Co-funded by the
Erasmus+ Programme
of the European Union

STATE-OF-THE-ART REPORT

Intellectual Output 1

November 2021

Building bridges for Circular Economy by Fostering Youth Entrepreneurship project has been financed by the European Commission, under Erasmus+ programme, Key action 2. GA: 2020-3BE04-KA205-002798

This publication reflects the views only of the authors and contributors, and the Commission cannot be held responsible for any use, which may be made of the information contained therein.

Co-funded by the Erasmus+ Programme of the European Union

AUTHORS & CONTRIBUTIONS:

Emma Szilagyi & Aida Szilagyi, CNPCD

Eva Kokkora, iED

Eva Žunec & Rebeka Kovačič Lukman, MIITR

Marion De Backer & Florent Losson, Groupe One

Mihai Adrian Vilcea, FITT

TABLE OF CONTENTS

SUMMARY [ENG]

Building Bridges for Circular Economy by Fostering Youth Entrepreneurship is an Erasmus+ project, highlighting the importance of youth involvement in the fields of Green Entrepreneurship (GE) and Circular Economy (CE) business opportunities. This document in front of you was prepared within the Intellectual output 1. Our national findings are collected, analyzed and concluded as a State-of-the-art report, composed out of data from four project partner countries: Belgium, Greece, Romania and Slovenia. The objective of this report is to build up a knowledge base, map existing educational offers and current state of youth competencies for further project activities in order to ensure that learners will acquire skills, competencies and knowledge on CE, GE and business opportunities within. Our search through the national legal frameworks and educational offer confirmed the lack of such free and widely accessible learning opportunities for youth. Moreover, our desk and field research results showed, young people wish to achieve better understanding of those topics, receive more practical guidance and learning materials as well as become active change-makers.

RÉSUMÉ [FR]

Building Bridges for Circular Economy by Fostering Youth Entrepreneurship est un projet Erasmus+ qui souligne l'importance de l'implication des jeunes dans les domaines de l'entrepreneuriat durable (ED) et des opportunités commerciales de l'économie circulaire (EC). Le document que vous avez devant vous a été préparé dans le cadre de la première production intellectuelle. Nos résultats nationaux sont collectés, analysés et conclus comme un rapport de pointe, composé de données provenant de quatre pays partenaires du projet : Belgique, Grèce, Roumanie et Slovénie. L'objectif de ce rapport est de construire une base de connaissances, de cartographier les offres éducatives existantes et l'état actuel des compétences des jeunes pour les activités futures du projet afin de s'assurer que les apprenants acquièrent des aptitudes, des compétences et des connaissances sur l'EC, l'ED ainsi que les opportunités commerciales. Notre recherche dans les cadres juridiques nationaux et l'offre éducative a confirmé l'absence de telles opportunités d'apprentissage gratuites et largement accessibles pour les jeunes. De plus, les résultats de nos recherches documentaires et sur le terrain ont montré que les jeunes souhaitent mieux comprendre ces sujets, recevoir davantage de conseils pratiques et de matériel d'apprentissage, et devenir ainsi des acteurs du changement.

ΠΕΡΙΛΗΨΗ [GR]

Το πρόγραμμα "Building Bridges for Circular Economy by Fostering Youth Entrepreneurship" είναι ένα έργο Erasmus+, το οποίο αναδεικνύει τη σημασία της συμμετοχής των νέων στους τομείς της πράσινης επιχειρηματικότητας (GE) και των επιχειρηματικών ευκαιριών της κυκλικής οικονομίας (CE). Το παρόν έγγραφο που βρίσκεται ενώπιόν σας εκπονήθηκε στο πλαίσιο του πρώτου παραδοτεου. Τα εθνικά μας ευρήματα συλλέγονται, αναλύονται και καταλήγουν σε μια έκθεση για την κατάσταση της προόδου, η οποία αποτελείται από δεδομένα από τέσσερις χώρες εταίρους του έργου: Βέλγιο, Ελλάδα, Ρουμανία και Σλοβενία. Ο στόχος αυτής της έκθεσης είναι η δημιουργία μιας βάσης γνώσεων, η χαρτογράφηση των υφιστάμενων εκπαιδευτικών ευκαιριών και της τρέχουσας κατάστασης των ικανοτήτων των

νέων για περαιτέρω δραστηριότητες του έργου, προκειμένου να διασφαλιστεί ότι οι εκπαιδευόμενοι θα αποκτήσουν δεξιότητες, ικανότητες και γνώσεις σχετικά με την Κυκλική Οικονομία, την Πράσινη Επιχειρηματικότητα και τις επιχειρηματικές ευκαιρίες στο πλαίσιο. Η έρευνά μας στα εθνικά νομικά πλαίσια και την εκπαιδευτική προσφορά επιβεβαίωσε την έλλειψη τέτοιων δωρεάν και ευρέως προσβάσιμων ευκαιριών μάθησης για τους νέους. Επιπλέον, τα αποτελέσματα της θεωρητικής έρευνας και της έρευνας πεδίου έδειξαν ότι οι νέοι επιθυμούν να κατανοήσουν καλύτερα αυτά τα θέματα, να λάβουν περισσότερη πρακτική καθοδήγηση και εκπαιδευτικό υλικό, καθώς και να γίνουν ενεργοί φορείς αλλαγής.

REZUMAT [RO]

Construirea de punți pentru economia circulară prin promovarea antreprenoriatului verde este un proiect Erasmus+, care evidențiază importanța implicării tinerilor în domeniile antreprenoriatului verde (GE) și a oportunităților de afaceri în domeniul economiei circulare (CE). Acest document este produsul primului rezultat intelectual al proiectului. S-au colectat date la nivel național din cele patru țări partenere: Belgia, Grecia, România și Slovenia, și s-a întocmit un raport de analiză de ultimă oră. Obiectivul acestui raport este de a construi o bază de cunoștințe, de a mapa ofertele educaționale existente și starea actuală a competențelor tinerilor pentru activitățile viitoare ale proiectului, pentru a se asigura că cursanții vor dobândi abilități, competențe și cunoștințe despre economia circulara, antreprenoriat verde și oportunități de afaceri de acest gen. Cercetarea a fost realizată prin cadrele legale naționale și oferta educațională a confirmat lipsa unor astfel de oportunități de învățare gratuite și accesibile pe scară largă pentru tineri. În plus, rezultatele cercetărilor noastre de birou și de teren au arătat că tinerii își doresc să dobândeasca cunoștiințe aprofundate in aceste domenii, să primească mai multă îndrumare practică și materiale didactice, precum și să devină o parte din acest curent al afacerilor verzi.

POVZETEK [SI]

Grajenje Mostov za Krožno Gospodarstvo s Spodbujanjem Mladinskega Podjetništva je Erasmus+ projekt, ki poudarja pomen vpetosti mladih v poslovne priložnosti na področjih zelenega podjetništva (GE) in krožnega gospodarstva (CE). Dokument pred vami je bil pripravljen v okviru Intelektualnega rezultata 1. Nacionalne ugotovitve partnerjev so zbrane, analizirane in sklenjene v obliki State-of-the-art poročila, s podatki iz štirih partnerskih držav: Belgije, Grčije, Romunije in Slovenije. Cilj tega poročila je zajeti bazo znanja, mapirati obstoječo izobraževalno ponudbo in trenutno stanje kompetenc mladih za nadaljnje projektne dejavnosti z namenom zagotavljanja veščin, kompetenc in znanja o CE, GE in pripadajočih poslovnih priložnosti za uporabnike. Naše raziskovanje nacionalnih pravih okvirjev in izobraževalne ponudbe je potrdilo pomanjkanje prostodostopnih in širše uporabnih učnih priložnosti za mlade. Nadalje, analize naših namiznih in terenskih rezultatov so pokazale, da si mladi želijo doseči boljše razumevanje predstavljenih tematik, pridobiti bolj praktično usmerjena učna gradiva in postati aktivni tvorci sprememb.

1. INTRODUCTION

More than 3.3 million young people (aged 18-28 years) were unemployed in the European Union in 2019. The situation has even worsened due to the COVID19 crisis in 2020 and post-COVID times. As one of the main statements of the European Union on the latest socio-economic and environmental challenges, the European Commission has adopted an action plan to help accelerate Europe's transition towards circular economy. The importance of circular economy is continually increasing when creating new green jobs, youth entrepreneurship opportunities and more inclusive economy, and therefore bringing social benefits. Moreover, entrepreneurship education makes a difference: within alumni, who participated in any entrepreneurship training are five times more willing to start entrepreneurship activities.

Building Bridges for Circular Economy by Fostering Youth Entrepreneurship is an Erasmus+ project, highlighting the importance of youth involvement in the fields of Green Entrepreneurship (GE), non-profit activities and Circular Economy (CE). The project involves 5 partners from 4 EU countries with a common goal: address the need to improve the knowledge, skills and competences in GE and CE among youth, needed to set up green businesses, to facilitate collaboration with peers in setting up new business models. Therefore, we believe that acquiring innovative specialised knowledge and competencies for young people, by empowering them to make use of GE and mind-sets, enabling them to create new CE, GE or non-profit business opportunities will result in positive behavioural and societal changes in the EU.

Project consortium started the implementation with the Intellectual output 1: state-of-the-art analysis. Our national findings are collected, analysed and concluded in front of you, in this document as a State-of-the-art report, composed out of data from four project partner countries: Belgium, Greece, Romania and Slovenia. The objective of this report is to build up a knowledge base, map existing educational offers and current state of youth competencies for further project activities in order to ensure that learners will acquire skills, competencies and knowledge on CE, GE and business opportunities within.

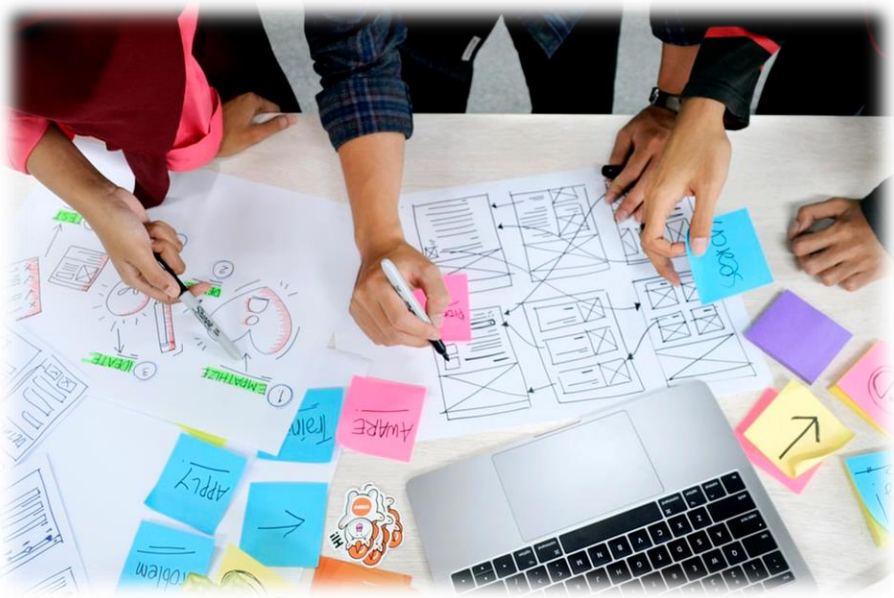
2. METHODOLOGY & APPROACHES

State-of-the-art merged national reports are a result of a systemic, theoretical, and practical elaboration of present conditions about the project related topics, the educational offer and definition of gaps and obstacles in partner countries. The data from the following project activities is included:

a) Desk research: mapping existing educational opportunities in partner countries as well as overview on the current national legal frameworks, promoting Circular Economy and Green Entrepreneurship.

b) Field research: competencies questionnaire among young people, aged 18-28 on their familiarity with Circular Economy and Green Entrepreneurship, competencies for fostering such business/career paths and their attitudes towards such education.

Prepared methodology to successfully carry out a desk and field research, was represented at the project meeting and agreed by all the partners, led by MIITR. Initially, partners prepared national reports, consisting of the analysis of the present conditions, carrying out a review of higher education and secondary education offerings, also comprehending a review of existing training materials, method used, etc. In addition to that, competencies questionnaire was distributed among young people in each partner country to gather actual feedback from our main target groups. In order to prepare national state of the art reports, the partners had to follow the predefined criteria and guidelines, as seen in the next chapters.



3. RESULTS SUMMARY

This section represents our key findings and the main highlighted results, obtained from the extensive national desk and field research and analysed data. Each further section in this document represents one of the partners' countries' findings: Belgium, Greece, Romania, and Slovenia. The section is structured into the following subsections:

General introduction
Legal framework
Main goals and methodology
Educational offer
Good practices
Results of competencies field research
Project integration, and identifying gaps

4. BELGIUM

This national state-of-the-art-report gives a short overview of the present conditions on youth circular and green entrepreneurship opportunities, good practices and offers in Belgium. In addition, it looks at the level of knowledge and competencies, identified by our main target group, young people from 18 to 28 years of age, their needs, and gaps.

4.1 GENERAL INTRODUCTION

Education in Belgium is being mandatory between 5 and 18 for young people, school is the main vector of education in Belgium. As a federal state, the country is divided by three communities (corresponding to the national languages) that gained autonomy regarding several matters, including education.

There are three levels in the scholar system: primary school, secondary school (both mandatory) and higher education (not mandatory). Young people have to choose their path starting from secondary school (around 12 years old). The general pathway focuses on an overview of different disciplines, while professional pathway focuses on professional practice, and artistic or technical pathway focuses on specialized learning.

Differences among schools are important, and diversity is still to be achieved. Mainly, this is caused by the fact that parents can sign their children in the school of their choice entirely (without geographic constraints), considering the relative rigidity of the pathways (once you make a choice, which is required quite soon, it's difficult to switch).

4.2 LEGAL FRAMEWORK

In Belgium, each region proposes a roadmap concerning the circular economy: the PREC (Regional Plan for the Circular Economy) in the Brussels-Capital Region, Het Vlaams Materialen Programma in the Flemish Region[1] and Circular Wallonia in the Walloon Region. To complete these regional plans, the federal government proposes 21 common measures[2]. Finally, a charter has been concluded with the Federations of Circular Economy and recovery Companies, COBEREC et GO4CIRCLE that recently merged to become DENUO[3]. In their memorandum[4]Go4Circle and COBEREC list, for the attention of decision-makers in Brussels, at the federal level and at the European level, some advice on how to make the circular economy a reality. These roadmaps determine the legal framework at different levels in the different regions.

[1] https://www.ovam.be/vlaanderen-circulair
[2] https://www.unep.org/fr/actualites-et-recits/recit/la-belgique-en-route-vers-une-economie-circulaire
[3] https://denuo.be/fr
[4] https://denuo.be/sites/default/files/M%c3%a9morandum%20%c3%a9lections%20Bruxelles%20-%20mai%202019.pdf

For example, Brussels has adopted a regional program in circular economic in 2016. This program, called PREC in French, has three general goals:

- Transforming environmental issues into economic opportunities.
- Relocate the economy to Brussels in order to produce locally, when possible, reduce travel, optimize land use and create added value for the people of Brussels.
- Contribute to the creation of employment.

Around these three main objectives, 111 measures are proposed in 4 strategic parts: transversal measures, sectoral measures, territorial measures, and governance measures. In the cross-cutting measures, we can find actions directly related to the teaching "Make training and teaching levers for tomorrow". This main objective is accompanied by five areas of work:

1. Identifying and anticipating the skills required for the circular economy (present and future), both organizational and technical.
2. Training of trainers and teachers.
3. Training of company directors and managers, to the new perspectives offered by the circular economy and the necessary skills.
4. Training of middle managers and workers.
5. Education and training of the younger generations to ensure that the younger generations will have the right skills to bounce back on the wave of the green economy including circular.

In the implementation of these 5 axes and by 2025, a series of proposals is established to achieve the main objective. One of these proposals, for example, is the integration of the concepts of the Circular Economy in the training cycle for self-employed and entrepreneurs at the EFP, a center for vocational training in Brussels.

4.3 MAIN GOALS & METHODOLOGY

The main sources of the qualitative and quantitative information indicated in this report were a result of an extended bibliographic, literature review and field data. During the project's research phase, Groupe One completed a mapping document to provide:

- a contextual status report on the circular economy and green entrepreneurship legal frameworks,
- information regarding existing training offers and education delivery,

- field research results on the circular and green entrepreneurship competencies and mind-sets among youth,
- identification of the synergies and gaps with **Building Bridges for Circular Economy by Fostering Youth Entrepreneurship** project.

4.4 EDUCATIONAL OFFERS

As described in the previous chapters, each roadmap includes objectives in terms of education. These objectives are aimed at secondary schools for young people, the actors of tomorrow, as well as at universities and colleges, and at people who are retraining or looking for training, via the continuing education channel. Based on these guidelines, Belgium, known for its diversified and wide-ranging associative world, many structures offer training related to sustainable development. In French-speaking Belgium, the educational offer related to sustainable entrepreneurship and the circular economy is proposed by 3 types of actors: Academic, associative, and institutional. Each of these actors work to propose complementary content.

In secondary schools in Brussels region, in accordance with the Decree on the reinforcement of education for responsible citizenship (2007), the theme of Education for the Environment and Sustainable Development is part of the Education for Citizenship. This political will integrates the issues of sustainable development and green entrepreneurship education within the educational priorities. However, in the majority of cases, training actions (towards students or teachers) are given by associative actors and financed by public institutions (e.g., Groupe One lectures on the topics of Circular Economy; awareness of climate issues; SDGs; Sustainable entrepreneurship with gamification approach and project-based pedagogy).

Activities on circular economy and green entrepreneurship at the VET level are offered by the actors, such as Eco-Consulting Institute (Institut Eco-Conseil) with a mission to increase the capacity of people and organizations to act, and to facilitate transitions through numerous training courses – addressing topics: Project management; Sustainable agriculture; Zero Waste; Health; Territories and mobility; Sustainable Energy; Water; Sustainable housing via active pedagogy as well as internships.

Activities on circular economy and green entrepreneurship at the university level are offered for example by ULB is the Free University of Brussels and deals with the circular economy through its "Master in Environmental Sciences and Management - Environmental Management" program. Topics covered in-depth are: Environmental impact analysis and management; ecological economics; environmental law; circular economy; sustainable energy and mobility; tourism; agriculture, …

4.5 GOOD PRACTICES

The contents and methodologies are varied and depend on the type of teaching and the target audience. Moreover, some good practices can be found in the different educational networks, whether in secondary schools, universities, and colleges or in continuing education.

Two methodologies are regularly used:

- Active pedagogy aims to make the individual in training an actor in his or her learning so that he or she builds knowledge through research situations. This pedagogy is based on the principle that "you learn by doing". The individuals trained will, for example, work on projects.
- Bottom-up pedagogy aims at learning through reflection, discussion, and debate. These processes start from the knowledge of the trainees and are taken up by the trainer to be detailed, adjusted, or corrected.

Moreover, in Brussels, “Boost your Talent”5 is a project funded by the Brussels Ministry of Economy and Employment. This project brings together players in sustainable entrepreneurship training (Groupe One, LJE, 100,000 entrepreneurs, Step2You, YouthThinkers) and aims to provide a complete and complementary offer to schools in terms of training in green entrepreneurship. Led by associations, Boost Your Talent offers schools, upon request, complete training courses and the creation of sustainable "mini-companies". The project-based pedagogy and the continuous training on the theme of the circular economy led the students to develop a complete entrepreneurial project.

4.6 RESULTS OF COMPETENCIES FIELD RESEARCH

Competencies questionnaire for youth was designed as a field activity and distributed nationally among youth, mainly targeting our key target group (18-28 years old). In Belgium, there were 58 respondents altogether, 42 from the key target group and majority being female (78 %).

Survey statements were based on a 5-point Likert scale to assess the levels of knowledge and youth mind-sets, regarding Circular Economy (CE) and Green Entrepreneurship (GE). In majority (71 %) they have heard about CE and GE, yet they lack the abilities to discuss, explain or design new solutions in business, using those principles (87 % strongly disagreed, disagreed or remained neutral), meaning they are also not circular or green entrepreneurs. However, they wish to receive that knowledge and develop such skills (69 %), as they also believe CE and GE contribute to a higher level of sustainability locally and globally (67 %).

[5] https://www.boostyourtalent.be/

Respondents also agree, they lack entrepreneurship knowledge (50 %), 24 % remained neutral and/or lack leadership skills (43 %), while 26 % remained neutral to be able to successfully start their own business. Moreover, they strongly disagree or disagree on receiving sufficient knowledge via their formal education (81 %) to become active change-makers in the business world, using CE and GE principles. Lastly, when asked to arrange the proposed topics (15), the top three answers on which they wish to receive more learning on were (marked as essential): Achieving resource efficiency - e.g. recyclability, reusability, upgradeability, durability (62 %); Reduction of energy use, water footprint, carbon emissions, transport, within the production and consumption processes (74 %); Product life extension methods/more efficient product use (62 %); Sharing models facilitating the share/use of under-utilized products (62 %).

4.7 PROJECT INTEGRATION, AND INDENTIFYING GAPS

Circular economy and awareness of sustainable entrepreneurship are continuously developing within the educational priorities in French-speaking Belgium. As we have seen, under the political impetus of the government, business creation support programs and school programs now include more “green” topics. Associations, trainers and professors from universities, colleges and high schools are taking up these topics and acquiring expertise. The roadmaps drawn up at the various political levels (regional and federal) guide the actors in this process. Thus, these concepts are becoming better known in spheres directly related to these themes, such as young people studying a master's degree in economics at a French-speaking Belgian university, for example.

According to our research, these themes are still in the hands of people who are already aware and eager to share this new expertise with their audience or are looking for solutions to environmental issues through entrepreneurial projects. In this context, it would be necessary to develop tools for a public with little awareness, far from economic and entrepreneurial matters. To do so, the circular economy and entrepreneurship must be popularized and made widely accessible. Moreover, these concepts must be more linked to other fields and put into practice through professions that do not yet address these themes. A student training to become an electrician, a heating engineer or a web designer could learn the concept of circular economy and sustainable entrepreneurship with practical notions, directly related to their field.

5. GREECE

This national state-of-the-art-report gives a short overview of the present conditions on youth circular and green entrepreneurship opportunities, good practices and offers in Greece. In addition, it looks at the level of knowledge and competencies, identified by our main target group, young people from 18 to 28 years of age, their needs, and gaps.

5.1 GENERAL INTRODUCTION

The educational system in Greece is primarily distinguished by its versatility, as dictated by the Greek Ministry of Education and Religious Affairs' various laws and decrees. It has adopted international education techniques to fit the demands of Greek society and the labour market and has resulted in a multilayered education system that serves all students in the country.

By law, all students who complete primary school must enroll in and attend classes at a Junior High School. In Greece, there are many types of junior high schools (experimental Junior High School through a lottery system, Model Junior High School, after taking a nation-wide entrance exam.) Even though upper-level secondary education is not mandatory in Greece, most students attend High School. Students can also enroll in Vocational High Schools or enroll in a Vocational Evening High School when they turn 16 and graduate after four years of study. As of September 2021, there are also Model Vocational High Schools. Vocational Training Institutes and Schools frequently adjust their curriculum to meet the demands of their adult students and the labor market.

In Greece, the percentage of university graduates is rather high. Many of them are enrolled in four-year university and Technological University programs. The primary suppliers of Lifelong Learning in Greece are Lifelong Learning centers, which are generally monitored by municipal services. These facilities provide a wide range of courses aimed at both formal and informal learning.

5.2 LEGAL FRAMEWORK

Beyond the educational framework, Greece has established a national strategy plan for sustainable and equitable growth that incorporates the need for green entrepreneurship integration in businesses and has the circular economy as a significant flagship. The Greek government created the National Strategy for Sustainable and Fair Development 2030. On April 27, 2018, the Strategy was presented to the Eurogroup and received unanimous approval from its members. The Strategy takes a comprehensive approach to planning, considering the three elements (economic, social, and environmental) identified in the Sustainable

Development Goals (SBA)[6]. Moreover, in 2018 Greece also published its National Action Plan on Circular Economy[7] with 3 main priority actions to integrate circular economy into legislation, earmarking existing funds and to improve governance structures to oversee the CE implementation.

The only legislative framework that introduces entrepreneurship and social entrepreneurship in youth education is Law 4692/2020, which mandates the integration of entrepreneurship and innovation as a separate thematic cycle in skilled laboratories piloted in the compulsory program of kindergartens, elementary, and secondary schools beginning in the school year 2020-21[8].

5.3 MAIN GOALS & METHODOLOGY

The main sources of the qualitative and quantitative information indicated in this report were a result of an extended bibliographic, literature review and field data. During the project's research phase, iED completed a mapping document to provide:

- a contextual status report on the circular economy and green entrepreneurship legal frameworks,
- information regarding existing training offers and education delivery,
- field research results on the circular and green entrepreneurship competencies and mind-sets among youth,
- identification of the synergies and gaps with **Building Bridges for Circular Economy by Fostering Youth Entrepreneurship** project.

5.4 EDUCATIONAL OFFERS

The need of incorporating circular economy and social enterprise ideas into all levels of education is presently being recognized in Greece. However, this process is being implemented in a fragmented and non-combinatorial manner. There are no compulsory educational programs to expose students to these concepts or provide them with the information they need in secondary and vocational school, at least no practical knowledge is being taught. In this context, several organizations are taking steps in this direction and bringing circular economy programs to secondary schools (courses, subjects, etc.) and VET schools. In most cases, the main "players" are the teachers/trainers who choose to support the program and the volunteer/consultant, company executive who willingly participates in its

[6] https://www.nationalgrowthstrategy.gr/el/
[7] https://circulareconomy.europa.eu/platform/en/strategies/national-action-plan-circular-economy
[8] https://www.sev.org.gr/Uploads/Documents/53244/SR_Epixeirimatiki_Ekpaidevsi_Draft_FINAL.pdf

implementation. The counselor/volunteer comes into the classroom and, in partnership with the instructor, guides the discussions, shares information and experiences with the students, and functions as a link between the school environment and the labor market. Through such educational programs, students become familiar with the concept of green entrepreneurship and the concept and the importance of the circular economy.

However, the Training and Lifelong learning Centre of the University of West Attica offers a 50-hour course on Circular Economy. The aim of the program is to educate participants with the required information about the basic concepts of the circular economy, current and emerging legislative changes, the necessity to transition from a linear to a circular economy, and the benefits of doing so, introduction to the concepts of cyclical design and cyclical production of products and services, logistics and reverse logistics, application of cyclical principles in procurement, and management of the transition to a cyclical economy.

Courses on circular economy and social entrepreneurship, on the other hand, are offered by many Greek universities. Greek universities, also, have already identified green and social entrepreneurial mindset as a critical horizontal competence that enhances young people's employability and social mobility, which must be nurtured systematically via education. Business education does not focus just on the development of new entrepreneurs, but rather on the development of soft skills that enable students to think positively, act effectively, and behave ethically and responsibly in all aspects of their professional and social lives. As a result, in recent years, Greek universities have incorporated training programs on social entrepreneurship and circular economy into their curricula. For example, The University of Piraeus offers an MSc in ‘Bioeconomy, Circular Economy and Sustainable Development'. It is an interdisciplinary program of the Department of Economics, School of Economic, Business Tourism and International Studies of the University of Piraeus and the Department of Biology of the National and Kapodistrian University of Athens, by providing theoretical and applied economic analysis in bioeconomy and circular innovation areas, as well as sustainable development and using interdisciplinary approach.

5.5 GOOD PRACTICES

Even though Greece lacks a legislative framework for green economy and sustainable development, as well as such policies in the Greek educational system, there are more wide initiatives in terms of sustainable development linked to education.

The Bravo Institution, for example, is a forum for discussion and promotion of projects that promote sustainable development and support a sustainable future. It highlights the development of systematic social discourse with the goal of establishing a forum for the exchange of ideas, information, and open consultation, as well as a broader culture on

Sustainable Development issues. The Quality Net Foundation oversees and organizes the Bravo nstitution. The Quality Net Foundation is a specialist organization in the field of Sustainable Development that has been operating in the Greek market for the last 20 years and interacts with the country's institutional, commercial, and social bodies to promote a sustainable future. The Bravo institution was established in partnership with international, European, and national authorities, with the goal of producing a systematic mapping of the maturity and trends of sustainable development in Greece. It has been 11 years since its inception, and it has evolved in three axes: the Bravo Sustainability Dialogue & Awards, the Bravo Global Goals and the Bravo Schools9 where we can observe some good practices implemented in secondary education10.

5.6 RESULTS OF COMPETENCIES FIELD RESEARCH

Competencies questionnaire for youth was designed as a field activity and distributed nationally among youth, mainly targeting our key target group (18-28 years old). In Greece, there were 46 respondents altogether, 41 from the key target group and majority being female (61 %).

Survey statements were based on a 5-point Likert scale to assess the levels of knowledge and youth mind-sets, regarding Circular Economy (CE) and Green Entrepreneurship (GE). In majority (63 %) they have heard about CE and GE, however around half of them lack the abilities to discuss, explain or design new solutions in business, using those principles (51 % strongly disagreed, disagreed or remained neutral), meaning they are also not yet circular or green entrepreneurs. Positively, they wish to receive that knowledge and develop such skills (68 %), as they also believe CE and GE contribute to a higher level of sustainability locally and globally (68 %).

Respondents also agree, they lack entrepreneurship knowledge (53 %), 22 % remained neutral and/or lack leadership skills (39 %), while 29 % remained neutral to be able to successfully start their own business. However, only 34 % they strongly disagree or disagree on receiving sufficient knowledge via their formal education to become active change-makers in the business world, using CE and GE principles. Lastly, when asked to arrange the proposed topics (15), the top three answers on which they wish to receive more learning on were (marked as essential): Achieving resource efficiency - e.g. recyclability, reusability, upgradeability, durability (34 %); Reduction of energy use, water footprint, carbon emissions,

[9] https://inactionforabetterworld.com/bravo-schools-event-2020/
[10] https://bravosustainabilityawards.com/bravo-o-thesmos/#1565252263994-dfa83dbb-fa7c

transport, within the production and consumption processes (34 %); Green product design (eco-design) (34 %); Public/consumer awareness raising campaigns (39 %).

5.7 PROJECT INTEGRATION, AND INDENTIFYING GAPS

Regarding Green Entrepreneurship, Greece maintains its low rating, with a score of 75 and a position of 19th among the EU28 nations. The policy framework for supporting innovation is expected to increase considerably, with the encouragement of particular eco-innovation initiatives included. Although there is no comprehensive policy framework to encourage the circular economy, the first circular economy dialogue event for corporations, SMEs, researchers, social entrepreneurs, and others was held in April 201911. With all that in mind, and based on the desk research, we conclude that while there are baseline initiatives for green entrepreneurship, they are still far from being incorporated into the Greek educational system. There are no linkages between circular economy, green, and social entrepreneurship in the Greek higher educational system's public sector. Only initiatives from the private sector of secondary, vet, and higher educational institutions have been identified.

Therefore, even though the public educational system does not participate as effectively yet, the foundations are progressively being set due to the creation of relevant tools and procedures, making it possible to construct a sustainable growth that is pursued for years without becoming a reality. This identified gap was also detected in the field research within our project, highlighting the need of developing such educational materials for youth to empower them with business competencies in the fields of circular economy and green entrepreneurship.

[11] https://ec.europa.eu/environment/ecoap/greece_en

6. ROMANIA

This national state-of-the-art-report gives a short overview of the present conditions on youth circular and green entrepreneurship opportunities, good practices and offers in Romania. In addition, it looks at the level of knowledge and competencies, identified by our main target group, young people from 18 to 28 years of age, their needs, and gaps.

6.1 GENERAL INTRODUCTION

The educational system has been a much-debated subject in Romania especially in the past decade, but despite being on both public and political agendas, it has seen little reform due to the stakeholders' reluctance towards change. The National Education Law describes two educational levels corresponding to secondary education, namely lower secondary education (ISCED 2) and superior secondary education (ISCED 3). Whereas the former encompasses basic education, the latter includes a number of available pathways: theoretical, vocational, technological, and professional and technical education. Secondary education may be continued either through tertiary non-university education (ISCED 4), or higher education (ISCED 5-8)12. These areas have been the subject of national strategies meant to adjust the academic curricula to the demands of the labor market. Lifelong learning opportunities vary with the socio-economic environment, but progress is being made with respect to the process of recognition of skills gained in informal and non-formal contexts13.

6.2 LEGAL FRAMEWORK

In Romania, the legislation on circular economy and green entrepreneurship, linked to education of youth is scarce and mostly unspecific, lacking consistency and continuity across the relevant fields: environment, employment, and education. The IRCEM organisation proposed a circular economy strategy14 for the upcoming decade that is still in progress. The objectives of this project include performing a state-of-the-art analysis of Romania's circularity potential and identifying relevant share- and stakeholders. The formulation of recommendations for the government to facilitate a smooth transition towards a circular economy is a vital step of the project, as well as identifying opportunities for the consolidation of economical competitivity in the frame of international economy. The analysis of resource efficiency, the valorisation of materials, products and waste, waste prevention, green acquisitions, responsible production and modifying existing production processes will be the main focus of this strategy.

[12] National Education Law No. 1/2011
[13] https://eacea.ec.europa.eu/national-policies/eurydice/content/ongoing-reforms-and-policy-developments-56_en
[14] https://www.ircem.ro/roadmap-for-developing-a-strategy-on-the-circular-economy-in-romania/

Skills and education are key qualities of the workforce and can determine the attractiveness of a market, and Romania still has disadvantages in this regard. A series of strategic documents and action plans for human resource development and education are being promoted in order to improve the quality of the education and training system so as to ensure the correlation with the labor market. The National Employment Strategy[15] provides educational initiatives for the development of human resources with a high level of qualification and skills adapted to the requirements of the labor market. The National Strategy for Tertiary Education[16] in turn identifies directions to ensure an education system adequate to market requirements and skill development through involving employers in the design and delivery of curricula, supporting staff exchanges and broadening practical experience in the curriculum.

The aim of the adoption of the National Higher Education Qualifications Framework[17] is to observe a significant increase in the quality of higher and post-graduate education. It introduces transparent standards and practices describing qualification and validation procedures, as well as the development of solutions relying on information technology for process management and the training of a contingent of evaluators of educational processes and their impact on higher education outcomes.

Master's and VET programs have been created in order to promote research and development of skills specific to the field of activity through the operational programs financed from FESI[18] (EU funding), which support coaching / training actions for future managers and entrepreneurs in enterprises to improve their skills; improve human resources management in companies; introduce innovative, green and productive models of work organization.

6.3 MAIN GOALS & METHODOLOGY

The main sources of the qualitative and quantitative information indicated in this report were a result of an extended bibliographic, literature review and field data. During the project's research phase, CNPCD and FITT completed a mapping document to provide:

- a contextual status report on the circular economy and green entrepreneurship legal frameworks,
- information regarding existing training offers and education delivery,
- field research results on the circular and green entrepreneurship competencies and mind-sets among youth,

[15] https://www.edu.ro/sites/default/files/_fi%C8%99iere/Minister/2016/strategii/strategia-cdi-2020_-proiect-hg.pdf
[16] https://www.edu.ro/sites/default/files/fisiere%20articole/Strategie_inv_tertiar_2015_2020.pdf
[17] http://www.invatamant-superior.ro/wp-content/uploads/2013/08/Metodologie-CNCIS.pdf
[18] https://www.curteadeconturi.ro/fondurile-europene-structurale-si-de-investitii-fesi

- identification of the synergies and gaps with **Building Bridges for Circular Economy by Fostering Youth Entrepreneurship** project.

6.4 EDUCATIONAL OFFERS

The secondary school course curricula reviewed, showed lacking in CE and GE principles overall. Subjects, such Economic education19, Technological abilities and practical abilities20, Entrepreneurial education21, Economics22 do cover some of the business and entrepreneurial aspects, alternative use of the resources or similar, but do not address CE and GE holistically. It is worth mentioning that all of the examples chosen in this category, with the exception of Economical education, are part of the mandatory curriculum, ensuring a minimal awareness towards circular economy for all students, regardless of their choice of specialization. However, Romanian educational legislation also permits the development of new courses by schools (CDȘ)23, which is good practice. One example of this is Economical education, which is approved by the Ministry of Education and is therefore public, nevertheless there may very well be a multitude of other courses proposed by schools that integrate some notions of CE & GE.

VET education (formal and non-formal) covers those ideas more structurally via programmes, such as Entrepreneurial competencies24, Support for the installation of young farmers25. Moreover, promoting the idea of life-long learning is a priority for Romania, given substantial gaps in enrolment rates in different kinds of training, retraining, professional upgrading, or specialization (more than 5 times lower than the EU average), as well as in social and personal development. Better performance in this area is critical for personal, civic, and social development, as well as the likelihood of obtaining better-paying jobs based on knowledge acquired through learning, from early childhood to post-graduate studies and other forms of adult education in formal and non-formal settings26.

Higher education offers, cover bachelor and master's programmes, such as Sustainable development27 (master's degree), Ecologic Economy (master's degree)28, Product design for sustainable development 29 (master's degree), where topics are covered from basic management, marketing, EU policies, environmental chemistry, impact assessments, …

[19] http://programe.ise.ro/Portals/1/Curriculum/Progr_Gim/CD/Educatie%20economica_gimnaziu.pdf
[20] http://programe.ise.ro/Portals/1/Curriculum/2017-progr/116-Educatie%20tehnologica%20si%20aplicatii%20%20practice.pdf
[21] http://programe.ise.ro/Portals/1/Curriculum/Progr_Lic/TH/Educatie%20antreprenoriala_clasa%20a%20X-a.pdf
[22] http://programe.ise.ro/Portals/1/Curriculum/Progr_Lic/OS/Economie_clasa%20a%20XI-a_a%20XII-a.pdf
[23] https://lege5.ro/gratuit/gqzdmnzvga2q/metodologia-privind-dezvoltarea-curriculumului-la-decizia-scolii-din-05022021
[24] https://training-romania.com/curs-competente-antreprenoriale/
[25] https://portal.afir.info/informatii_generale_pndr_investitii_prin_pndr_sm_6_1_sprijin_pentru_instalarea_tinerilor_fermieri
[26] http://www.mmediu.ro/beta/wp-content/uploads/2012/06/2012-06-12_dezvoltare_durabila_nsdsenglish12112008.pdf
[27] http://www.politice.ro/ro/msmdd
[28] https://eam.ase.ro/index.php?route=academic-masterat-ee
[29] https://dpm.unitbv.ro/ro/programe-de-studii/masterat.html

Several Green entrepreneurship and circular economy notions are introduced in the context of the degree subject, which ensures a better assimilation of knowledge, as well as the gain of specific competencies. The relatively wide range of subject areas, from economics and sustainable development to geography and even ethics, suggests some coverage of circular economy and green entrepreneurship aspects within higher education.

6.5 GOOD PRACTICES

In terms of good practices, there are many educational opportunities in terms of learning the essentials behind starting a business. One of these opportunities is provided by Startarium30, which is a platform that created a comprehensive 8 module course that concerns everything one needs to know before starting a new business. The course is online, entirely free and accessible to anyone interested and covers topics such as how to write a business plan, how to manage the finances of a business, how to create a successful product, marketing and advertisement, how to attract funding, how to build a reliable team and how to develop a business mindset. Each chapter has a summary and quiz at the end to test and fixate the knowledge gained, as well as video support. They also give training on how to make use of the popular business tools available (the business model canvas, the value proposition canvas, the business selfie and pitch deck). If used right, these tools can also be a very handy way to develop a business plan and keep the general idea and plan of the business in mind. Startarium acts as a platform for informing aspiring entrepreneurs on new funding opportunities and giving them tips on how to reach these grants. They have many articles that coach their students on how to apply for crowdfunding or how to attract local investors. They also organize a competition where participants must pitch their business ideas and the three best pitches receive a sum of 50.000, 30.000 and 20.000 euro (depending on their ranking). As for networking, Startarium also connects young entrepreneurs with mentors or with each other through different events and conferences they organize or by promoting events of interest.

Looking at an overview of available VET training opportunities, a good practice identified throughout these would be the fact that the focus on entrepreneurial mentorship is solid, especially through monetary stimulation as most of these programs offer a sort of contest where students can showcase and apply their newly gained knowledge. Other existing VET educational platforms, created through Erasmus Plus partnership projects, offer qualitative source of learning for various stakeholders, in circular economy, such as: “EduZWaCE-Education for Zero Waste and Circular Economy”31, “LeadSus- Leadership in

[30] https://startarium.ro/curs/startup-edu
[31] https://www.eduzwace.eu/

sustainability”32 and many more. Many of these projects also offer opportunities for networking and facilitation of business cooperation. While CE & GE may not be the main subject, many of these programs do still have sustainability as a topic within their curricula and introduce basic notions to their students. However, accelerator programs that strictly fund eco-innovative start-ups also exist, therefore opportunities to access programs that are directly related to CE & GE are also possible (e.g., the ClimAccelerator33 project).

6.6 RESULTS OF COMPETENCIES FIELD RESEARCH

Competencies questionnaire for youth was designed as a field activity and distributed nationally among youth, mainly targeting our key target group (18-28 years old). In Romania, there were 80 respondents altogether, 76 from the key target group and majority being female (71 %).

Survey statements were based on a 5-point Likert scale to assess the levels of knowledge and youth mind-sets, regarding Circular Economy (CE) and Green Entrepreneurship (GE). In minority (29 %) they have heard about CE and GE, therefore they lack the abilities to discuss, explain or design new solutions in business, using those principles (74 % strongly disagreed, disagreed or remained neutral), meaning they are also not circular or green entrepreneurs. However, they wish to receive that knowledge and develop such skills (79 %), as they also believe CE and GE contribute to a higher level of sustainability locally and globally (67 %).

Respondents also agree, they lack entrepreneurship knowledge (62 %), 14,5 % remained neutral and/or lack leadership skills (41 %), while 22 % remained neutral to be able to successfully start their own business. Moreover, they strongly disagree or disagree on receiving sufficient knowledge via their formal education (78 %) to become active change-makers in the business world, using CE and GE principles. Lastly, when asked to arrange the proposed topics (15), the top three answers on which they wish to receive more learning on were (marked as essential): Achieving resource efficiency - e.g. recyclability, reusability, upgradeability, durability (54 %); Reduction of energy use, water footprint, carbon emissions, transport, within the production and consumption processes (50 %); Packaging optimization (59 %); EU funding programmes, regulatory framework, environmental certificates (50 %).

6.7 PROJECT INTEGRATION, AND INDENTIFYING GAPS

t is clear from both, the legal framework and the analysis of the educational opportunities that, while attempts have been made, circular economy is not yet a well-developed aspect in

[32] http://leadsus.bicero.com/
[33] https://theclimatevertical.com/ro/climaccelerator.html?fbclid=IwAR2Ap7TpBWEhodMTXlNi2eriAOyJS4yExWbdmvMtc-h6MnaPsa_nHkd6UwQ

Romania. With the legislation surrounding it being scarce and unclear, the topic becomes impersonal for the people, resulting in low general engagement and making educational opportunities which approach this subject that much more important. Furthermore, other courses that are not so closely related to big subject areas such as ecology and economics, where discussions of circular economy are inevitable, may even lack mentions of it altogether, resulting in lost teaching opportunities. Moreover, most of the educational opportunities that regard CE & GE are within formal education, may it be secondary school, formal VET education, or higher education, while informal and non-formal training and programmes are scarcer and/or not well promoted, usually ran by NGOs, and not financially supported by authorities. There is no surprise that university opportunities are more comprehensive, as higher education institutions tend to keep up with the specific academic research and more readily update their course content based on new approaches and themes.

However, it is important to mention that Romania does not have a defined policy for green and social entrepreneurship in youth start-ups or many projects that fit in all these categories. However, there are directives, projects and strategies concerning green entrepreneurship, social entrepreneurship and youth entrepreneurship as separate categories. These directions clearly exist in the Romanian policy, and they are discussed frequently, even if separately, there are many available possibilities for youth to get funding for starting their own businesses, as many do exist even if not specifically oriented on these topics. There are many legal benefits especially for young people or people in the social sphere as these new businesses are obviously encouraged by the Romanian government.

It is now widely acknowledged that the radical improvement and diversification of the opportunities provided by the Romanian educational and training system are priority strategic objectives and basic preconditions for the effective implementation of the CE and GE the principles, even though tangible results become evident only after several years. The development of human capital and improving competitiveness by connecting education and life-long learning to the labor market and providing greater chances to engage in a modern, inclusive, and flexible labor market. In conclusion, while the Romanian legislation favors young entrepreneurs and the creation of business opportunities, the general level of preparation among youth on the topic of circular economy is still limited and this leads to a series of lost opportunities. There is no direct informal course that explains what sustainable entrepreneurship entails and prepares students to face the market with expert competitors. There is a clear need to train future entrepreneurs on the field of CE and GE and create a direct link between industry and sustainable practices, as general information will not suffice to initiate or maintain a green business.

7. SLOVENIA

This national state-of-the-art-report gives a short overview of the present conditions on youth circular and green entrepreneurship opportunities, good practices and offers in Slovenia. In addition, it looks at the level of knowledge and competencies, identified by our main target group, young people from 18 to 28 years of age, their needs, and gaps.

7.1 GENERAL INTRODUCTION

The Slovenian education system consists of primary, secondary, and tertiary education. The right to free education is enshrined in the Constitution of the Republic of Slovenia. Therefore, primary education is compulsory and is financed by public funds. Among other objectives, primary school education aims to educate people on sustainable development and take responsibility for their actions, health, other people, and the environment.

School leaving qualifications are classified by the Slovenian Qualifications Framework (SQF)[34]. Primary education is provided by public and private kindergartens, primary schools, primary schools with an adapted education programme, music schools and educational institutions for children with special educational needs. Upper secondary schools and secondary schools provide secondary education. It is classified as general or vocational-technical and secondary professional or technical education. The third segment of education, tertiary education, is provided by both public and private institutions. It consists of higher post-secondary vocational education and higher education. Higher post-secondary vocational education is provided by higher vocational colleges, while higher education is provided by faculties, academies, and independent higher education institutions.

7.2 LEGAL FRAMEWORK

Back in 2015, the Government of the Republic of Slovenia adopted the Framework Program for the transition to a Green Economy, which was the first serious reflection on the circular economy, albeit under a different name. A broad partnership for a Green Economy emerged but unfortunately lost most of its momentum after the change of government. As a "region", Slovenia has become a member of the Circular Economic program of the Ellen MacArthur Foundation, a global leader in the circular economy. The roadmap to Circular Economy in Slovenia[35] sets out the path for Slovenia to become a leader in the recycling industry in the

[34] https://www.gov.si/en/topics/slovenski-solski-sistem-in-slovensko-ogrodje-kvalifikacij/
[35] https://static1.squarespace.com/static/5b97bfa236099baf64b1a627/t/5beabb62f950b773950d1ce7/1542110257669/ROADMAP+TOWARDS+THE+CIRCULAR+ECONOMY+IN+SLOVENIA.pdf

region. Designed using an inclusive, multi-stakeholder approach, it identifies four priority sectors, makes recommendations to the government, and identifies best practices. The roadmap presents Circular Triangle, a model that combines three inseparable elements - Circular Economy (business models), Circular Change (government policy) and Circular Culture (citizens), three interdependent aspects that form the core of the systemic change from a linear to a circular economy in Slovenia. Among the most important national documents such as "A Vision for Slovenia in 2050"[36] and "Slovenian Development Strategy 2030"[37], CE is one of the essential sustainability drivers for Slovenia.

The Slovenian Qualifications Framework (SQF)[38] is a uniform system of qualifications in the Republic of Slovenia, which aims to outline the educational and other qualifications available in Slovenia and the mutual comparability of different qualifications. Its basic function is to clarify the horizontal and vertical relationships between different types of qualifications, certificates, and degrees/diplomas. They consist of level descriptors; each level descriptor being defined by learning outcomes. At the higher education level, Slovenia is actively involved in the Bologna Process and, as a member of the European Union, is committed to the objectives of the Lisbon Strategy. It strives for a high-quality, diverse, and accessible tertiary education system that is internationally comparable. The most important tertiary education goals include quality, employability and mobility in Europe and the world, fair access and the diversity of institutions and study programmes.

7.3 MAIN GOALS & METHODOLOGY

The main sources of the qualitative and quantitative information indicated in this report were a result of an extended bibliographic, literature review and field data. During the project's research phase, MIITR completed a mapping document to provide:

- a contextual status report on the circular economy and green entrepreneurship legal frameworks,
- information regarding existing training offers and education delivery,
- field research results on the circular and green entrepreneurship competencies and mind-sets among youth,
- identification of the synergies and gaps with **Building Bridges for Circular Economy by Fostering Youth Entrepreneurship** project.

[36] https://www.slovenija2050.si/
[37] https://www.gov.si/assets/vladne-sluzbe/SVRK/Strategija-razvoja-Slovenije-2030/Strategija_razvoja_Slovenije_2030.pdf
[38] https://www.gov.si/en/topics/slovenski-solski-sistem-in-slovensko-ogrodje-kvalifikacij/

7.4 EDUCATIONAL OFFERS

When looking at secondary school programs related to a circular economy, sustainable development, green deal, etc., we note that schools in this area have not yet integrated these contents more intensively into their educational programs. In high schools and grammar schools, students are educated about the circular economy in non-formal education. The most visible form of education takes place through the Eco school project. The Eco school program is an internationally recognised program of integrated environmental education that aims to promote and raise awareness of sustainable development among schoolchildren and students through their educational program and active participation in the local community and beyond.

As for tertiary education, the curriculum is much broader, with more courses specialising in the circular economy, sustainable development and entrepreneurship. In addition to the formal education system, the tertiary sector often offers training seminars specialised in these subjects as well. For example, on University of Maribor: Faculty of Logistics (Circular economy in logistics), Faculty of Energy (Circular economy and energy technology, 2nd level elective), Faculty of Chemistry and Chemical Engineering (Cleaner Production); University of Ljubljana: Biotechnical Faculty (Bioeconomy, 2nd degree); B&B College for Sustainable Development (Environmental Protection Program); Jožef Stefan International Postgraduate School (Introduction to the circular economy). Within those offers, specialized competencies are acquired in the fields of sustainability, technical processes (production and consumption), life-cycle assessments, management of resources, topics of social entrepreneurship and circular economy concepts, … via lectures, interdisciplinary approach, and individual work.

Regarding non-formal education, projects like "Development of students' competencies for the circular economy"[39] are carried out under the University of Maribor, the Faculty of Chemistry and Chemical Technology and the Faculty of Mechanical Engineering and Styrian Chamber. While other stakeholders, like NGOs, youth centers and initiatives are actively involving participants into various courses, workshops and events that are being organized in the last few years - Academy Green Slovenia hosted online conference in March 2021: “Opportunities and challenges of circular packaging”[40], paid workshop “Green entrepreneurship”[41] by the Institute Intercer for sustainable solutions, Development Agency Sotla is currently (Sept 2020-Aug 2023) implementing a project “Circular Economy in practice”[42], where they are preparing an e-course for the CE trainers. Moreover, United Nations System Staff College (UNSSC)

[39] https://www.srips-rs.si/storage/app/media/RAZVOJ%20KADROV/SIPK/Projekti%202018-2019/Maribor/Koncno_porocilo_UM_FKKT_2.pdf
[40] https://www.zelenaslovenija.si/486/spletna-konferenca-priloznosti-in-izzivi-krozne-embalaze
[41] https://www.napovednik.com/dogodek399361_intercer_delavnica_zeleno_podjetnistvo
[42] https://www.ra-sotla.si/circular-economy-in-practice-krozno-gospodarstvo-v-praksi/

developed 5-week course “Circular Economy and Agenda 2030”[43], promoted by Sloga initiative in Slovenia.

7.5 GOOD PRACTICES

An example of good practice is the project "AWARE: Raising public awareness on electronic waste as a source of valuable materials"44, which aims to increase the proportion of waste that ends up in official collection systems rather than losing resources to landfills or incinerators and collection outside official systems. The project's focus is to educate and engage school children and high school students to raise awareness of used electronics as a resource and deliver messages to families and society as whole. The project created educational materials developed with youth to reach peers and engage youth in planning collection campaigns for discarded electronics. The idea is to involve schoolteachers in engaging with new learning topics and disseminating information about the circular economy of used electronics in new and interesting forms (e.g., games and videos or phenomenon-based learning) to primary, secondary, and post-secondary schools (in Finland). The project provides recycling companies, associations, and local authorities with new ideas from students to organise campaigns in schools or in the community based on student feedback.

- Specific objectives from the project:
- Work with students to create inspirational materials and models for teachers to teach their students in primary and secondary school about using electronics as a future resource.
- Subjects would focus on environment and science (at primary school) and geography (resources), chemistry and physics (at secondary school and college), and the circular economy, incorporating the social economy and environmental benefits as part of a new model of environmental education.
- Train university students to act as "emissaries" to disseminate information about the basics of the circular economy of used electronics in primary and secondary schools using innovative methods (games, hands-on activities, etc.)
- Involve school children in planning campaigns to collect used electronics, using tools and channels familiar to the younger generation.

Learning objectives:

[43] https://sloga-platform.org/krozno-gospodarstvo-in-agenda-2030/
[44] https://aware-eit.eu/

- Students understand that e-waste comprises of different materials (e.g., metals, plastics, including valuable and rare materials.
- Electronics Value Chain.
- The student understands the benefits of e-waste recycling and how e-waste is recycled.
- The student understands the environmentally and socially sustainable aspects of electronics production and recycling.

7.6 RESULTS OF COMPETENCIES FIELD RESEARCH

Competencies questionnaire for youth was designed as a field activity and distributed nationally among youth, mainly targeting our key target group (18-28 years old). In Slovenia, there were 45 respondents altogether, 40 from the key target group and majority being male (57,5 %).

Survey statements were based on a 5-point Likert scale to assess the levels of knowledge and youth mind-sets, regarding Circular Economy (CE) and Green Entrepreneurship (GE). In majority (77,5 %) they have heard about CE and GE, yet they lack the abilities to discuss, explain or design new solutions in business, using those principles (77,5 % strongly disagreed, disagreed or remained neutral), meaning they are also not circular or green entrepreneurs. However, they wish to receive that knowledge and develop such skills (68 %), as they also believe CE and GE contribute to a higher level of sustainability locally and globally (85 %).

Respondents also agree, they lack entrepreneurship knowledge (70 %), 22,5 % remained neutral and/or lack leadership skills (67,5 %), while 20 % remained neutral to be able to successfully start their own business. Moreover, they strongly disagree or disagree on receiving sufficient knowledge via their formal education (67,5 %) to become active change-makers in the business world, using CE and GE principles. Lastly, when asked to arrange the proposed topics (15), the top three answers on which they wish to receive more learning on were (marked as essential): Achieving resource efficiency - e.g., recyclability, reusability, upgradeability, durability (45 %); Recycling waste into secondary raw materials (45 %); Reduction of energy use, water footprint, carbon emissions, transport, within the production and consumption processes (52,5 %); Product life extension methods/more efficient product use (50 %).

7.7 PROJECT INTEGRATION, AND INDENTIFYING GAPS

In general, Slovenia has excellent potential for implementing the European Green Deal objectives. However, considering the currently prepared national strategies, we are perhaps

a bit too ambitious in our strategy. We are not sure yet, if current pandemic will accelerate the transition to sustainable development. However, we know that Slovenia is in a worse position regarding the current circularity of processes and material efficiency for example, but has good results in municipal waste management and an excellent starting point for rapid progress. The circular economy as a concept is sinking into the subconscious in Slovenia more slowly than elsewhere, but more and more steps are being taken that will transform the concept from an almost purely administrative theory into widespread everyday practice.

One of the main objectives of the national education system are developing entrepreneurial skills, innovation, and creativity. Slovenia tries to focus on integrating circular economy and sustainable development issues into the formal and non-formal education systems. Its commitment seems to be more intense at the tertiary level of education, while it is not yet as fierce at the secondary level of education. There are a few universities in higher education developing such programs, for example, the University of Ljubljana and the University of Maribor offer educational content in non-formal education on the circular economy. However, a review of courses, training and best practices showed that circular economy approaches are not widespread in Slovenia. There is currently no course focused on the circular economy at the secondary level in Slovenia, but there are courses that mention the circular economy concept. Despite significant improvements in environmental topics (e.g., sustainable development) and formal courses for secondary and higher education, Slovenia continues to perform poorly. Low ranking also confirms this among countries with eco-innovative practices. Therefore, by promoting and disseminating these practices, our project provides additional skills in entrepreneurship and attitudes, creativity and innovation, communication and interpersonal management, and business practices in the fields of CE and GE.

8. CONCLUSION

In today's society of unpredictability and rapid change, the educational practices must provide young people with the information and skills in order for them to be able to make a smooth transition to employment and have positive career objectives and social prospects.

This Intellectual output 1 in the **Building Bridges for Circular Economy by Fostering Youth Entrepreneurship** project highlights main findings in 4 EU countries: Belgium, Greece, Romania, and Slovenia. Each partner organization carried out extensive desk research on the legal framework, current educational offers, and good practices in the fields of Circular Economy (CE) and Green Entrepreneurship (GE). In addition, we conducted national field research via competencies questionnaire, to identify actual gaps in knowledge among young people (18-28 years old) in those fields. Our findings, as seen in the chapters of this documents, show that:

- Legal frameworks, like national strategies for transitions to CE and GE are in the process of implementation, but this is a long-term process, before acquiring tangible results;
- Moreover, the change in the formal educational programs, when including CE and GE topics is slow and not as flexible – therefore, the most in-depth topics covered can be found only in the tertiary educational level (mostly as master programmes);
- However, young people from Belgium, Greece, Romania, and Slovenia showed great interested in receiving additional knowledge on those topics, wanting to be active change-makers;
- As young people understand benefits and added value of implementing CE and GE principles into the business, yet they are lacking the entrepreneurial competencies to establish their own career path in those fields;
- More free and widespread courses in the non-formal educational area are needed in order to complement formal education programs and ensure proper addressing of the knowledge gaps among young people, regarding circular economy principles and green entrepreneurship, fostering practical realization and added value within youth business activities.

As seen in the Table 1 below, we specifically asked young people between 18 and 28 years of age from Belgium, Greece, Romania and Slovenia to mark the most “essential” topics out

of 15 provided, they wish to learn more about: Nature based solutions; Achieving resource efficiency (e.g., recyclability, reusability, upgradeability, durability); Recycling waste into secondary raw materials; Replacing traditional materials with alternative sustainable materials; Reduction of energy use, water footprint, carbon emissions, transport, within the production and consumption processes; Green product design (eco-design); Packaging optimization; Life cycle assessment of products and services; Product life extension methods / more efficient product use; Sharing models facilitating the share/use of under-utilized products; Life cycle costing (LCC is considering all the costs that will be incurred during the lifetime of the product, work or service); Verification methods, quality monitoring and environmental impact assessments; Public/consumer awareness raising campaigns; EU funding programmes, regulatory framework, environmental certificates; Digitalization, ICT support.

Table 1: Identified topics, top 4 out of 15 proposed in the project competencies questionnaire, on which young people (18-28 years old) wish to receive the most knowledge on per partner country:

PARTNER COUNTRY	**TOP 4 TOPICS FOR ADDITIONAL KNOWLEDGE FROM FIELD RESEARCH REQUESTED BY YOUTH (marked as Essential)**
BELGIUM	**Achieving resource efficiency (e.g., recyclability, reusability, upgradeability, durability)** **Reduction of energy use, water footprint, carbon emissions, transport, within the production and consumption processes** Product life extension methods/more efficient product use Sharing models facilitating the share/use of under-utilized products
GREECE	**Achieving resource efficiency (e.g., recyclability, reusability, upgradeability, durability)** **Reduction of energy use, water footprint, carbon emissions, transport, within the production and consumption processes** Green product design (eco-design) Public/consumer awareness raising campaigns

ROMANIA	**Achieving resource efficiency (e.g., recyclability, reusability, upgradeability, durability)** **Reduction of energy use, water footprint, carbon emissions, transport, within the production and consumption processes** **Packaging optimization** EU funding programmes, regulatory framework, environmental certificates
SLOVENIA	**Achieving resource efficiency (e.g., recyclability, reusability, upgradeability, durability)** Recycling waste into secondary raw materials **Reduction of energy use, water footprint, carbon emissions, transport, within the production and consumption processes** Product life extension methods/more efficient product use

Interestingly, youth from all 4 partner countries shared two common answer options:

Achieving resource efficiency (e.g., recyclability, reusability, upgradeability, durability) and

Reduction of energy use, water footprint, carbon emissions, transport, within the production and consumption processes.

In accordance with our findings, our main project result within the **Building Bridges for Circular Economy by Fostering Youth Entrepreneurship** project will be an innovative e-course, meant for young people between 18 and 28 years of age. It will provide them with competencies, skills and knowledge, demonstrating the importance, benefits and dimensions of the circular economy and green entrepreneurship. Thus, giving young people encouragement via practical and interactive chapters to use these skills to improve their employability in the fields of circular economy and green entrepreneurship, fostering higher development potential for business innovation and overall improved sustainability levels in EU.

And if we borrow an inspirational quote from N. Mandela:

***"It always seems impossible, until it is done"*.**