the difficulties faced by SMEs in accessing bank loans vary depending on their scale and the business environment they operate in. Small and young businesses generally face problems in accessing credit and in terms of credit costs under all circumstances, while medium-sized businesses may experience difficulties in accessing credit due to insufficient credit volume and unfavorable conditions in developed economies, and in accessing credit in general in developing economies. This situation is generally due to the less developed financial system, liquidity shortages, and banks' lack of experience and willingness to lend to small-scale businesses in developing countries.

Despite the specialization in SME loans within the banking system in recent years, the situation still falls far short of where it should be. In Europe, activities related to venture capital have gained momentum, especially since 1980. Various studies indicate that venture capital investments in Europe have gained positive momentum through the individual regulations and joint programs of European Union member countries. A study conducted by the European Central Bank based on the years 2007-2012 shows that venture capital investments have been declining since 2008. While there are various reasons for this, the major cause is stated to be the economic crisis that started in the United States in 2007, spread to international markets in 2008, and intensified after 2009. In 2013, venture capital investments in Europe increased by 5% compared to 2012, reaching a total amount of 3.4 billion euros. In that year, venture capital support was provided to more than 3000 companies.

## **PART THREE- BEST PRACTICES WE HAVE IN OUR INSTITUTION, IN OUR CITY OR COUNTRY EVEN IN THE PARTNERS' COUNTRIES**

### **1-Green Entrepreneurship Culture in the regional area**

Environmental issues are becoming increasingly important because the environment is constantly being harmed, and many environmental problems have their roots in economic activities. Environmental degradation jeopardizes the future of humanity.

One contributing factor to stopping environmental degradation is green entrepreneurship. Green entrepreneurship has the potential to act as a catalyst for positive change in both economic and environmental realms. Green entrepreneurs view the environmental dimension not as an obstacle but as an opportunity, and they offer different types of businesses that are beneficial to the environment, socially responsible, and economically satisfying. In short, green entrepreneurs seek better ways to have a cleaner and greener world. There is still much to learn about green entrepreneurship, and the main objective of this study is to provide definitions related to green entrepreneurship and to highlight the barriers it faces and its importance for the economy and society.

The environmental challenges faced today can be turned into economic opportunities by green entrepreneurs. For example, green entrepreneurs can bridge the gap between increasing economic demands and environmental services by producing eco-innovative products and services such as new products made from recycled waste or services in the field of environmental technology (such as renewable energy).

Green entrepreneurs engage in activities such as eco-tourism, recycling, energy efficiency, sustainable mobility, organic farming, renewable energy, and contribute to the increasing number of green jobs associated with these activities.

Green entrepreneurship requires both innovation and entrepreneurship. Green entrepreneurship is important because of eco-innovations. Eco-innovations will be the future competitive advantage for companies and countries. If companies and countries want to succeed in the international market in the future, new and innovative

environmental technologies, services, and processes will be much more important than low cost (McEwen, 2013: 270).

### **Some regional and local support programs for Young Entrepreneurs**

<i>Title</i>	<b>Mersin Üniversitesi Girişim Limanı (Mersin University Venture Port)</b>
<i>Provider (+ Is it a public or private body?)</i>	Public Body
<i>Target group and eligibility criteria</i>	Youth
<i>Amount- Opportunities</i>	Basic Entrepreneurship Training - 10 hours Applied Business Plan Training - 40 hours Applied Project Writing Training - 60 hours
<i>Conditions</i>	Apply now to benefit from all these opportunities, let's first meet and talk about what we can do for your idea.
<i>Level (Local / regional / national)</i>	Local
<i>What is it for? (short description)</i>	Founded by Mersin University in 2018, Mersin University Young Entrepreneur Application and Research Centre, also known as Venture Port, aims to support all entrepreneurship activities, especially in the Çukurova region. Aiming to support projects in many different fields from financial technologies, health technologies, augmented reality applications to hardware projects, Venture Port is a large entrepreneurship platform that brings together entrepreneurs, companies, angel investors and professionals. It aims to build a global entrepreneurship ecosystem through unique experiences and inspiring connections where people have the chance to prove their entrepreneurial skills.
<i>When and how to apply?</i>	For Application Forms click on the link: <a href="https://girisimlimani.com/sign-up/">https://girisimlimani.com/sign-up/</a>
<i>Link and contact info</i>	<a href="https://girisimlimani.com/">https://girisimlimani.com/</a> <a href="mailto:girisimlimani@mersin.edu.tr">girisimlimani@mersin.edu.tr</a>



<i>Title</i>	<b>Mersin Teknopark (Mersin Technopark)</b>
<i>Provider (+ Is it a public or private body?)</i>	Public Body
<i>Target group and eligibility criteria</i>	Youth
<i>Amount- Opportunities</i>	Mentor-Mentee Matching Programme Mentor-Mentee System Exchange of information and experience between the parties Duration: 6 Months - 1 year Evaluation Format : Mentoring Follow-up Form Match Status : Mentor TGB, Mentee TGB
<i>Conditions</i>	No. 691 Technology Development Zones (TDZ) established in accordance with the Technology Development Zones Law may become a member of the association upon application.  Acceptance to Membership  The membership application to be made in writing to the chairman of the Association by persons who meet the membership requirements shall be decided by the board of directors within maximum thirty days as acceptance to membership or rejection of the request and the result shall be notified to the applicant.
<i>Level (Local / regional / national)</i>	Local
<i>What is it for? (short description)</i>	Mersin Teknoloji Geliştirme Bölgesi- Mersin Technology Development Zone (MTGB) was established in order to transfer the research and development (R&D) activities carried out by universities, industry and other organisations in Mersin to industrial production and to produce new technologies that will contribute to Mersin's national and international competitiveness.
<i>When and how to apply?</i>	Technoparks are organised research and business development ecosystems where universities/research institutions and industrial enterprises carry out research, development and innovation activities in the same environment, and where academic, economic and social structures are integrated in a way to ensure knowledge and technology transfer between each other.
<i>Link and contact info</i>	For Application Forms click on the link: Mersin Üniversitesi Çiftlikköy Kampüsü Teknopark İdari Binası MERSİN <a href="http://www.technoscope.com.tr">www.technoscope.com.tr</a> <a href="mailto:info@technoscope.com.tr">info@technoscope.com.tr</a>



## **PART FOUR- LINKS TO VIDEOS AND FURTHER READING SOURCES FOR THE CONTENT OF MODULE**

<i>Title</i>	<b>The European exchange programme for Entrepreneurs</b>
<i>Provider</i>	EU
<i>Short description (max 2 sentences)</i>	Erasmus for Young Entrepreneurs is a cross-border exchange programme which gives new or aspiring entrepreneurs the chance to learn from experienced entrepreneurs running small businesses in other Participating Countries.
<i>Link and contact info (English!)</i>	<a href="https://www.erasmus-entrepreneurs.eu/">https://www.erasmus-entrepreneurs.eu/</a>

### **Resources and useful links for new entrepreneurs in our country**

- Mersin Üniversitesi <https://l24.im/zuF>
- TÜBİTAK Genç Girişimci Destek Programı <https://l24.im/zVyu>
- StartupCentrum <https://media.startupcentrum.com/tr/startuplar-icin-hibe-ve-tesvikler/#HIT>
- <https://www.learningfornature.org/en/courses/green-entrepreneurship-2022/>
- <https://www.green-entrepreneurship.online/en/curriculum/>

## **PART FIVE- THE IMPORTANCE OF THE MODULE IN YOUTH EDUCATION**

It is important for young people to have this kind of information so that they know who to approach if they want to develop an environmental project, environment-climate project or to develop a business idea. Understand the state of the art regarding Environmental-climate sensitivity and what steps should be taken to improve the situation.

**PART SIX- YOU CAN INCLUDE A SELF-CHECK FOR THE LEARNER AT THE END, A CHECKLIST ABOUT COMPETENCES THEY HAVE GOT FROM THE MODULE.**

The increasing urgency of contemporary environmental issues (e.g. energy shortages, waste disposal and climate change) makes it essential to educate younger generations, as today's children will be tomorrow's adults. With the relevant skills training, young people will be able to confront the challenges that our world is facing. For example, it is critical that young people fully understand the possible consequences of poor management of the world's natural resources.

Considering the pace at which our world is developing, we will surely be faced with the challenges of contemporary environmental issues sooner rather than later. Raising consciousness about environmental issues requires a radically new way of thinking, which cannot be gained in a single lesson. We must learn to live everyday conscious of our environmental impact.

Green skills refer to the skills that enable employers and employees to:

- Reduce energy and raw material consumption,
- Limit greenhouse gas emissions,
- Minimise waste and pollution, and
- Design products and services that provide a solution to an environmental problem
- Analytical ability
- Initiative
- Motivation
- Decision-making
- Strategic thinking

- Strategic networking
- Critical thinking

## **PART SEVEN- CONCLUSION**

Analysing the numbers and situation of NGOs in our region or local districts we could have a chance to get the knowledge about improving our network and the numbers of probable youth to reach within our local activities. With the help of interviews, we have learned the gap between the formal education and skills need in solving problems experienced in the environment and climate field. If we prepare many more local activities to increase awareness on green thinking skills, we need to reach youth generation from their early ages.

## **REFERENCES**

International Journal of Economics and Innovation

<https://www.siviltoplum.gov.tr/>

<https://mersin.meb.gov.tr/>



*Arad*

## **PART ONE**

### Introduction to the Topic

#### **1-Determining the number of existing enterprises / NGOs / public /youth groups / schools**

##### 1.1-Associations / NGOs / Youth groups

- European Enviroment Agency
- National Agency for Enviromental Protection
- Administration of the Enviroment Fund
- The Enviromental Guard

##### 1.1.A-Range of Associations According to their Field of Activities (your country ( Countrywide)):

- European Enviroment Agency
  - provides decision makers and the public with accurate and independent information about the environment.
- National Agency for Enviromental Protection
  - has as main objective to ensure the population a healthy environment in harmony with the economic development and the social progress of Romania.
- Administration of the Enviroment Fund
  - provides financial support for the implementation of projects and programs for environmental protection
- The Enviromental Guard

- controls the activities with an impact on the environment, and applies contravention sanctions provided by the legislation in the field of environmental protection;
- verifies notifications regarding the violation of the legislation in force in the field of environmental protection;
- cooperates with other authorities and international environmental bodies and participates in projects and programs carried out in the field of environmental protection;

#### 1.1.B- Number of Associations in your city:

- Romsilva - National Directorate of Forests
- Association *Codrenii Vășoiaia*
- Association *Condor Club Arad*
- Association for Tourism and Nature Protection *Veniți cu noi*
- Association *Breath green, Romanian!*
- *The Regional Ecological Centre Arad*
- *Ecological Organisation Ecomond*

#### 1.2-Schools;

##### 1.2.A-Schools in ( your country) Secondary Schools (Public)

- Technological Highschool for Construction and Enviromental Protection, Arad
- Technological Highschool of Forestry and Agriculture, Timișoara
- Technical College *Mihai Viteazul*, Oradea
- Technological Highschool *Grigore Moisil*, Deva
- Technical College *Ana Aslan*, Cluj-Napoca
- Technical College *Remus Răduleț*, Brașov
- Technological Highschool *Pontica*, Constanța
- Technological Highschool *Petru Poni*, Iași
- Technological Highschool *Constantin Brâncuși*, București

### 1.2.B-In your city:

- Technological Highschool for Construction and Enviromental Protection, Arad
- Aurel Vlaicu University, The Faculty of Food Engineering, Tourism and Enviromental Protection, Arad

## 2-Determination of youth age groups of institutions

The number of schools in Arad County, Romania, is more than 460. Out of these, 45 are high schools, colleges or post-high school educational institutions. Youth beneficiaries (students in these educational institutions) are aged between 14 – 20 years old.

The 2 large universities of Arad city gather thousands of students in total, from Arad County and Western part of Romania, mainly, with an impressive number of international students, for some of the faculties. Their ages range from 18 to 23 and towards 30, to what is considered as „youth group” in terms of Erasmus+ Programme by the European Union.

## 3-The number of institutions with environmental-climate studies

*Lunca Mureşului Natural Park* is a protected area in the very outskirts of the city of Arad. The organization with the same name is in charge of educational activities and preservation of the ecosystem. Residents of Arad area can benefit of organized workshops and various educational projects implemented there. The natural park is open access for leisure purposes to all visitors, free of charge.





In Arad region, there are several organization, foundations and government-led bodies that are in charge of managing resources and ensuring sustainability, out of this longer list, the public financed organizations are elaborating yearly and monthly reports or studies with concern of environmental interest.

#### **4-What percentage of young people in institutions can be reached with the project**

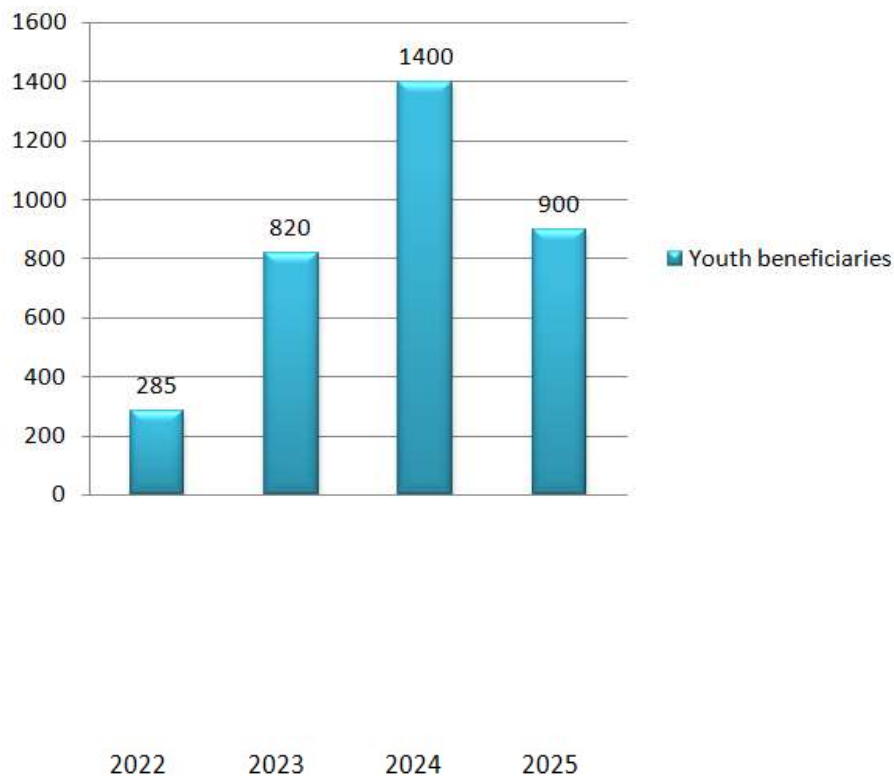
A very large number of youth can be reached with the project activities. By the production of the current report, a number of over 600 young people benefitted from workshops help by Share Education Association, on green thinking and empowering sustainable behaviours.

In general schools and organizations are very open to external collaborations with organizations providing training/workshops and educational opportunities. For this project only, we estimate a number of over 2000 young people benefiting of the project results during the 2 years of implementation.

#### **5-How many young people can be trained in green youth centres**

Using previous data from association reports and estimates from the management plans, the total number of young people reached by the end of year 2024 could pike to 1400, due to the project activities and the organization's strategic goals for the upcoming years.





#### **6-How many NGOs / public / youth groups / schools can be given seminars in green youth centres**

At least 3 different organizations can participate in the green youth centre's activities, giving seminars and expertise.

#### **7-Number of universities / businesses and young people who can come together for green employment in the green youth centre**

The 2 Universities in Arad will participate in the project activities and bring added value to the green youth centres.



## PART TWO

Specification of the elements to learn under this topic including learning tasks:

### 8-Impact areas of environment-climate awareness

Ceala Visitor Center - Lunca Mureşului Natural Park

### 9-Analysis of access routes to finance for Green Entrepreneurs

- Green Power Investment SRL Arad offers complete solutions for investments in renewable energy
- The Administration of the Environment Fund provides financial support for the implementation of projects and programs for environmental protection
- The *Black Sea ClimAccelerator* program offers support to start-ups from Romania and Bulgaria that focus on solutions to combat climate change

in the Green Startup Ecosystem report 150 green startups in Romania and 115 key actors supporting them were identified

## PART THREE

### Best practices

we have in our institution, in our city or country even in the partners' countries

Some important projects and examples of good practices are or were implemented at national and regional levels:

- Managementul conservativ al siturilor de importanță comunitară “Insulele stepice Șura Mică-Slimnic”, “Movilele de la Păucea” și “Mlaca Tătarilor (Conservative management of the sites of community importance “Șura Mică-Slimnic steppe islands”, “Movilele de la Păucea” and “Mlaca Tătarilor).
- Proiect Norvegia "Parteneriatul pentru un mediu curat, reducerea deșeurilor și dezvoltare durabilă în Regiunea 7 Centru" (Norway Project "Partnership for a Clean Environment, Waste Reduction and Sustainable Development in Region 7 Center").
- Proiect BioREGIO Carpathians
- Proiect LIFE+ "Conservarea acvilei țipătoare mici în România" (LIFE + project "Conservation of the Lesser Spotted Eagle in Romania").
- Proiectul CLEVER Cities-“Proiectarea participativă a soluțiilor ecologice ajustate la nivel local pentru regenerarea cu valoare adăugată, integrată din punct de vedere social în Orașe” finanțat prin Programul Orizont 2020 (CLEVER Cities project-“Participatory design of locally adjusted ecological solutions for value-added regeneration, socially integrated in Cities” funded by Horizon 2020).

- CAMARO-D-“Cooperare pentru practici avansate de management a impactului utilizării terenurilor asupra regimului apei în bazinul hidrografic al Dunării (CAMARO-D- “Cooperation for advanced land use management practices on the water regime in the Danube river basin”).
- Project WOLFLIFE-LIFE13NAT/RO/000205 (WOLFLIFE aims to implement best practices for the conservation of wolves (*Canis lupus*) in the wild, maintain a healthy and viable wolf population in the Eastern Carpathians, but also promote better wolf-human coexistence).

### **10-Green Entrepreneurship Culture in the regional area**

- *Vitas supports education - School of Green Entrepreneurship* – regional project for young students (2019)
- The Western University "Vasile Goldiș" (UVVG) Arad organized a webinar on "Innovative entrepreneurship in the green economy" (2021)
- The Western University "Vasile Goldiș" (UVVG) Arad organized the webinar: "The green economy. Technological changes vs. Behavioural changes (2022)

## PART FOUR

As the priorities of the world leading organizations and governments shift to a more greener approach in all fields, following with financial investments and allocations, the resources for green thinking and environmental education can be found online or created by educators and trainers according to the educational needs of the groups. Following, as series of resources for information and ready to be used as such by leaders and trainers.

- *Exploring Green Building and the Future of Construction* – an interesting and innovative perspective on how we see the future of housing and building industry.

<https://www.youtube.com/watch?v=wmoy27EZ8y0>

- *Greenuary* – a creative way to challenge students and youth to implement small changes in their behaviour towards sustainability

[https://www.salto-youth.net/downloads/toolbox\\_tool\\_download-file-2858/Greenuary%20\(5\).pdf](https://www.salto-youth.net/downloads/toolbox_tool_download-file-2858/Greenuary%20(5).pdf)

- *"Think green: Education and climate change"*, a report on education and environmental education by The Organisation for Economic Co-operation and Development

<https://www.oecd-ilibrary.org/docserver/2a9a1cdd-en.pdf?expires=1692140691&id=id&accname=guest&checksum=9338D2E76C9A7C633EC5B969885AE6A6>

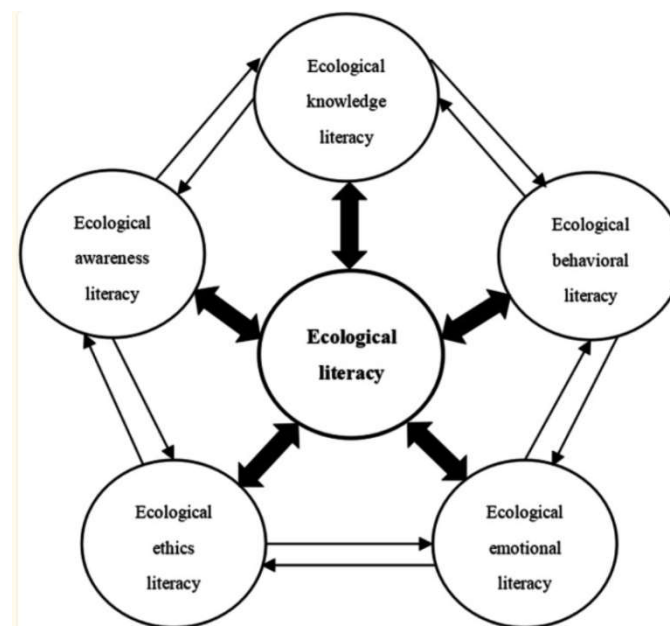
- How to make your school more sustainable and eco-friendlier?

<https://circularcomputing.com/news/10-ways-make-school-sustainable/>

## PART FIVE

### The importance of the module in Youth Education

Ecological literacy refers to the acquisition and dissemination of ecological knowledge, enhancing awareness of ecological protection, and ultimately guiding the sustainable development of ecological behaviour to achieve a higher level of ecological literacy. In other words, the five dimensions of ecological literacy comprise a unified whole, and each of them is almost equally important theoretically. <sup>1</sup>





## PART SIX

You can include a self-Check for the learner at the end, a checklist about competences they have got from the module.

## PART SEVEN

### Conclusions

Across EU and OECD countries, the vast majority of 15-year-old students (nearly 80%) are aware of climate change and global warming. However, students' environmental awareness varies greatly by topic. Their pro-environmental behaviour also largely differs by form of engagement: around 6 out of 10 students report being engaged in saving energy for environmental reasons, while fewer than 2 out of 5 students report participating in collective activities aimed at promoting environmental protection.<sup>2</sup>

The importance of education in environmental awareness is paramount if we wish for sustainable development and greener economies. More so, it is not a matter of „wish” but a matter of necessity in order to preserve the natural resources and maintain the quality of living.

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## Portugal

### Foreword

Environment and climate change are directly related to people's quality of life, as detailed in the EU's 2030 long-term strategy and in the ERASMUS 2021-27 strategy. Sustainability of climates is important in terms of ensuring that future generations can use and benefit from natural resources. All countries should pay special attention to the five sectors based on Green and Renewable Economy in the Field of Environmental Literacy.

These are; Renewable energy, sustainable transport, green construction, sustainable tourism, energy efficiency and management, etc. It is extremely important for the EU and the world to raise generations of entrepreneurs who think green for these sectors.

The 2030 strategy of the EU is a binding set of legislation to ensure that it achieves its climate and energy targets. The progress of the EU towards a lowcarbon economy and fulfillment of the commitments under the Paris Agreement will ensure green growth and raising green-minded generations.

Our aim with our partners involved in the project is to raise greenthinking generations in our countries and regions and to create awareness in the field of climate-environmental literacy. According to the results of the Concern Survey for Environmental Problems we have conducted in our regions, the most important problem experienced in the environment and climate is the insensitivity of the new generation and their lack of green entrepreneurship knowledge and vision. In order to solve this situation, some data should be obtained first. These data are important in determining the direction in which we should continue our studies and research on the subject. These data can only be reached by performing a situation analysis. Efforts to prevent environmental problems before they occur will only be realized by raising generations that have environmental literacy and green thinking.

Environmental education is a systematic and lifelong process for all institutions. This process is very important for a livable EUROPE. Thanks to the situation analysis to be made, **we will have developed a regional (with partner countries) European situation document describing the situation of our project in the EU**. Each partner will discuss the issue according to the following headings and will produce a report. Responsible prEU nec GmbH will combine the situation analysis reports from other partners and prepare a common and general document.

With this study, we will x-ray the environmental-climate awareness and sustainability of our Regions and countries. Some of the work we have done before the project will be further developed with the situation analysis and by ensuring that all partners do this, it will enable our project partners to focus on the most important and necessary issues. Innovation elements, on the other hand; With the work we will do, not only environmental-climate awareness, but also there will be the employment areas of green entrepreneurship, the use of green energy, environmental literacy, etc.

The content of the output:

**IN AN ANALYSIS REPORT;**

**PART ONE-** Introduction to The Topic

## ***1-Determining the number of existing NGOs / public / youth groups / schools***

### ***1.1 - Associations / NGOs / Youth groups***

Non-Governmental Organisations (NGOs) play a key role in addressing social problems and promoting positive change on a global scale. These organisations, driven by a commitment to social justice, human rights and environmental sustainability, among others, serve as catalysts for progress where governments and the private sector may fall short. NGOs often fill gaps in healthcare, education, poverty reduction and disaster relief, offering vital services to marginalised communities, and contributing to the overall resilience of societies. NGOs also act as advocates for the voiceless, lobbying for policy change and raising awareness of pressing issues. Their inclusive and participatory approach promotes community involvement, empowering individuals to take control of their own welfare. In an interconnected world facing multiple challenges, NGOs are essential partners in building a more equitable, supportive and sustainable future.

According to the latest data available, in Portugal, by 2016, there were 17012 NGOs (Franco 2015), and by 2022 there were 103 Environmental NGOs (Pordata 2023). If we consider Aveiro's Region, in 2013, there were 991 NGOs (Fundação Calouste Gulbenkian), and in 2022, 4 ENGOS (Pordata 2023). If we zoom in even further, to the Municipality of Albergaria-a-Velha, in 2013, there were 64 NGOs (Fundação Calouste Gulbenkian), and in 2022, only 1 ENGO (Pordata 2023).

Regarding Youth Groups, and focusing on Youth Associations, according to Law No. 57/2019 of 7 August, are those with more than 80% of members aged 30 or less, in which the executive body is made up of 80% of young people aged 30 or less and led by a young person aged 30 or less on the date of their election. In Portugal, there is a National Federation of Youth Associations, that represents 1200 Youth Associations countrywide (FNAJ).

*1.1.A - Range of Associations According to their Field of Activities (your country (Countrywide)):*

N.º No.	Industry (A10)	
13 1		Agriculture, forestry and fishing
5 2		Industry, energy, water supply and sewerage
2 3		Construction
4 4		Wholesale and retail trade, repair of motor vehicles and motorcycles; transportation and storage; accommodation and food service activities
77 5		Information and communication
0 6		Financial and insurance activities
0 7		Real estate activities
1 006 8		Professional, scientific and technical activities; administrative and support service activities
8 425 9		Public administration and defence; compulsory social security; education; human health and social work activities
		Of which:
886 i		Education
379 ii		Human health services
6 684 iii		Social work activities
18 453 10		Arts; entertainment; repair of household goods and other services
		Of which:
11 228 iv		Associative organizations activities
27 985	Total	

Bin

Table 1 - Non-Governmental Organizations (NGO) by industry (A10) - 2013. Source: Calouste Gulbenkian Foundation ([https://cdn.gulbenkian.pt/wp-content/uploads/2017/07/Quadros\\_finais\\_v3.pdf](https://cdn.gulbenkian.pt/wp-content/uploads/2017/07/Quadros_finais_v3.pdf))

## 1.2 - Schools;

The education system in Portugal is characterised by a commitment to providing comprehensive, quality education from primary to higher education. The system is divided into three main cycles: basic education, secondary education and higher education. Basic education comprises three cycles: the first, from 6 to 10 years old, the second, from 10 to 12 years old, and the third, from 12 to 15 years old. This is followed by secondary education, usually between the ages of 15 and 18, and students can choose between a general or

vocational route. The higher education system includes universities, polytechnics and private institutions, which offer a diverse range of academic programmes.

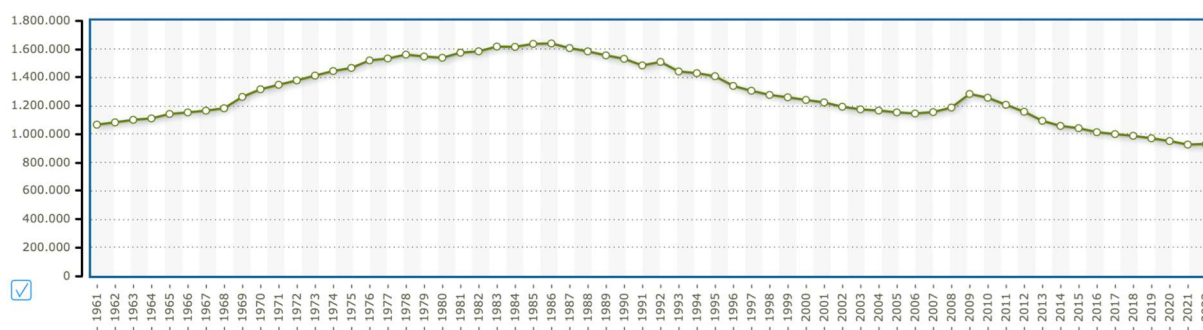


Figure 1 - Number of students enrolled in basic education in Portugal. Source: Pordata  
(<https://www.pordata.pt/portugal/alunos+matriculados+no+ensino+basico+total+e+por+modalidade+de+ensino-1039>)

In 2022, there were 930 323 students enrolled in basic education. The number has been decreasing over the years, a reflection of the low birth rate in Portugal.

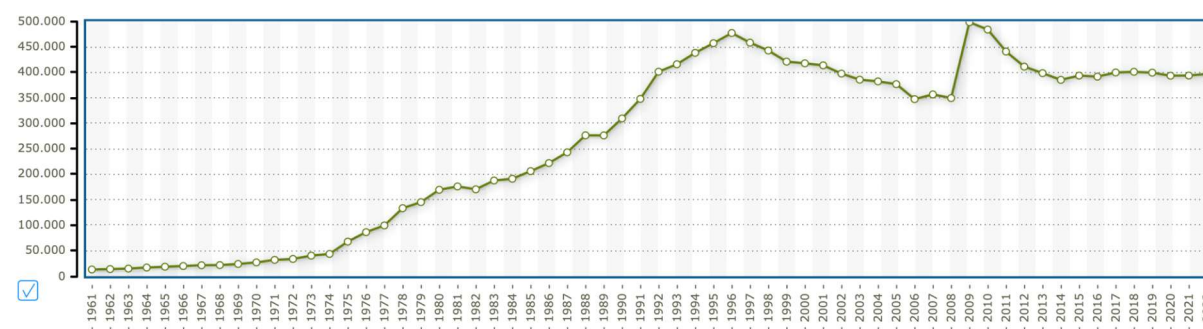


Figure 2 - Number of students enrolled in secondary education in Portugal. Source: Pordata  
(<https://www.pordata.pt/portugal/alunos+matriculados+no+ensino+secundario+total+e+por+modalidade+de+ensino-1042>)

Regarding secondary education, there were 397 100 students enrolled. The increasing number in the 20th century was due to an investment in education, and the peak in 2009 reflects the change in the education system, with compulsory education moving to the 12th grade.

In Portugal, there are 963 secondary schools, of which 588 are public and 375 private.

Regarding the municipality of Albergaria-a-Velha, there is 1 public secondary school and 2 private secondary schools. In total, in 2022, there were 873 students in the municipality, considering the regular and vocational education, and public and private schools – 479 students in public schools and 394 students in private schools. These students are taught by 162 teachers, from the 3rd cycle and the secondary, 141 in public schools and 21 in private schools.

### ***3-The number of institutions with environmental-climate studies***

In Aveiro's region, there is one public university (University of Aveiro), which includes 6 R&D centres that study, among others, climate issues, environmental issues and the impacts of climate change in the environment, and, consequently, on biodiversity and on humans.

#### **4-What percentage of young people in institutions can be reached with the project**

Through a range of activities, including the presence on social media, the project website, and our cooperation network as well as our volunteers, we believe we can reach a substantial audience. We estimate that we can reach at least 800 people, mostly considering Biology students, Biology and Geology students, Environmental Engineering students, and Environmental Studies students.

Nevertheless, our aim is to be as inclusive as possible, therefore it is important to ensure that aspiring entrepreneurs from different backgrounds (whether cultural, socioeconomic, or demographic) have equal opportunities to acquire entrepreneurial skills and knowledge. To reach a wider audience, we will disseminate the project and its results among our network of contacts.

#### ***5-How many young people can be trained in green youth centres***

In total, we believe we can train about 100 people in the Green Thinking Centre, mostly through workshops.

#### ***6-How many NGOs / public / youth groups / schools can be given seminars in green youth centres***

We estimate that 9 NGOs and public entities can participate in seminars, delivering lectures and workshops; and that 10 schools and youth associations can attend these seminars.

#### ***7-Number of universities / businesses and young people who can come together for green employment in the green youth centre***

The University of Aveiro can participate in the project activities, as well as 5 business people (estimates), bringing added value to the green youth centre and helping us to reach more young people.

**PART TWO-** Specification of the elements to learn under this topic including learning tasks:

#### ***8-Impact areas of environment-climate awareness***

There are several areas that impact environment-climate awareness. Among those, we can highlight politics and decision-making, marketing, science (R&D), nature conservation, and daily life. Politics and decision-making as they impact everything in a country's life, especially the public investments on greener alternatives to fossil fuels; marketing, that influences the consumers choice and may help to raise awareness to environmental and climate issues; science (R&D) as it provides more knowledge on these topics and, at the same time, increased awareness stimulates innovation in renewable energy, climate modelling, and sustainable technologies; nature conservation because nature helps to mitigate the impacts of climate change, nevertheless, it is also impacted by climate change, therefore, more efforts should be put to nature conservation project; and finally, our daily life also impacts environment-climate awareness, considering that we are examples to one another, our environment-oriented actions may influence other people to do the same.

#### ***9-Analysis of access routes to finance for Green Entrepreneurs***

In Portugal there are different types of financing for Green Entrepreneurs:

- Grants;
- Public support (e.g. through IEFP programs, Portugal 2020 and Portugal 2030);
- Loans;



- Mutual guaranteed credit;
- Crowdfunding;
- Equity crowdfunding;
- Peer-to-peer lending;
- Other private investments.

**PART THREE-** Best practices we have in our institution, in our city or country even in the partners' countries

***10-Green Entrepreneurship Culture in the regional area***

Associação BioLiving is a good example of Green Entrepreneurship, because our association was created by young people whose objectives were, among others, to promote sustainability through the engagement in environmental citizenship and public participation for the protection of nature while boosting the social economy and fostering inclusion, peace and solidarity, using education, natural resources and the protection of nature as leitmotiv. It started with 2 collaborators and a few volunteers working locally and after 6 years we count with 7 collaborators and more than 20 volunteers that are involved in more than 5 regional and international projects.

**PART FOUR-** Links to videos and further reading sources for the content of module

<https://www.regiaodeaveiro.pt/pages/589>

[BioWaste](#)

[Lower Vouga Lagoon Primary Defense System](#)

**PART FIVE-** The importance of the module in Youth Education

It is important for young people to have this kind of information so that they know who to approach if they want to develop an environmental project, environment-climate project or to develop a business idea.

It is also important for them to understand the state of the art regarding Environmental-climate sensitivity and what steps should be taken to improve the situation.

**PART SIX-** You can include a self-Check for the learner at the end, a checklist about competences they have got from the module.

	Fully acquired	Reasonably acquired	Not acquired	N/A
General competences	-	-	-	-
Analytical ability				
Initiative				
Motivation				
Decision-making				
Strategic thinking				



Strategic networking				
Critical thinking				
Specific competences	-	-	-	-
I know how to identify the different institutions of my region				
I know how and where to find environmental information in my region				
I am able to identify access routes for financing Green Entrepreneurship				
I can identify and assess best practices				
I comprehend the importance of youth awareness and participation				
I am able to identify ways of involving youth people participation				

## PART SEVEN- Conclusion

Ecological literacy is extremely important for promoting a deep understanding of the intricate relationships between human beings and the environment. Ecological literacy equips individuals with the knowledge and awareness necessary to make informed decisions that promote sustainability and conservation. Ecological literacy goes beyond a basic understanding of ecosystems; it encompasses an appreciation of the interconnectedness of all living organisms and the delicate balance of nature. In a world grappling with environmental challenges such as climate change, biodiversity loss and pollution, ecological literacy empowers people to participate in informed debates, advocate for environmentally responsible policies and adopt sustainable practices in their daily lives.

Ecological literacy is essential to the success and impact of green entrepreneurship. In the field of sustainable business, entrepreneurs with a strong ecological literacy are better equipped to navigate the complex web of environmental challenges and opportunities. Ecological literacy guides entrepreneurs in making ecologically sound decisions, from supply chain management to waste reduction strategies, contributing to a more sustainable and responsible business model. In addition, ecological literacy promotes a mindset that goes beyond profit and encompasses environmental and social considerations, aligning green entrepreneurs with the broader goals of ecological sustainability.

To achieve this, we must train and engage young citizens, as they may be aware of the climate and environmental crisis, but we need them to act accordingly.

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Fundação Calouste Gulbenkian, online: [https://cdn.gulbenkian.pt/wp-content/uploads/2017/07/Quadros\\_finais\\_v3.pdf](https://cdn.gulbenkian.pt/wp-content/uploads/2017/07/Quadros_finais_v3.pdf) visited in December 2022

## ***Berlin***

### **Analysis of Non-Governmental Organizations (NGOs) in Berlin**

#### **Number and Scope of NGOs in Berlin**

- **Quantifying the NGOs:** While exact figures are not available, estimates suggest a significant presence, given Berlin's status as a cultural and political hub. The diversity in NGO types mirrors the city's multifaceted societal fabric.
- **Role in Society:** Berlin's NGOs play crucial roles in addressing social issues, advocating for policy changes, and providing services that complement governmental efforts.

#### **Breakdown of NGO Types**

##### **1. Social Services and Humanitarian Aid:**

- **Services Offered:** Include shelters, food banks, legal assistance, and psychological support.
- **Target Groups:** Focus on refugees, the homeless, and individuals facing socio-economic challenges.

##### **2. Environmental Protection:**

- **Activities:** Campaigns for sustainable practices, climate change awareness programs, and conservation projects.
- **Impact:** Influencing local policies on environmental issues and engaging in global climate change discussions.

##### **3. Cultural and Educational Activities:**

- **Contributions:** Preservation of Berlin's rich cultural heritage, art exhibitions, educational workshops, and community events.

- **Community Engagement:** Fostering a sense of community through cultural exchange and educational initiatives.

#### 4. **Healthcare and Well-being:**

- **Health Initiatives:** Focus on public health awareness, mental health services, and support for specific health conditions.
- **Community Health Impact:** Playing a vital role in complementing public health services and reaching underserved populations.

#### 5. **Youth and Community Development:**

- **Youth Programs:** Leadership training, skills development workshops, and community service projects.
- **Empowerment:** Focusing on empowering young people to play an active role in societal development.

#### 6. **Economic Development and Innovation:**

- **Support for Startups:** Providing resources and mentorship for budding entrepreneurs, especially in the tech and green sectors.
- **Economic Impact:** Contributing to Berlin's economic growth through innovation and entrepreneurship support.

#### 7. **Human Rights and Advocacy:**

- **Advocacy Work:** Legal aid, human rights campaigns, and policy advocacy, focusing on justice and equality.
- **Influence on Policy:** Influencing legislation and public opinion on critical human rights issues.

#### 8. **International Cooperation and Development:**

- **Global Outreach:** Aid and development projects in collaboration with international partners.

- **Contribution to Global Goals:** Aligning with global initiatives like the SDGs to address international development challenges.

## Environmental and Climate Initiatives in Berlin

### Implementation of SDGs

- **City-Wide Efforts:** Detailed look at how Berlin integrates the 17 SDGs into local governance, policy-making, and community initiatives.
- **Collaboration Examples:** Partnerships with educational institutions, businesses, and community groups to promote SDGs.

### Environmental Justice Atlas

- **Comprehensive Analysis:** Detailed insights into how the atlas evaluates environmental burdens and their impact on different communities.
- **Policy Influence:** Examples of how the atlas data has been used to influence local environmental policies.

### Green Spaces in Urban Planning

- **Green Space Management:** Exploration of Berlin's strategies for maintaining and expanding urban green spaces.
- **Ecological and Recreational Benefits:** Detailed examples of key green spaces and their impact on urban biodiversity and community well-being.

### Climate Action and Energy Strategies

- **Emission Reduction Efforts:** Specific programs and initiatives aimed at reducing carbon emissions in Berlin.
- **Renewable Energy Adoption:** Detailed overview of Berlin's efforts to transition to renewable energy sources.

### Public Awareness and Education

- **Educational Programs:** In-depth look at various educational initiatives aimed at increasing public awareness about environmental and climate issues.
- **Community Involvement:** Case studies of successful community-driven environmental projects.

## Collaboration with Environmental Organizations

- **Partnerships:** Exploration of how Berlin collaborates with local and international organizations to enhance environmental initiatives.
- **Impactful Projects:** Examples of successful projects resulting from these collaborations.

## Green Entrepreneurship and Funding in Berlin

### Funding Opportunities for Green Entrepreneurs

#### 1. Green Generation Fund:

- **Investment Focus:** Explore the types of startups and technologies funded by the Green Generation Fund in detail, including criteria for investment.
- **Success Stories:** Highlight case studies of startups that have successfully received funding and their impact on the green tech sector.

#### 2. Government and City Initiatives:

- **Overview of Initiatives:** Detail the range of programs offered by the German Federal Government and Berlin city, focusing on their objectives and impact on green startups.
- **Case Studies:** Present specific examples of startups or projects that have benefited from these initiatives.

#### 3. Local Funding Programs:

- **Program Analysis:** Dive deeper into each local funding program, discussing their specific focus, eligibility criteria, and application process.
- **Beneficiary Insights:** Share success stories or testimonials from green entrepreneurs who have utilized these programs.

#### 4. Crowdfunding and Business Angels:

- **Role in the Ecosystem:** Discuss the importance of crowdfunding and business angel networks in the Berlin startup ecosystem, particularly for green businesses.
- **Notable Campaigns:** Explore a few significant crowdfunding campaigns or investments by business angels in green startups.

#### 5. National Infrastructure Funding:

- **Detailed Allocation:** Examine how the €57 billion commitment by Germany is being allocated across various sectors.
- **Impact Assessment:** Analyze the potential impact of this funding on the green entrepreneurship landscape in Berlin and Germany.

## Analysis of Green Entrepreneurship Culture in Berlin Innovative Ecosystem

- **Startup Landscape:** Provide a comprehensive overview of Berlin's startup ecosystem, focusing on its growth, diversity, and inclusivity, particularly in the green tech and sustainability sectors.
- **Ecosystem Support Structures:** Detail the roles of various support structures like accelerators, incubators, and mentorship programs in nurturing green startups.

## Supportive Infrastructure

- **Resource Availability:** Discuss the abundance and variety of resources available to green entrepreneurs in Berlin, including co-working spaces and networking events.
- **Infrastructure Impact:** Assess the impact of this supportive infrastructure on the success and growth of green startups.

## Governmental Commitment

- **Policy Framework:** Examine the policies and regulations in place that support green entrepreneurship, including incentives and grants.
- **Government-Startup Collaboration:** Highlight successful collaborations between the government and green startups, showcasing the mutual benefits.

## Research and Academic Collaboration

- **Partnerships:** Discuss the nature and scope of collaborations between green startups and academic institutions, focusing on research and development.
- **Innovation Examples:** Present examples of innovations or technologies developed through these collaborations.

## Community Engagement

- **Public Support:** Analyze the level of public support for green initiatives, including consumer behavior and community-led projects.
- **Outreach Programs:** Explore various outreach and education programs designed to increase community involvement in sustainability efforts.



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Marc Beutner / Niclas C. Grüttner

## Greenworld

### Environmental-climate sensitivity analysis report Germany

A Result of the GREENWORLD Project



University Paderborn



The 'Greenworld - Think Green for the world' project, addressed in this book, is co-funded by the ERASMUS+ programme of the European Union. The European Commission is not responsible for any uploaded or submitted content. Such content expresses the views of its author(s) only.

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## Abbreviations

AWE	Agentur für Wirtschaft und Entwicklung (
BMBF	Bundesministerium für Bildung und Forschung
BMWK	BUNDESMINISTERIUM FÜR WIRTSCHAFT UND KLIMASCHUTZ
BMZ	Bundesministerium für wirtschaftliche Zusammenarbeit
BDKJ	Bund der Deutschen Katholischen Jugend
BOS	Berufsoberschule
BPB	Bundeszentrale für politische Bildung
BUND	Bund für Umwelt und Naturschutz
BZB	Biologie-Zentrum-Bustedt
cf.	cited from
DNR	Deutscher Naturschutzring
DUH	Deutsche Umwelthilfe
ESD	Education for sustainable development
Et al.	et alii – meaning and others
EU	European Union
FOS	Fachoberschule
FOR	Fachoberschulreife
Greenworld	Erasmus+ - project “Think green for the world”
HTGF	High-Tech Gründerfonds
IBB	IBB-Business Team GmbH und Investitionsbank Berlin
Ibid.	abbreviation for the Latin word <i>ibidem</i> , meaning ‘in the same place’
IK	Ingenious Knowledge
IT	Information Technology

KFW	Kreditanstalt für Wiederaufbau
MSA	Mittler Schulabschluss
NABU	Naturschutzbund Deutschland
NAJU	NAJU      Naturschutzjugend im NABU
NECP	National energy and climate plan
NGO	Non-Governmental Organizations
NRW	North-Rhine Westfalia
OWL	Ostwestfalen-Lippe
PR	Project Result
R&D	Department of Research and Development
SME	Small and medium-sized enterprises
UBA	Umwelt Bundesamt
UIA	Union of International Associations
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
UPB	Universität Paderborn, Lehrstuhl Wirtschaftspädagogik II, University of Paderborn, Chair Business and Human Resource Education II
VET	Vocational Education and Training
WWF	World Wildlife Fund For Nature
ZIM	Zentrales Innovationsprogramm Mittelstand

# **1. Education and its connection to sustainability as well as environmental and climate change**

Marc Beutner

Environment and climate change stand at the forefront of contemporary European life and politics. They are inextricably linked to sustainability considerations, which have become a significant component of education (in youth education but also in general education, in VET, in adult education and higher education), in both Europe and Germany today. Nowadays we have to deal with global implications, which means that environmental and climate change carries extensive consequences that impact the entire globe. Moreover, air pollution, water contamination, and the spread of diseases due to shifting climate conditions, have direct repercussions on human health (see e.g. European Environment Agency 2023). One of our mayor tasks is to preserve biodiversity and fight against habitat loss and species extinction. In the realm of education and youth engagement, this entails the responsibility to raise awareness about environmental issues, reach out to a wider audience, and inspire individuals to embrace environmental stewardship.

There is an obvious nexus between the environment and climate change and this strong connection is intricately linked to the well-being of individual. The European Union (EU) has played a pivotal role as a prominent player in the worldwide endeavour to combat climate change. Introducing a climate and energy policy framework for 2030 (European Commission 2013), the objective is to prolong the existing legislative framework of 2020 and establish precise climate objectives aligned with the European Union's long-term decarbonization goal outlined in the 2050 Energy Roadmap (European Commission 2011).

In addition to health problems there are also economic ramifications and consequences caused by environmental changes. This implies that sustainable resource management is vital for the long-term well-being of humanity and economy. Here, the Green Deals comes into action. The European Green Deal (European Commission 2019) focusses on principles like:

- “Supplying clean, affordable and secure energy”  
(European Commission 2019, p. 6)
- “Mobilising industry for a clean and circular economy”  
(European Commission 2019, p. 7)
- “Building and renovating in an energy and resource efficient way”  
(European Commission 2019, p. 9)



- “Accelerating the shift to sustainable and smart mobility”  
(European Commission 2019, p. 10)
- “From ‘Farm to Fork’:  
designing a fair, healthy and environmentally-friendly food system”  
(European Commission 2019, p. 11)
- “Preserving and restoring ecosystems and biodiversity”  
(European Commission 2019, p. 13)
- “A zero pollution ambition for a toxic-free environment”  
(European Commission 2019, p. 14)

According to UNESCO “*Education for sustainable development (ESD)* is UNESCO's *education* sector response to the urgent and dramatic challenges the planet faces.” (UNESCO 2023)

Education for sustainability nurtures the understanding, competencies, ethical principles, and perspectives essential for individuals to engage in behaviors that promote sustainable lifestyles. It empowers individuals and communities to contemplate various ways of perceiving and interacting with the world. Moreover, it offers a way to give special attention to the five key domains of the Green and Renewable Economy which every nation has to do today. They are outlined in the national energy and climate plans (NECPs):

- “energy efficiency
- renewables
- greenhouse gas emissions reductions
- interconnections
- research and innovation” (European Commission 2023)

This goes hand in hand with concepts e.g. for renewable energy, sustainable transportation, eco-friendly construction, responsible tourism, and energy efficiency and management. Education on sustainable issues like it is provided in Greenworld can help fostering a mindset of eco-consciousness.

The information below is a part of the Greenworld project and offers the Environmental-climate sensitivity analysis report of Germany with some specific foci on the City of Paderborn. It addresses the aspects of analysis given in the project.

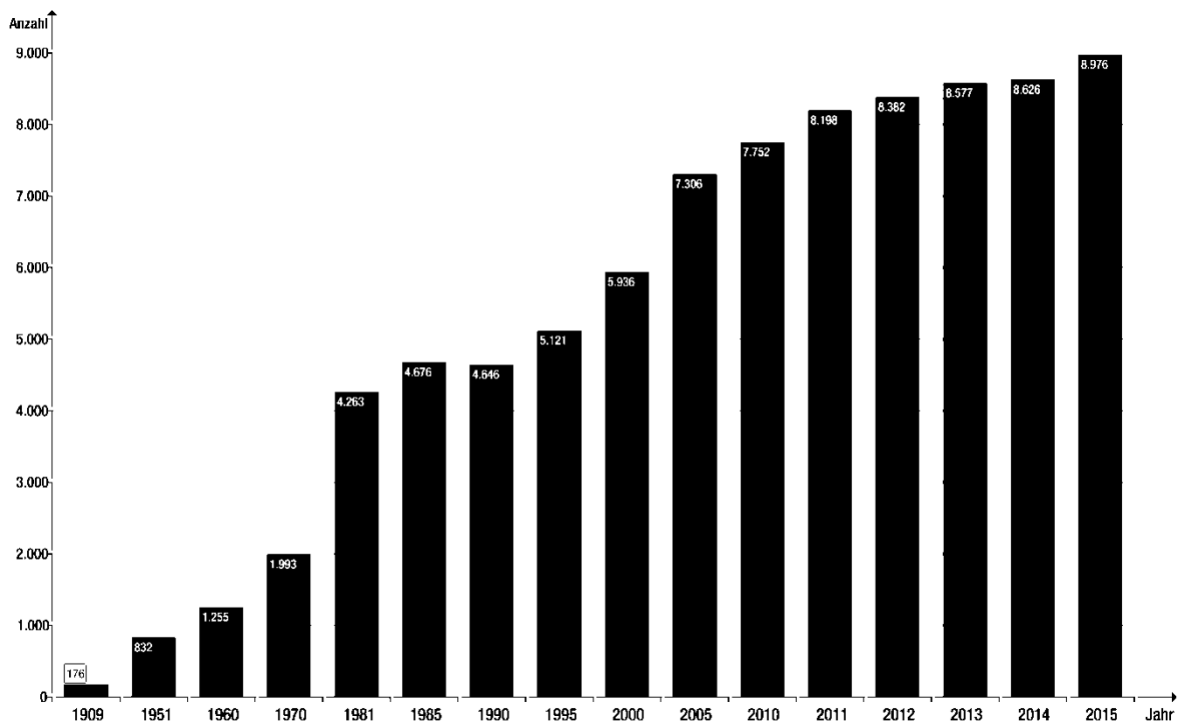
## **2. Number of existing employment agency/ NGO / public / youth groups / schools**

The contemporary socio-economic landscape of Germany is marked by a dynamic interplay of multiple factors that shape employment opportunities, youth engagement, and public welfare. One aspect of this landscape is the presence and proliferation of employment agencies, non-governmental organizations (NGOs), public initiatives, youth groups, and educational institutions, such as schools. These entities collectively form the backbone of Germany's efforts to address critical issues related to employment, education, and social integration as well as climate issues. In the following chapter, a short introduction to the existing employment agencies, non-governmental organisations, youth groups and schools in Germany as well as in Paderborn is given.

### **2.1 Number of non-governmental organisations and associations in Germany and Paderborn**

Whether it is the Association for German Nature Conservation, Greenpeace, NABU or WWF, they all are so-called non-governmental organisations, (NGOs). These NGOs have a great impact on the functionality of our society, not only in Germany but world-wide. Their work is independent of the state and government for social, socio-political or environmental purposes without pursuing their own profit motives, which makes them working for the society and the people in it rather than working for political or governmental ideas (LENA 2023). After the end of World-War II until the beginning of the 1980's, the number of non-governmental organisations increased by the factor 5.6, which can be seen in the chart below. This is due to the fact that their importance has further increased through collaboration, expertise and lobbying (BPB 2017). According to latest data provided by the Union of International Associations (UIA), the number of non-governmental organisations raised from 176 to 8.976 between the years 1909 and 2015 (BPB 2017).

A list of all non-governmental organisations can be found under the following link:  
<https://www.nachhaltigejobs.de/verzeichnis/ngo>

**Chart 1:** Number of Non-Governmental-Organisations between 1909 and 2015*Figure 1: Number of NGOs between 1909 and 2015**Source: Bundeszentrale für politische Bildung (BPB) 2017:**<https://www.bpb.de/kurz-knapp/zahlen-und-fakten/globalisierung/52808/ngos-nicht-regierungsorganisationen/>*

On the global stage, NGOs employ three primary approaches to exert influence on the political agenda. Firstly, they engage as lobbyists, utilizing various methods such as advocacy campaigns, protest activities, or informal lobbying efforts. Second, they actively participate in negotiations aimed at shaping global standards and norms, often forming part of negotiation networks. In these instances, NGOs directly engage in the political decision-making processes that guide international governance. Thirdly, NGOs contribute their resources by functioning as service providers and experts, offering services such as monitoring, coordination, and advisory functions within networks dedicated to addressing global challenges (BPB 2017).

Despite their self-proclaimed role as representatives of broad societal interests and their non-affiliation with any specific political party, NGOs face criticism regarding their potentially excessive influence. One notable critique pertains to their inability to fully address the legitimacy deficits inherent in global politics, primarily because NGOs themselves lack democratic legitimacy. Even those NGOs advocating for enhanced global democracy lack the mandate derived from democratic elections and thus lack the formal authorization to act on behalf of the global populace. Moreover, internal democratic structures within NGOs may not always be robust, and their reliance on donations can raise concerns about the potential compromise of their credibility. (BPB 2017).

Descending from a country-wide view to a more local approach, it can be seen that in Paderborn there are numerous institutions, associations and non-governmental organizations in Paderborn but only three of them are dealing with topics like sustainability. These are: Greenpeace Greenwire Paderborn, Non-profit environmental protection association pro grün e.V Paderborn and UNICEF Germany. This shows that in correlation to the number of organisations and associations countywide, only a small number of organisations dealing with sustainability and environment are settled in Paderborn.

It must be said that Chart 1 deals with all the non-governmental organisations in Germany, no matter what they are dedicated to. This means that another study must be done to differentiate those organisations who deal with topics of sustainable development with those who have another strain of work in their organisation.

### **2.1.1 Schools**

The German school system has long been regarded as a symbol of excellence in education, characterized by a long history, a strong emphasis on academic rigor, and a commitment to producing highly skilled and knowledgeable citizens. As one of the largest and most influential European nations, Germany's approach to education has attracted international attention and admiration (AUGUSTINE 2023). However, beneath this reputation lie a multitude of complexities, challenges, and ongoing reforms that warrant thorough examination. This chapter deals with the exploration of the German school system, with a particular focus on its diversity in school forms and the intricacies of differentiation between them as well as an overview of the numbers of schools in the republic. Germany's educational landscape is marked by a rich tapestry of school types, each designed to cater to diverse student needs and aspirations. Understanding this intricate mosaic of schools is pivotal to grasping the essence of the German education system. As one of the largest European nations, Germany boasts an extensive network of schools, both public and private, spanning all educational levels. The complexity arises from the fact that the country's educational structure is decentralised, with each of its 16 federal states (Bundesländer) having a significant degree of autonomy in shaping its own educational policies and school system. Consequently, a multitude of school forms have emerged, each with its unique characteristics and purposes (for further information see: EDELSTEIN 2013 and PHILLIPS 1995).

### 2.1.2 Schools in Germany - Secondary Schools (Public)

The easiest way to understand how the secondary school in Germany works is to have a look to the definition that Edelstein (2013) has:

“The upper secondary level comprises general education and full-time vocational schools as well as vocational training in the dual system. Which of these educational institutions is open to a young person depends largely on the school-leaving certificate he or she has obtained: The lower secondary school leaving certificate qualifies above all to take up dual vocational training. To do so, however, young people must first find an apprenticeship in a company. If this is not successful - and this applies to a considerable proportion of school leavers with a lower secondary school leaving certificate - the young people, especially if they are still of compulsory school age, must complete a vocational preparation measure in the transition system. For young people with an intermediate school leaving certificate (Mittlerer Schulabschluss, MSA), the range of options is much wider. In addition to the dual system, the MSA also enables admission to full-time school-based VET and opens up access to the various types of vocational upper secondary schools (FOS, BOS, Fachgymnasium) and to the gymnasiale Oberstufe (upper secondary school) - in some cases subject to a certain grade point average. In dual and full-time school-based vocational education and training, a vocational qualification is obtained that qualifies the holder to take up a specific gainful employment. The other (also vocationally oriented) courses of education lead to a general or subject-linked higher education entrance qualification or to a higher technical college entrance qualification, and thus entitle the holder to take up studies at the tertiary level. However, a considerable proportion of young people who have obtained a higher education entrance qualification also take up dual or full-time school-based vocational education and training” (EDELSTEIN 2013 – Translated from German to English).<sup>1</sup>

This definition is giving an excellent overview of what the term ‘secondars school’ means in the context of the German school system. A study, dealing with the number of general education schools in Germany in the school year 2021/2022 made by STATISTA (2023) shows that Germany has 32.206 schools which includes a number of 9.381 secondary schools (STATISTA

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<sup>1</sup> The ‘Mittlerer Schulabschluss, MSA’ is in general the ‘FOR – Fachoberschulreife’ you get in Germany typically at a Realschule and is often also called ‘Mittlere Reife’.

2023). Coming back from a countrywide view to a much more local perspective, it can be seen that the city of Paderborn alone is responsible for 37 schools and school associations, at which approx. 18,000 pupils are taught by approx. 1,500 teachers. In addition, there are other non-municipal schools, an evening grammar school and various vocational colleges run by the district of Paderborn (STADT PADERBORN n.d. – English version translated from German). Unfortunately, there is no determination of youth age groups of institutions that is proofed by studies.

To put it in a nutshell, while these statistics and examples offer a broad overview of the secondary school system in Germany, there is a lack of specific data on the age groups of students enrolled in these institutions. This information gap highlights the need for further research and data collection to better understand the demographics and needs of students within the German secondary school system. All in all, the German secondary school system is a complex and multifaceted educational landscape, offering diverse opportunities to young learners. The combination of Edelstein's definition, national statistics, and a local perspective provides a comprehensive picture of the significance and diversity of secondary education in Germany, while also pointing out areas where additional research and data are required for a more detailed understanding.

### **3. Number of institutions dealing with the environment-climate issue**

Environmental protection organisations are associations of citizens who are committed to protecting the environment on a long-term and programmatic basis. Unlike citizens' initiatives, which often focus on local environmental problems, they address a wide range of environmental issues. Their main goals include classic nature conservation, such as the protection of natural habitats, climate protection, the protection of endangered animal and plant species and ecosystems. They also advocate for the protection of environmental media such as air, water and soil. In addition, they are committed to environmentally friendly measures in other policy areas such as energy, transport and agriculture. The environmental movement can be divided into two main streams: pragmatic environmentalism and traditional conservation, and political ecology (MEZ 2021, p. 925). A sustainable and consistent environmental development with a view to future developments, especially with a focus on climate change and the constantly evolving climate policy, is not possible without institutions that take care of environmental and climate issues. Especially in regard to their impact, smaller institutions and organisations are

mostly unknown or only of a local importance. Therefore, a description as well as the link to the seven biggest institutions in Germany can be found in the following:

Name	Website-URL	Description
<b>Bund für Umwelt und Naturschutz</b>  <b>Association for the Environment and Nature Conservation</b>	www.bund.net (German)  www.bund.net/bund-in-english/ (English)	“For clean rivers and sustainable traffic policies - against nuclear energy and factory farming: the German Association for the Environment and Nature Conservation (BUND) has been devoted to environmental politics since 1975. Almost 500,000 members and supporters work to serve mother nature on local, regional and international levels.”
<b>Deutsche Umwelthilfe</b>  <b>German Environmental Aid Association</b>	www.duh.de (German)  www.duh.de/englisch/ (English)	“A crusader for nature and consumers: The German Environmental Aid Association (DUH) takes a strong stand in favor of sustainable technologies and environmentally compatible products. The Association, which was first formed in 1975, speaks up for the rights of consumers by submitting test cases.”
<b>Deutscher Naturschutzring</b>  <b>Association for German Nature Conservation</b>	www.dnr.de (only available in German)	“Environmental protection and nature conservation concern each and every one of us. The Association for German Nature Conservation (DNR – Deutscher Naturschutzring), which was first founded in 1950, has been working steadily to secure and enhance our quality of life. Today, 95 different associations belong to the umbrella association of nature conservation and environmental protection organizations in Germany.”
<b>Greenpeace</b>	www.greenpeace.de (German)  www.greenpeace.org/eu-unit/ (English)	“Greenpeace activists always show up wherever they suspect danger for the environment: the environmental protection organization protests against atomic testing, pollution on the high seas and toxic waste transports.”
<b>NABU – Naturschutzbund Deutschland</b>  <b>NABU - German Nature Conservation Association</b>	www.nabu.de (German)  www.en.nabu.de (English)	“The German Nature Conservation Association (NABU) has been getting people excited about experiencing and appreciating nature for more than one hundred years. From actual conservation projects to political action and right on up to education on the environment - approximately 520,000 NABU members are committed to protecting the plant and animal world. The lobbyist for nature names the “Bird of the Year“ each year and oversees research projects in two institutes.”



<b>ROBIN WOOD</b>	www.robinwood.de (only available in German)	“Originally inspired by the legendary Robin Hood: ROBIN WOOD, an environmental organization, has been fighting against forest dieback in Germany and in topical countries since 1982. The non-profit organization is also active in the fields of energy and traffic. The “Avengers of the Dying Forests“ - as the activists call themselves - draw the public’s attention by carrying out spectacular actions.”
<b>WWF Deutschland</b>	www.wwf.de (German)	“More than half of the plant varieties found throughout the world are currently in danger of becoming extinct; every fourth species in the animal kingdom is already on the endangered list. The workers at the World Wildlife Fund For Nature (WWF Germany), one of the largest independent nature conservation organizations in the world, are committed to species and climate protection.”
<b>WWF Germany</b>	www.wwf.eu (English)	

Table 1: Seven biggest institutions concerning environment protection and sustainability in Germany.

Chart based on: <https://www.deutschland.de/de/topic/umwelt/erde-klima/umweltorganisationen>

Of course, the table above shows only a small part of the many environmental associations in Germany. But it is already evident here that Germany has an important focus on environmental protection. Not at least because the “specialisation, objectification and professionalisation of environmental protection associations has increased and lobbying and strategic alliances with environmental administrations and companies have gained in importance over protest-oriented forms of action, [...] but also because their strength and competence are considered an important condition for the success of environmental policy in international comparison” (MEZ 2021, p. 927).

#### 4. What percentage of young people in institutions can be reached with the project Green World in Germany (estimated)

Through a range of activities, including our presence on social media, the project website, and our cooperation network as well as our collaborative, we envisage reaching a substantial audience. We estimate that we can reach at least 800 people and cannot give a percentage, because this has to be calculated with regard to different parent populations (all young people in a region, in Germany in Europe, in a youth group etc.). The primary focus of this project centres on engaging young individuals in voluntary participation within the realm of ‘non-formal’ education for example in youth groups like the Dragon Legion, which is active in



Germany and has branches and subgroups in more than ten other European Countries. Our goal is to foster widespread and inclusive learning that supports social and personal development.

Fostering widespread inclusive learning that supports social and personal development in Greenworld refers for Germany to an educational approach or initiative aimed at creating an environment where learning is accessible to a diverse group of individuals. Such a learning process contributes positively to their social and personal growth. Emphasising inclusivity is here an approach, which means that it seeks to ensure that all individuals, regardless of their backgrounds, abilities, or circumstances, have equal access to learning opportunities with regard to sustainability issues and Green Entrepreneurship (see Beutner 2018, Beutner / Rüscher 2017 or Beutner / Chirleşan 2018). Inclusivity<sup>2</sup> promotes diversity and welcomes learners from various cultural, socioeconomic, and demographic backgrounds. The German Greenworld approach focusses on inclusivity in entrepreneurship education as a practice of making entrepreneurship education accessible and beneficial to a diverse range of individuals, regardless of their backgrounds, identities, or circumstances. This approach recognizes the importance of ensuring that aspiring entrepreneurs from all walks of life have equal opportunities to acquire entrepreneurial skills and knowledge. This goes hand in hand with the idea of a widespread reach. Widespread implies that the initiative Greenworld intends to reach a large and diverse audience. It may use various channels and methods to disseminate educational content and engage learners on a broad scale. The core focus is on learning about Green Economy (Loiseau et. al. 2016) , Green Entrepreneurship and creating awareness for this at youth is not only encompassing traditional academic knowledge but also necessary competences, skills, values, and attitudes. Learning is seen as a lifelong process that occurs in various settings, including formal and informal ones. With regard to social issues we aim to contribute to the social development of individuals. This involves helping learners acquire social skills, empathy, and an understanding of societal issues. It may encourage collaboration, teamwork, and community engagement. In addition to that personal Development of the young people has to be addressed. In Greenworld, personal development focuses on individual growth

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<sup>2</sup> Concerning an 'Interdisciplinary Framework for Educational Inclusivity' see e.g. DeLuca 2013

"Thomas et al. (1998) further distinguished responses to inclusion by contrasting integration and inclusion." (DeLuca 2013, p. 310). According to Thomas integration focusses on needs of "special students" (Thomas / Walker / Webb 1998 cf. DeLuca 2013) and inclusion focusses on the rights of all students. In addition to that, Thomas / Walker / Webb 1998 provide more distinguishing elements (Thomas / Walker / Webb 1998).

and self-improvement. The core issue is to enhance learners' self-esteem, self-awareness, resilience, and their ability to set and achieve personal goals.

In total, the German Greenworld approach is a holistic one, with a holistic view of education and development, acknowledging that learning of young people in the context of sustainability is not solely about academic achievement but also about becoming well-rounded, socially conscious individuals. To achieve these goals, inclusive learning environments are created. These environments are designed to accommodate different learning styles and abilities and provide support and resources to help young people succeed.

To achieve this, we orchestrate a series of social, cultural, and educational initiatives within Greenworld and this is directly linked to the project results of this ERASMUS+ project. We are pretty sure that we can manage to get more than 800 people. But, 800 is the realistic minimum to reach with Greenworld in Germany.

## **5. How many young people can be trained in Green Thinking Centres in Germany (estimated)**

Environmental issues not only endanger the survival of humanity but also pose a significant threat to the habitability of our planet. To avert this impending catastrophe, it is imperative that people discard conventional thinking and behaviours, both presently and in the future. Therefore, individuals must take prompt action to seek solutions to these pressing environmental challenges. In the contemporary context, addressing environmental problems goes beyond relying solely on technological advancements or legal regulations. The crux of the matter lies in transforming individual behaviours, a shift that demands alterations in attitudes, knowledge, and values. Cultivating a positive attitude and instilling values that prioritize the environment can be achieved through environmental education.

The term 'Green thinking centre' is not really specified and is not widely recognized or established concept. Nevertheless, in the German context of Greenworld is an educational facility or organization dedicated to promoting environmentally conscious and sustainable thinking and practices. Therefore, our centres focus on education and raising awareness for sustainability issues. So, they providing programs, workshops, and resources to educate individuals, communities, and organizations about environmental issues, conservation, and sustainable living. In addition to that they work on advocacy with regard to promoting

environmental advocacy and encouraging individuals and groups to take action on environmental issues at local, national, or global levels. Moreover, the German 'Green thinking centres' focus also on community engagement: and collaboration to support green infrastructure by showcasing sustainable technologies and infrastructure, such as renewable energy sources, energy-efficient buildings, and green landscaping.

Environmental education encompasses the cultivation of environmental awareness across all segments of society. It involves imparting an understanding of environmentally sensitive and sustainable practices while promoting positive behavioural changes. Simultaneously, it upholds the preservation of natural, historical, cultural, and socio-aesthetic values. Environmental education actively encourages participation and engagement in problem-solving endeavours. Its fundamental objective is to equip individuals who have undergone the educational process with the knowledge, skills, and values necessary to exhibit responsible behaviours in relation to the environment.

Green Thinking Centres represent essential institutions in the pursuit of a more sustainable and environmentally conscious future. These centres are dedicated to cultivating a deep understanding of ecological challenges and promoting innovative solutions among the younger generation. By offering a diverse array of educational programs, workshops, and resources, they play a pivotal role in equipping young individuals with the knowledge and skills needed to become effective stewards of the environment.

As we explore the question of estimating the number of young people who can be trained within these Green Thinking Centres, we are essentially delving into the heart of an important societal endeavour. The capacity of these centres to engage, educate, and inspire young minds is a matter of great significance, as it directly impacts our ability to address pressing environmental issues.

In total we can train about 150 people in the Green Thinking Centre which is directly connected with university lectures here at the University Paderborn (UPB).

## **6. How many NGOs / public / youth groups / schools can participate in the seminars to be held in German Green Thinking Centres (estimated)?**

*Thinking Green* can serve as an umbrella for all sustainable and greening initiatives. Creating ideas and planning stands as foundational skill in adopting a green mindset, and it applies

equally to structuring our personal lives as it does to accomplishing our objectives in business or at work. *Thinking Green* serves as the strategic process employed to attain our goals, akin to crafting a map that guides our mental journey into the future. Through planning, we calculate the necessary resources and identify the obstacles we must surmount. Exceptional planners are forward-thinkers who anticipate changes and shifts, seek out opportunities, and address the uncertainties that lie ahead. Therefore, the Greenworld *Green Thinking Centres* are an important regional support.

In Germany and the Paderborn region we can establish a *Green Thinking Centre* at the chair of Business and Human Resource Education at the university Paderborn. This is connected to three other German institutions who will establish *Green Thinking Centres*, the IT company Ingenious Knowledge GmbH (IK), the youth group association Dragon Legion with its European partners and the educational institution BOB GmbH. Trainings and seminars of the *Green Thinking Centre* at Paderborn University with the three centres will be provided monthly and additional Trainings and seminars on a yearly basis will be provided to at least 10 institutions.

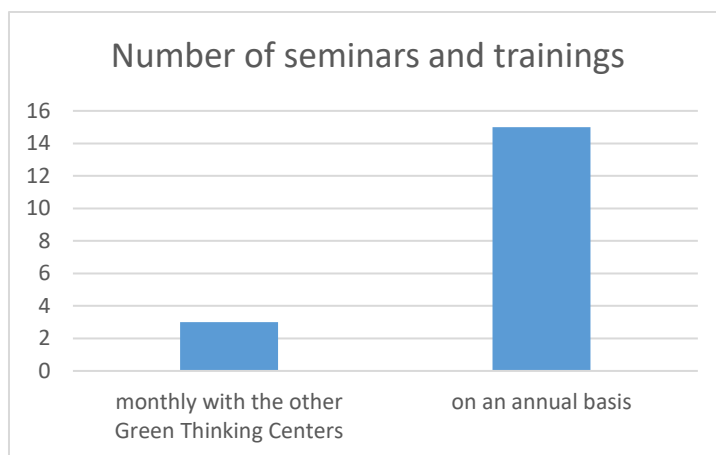


Figure 2: Number of seminars and trainings of the Green Thinking Centre in Germany

## **7. Number of universities / businesses and young people who can come together for green employment in the green think tank (estimated)**

The university Paderborn is situated in North-Rhine Westfalia (NRW) in the western part of Germany. In total North-Rhine Westfalia has more than 70 universities, universities of applied sciences and art colleges as you can see in the following tables with the status from 2021 where

71 entries are included. Generally speaking, they all could come together to discuss on Green Economy and Green Employment, because most of them discuss aspects of sustainability in their programme. In reality, not all are interconnected and the university of Paderborn with the Green Thinking Centre can only address a few of them. But it is possible to inform at least all about the Greenworld project and this is way there are mentioned below:

<b>Name</b>	<b>headquarters / location</b>	<b>Type of university</b>	<b>Sponsorship</b>
<a href="#"><u>Alanus Hochschule für Kunst und Gesellschaft</u></a>	Alfter	art college	private
<a href="#"><u>Bergische Universität Wuppertal</u></a>	Wuppertal	university	public law
<a href="#"><u>Cologne Business School</u></a>	Köln	university of applied sciences	private
<a href="#"><u>Deutsche Hochschule der Polizei</u></a>	Münster	university	administration
<a href="#"><u>Deutsche Hochschule für Gesundheit und Sport</u></a>	Unna	university of applied sciences	private
<a href="#"><u>Deutsche Sporthochschule Köln</u></a>	Köln	university	public law
<a href="#"><u>EBC Hochschule</u></a>	Düsseldorf	university of applied sciences	private
<a href="#"><u>EBZ Business School</u></a>	Bochum	university of applied sciences	private
<a href="#"><u>Europäische Fachhochschule</u></a>	Brühl	university of applied sciences	private
<a href="#"><u>Evangelische Hochschule Rheinland-Westfalen-Lippe</u></a>	Bochum	university of applied sciences	kirchlich
<a href="#"><u>FH Aachen</u></a>	Aachen	university of applied sciences	public law
<a href="#"><u>Fachhochschule Bielefeld</u></a>	Bielefeld	university of applied sciences	public law
<a href="#"><u>Fachhochschule der Diakonie</u></a>	Bielefeld	university of applied sciences	kirchlich
<a href="#"><u>Fachhochschule der Wirtschaft</u></a>	Paderborn	university of applied sciences	private
<a href="#"><u>Fachhochschule des Mittelstands</u></a>	Bielefeld	university of applied sciences	private
<a href="#"><u>Fachhochschule Dortmund</u></a>	Dortmund	university of applied sciences	public law
<a href="#"><u>Fachhochschule für Rechtspflege Nordrhein-Westfalen</u></a>	Bad Münstereifel	university of applied sciences	administration
<a href="#"><u>Fachhochschule Münster</u></a>	Münster	university of applied sciences	public law
<a href="#"><u>Fachhochschule Südwestfalen</u></a>	Iserlohn	university of applied sciences	public law
<a href="#"><u>Fernuniversität in Hagen</u></a>	Hagen	university	public law

<b>Name</b>	<b>headquarters / location</b>	<b>Type of university</b>	<b>Sponsorship</b>
<a href="#"><u>Fliedner Fachhochschule Düsseldorf</u></a>	Düsseldorf	university of applied sciences	private
<a href="#"><u>Folkwang Universität der Künste</u></a>	Essen	art college	staatlich
<a href="#"><u>Heinrich-Heine-Universität Düsseldorf</u></a>	Düsseldorf	university	public law
<a href="#"><u>Hochschule Bochum</u></a>	Bochum	university of applied sciences	public law
<a href="#"><u>Hochschule Bonn-Rhein-Sieg</u></a>	Sankt Augustin	university of applied sciences	public law
<a href="#"><u>Hochschule der Sparkassen- Finanzgruppe</u></a>	Bonn	university of applied sciences	private
<a href="#"><u>Hochschule des Bundes für öffentliche Verwaltung</u></a>	Brühl	university of applied sciences	administration
<a href="#"><u>Hochschule Düsseldorf</u></a>	Düsseldorf	university of applied sciences	public law
<a href="#"><u>Hochschule Fresenius</u></a>	Köln	university of applied sciences	private
<a href="#"><u>Hochschule für Finanzen Nordrhein- Westfalen</u></a>	Nordkirchen	university of applied sciences	administration
<a href="#"><u>Hochschule für Gesundheit</u></a>	Bochum	university of applied sciences	public law
<a href="#"><u>Hochschule für Kirchenmusik der Evangelischen Kirche von Westfalen</u></a>	Herford	art college	kirchlich
<a href="#"><u>Hochschule für Medien, Kommunikation und Wirtschaft</u></a>	Köln	university of applied sciences	private
<a href="#"><u>Hochschule für Musik Detmold</u></a>	Detmold	art college	staatlich
<a href="#"><u>Hochschule für Musik und Tanz Köln</u></a>	Köln	art college	staatlich
<a href="#"><u>Hochschule für Oekonomie &amp; Management</u></a>	Essen	university of applied sciences	private
<a href="#"><u>Hochschule für Polizei und öffentliche Verwaltung Nordrhein-Westfalen</u></a>	Gelsenkirchen	university of applied sciences	administration
<a href="#"><u>Hochschule Hamm-Lippstadt</u></a>	Hamm	university of applied sciences	public law
<a href="#"><u>Hochschule Niederrhein</u></a>	Krefeld	university of applied sciences	public law
<a href="#"><u>Hochschule Rhein-Waal</u></a>	Kleve	university of applied sciences	public law
<a href="#"><u>Hochschule Ruhr West</u></a>	Mülheim an der Ruhr	university of applied sciences	public law
<a href="#"><u>International School of Management</u></a>	Dortmund	university of applied sciences	private
<a href="#"><u>Katholische Hochschule Nordrhein- Westfalen</u></a>	Köln	university of applied sciences	kirchlich
<a href="#"><u>Kirchliche Hochschule Wuppertal</u></a>	Wuppertal	university	kirchlich

<b>Name</b>	<b>headquarters / location</b>	<b>Type of university</b>	<b>Sponsorship</b>
<a href="#"><u>Kölner Hochschule für Katholische Theologie</u></a>	Köln	university	kirchlich
<a href="#"><u>Kunstakademie Düsseldorf</u></a>	Düsseldorf	art college	staatlich
<a href="#"><u>Kunstakademie Münster</u></a>	Münster	art college	staatlich
<a href="#"><u>Kunsthochschule für Medien Köln</u></a>	Köln	art college	staatlich
<a href="#"><u>Philosophisch-Theologische Hochschule Münster</u></a>	Münster	university	kirchlich
<a href="#"><u>Praxis-Hochschule</u></a>	Rheine	university of applied sciences	private
<a href="#"><u>Rheinische Fachhochschule Köln</u></a>	Köln	university of applied sciences	private
<a href="#"><u>Rheinische Fachhochschule Neuss</u></a>	Neuss	university of applied sciences	private
<a href="#"><u>Rheinische Friedrich-Wilhelms-Universität Bonn</u></a>	Bonn	university	public law
<a href="#"><u>Robert Schumann Hochschule Düsseldorf</u></a>	Düsseldorf	art college	staatlich
<a href="#"><u>Ruhr-Universität Bochum</u></a>	Bochum	university	public law
<a href="#"><u>RWTH Aachen</u></a>	Aachen	university	public law
<a href="#"><u>SRH Hochschule für Logistik und Wirtschaft</u></a>	Hamm	university of applied sciences	private
<a href="#"><u>Technische Hochschule Georg Agricola</u></a>	Bochum	university of applied sciences	private
<a href="#"><u>Technische Hochschule Köln</u></a>	Köln	university of applied sciences	public law
<a href="#"><u>Technische Hochschule Ostwestfalen-Lippe</u></a>	Lemgo	university of applied sciences	public law
<a href="#"><u>Technische Universität Dortmund</u></a>	Dortmund	university	public law
<a href="#"><u>Theologische Fakultät Paderborn</u></a>	Paderborn	university	kirchlich
<a href="#"><u>Universität Bielefeld</u></a>	Bielefeld	university	public law
<a href="#"><u>Universität Duisburg-Essen</u></a>	Duisburg	university	public law
<a href="#"><u>Universität Paderborn</u></a>	Paderborn	university	public law
<a href="#"><u>Universität Siegen</u></a>	Siegen	university	public law
<a href="#"><u>Universität Witten/Herdecke</u></a>	Witten	university	private
<a href="#"><u>Universität zu Köln</u></a>	Köln	university	public law
<a href="#"><u>University of Applied Sciences Europe</u></a>	Iserlohn	university of applied sciences	private
<a href="#"><u>Westfälische Hochschule</u></a>	Gelsenkirchen	university of applied sciences	public law
<a href="#"><u>Westfälische Wilhelms-Universität</u></a>	Münster	university	public law

Table 2: Overview on potential higher education institutions in NRW, Germany



As said before the University Paderborn (UPB) can only cooperate with a few of these universities actively. These are the university Cologne (Universität Köln) and the university Bielefeld (Universität Bielefeld) as well as the technical university of applied sciences Cologne (Technische Hochschule Köln).

## 8. Environmental-climate awareness areas

According to the Umwelt Bundesamt, the German Environment Agency - (UBA 2023) raising environmental-climate awareness is a crucial topic. The UBA states:

*“Out of all the problems which Germany faced in 2018 and again in 2019, environmental protection and climate action took precedence over every other challenge for the people surveyed.” (UBA 2023)*

Nowadays, Germany is renowned for its strong commitment to environmental conservation and climate awareness. The country's approach to these crucial issues encompasses various key areas, each contributing to a more sustainable and eco-conscious society.

With regard to the renewable energy revolution Germany has been a pioneer in the transition to renewable energy sources, known as the "Energiewende" (BMBF 2023). Within this programme Germany heavily invests in wind, solar, and hydroelectric power, aiming to reduce its carbon footprint and dependence on fossil fuels (Ibid. 2023). Moreover, Germany encourages sustainable transportation options. Germany wants to become more bicycle-friendly especially in the cities. Therefore, Germany creates a growing electric vehicle infrastructure. The government promotes eco-friendly commuting and reduce greenhouse gas emissions and this is addressed by strengthening the public transport. Regarding construction and building Germany leads in energy-efficient construction and sustainable architecture. The country's commitment to green building practices promotes energy conservation and reduced environmental impact.

For many years now, Germany has a broad waste management system. Currently, the government boasts the efficiency of this waste management system. The core idea is to improve the recycling programmes in combination with very strict regulations on waste disposal. This contributes to reduced landfill waste and increased resource efficiency.



German companies are at the forefront of developing sustainable technologies and environmentally friendly innovations. From green energy solutions to eco-conscious products, Germany fosters innovation for a greener future and this starts at school. Environmental awareness starts early in German schools. The education system places a strong emphasis on sustainability, teaching students about the importance of environmental protection and conservation. Currently Germany tries to strengthen the aspects of Green Education, Green Entrepreneurship (Beutner 2018) and Green Economy in the curricula at schools.

Students learn about the value of preserving Germany's natural landscapes and biodiversity. This is accompanied by Public Awareness Campaigns which run regularly. The core aim is to educate its citizens and students about environmental issues, climate change, and ways to reduce their ecological footprint.

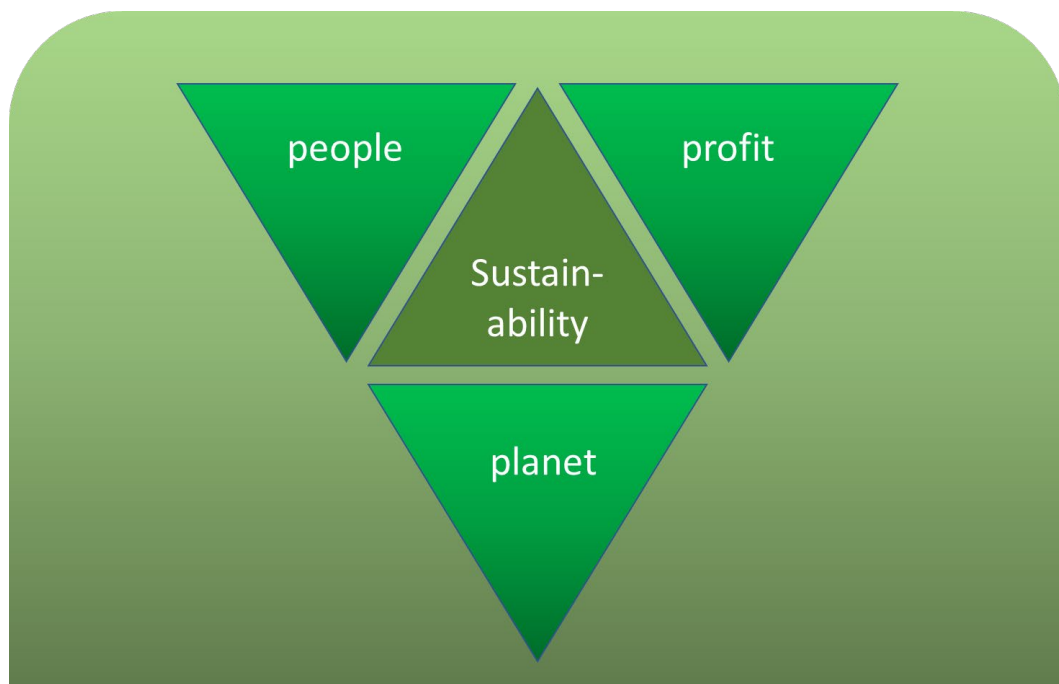
In summary, Germany actively participates in international climate agreements and initiatives, such as the Paris Agreement. The country is committed to reducing its greenhouse gas emissions and aiding other nations in their climate action efforts. Germany's environment and climate awareness efforts are multifaceted and comprehensive, covering various aspects of society and the economy. The country's commitment to sustainability serves as an inspiring model for other nations striving to combat climate change and protect the environment. These awareness activities take place in Politics and Decision-making but also in the field of science. In German companies environmental-climate awareness is addressed within the Departments of Research and Development (R&D) but also in Marketing.

The most important issue is that environmental protection and nature conservation has to be tackled in daily life.

## 9. Analysis of access to funds for green entrepreneurs

In Germany it is quite easy to find different types of financing and funding for Green Economy and Green Entrepreneurs.

Green Economy is focussing on sustainability and its triple bottom line (TBL) with the three aspects or 3 Ps – people, planet and profit for sustainable development (see e.g. Adams / Frost / Webber 2004 and Kanashiro et al. 2020) which takes into account ecological, economic and social performance of a society:



*Figure 3: Green Economy and sustainability aspects – The triple bottom line  
(own graphic according to Adams et. al. 2004 and Kanashiro et al. 2020)*

There are grants and public support programmes. In this field you can find various public funding programs like the programme of the Investitionsbank Berlin (IBB) and many others. We described here the most popular ones:

The AWE - Agentur für Wirtschaft und Entwicklung (AWE 2023) provides support by accompanying and advising Green Entrepreneurs with specific focus on the support of developing and emerging countries.

The German Federal Ministry for Economic Cooperation and Development (BMZ 2023) offer the funding programme develoPPP.de. Through this program, support is extended to companies and innovative initiatives in developing and emerging nations, aiming to generate enduring benefits for the local population.

Moreover, the German Federal Ministry for Economic Affairs and Climate Action (BMWK 2023) offers a public support programme. It is called INVEST and offers support to generate venture capital. INVEST brings together start-ups and private investors. Such investors typically believe in bold ideas. The funding program mobilizes more private venture capital from business angels. Thus, the programme helps Green Entrepreneurs to find an investor in an easy way.

The German Federal Ministry for Economic Affairs and Climate Action (BMWK 2023b) also offers the programme ZIM - Zentrales Innovationsprogramm Mittelstand, Germany's largest innovation programme for SMEs (small and medium-sized enterprises). ZIM stands for 'Central Innovation Programme for small and medium-sized enterprises (SMEs)'. ZIM aims to foster their innovative capacity and focuses on significant improvements of existing products, processes or technical services or the development of new solutions. It supports start-ups and Green Entrepreneurs and is open to all fields of technology and addresses also all sectors.

Also the High-Tech Gründerfonds – HTGF (HTGF 2023): The HTGF extends initial-stage funding and assistance to pioneering technology startups. This can also be Green Entrepreneurs operating in software, media, internet, hardware, energy, life sciences, and automation sectors.

The IBB - Business Team GmbH (IBB 2023) supports entrepreneurs in the German capital Berlin. The funds are for business coaching activities. These coachings are provided by qualified coaches who take care about Green and economic issues.

A specific funding for the German capital Berlin is also provided by the Investitionsbank Berlin (Investitionsbank Berlin 2023), which was already mentioned above. Investitionsbank Berlin clearly focuses on SMEs. The bank offers loan-based and participation-oriented financing as well as grant programmes. This is combined with coaching activities, seminars and workshops for start-ups and founders in Berlin. Green Entrepreneurs are always welcome.

One of the most important funding opportunities is the KfW (Kreditanstalt für Wiederaufbau). Whether it's sustainable products, embracing a circular economy, or venturing into green technology, there are numerous avenues through which one can contribute to climate protection via a green startup. KfW provides here a robust financial support to green startups (KfW 2023) and is one of the most important promoters of Green Entrepreneurship in Germany.

## 10. Green Entrepreneurship Culture at Regional Area

According to Gevrenova Green Entrepreneurship “could be defined as a new type of commerce which is equally profit- and nature-orientated, and might possibly solve ecological problems throughout its business activity.”

Green Entrepreneurship Culture means a bit more. With regard to the discussion of Chen / Lin / Lai 2022 determinants of green entrepreneurship are the perspectives of leadership, culture, and creativity. According to their findings green creativity has a mediator role. This role focusses on the relationship between managerial environmental leadership and green entrepreneurship. Also they found a more active full mediator role concerning the relationship between environmental organizational culture and green entrepreneurship (Chen / Lin / Lai 2022).

In Germany and in the region Paderborn this importance of Green Entrepreneurship and the creation of an adequate regional and organisational culture for it, is considered. Economic activities have an effect on the region and also on the environment. Therefore, environmental concerns are gaining increasing significance. The degradation of the environment poses a serious threat to the future of humanity in total as well as to Germany and the region around Paderborn, which is Ostwestfalen-Lippe (OWL). This is more crucial due to the fact that the heavy industrialised area of Ruhrgebiet is not far away from our region.

The city of Paderborn, as a municipal provider, maintains a total of 14 open children's and youth clubs in the Paderborn city area and thus offers a diverse and district-specific offering in the area of open child and youth work. The of 14 open children's and youth clubs are:

1. Jugendtreff Sande
2. Jugendtreff Elsen
3. Kinder- und Jugendzentrum Villa
4. Jugendhaus Heide
5. Jugendtreff Marienloh
6. Jugendtreff Neuenbeken
7. Kindertreff Benhausen
8. Jugendtreff Berliner Ring
9. Jugendkulturzentrum MultiCult
10. Jugend- und Kindertreff Ju KIZ
11. Kindertreff Benediktinerstraße

12. Jugendzentrum No.1

13. Jugendtreff Dahl

14. Jugendtreff Wewer

In Germany we are pretty aware that one crucial element in combatting this degradation is green entrepreneurship. Green entrepreneurship holds the potential to serve as a catalyst for positive transformation in both economic and environmental domains. Green entrepreneurs perceive the environmental aspect not as a hindrance but as an opportunity, and they establish in our region businesses that benefit the environment, prioritize social responsibility, and offer economic rewards. In Paderborn we also find youth groups or ecclesiastical groups which help to actively engage in environmental improvement and which raise awareness for the topic. This is e.g.:

- (a) NAJU - exploring nature through play – (NABU Paderborn 2023)  
The NAJU offers numerous opportunities for teenagers and young adults between 14 and 27 to get involved in nature and the environment.
- (b) Also, BDKJ Paderborn (BDKJ 2023), is active in protecting climate. n youth association groups, children and young people are sensitized to ecological sustainability and global justice, and are empowered to transform themselves and society and to understand decision-makers as the target group of their demands.

Nearby, we also find several institutions like biological stations, nature groups, learning farms and environmental centres where young and old people can get information on the environment and about sustainability issues (InfoNetz 2023):

- Naturwissenschaftlicher Verein für Bielefeld und Umgegend
- Biologische Station Minden-Lübbecke e.V.
- Biologische Station Ravensberg im Kreis Herford e.V.
- Biologische Station Gütersloh/Bielefeld e.V.
- Biologische Station Kreis Paderborn – Senne
- Biologische Station Lippe e.V.
- Landschaftsstation im Kreis Höxter e.V.
- Schulbauernhof Ummeln
- Zoo-Schule Grünfuchs
- Naturfreundejugend Teutoburger Wald
- Naturpädagogisches Zentrum Schelphof e. V.
- Naturkunde-Museum Bielefeld

- NatURsinn e.V.
- Primelgrün - (draußen) sein und tun
- Landschaftspflegehof Ramsbrock
- ART at WORK e.V.
- Umweltzentrum e.V.
- Bielefelder Bauernhausmuseum
- Biologie-Zentrum-Bustedt (BZB)
- Jugendhof Vlotho - Bildungsstätte des Landschaftsverbandes Westfalen-Lippe
- Rolfscher Hof in Berlebeck
- Umweltzentrum Heerser Mühle e. V.
- Treffpunkt Natur
- Senne Umweltbildungszentrum
- Westfälisches Freilichtmuseum Detmold
- Volkshochschule Bielefeld
- Volkshochschule Lübbecker Land

In essence, green entrepreneurs in Germany and the region of Paderborn actively seek innovative methods to foster a cleaner and more environmentally sustainable world. While much remains to be learned about green entrepreneurship, the primary aim of this study is to provide comprehensive definitions related to this concept, shed light on the challenges it encounters, and underscore its significance for both the economy and society.

The Paderborn district currently offer companies a cost-effective opportunity to introduce an environmental management system by taking part in the project ÖKOPROFIT. This is accompanied by a promotion of various measures and offers concerning climate protection. Paderborn also offers a platform with an overview map to present projects on sustainability and climate protection across the district (Kreis Paderborn 2023).

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