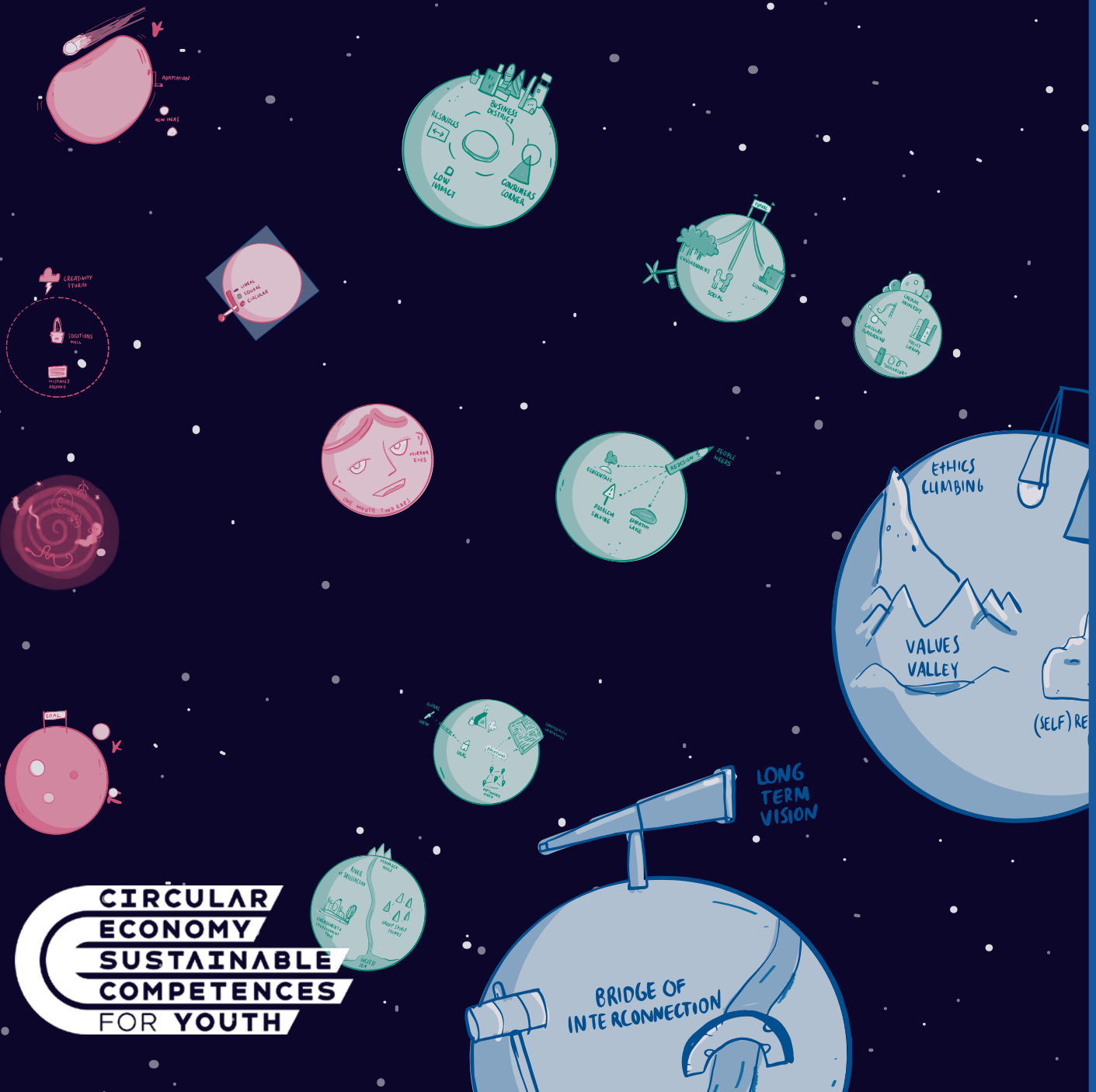


# Circular Economy Sustainable Competences for Youth





Erasmus+



erasmus+ and  
european solidarity  
corps agency

A **Circular Economy Competence Framework for Young People** - Circular Economy Sustainable Competences for Youth is the fourth intellectual output of the Circular Economy - Sustainable Competences for Youth ("CESCY")

Project, cofounded by the Erasmus+ Programme of the European Union and written by the partners in said project, as follows:

## REDU

[www.educareaidirittiumani.net/](http://www.educareaidirittiumani.net/)  
[educaredirittiumani@gmail.com](mailto:educaredirittiumani@gmail.com)

Carlo Andorlini  
Lorenzo Barucca  
Alessio Di Addezio  
Silvia Volpi  
Stefania Zamparelli



## Zink! Asturias

[zinkast@gmail.com](mailto:zinkast@gmail.com)  
María Álvarez  
Ramón Martínez



## AEGEE Europe

[www.aegee.org](http://www.aegee.org)  
[headoffice@aegee.org](mailto:headoffice@aegee.org)  
Marié-Celine Falisse



## Lowmerism OÜ

[mayri@lowmerism.com](mailto:mayri@lowmerism.com)  
Liisa Aavik  
Mayri Tiido

## Common Gold

[sjaak@common-gold.com](mailto:sjaak@common-gold.com)  
Sjaak de Beer

## Mentes empreendedoras

[www.mentesempreendedoras.com](http://www.mentesempreendedoras.com)  
[geral@mentesempreendedoras.com](mailto:geral@mentesempreendedoras.com)  
Nathalia Gaiarim  
Sofia Duarte



Illustrations and layout design:

Raquel Valenzuela Ortega - GraphicsRQ - [www.graphicsrq.com](http://www.graphicsrq.com)

Editing of this publication:

Ramón Martínez - Learning Designers - [moncho@learnl.org](mailto:moncho@learnl.org)

## Disclaimer

The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

# Table of Contents

1. Introduction.....	4
2. CESCOY Competence Framework.....	6
2.1. What's a competence in the CESCOY Context?.....	6
2.2. Competences into action - CESCOY inventory .....	9
2.3. CESCOY competences framework.....	12
2.4. CESCOY Self-assessment .....	54
3. The role of the youth work within Circular Economy opportunities for young people.....	58
3.1. Why is the youth - Circular Economy connection so important?.....	58
3.2. New skills and new horizons for new professions .....	59
3.3. Transformative competences of youth work .....	62
3.4. Challenges that youth workers must consider while supporting young people to acquire competences in the Circular Economy framework.....	63
3.5. What is the role of youth work in supporting young people in a Circular Economy? .....	66
4. Circular Economy, Civil Economy and Climate Crisis .....	67
4.1. Circular Economy and climate crisis. ....	67
4.2. Circular Economy in the framework of the civil economy: Circular Inclusion, The many Rs and civil economy districts .....	84
5. CESCOY and European Commission Frameworks of Competences.....	89
5.1. EntreComp .....	90
5.2. Life-long learning .....	94
5.3. The CESCOY framework in relation to other framework.....	96

# 1. Introduction

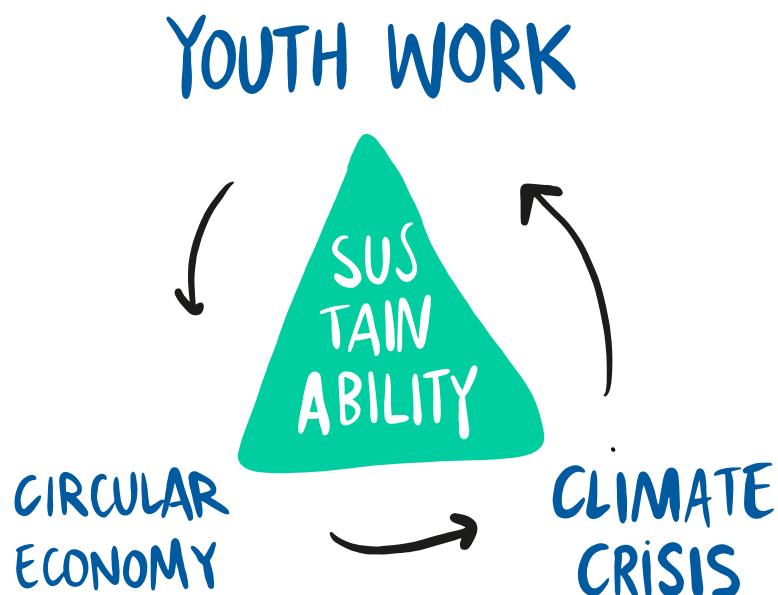
This competence framework is the result of the work done by the CESCYP (Circular Economy Sustainable Competences for Youth) team in identifying the competences that young people may develop as active citizens when adopting a Circular Economy culture. Partners consulted companies and stakeholders at a local and national level to identify the competences young people are expected to have to work in the Circular Economy field. At the same time, they consulted young people and youth workers to verify their self-awareness about the competences needed to a Circular Economy approach in their own life.

More specifically, the competence framework aims to define competences on Circular Economy and sustainability for young people. Even though there are several competence frameworks created for youth, there is none which looks at it from the perspective of Circular Economy and sustainability.

In the times of climate crisis and the need for immediate actions, we believe that it is necessary to provide young people with such a framework to support them in the self-evaluation process and in designing their paths to follow new lifestyles and behaviours in line with the adoption of a Circular Economy perspective.

The competence framework is meant to also support youth workers in their work, while accompanying young people to grow up personally and professionally. By doing this, we expect the youth field in Europe will become more aware of the matter and will start implementing sustainable practices in their activities.

Furthermore, we also focus on competences related to entrepreneurship and leadership to support young people to shape the labour market into a more circular direction.





More specifically, the manual contains 3 main chapters:

- ➔ **the CESCY competence framework** that starts with the definition of a competence and continues with the identification of the different competences that compose the framework. At the end of this chapter young people and practitioners will also find a self-assessment tool that can support young people in a self-evaluation process and in the identification of a possible learning path within Circular Economy.
- ➔ **The role of the youth work within Circular Economy opportunities for youth** that reflects on the competence's youth workers need to have while accompanying young people in the transition to Circular Economy. The chapter provides some insights also on the challenges youth workers may face in this context and the role they may play.
- ➔ **Circular Economy, civil economy, and climate crisis** is the chapter that can support young people and youth workers to acquire information on the link between climate crisis and Circular Economy and on the difference between linear and Circular Economy models and, finally, on the connection between circular and civic economy.

CESCY (Circular Economy – Sustainable Competences for Youth) project is a co-funded Erasmus+ Strategic Partnership running between 2019 to 2022. The main aim of the project is to connect youth work and youth to Circular Economy and sustainability topics with the central question: what are the skills and competences needed for young people to be the future leaders in Circular Economy? The project team has carried out 3 trainings for young people on Circular Economy knowledge and competences, a consulting seminar for youth workers to get their perspectives, a training for youth workers on supporting young people in acquiring Circular Economy competences and several local multiplier events. In addition, the consortium has carried out research regarding the status quo of Circular Economy in partner countries, research among 50 Circular Economy aspiring company leaders regarding competences expectations and reality, it has put together policy recommendations for different involved stakeholders and has put together a toolkit on how to use the competence framework for educational practitioners and youth workers to support youth in their learning in the Circular Economy and sustainability areas.

CESCY project team is formed of organisations from Estonia, Belgium, Italy, The Netherlands, Spain and Portugal.

## 2. CESCOY Competence Framework

### 2.1. What's a competence in the CESCOY Context?

Before entering the description of a competence framework, in this paragraph we aim at clarifying what a competence in the CESCOY project is.

At an international level, a huge amount of work has been done in identifying and defining what a competence is, especially within the framework of youth work and non-formal learning.

For the Council of Europe<sup>1</sup>, while talking about youth workers' competences, a competence is the "ability to do something successfully or efficiently". The term is often used interchangeably with the term 'skill', although they are not the same. Two elements differentiate competence from skill and make 'competence' more than 'skill'. When people are competent, they can apply their knowledge to do a specific task or solve a problem and they are able to transfer this ability between different situations. Furthermore, when people are proactive in their life and in their context, it means that they can use competences to take actions to change and/or improve situations and issues.

In the "European Training Strategy in the field of youth"<sup>2</sup> a competence model for trainers working at international level Competences" the term 'competences' refers to a system of values, attitudes and beliefs, and skills and knowledge that can be applied in practice to manage various complex situations and tasks successfully. Confidence, motivation, and well-being are important prerequisites for someone wishing to successfully apply developed competences.

ESCO<sup>3</sup> applies the same definition of "competence" as the European Qualification Framework (ECF)<sup>4</sup>. According to the latter, "competence means the proven ability to use knowledge, skills and personal, social and/or methodological abilities, in

---

1 For more details: <https://www.coe.int/en/web/youth-portfolio/youth-work-competence>

2 For more details: <https://www.salto-youth.net/rc/training-and-cooperation/trainingstrategy/>

work or study situations and in professional and personal development.” They are described in terms of responsibility and autonomy.

Within the CESCYP project, competences are understood as an integrated set of knowledge, skills, and attitudes/values (European Commission, 2019):

- **Knowledge** consists of established theories, concepts, facts and figures that contribute to an understanding of a given subject.
- **Skills** comprise manual and cognitive abilities to put acquired knowledge into practice.
- **Attitudes** represent a mindset or tendency to behave or react in a particular way in a particular context.
- **Values** represent the principles, beliefs, and ideals every person stands for.

Competences are not abstract, but they are visible and tangible in the behaviours and actions of each person. The execution of an action – a performance – is understood, within the CESCYP project, as the way to express one’s own competences.

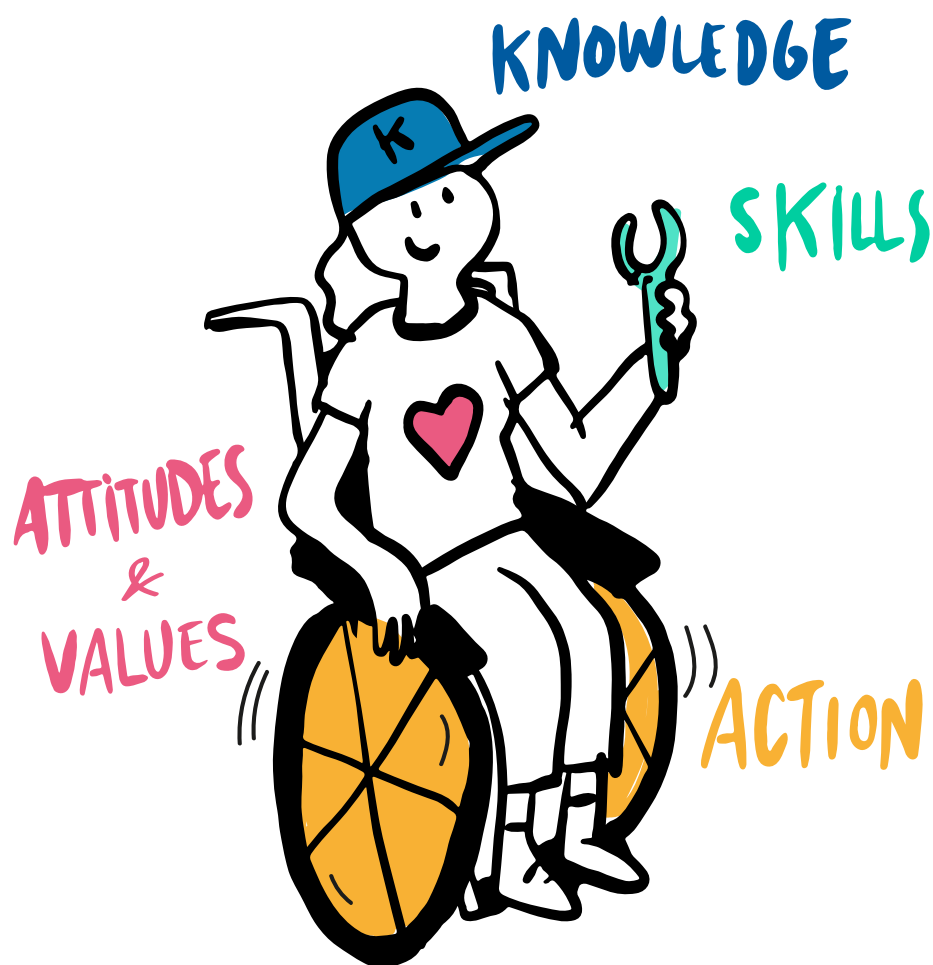
Moreover, CESCYP competences for young people are those competences that young people can acquire not only to be able to look for a job in Circular Economy organisations and entities, but especially for being and acting as a responsible and active citizen in their own community.

As a result, our competence framework wants to focus on the person as a whole and not on a specific professional role that young people can play within the CE.

Values and attitudes are at the core of CESCYP competences: they are the starting elements to the learning processes leading young people to gain knowledge and skills, to be able to act in their own community and context. To act means bringing positive changes at a micro-level in one’s own life and community that, consequently, has an influence on society and natural resources.

- 
- 3 ESCO stands for “European Skills, Competences, Qualifications and Occupations” (ESCO) is a multi-lingual classification that identifies and categorises skills, competences, qualifications and occupations relevant for the EU labour market and education.
  - 4 For more details: [https://ec.europa.eu/esco/portal/escopedia/European\\_Qualification\\_Framework\\_\\_40\\_EQF\\_41\\_](https://ec.europa.eu/esco/portal/escopedia/European_Qualification_Framework__40_EQF_41_)

For instance, if young people aim at slowing down climate change, it means that they have values and attitudes in favour of protecting the environment, they are in favour of reusing and recycling materials and against waste, and so on. Starting from these cornerstones, young people will be motivated to learn about what the Circular Economy is and how it can help to slow down the global warming process, and how circular economic models can foster a less polluted environment by avoiding waste of resources and materials. At the same time, they can be motivated to acquire techniques and skills to act consciously to slow down the climate change process. Knowledge and skills are the tools that allow them to put their attitudes and values into practice, assuming compatible behaviours and acting with the aim of changing themselves and improving the community.



## 2.2. Competences into action - CESCYP inventory

CESCYP inventory has been elaborated by considering the core values and attitudes, knowledge, and skills that young people should have to play an active role in their context and to adopt a Circular Economy approach.

More specifically, identifying the different CESCYP competences, we took into consideration that all those competences embody attitudes, values, skills and knowledge.

Talking about attitudes, values, skills, and knowledge, within CESCYP we understand the following:

- ➔ **Values** We understand values as personal values that are visible only when they are put into practice. The guiding question to identify my own CESCYP values can be: How are my values (what I believe in) applied in the actions I undertake in everyday life?
- ➔ **Attitudes:** We understand attitudes as feelings and ways of thinking that may affect our behaviours. The guiding question to identify my own CESCYP attitudes can be: Which are my feelings and thoughts about CE in my everyday life?
- ➔ **Skills:** We understand skills as the aptitudes or inclinations into action: the expression of aptitude and inclinations, the manifestation of aptitude in concrete actions. The guiding question to identify my own CESCYP skills can be: How are my aptitudes transformed into actions in my everyday life?
- ➔ **Knowledge and critical understanding:** We understand knowledge as being aware of, having learnt and understood information. More specifically, it is the ability to treasure information, not simply stored in memory, but metabolised through self-observation and self-reflection which allows one to control thoughts, activate critical thinking, and manage learning processes. The guiding question to identify one's own CESCYP knowledge can be: What do I already know about Circular Economy? How did I solve problems related to this issue in the past? What other information do I need to be able to act in my daily life?

Finally, we believe that it is important to mention how CESCYP competences can be identified. We believe that our performances (as actions and behaviours) reveal our competences and the possibility for improvement and/or acquisition.

→ **Performance:** we understand performance as the description of behaviours and actions put in place using CESCYP competence (KSAV) in a specific context and/or situation. The guiding question to identify one's own CESCYP performances can be: What are the behaviours I put in place in coherence with Circular Economy principles to bring a change to my own life and to my community?

In the CESCYP inventory we have identified three main areas of competences that young people may develop in relation to the Circular Economy: the CORE Competences, the TECHNICAL competences, and the INNOV-ACTION competences.

Here are the three tables summarising the competences in the three areas:

Technical	Core	Innov-Action
Critical understanding of Circular Economy	Ethics in Circular Economy	Adaptability and flexibility
Critical understanding of circular business models		Problem solving
Critical understanding of Sustainability	Vision in Circular Economy	Teamwork and collaboration
Systems thinking	Motivation for Circular Economy	Assertive and empathic communication
Design thinking		Activating a change
Participative project management	Lateral Thinking	Working in complex environments and situations

## 2.3. CESCYP competences framework

Hereinafter, you may find CESCYP Competences framework where, for each competence, in each one of the three areas, we have identified **indicators** that can support young people to evaluate their actual performance level and the desired performance level to be developed.

The **performance** is the description of behaviours and actions put in place using CESCYP competence (Knowledge/Skills/Attitudes and Values) in a specific context and/or situation.

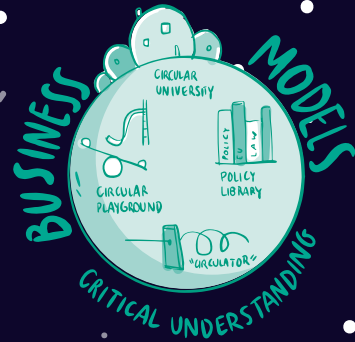
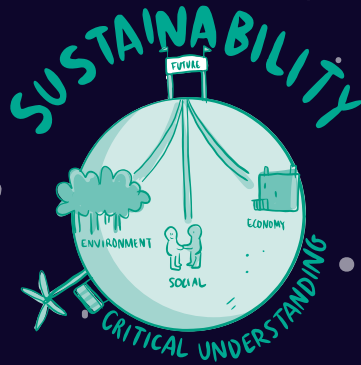
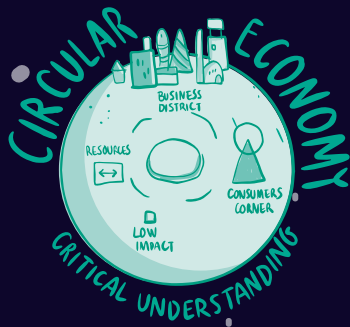
To facilitate young people in the self-evaluation processes and the youth workers to support them, we have identified three levels of performance:

- **The potential** level of performance indicates that a young person has the **possibilities and necessary attitudes and values** to develop the entire set of CESCYP competences. Young people understand the topics and their importance, but they are not yet able to act and/or are not aware of it.
- **The awareness** level of performance indicates that a young person has the **necessary attitudes and values as well as the knowledge, understanding and skills related to** the main topics of the Circular Economy and sustainability. Young people are aware when they are able to do things and they successfully demonstrate competence.
- **The proactive** level of performance indicates that a young person has the **necessary attitudes and values as well as the knowledge and understanding** of Circular Economy and sustainability and the **skills to put into practice actions and behaviours** that can lead to a personal and societal change in coherence with the CE principles.

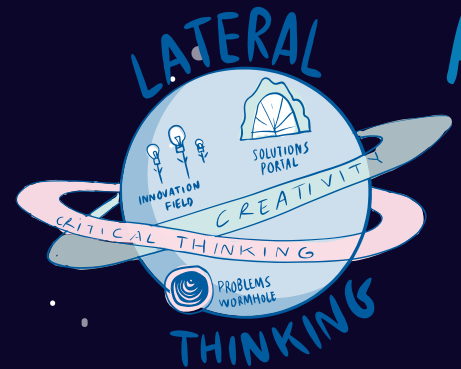
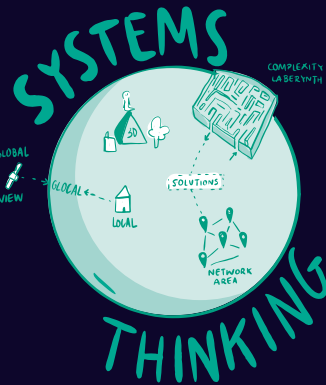
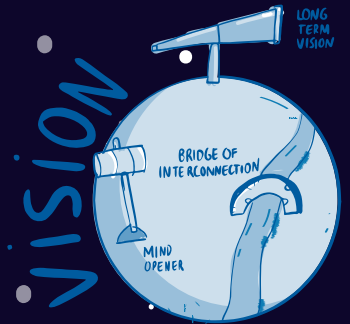
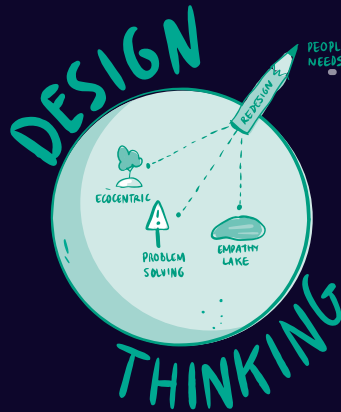
For each competence we have identified some indicators per level of performance to facilitate the self-assessment of young people, as follows:



Potential	Awareness	Proactive
Has the possibilities (is involved and connected)	EQUAL	EQUAL
Has the attitude and values	Potential + skills and knowledge	Aware + Advance
Can understand its importance	Successfully demonstrates competence	Support others in understanding and learning new competences
Not yet able or aware to ACT	Puts into practice actions and behaviours	Brings personal and society change



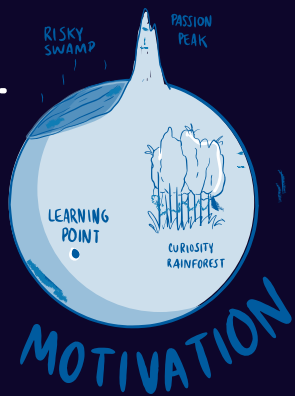
# TECHNICAL COMPETENCES AREA



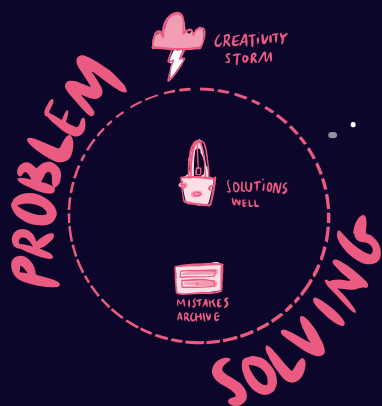
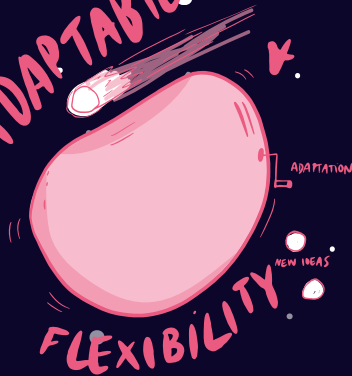
ETHICS



PROBLEM SOLVING  
COMPETENCES  
AREA

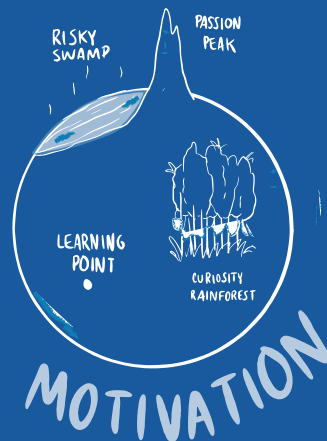
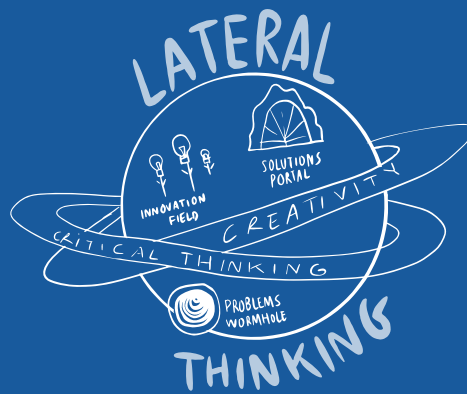
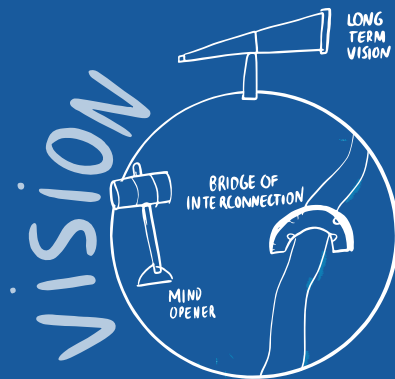


ADAPTABILITY



INNOV-ACTION  
COMPETENCES  
AREA

# Core Competences Area



**T**his area is the central part of the CESCY competences. These are the ones that make young people focus on Circular Economy, motivate them to learn more and to act accordingly to a certain set of values and attitudes in their daily life. In brief, the core competences are like the engine that gives impulse to one's own development and action.

The main competences that we have identified under this area are:

- **ETHICS in CIRCULAR ECONOMY** means being able to identify one's own values in relation to respect for other living beings, considering the reduction of the environmental impact of one's own actions and a more equitable society that respects human rights.
- **VISION in CIRCULAR ECONOMY** means being able to have a vision in Circular Economy and having an open mind that facilitates setting long-term goals, remaining open to change through understanding how natural and social ecosystems operate and are interconnected.
- **MOTIVATION for CIRCULAR ECONOMY** is the ability to use one's passion and inner drive for a paradigm shift and a change in economic and social models. Thanks to this competence, people face failure as a positive challenge to be faced even more aware of their values, behaviours and thoughts.
- **LATERAL THINKING** is a way of thinking that aims to see things differently and to generate alternatives and new ideas creatively. This competence allows us to be open minded for new ideas and new approaches, for learning and it stimulates the possibility to activate processes to solve problems using a critical and creative approach. Lateral thinking is a core competence because it defines the open mindset for all other competences in the framework.

# ETHICS



*Ethics in Circular Economy means being able to identify one's own values in relation to respect for other living beings, to the reduction of the environmental impact of one's own actions and to a more equitable society that respects human rights.*

# Ethics in CE

## INDICATORS

### Potential

- ☐ I **identify my values** in relation to Circular Economy and its founding principles.
- ☐ I **identify situations and problems** in **social, individual, and natural life** that are worth thinking about in relation to CE.
- ☐ I **reflect** ethically on topics that are important in my life.
- ☐ I **argue** without contradiction and with **proof**.

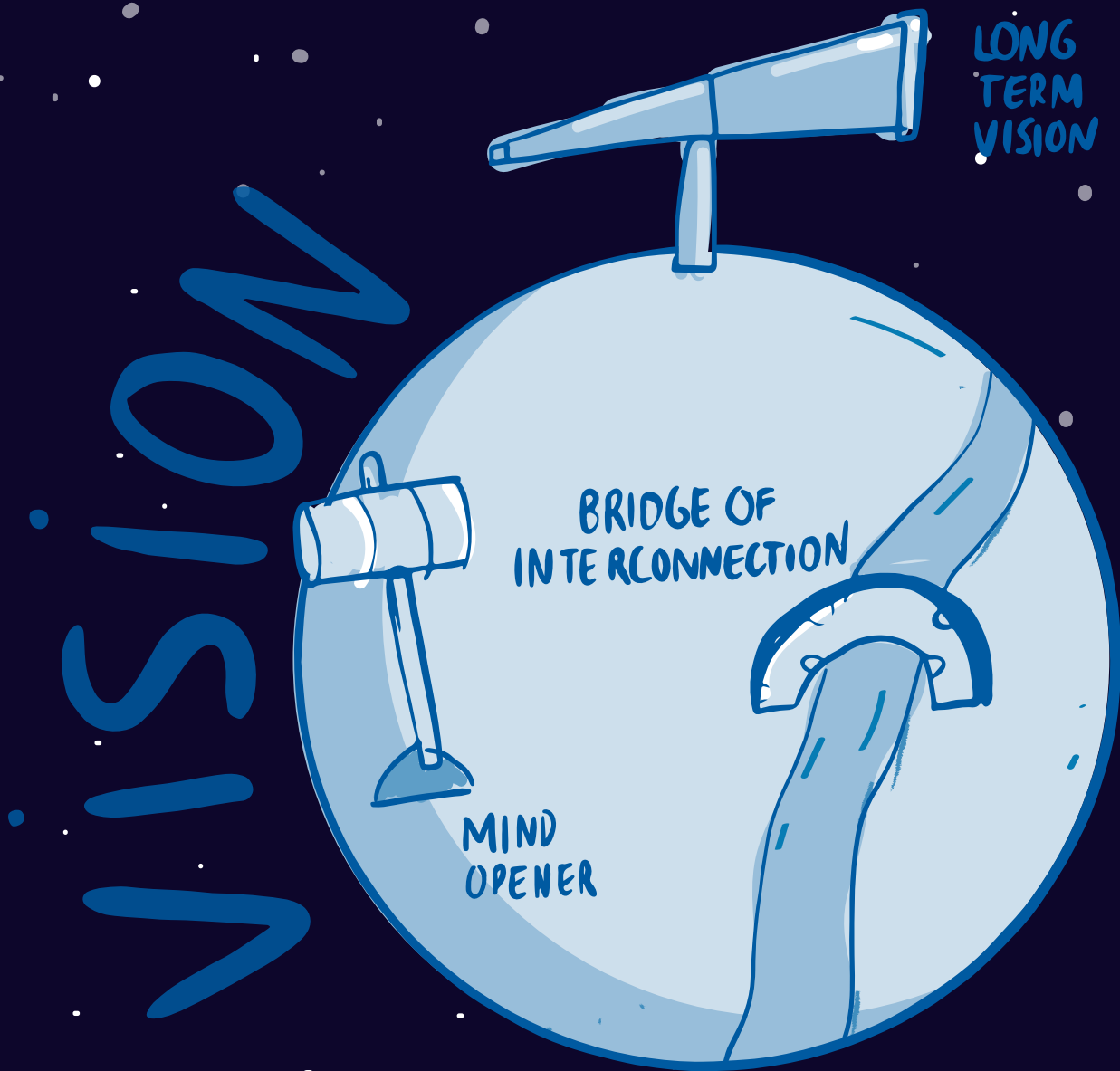
### Aware

- ☐ I **name and describe my values** in relation to Circular Economy and its founding principles.
- ☐ I **describe and interpret situations and problems** in social, individual, and natural life that are worth thinking about in relation to CE.
- ☐ I **reflect** with the use of ethical and moral concepts on topics that are important to society and in relation to CE.
- ☐ I recognise situations with ethical problems. I analyse, reflect on them with the use of ethical and moral concepts, **arguing and judging** on a solid and proven base.
- ☐ I understand **moral concepts** and their **historical and cultural background**: I **make decisions** based on these concepts on subjects related to CE.

### Proactive

- ☐ I **use my values** in my daily life favouring Circular Economy solutions.
- ☐ I **support** the resolution of situations and problems in social, individual, and natural life that are worth addressing while **standing for CE**.
- ☐ I **advocate** on CE, using moral and ethical concepts on environmental and social challenges.
- ☐ I **critically engage in debates** related to CE with my own position and the position of others, **standing for a fair and just world for the future generations**.
- ☐ I **lead desired behaviour by example and model**.

*Tick those indicators that you want to further develop so you can come back and check your progress!*



*Being able to have a vision in the Circular Economy means having an open mind that facilitates setting long-term goals, remaining open to change through understanding how natural and social ecosystems operate and are interconnected.*



# Vision for CE

## INDICATORS

### Potential

- ☐ I understand **natural and social ecosystems** and am concerned for **future generations**.
- ☐ I understand the importance of having a **long-term vision**.
- ☐ I set long-term **objectives** for my own life.
- ☐ I **stay focused** on a vision.
- ☐ I am **open-minded** to **change** and **new ideas**.

### Awareness

- ☐ I articulate a **clear and compelling vision**.
- ☐ I understand the importance of having a vision in Circular Economy for making **sustainable changes**.
- ☐ I **mobilise resources** to achieve **shared** strategic vision and goals.
- ☐ I develop a **plan** to achieve a vision.
- ☐ I measure **progress** towards a vision.

### Proactive

- ☐ I **develop innovative solutions** to environmental and societal challenges.
- ☐ I **express and argue** for my own vision, **inspiring** others **to join**.
- ☐ I **adapt** my vision as circumstances change.
- ☐ I create a shared vision of **organisational and operational** excellence.
- ☐ I **connect SDGs** goals and individual contributions to vision.
- ☐ With my behaviours, I am able to demonstrate that a vision can be used to **guide decision-making**.

*Tick those indicators that you want to further develop so you can come back and check your progress!*



*The ability to use one's passion and inner drive for a paradigm shift and a change in economic and social models. Thanks to this competence, people face failure as a challenge to be faced and become even more aware of their values, behaviours and thoughts.*

# Motivation for CE

## INDICATORS

### Potential

- ☐ I have a **desire to help others** and make a **positive difference** in the world.
- ☐ I set **goals for action** and understand their importance.
- ☐ I have **passion** and **curiosity** for innovative economic and social models.
- ☐ I am **resilient** and maintain a **positive attitude** in the face of setbacks.

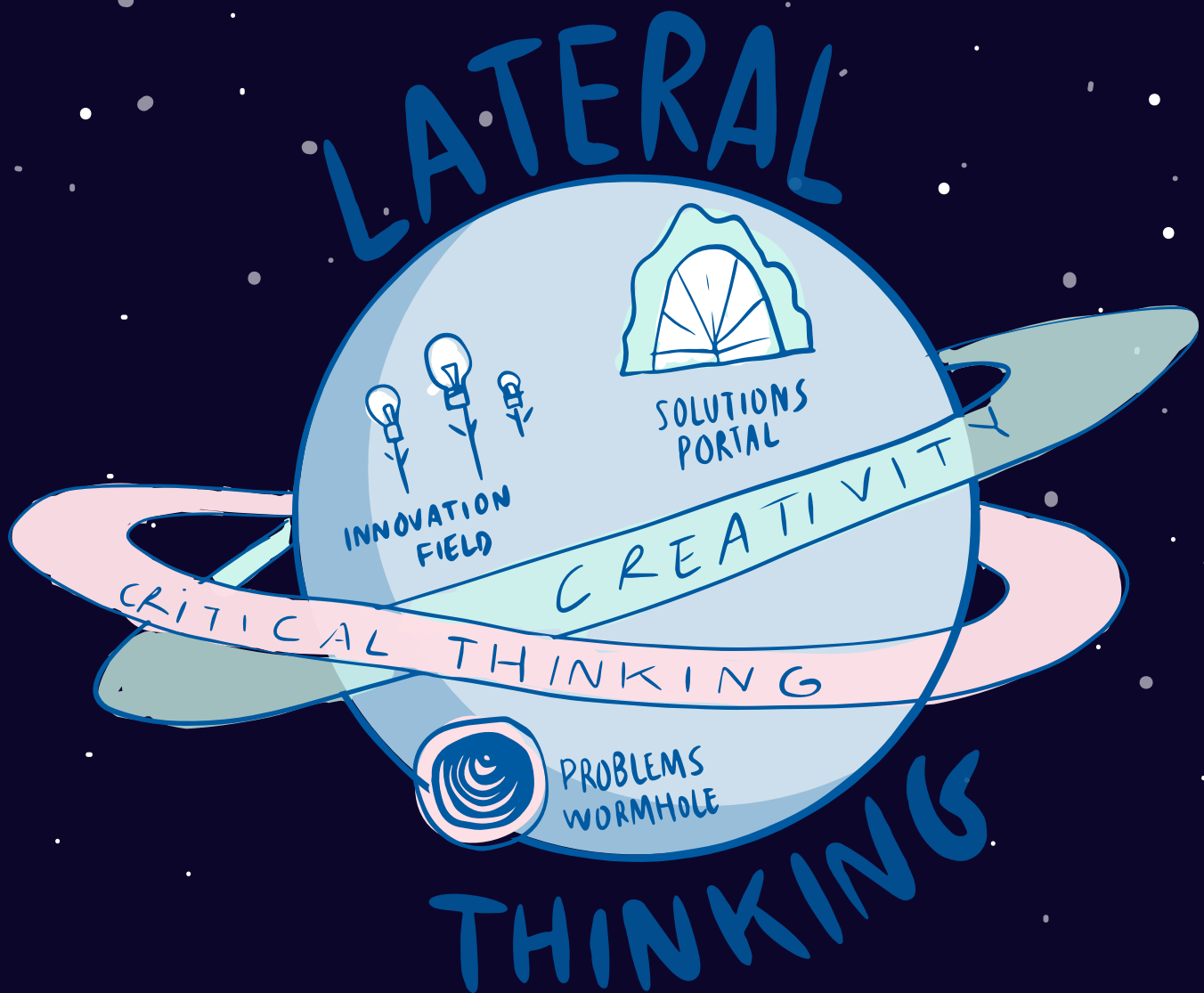
### Awareness

- ☐ I use my **passion** for a Circular Economy to change the actual paradigms in my **life** and in my **work**.
- ☐ I have a **commitment to social justice** and a belief in the **importance of equality**.
- ☐ I **recognise** the situations that drag me **down** or **demotivate** me.
- ☐ I **continue to learn and grow** throughout mistakes and success.

### Proactive

- ☐ I make **lasting changes** and a willingness to **take risks** for the greater outcome.
- ☐ I use my passion for Circular Economy to **inform** other persons and to **engage** them into actions to improve the way they live together.
- ☐ I **persevere** in the face of setbacks and continue working towards a goal.
- ☐ I **motivate others with my motivation** during positive and challenging times.

*Tick those indicators that you want to further develop so you can come back and check your progress!*



*A way of thinking that aims to see things differently and to generate activate alternatives and new ideas creatively. This competence allows us to processes to solve problems using a critical and creative approach. Lateral thinking is a core competence because it defines the open mindset for all other competences in the framework.*

# Lateral Thinking

## INDICATORS

### Potential

- ☐ I **think abstractly**.
- ☐ I am **open** to new ideas and **perspectives**.
- ☐ I enjoy coming up with **new ideas**.
- ☐ I understand that there are different ways of looking at problems, which can have **more than one solution**.
- ☐ I identify reliable information and **resources**.

### Aware

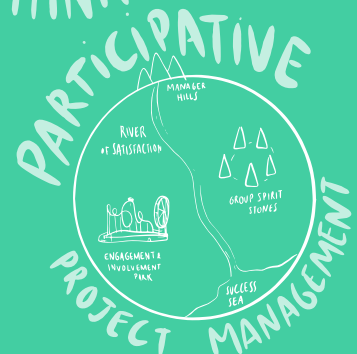
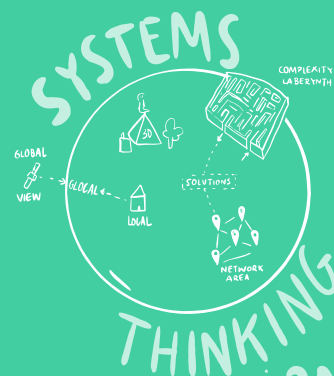
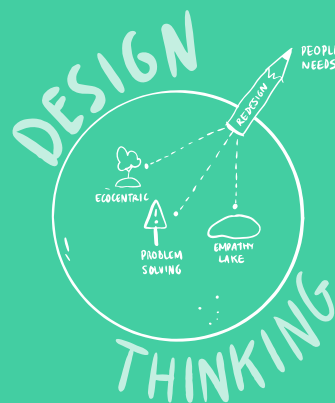
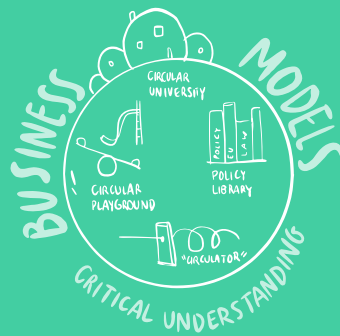
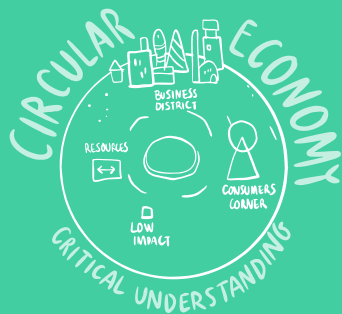
- ☐ I view issues **without any pre-set biases or limitations**.
- ☐ I **persevere**, be **resourceful** and **set goals**.
- ☐ I **demonstrate** and support the fact that there are **different ways of looking at problems**.
- ☐ I see the **big picture** and impact of results.
- ☐ I generate **innovative solutions** to problems.

### Proactive

- ☐ I see an idea through to **completion despite obstacles**.
- ☐ I **identify and choose possibilities** to come up with original solutions for solving a problem.
- ☐ I make use of **available resources in creative ways**.
- ☐ I **engage other persons** to use creativity in generating solutions to problems.
- ☐ I logically collect input to **make informed decision**.

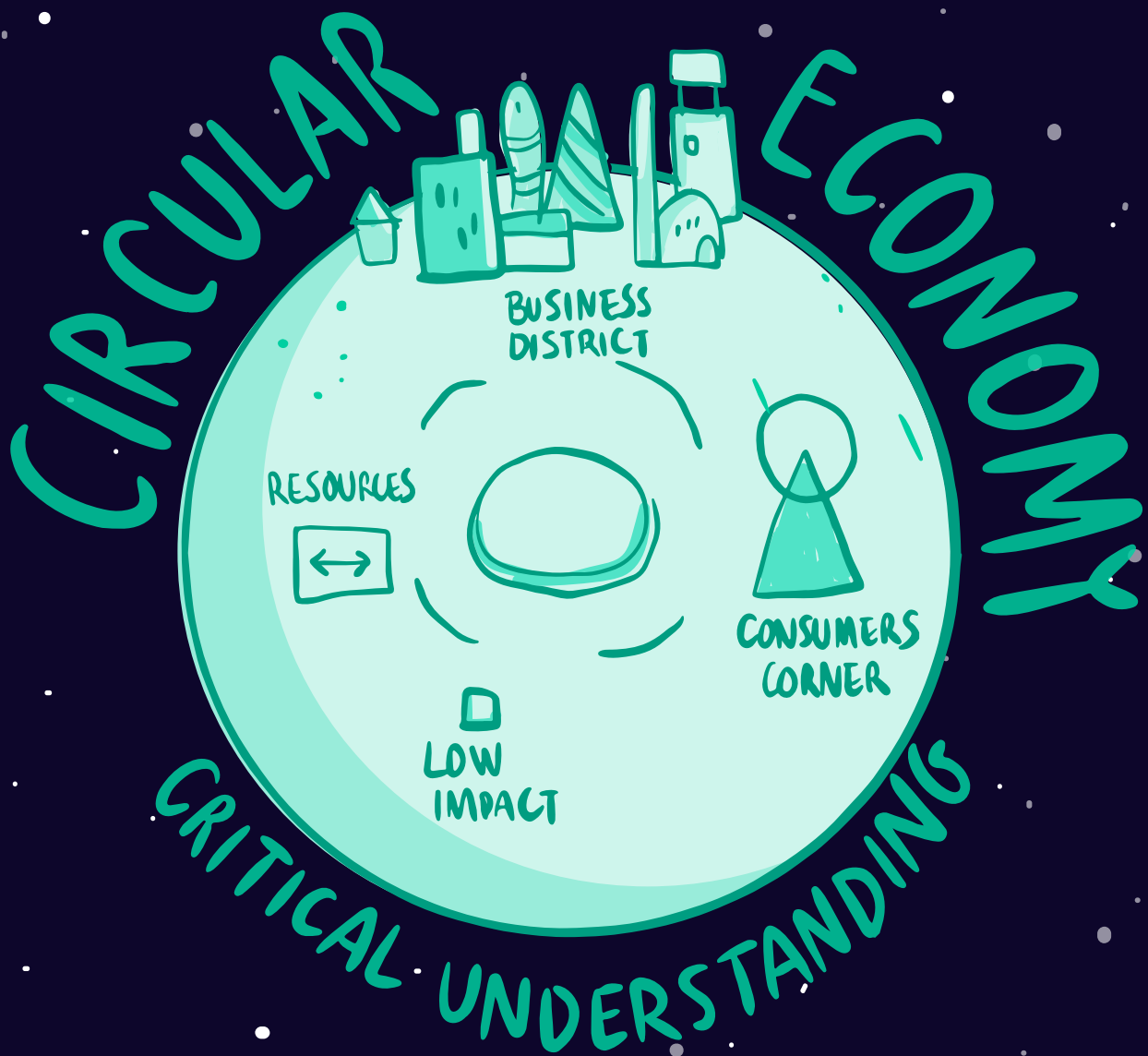
*Tick those indicators that you want to further develop so you can come back and check your progress!*

# Technical Competences Area



**T**his area is the one focusing on CE technical competences. Those competences make young people understand Circular Economy systems and models in relation to linear economy ones. Furthermore, in this area we find competences related to the way of thinking and the management styles that can support the implementation of coherent CE activities and initiatives. In brief, the technical area embodies knowledge and skills that support young people to put their CE values and attitude in place.

- **CIRCULAR ECONOMY CRITICAL UNDERSTANDING** is the competence that supports young people to recognise and critically understand Circular Economy principles, procedures and regulations, specific to Circular Economy as opposed to linear economy, at a local and an international level.
- **BUSINESS MODELS CRITICAL UNDERSTANDING** is the competence that supports young people to recognise and critically understand CE business models, their procedures and regulations, applying them in one's own operational context and seeking to strike a balance between impact and profit, while also considering the interests of consumers.
- **SUSTAINABILITY CRITICAL UNDERSTANDING** is the competence that supports young people to recognise and critically understand what sustainability stands for, while meeting the needs of the present without compromising the ability of future generations to meet their own needs. Shortly, young people know and have a critical understanding of sustainability policies and practices and the related pillars: environmental, economic and social.
- **SYSTEMS THINKING** is the ability to analyse complex systems across different domains (society, environment, economy) and different scales (from local to global). In brief, young people may be able to analyse the complexity of the systems and extrapolate the capacity to create synergies, ties and networks in CE contexts, at a local and an international level.
- **DESIGN THINKING** is the ability to design activities, empathising with people and their needs and interpreting problems from different points of view leaving room for ambiguity. This competence makes you able to redesign the means to satisfy these people's needs and achieve the desired results. In order to be a design thinker, it is necessary to adopt an "ecocentric" and not ego-centric attitude because we consider the ecosystem in which we live.
- **PARTICIPATIVE PROJECT MANAGEMENT** Is the ability to manage projects, initiatives and activities creating a group spirit, which transcends the boundaries of the project team and creates intellectual and emotional involvement, engagement and contribution of the different stakeholders such as employees, families, customers, education, and other companies, thus boosting possibilities for successful project completion, where the interests of all parties are satisfied.



*The competence that supports young people to recognise and critically understand the Circular Economy principles, procedures, and regulations, specific to Circular Economy as opposed to linear economy, at a local, national and international level.*



# Circular Economy

## Critical understanding

### INDICATORS

#### Potential

- ☐ I understand the **principles of sustainable development and Circular Economy**.
- ☐ I **explain** the meaning of the **basic concept** of CE, including the difference between linear and Circular Economy.
- ☐ I explain basic concepts why **Circular Economy should replace linear economy**.
- ☐ I identify national and international CE **rules and norms**.

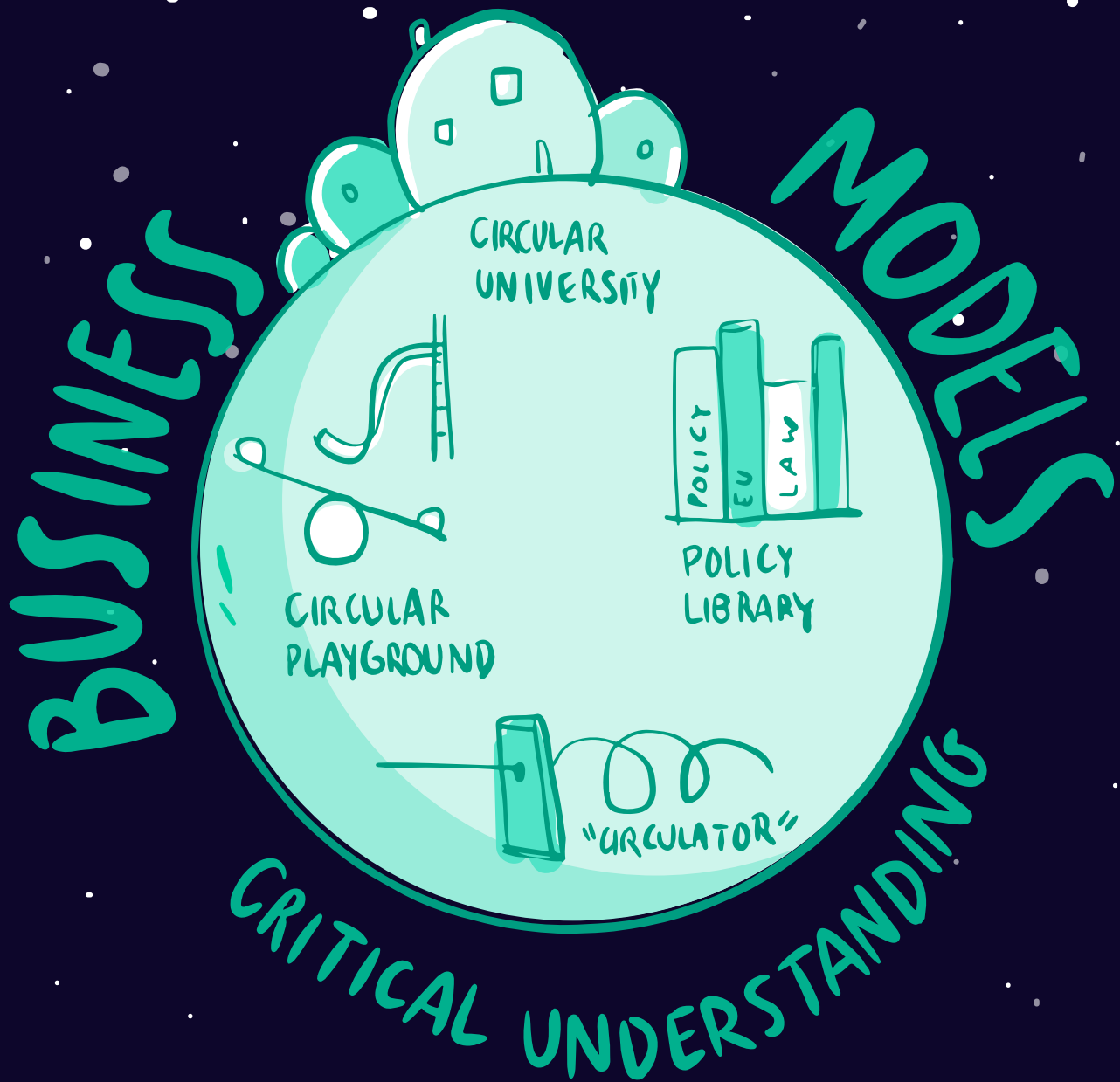
#### Aware

- ☐ I **apply** the understanding of sustainable developments and Circular Economy **principles to specific** projects and initiatives.
- ☐ I clearly explain CE and Linear Economy mentioning **principles** as well as **examples** and practices at a national level.
- ☐ I reflect critically on and explain the nature of **CE as a needed alternative** to linear economy.
- ☐ I reflect knowledge and information from **different disciplines**, show **relations** and discuss them in relation to CE.
- ☐ I identify **principles, regulations, and procedures** of CE at local, national and international level.

#### Proactive

- ☐ I describe CE with **concrete examples at local, national, and international level**.
- ☐ I reflect critically on the **nature of Circular Economy**, using concrete examples in my own context and abroad.
- ☐ I reflect on the **impact of linear and Circular Economy** on societies and on young people critically.
- ☐ I contribute to local, national and international debate on **regulations and procedures** of CE with meaningful **proposals** and sources.

*Tick those indicators that you want to further develop so you can come back and check your progress!*



*The competence that supports young people to recognise and critically understand CE business models, their procedures, and regulations, applying them in one's own operational context and seeking to strike a balance between impact and profit, while also considering the interests of consumers.*

# Business Models

## Critical understanding

### INDICATORS

#### Potential

- ☐ I understand environmental issues and a concern for **future generations**.
- ☐ I understand the **role that the private sector** plays in environmental issues.
- ☐ I recognise that a circular business model is one that is designed to minimise **waste** and maximise **resource efficiency**.
- ☐ I understand how a circular **business model** differs from a linear business model.

#### Aware

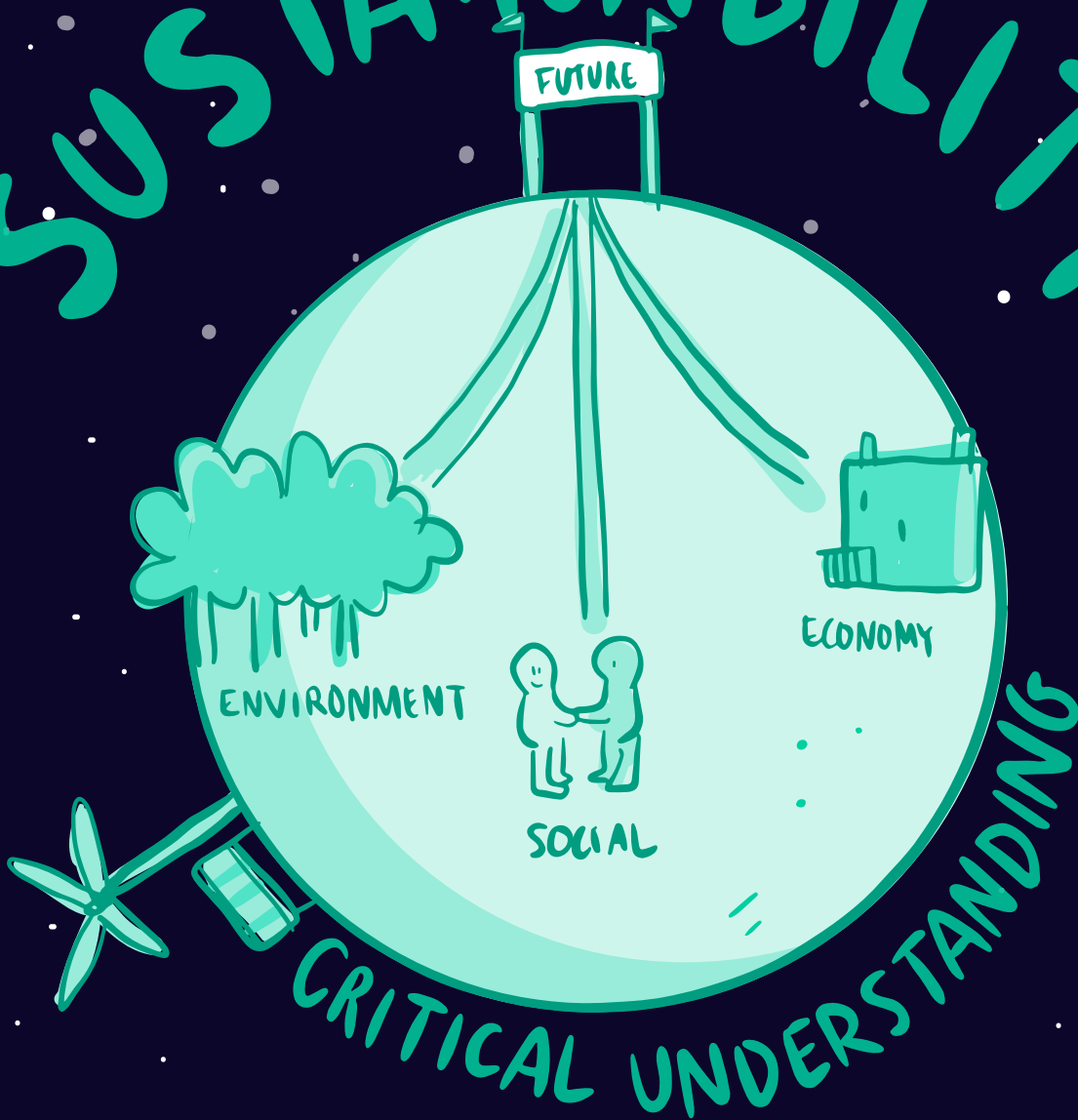
- ☐ I know **principles of circular businesses** and apply them to specific projects.
- ☐ I know **different types** of circular business models.
- ☐ I know about the **benefits** of circular business models.
- ☐ I know about the **challenges** associated with implementing a circular business model.
- ☐ I know **case studies** of companies that have successfully implemented circular business models.

#### Proactive

- ☐ I know detailed knowledge of circular business practices and the ability to **develop innovative solutions** to environmental and societal challenges.
- ☐ I know about the **key success factors and challenges** for implementing a sustainable and self-sufficient circular business model.
- ☐ I **present** CE business models in detail to others.
- ☐ I **apply the CE business models** in the field of work I like the most.

*Tick those indicators that you want to further develop so you can come back and check your progress!*

# SUSTAINABILITY



*The competence that supports young people to recognise and critically understand what sustainability stands for, while meeting the needs of the present without compromising the ability of future generations to meet their own needs. Shortly, young people know and have a critical understanding of sustainability policies and practices and the related pillars: environmental, economic, social.*

# Sustainability

## Critical understanding

### INDICATORS

#### Potential

- ☐ I know the debates surrounding **sustainability and environmental issues**.
- ☐ I know about the **main principles** of sustainable development.
- ☐ I understand the **causes and problems** associated to unsustainable development.
- ☐ I recognise that sustainability is about **meeting the needs of present and future generations**.

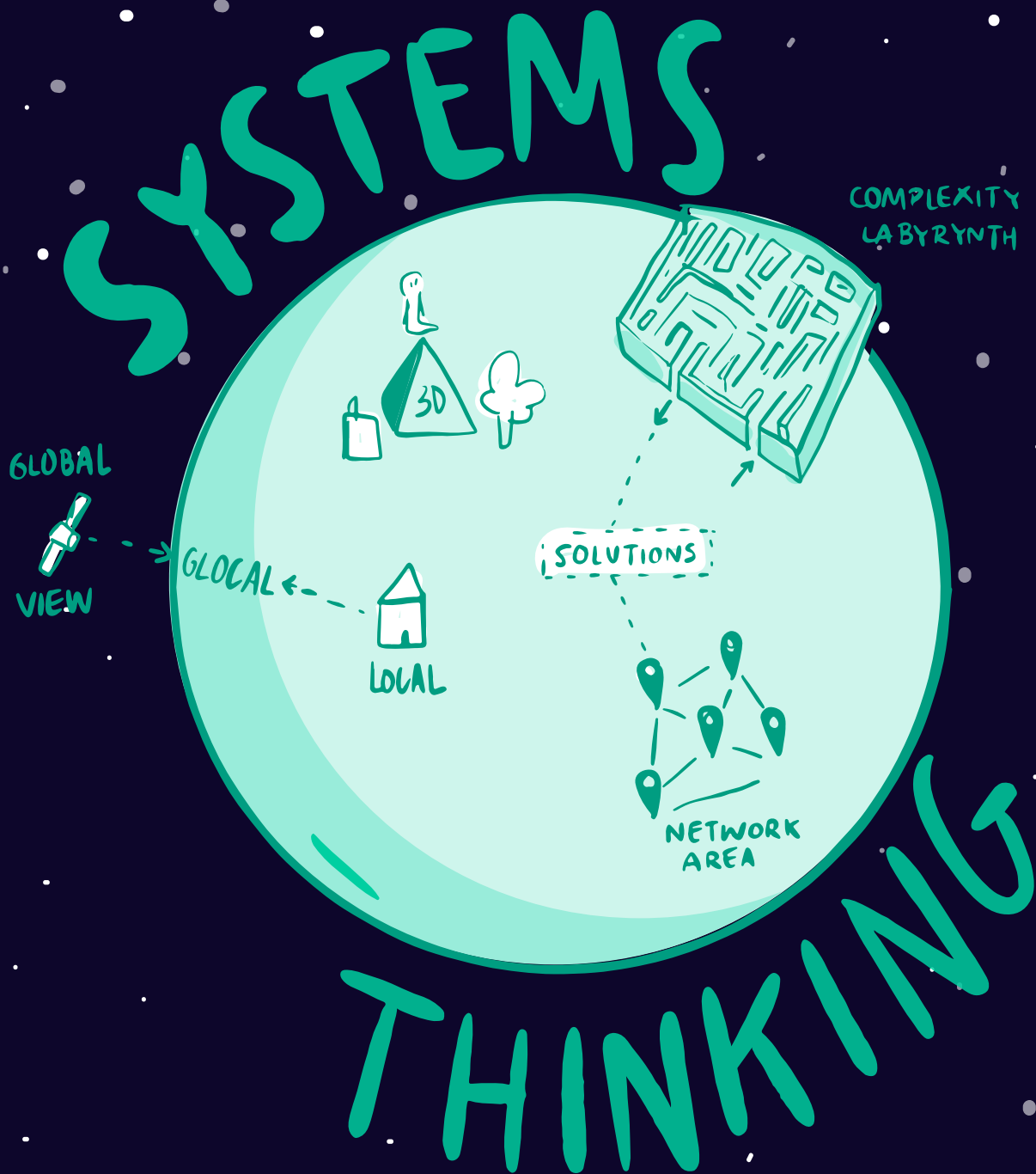
#### Aware

- ☐ I **engage with the debates** surrounding sustainability.
- ☐ I know about the **policies and initiatives** related to sustainable development.
- ☐ I know **different approaches** to sustainable development.
- ☐ I know **environmental, social, and economic dimensions** of sustainability.
- ☐ I explain the meaning of the terms **“sustainable development” and “sustainable growth”**.

#### Proactive

- ☐ I lead the discourse on **debates** surrounding sustainability and its environmental, economic, and social pillars.
- ☐ I contribute to the needs of present and future generations through a **critical understanding of what sustainability is**.
- ☐ I debate on **sustainable policies**.
- ☐ I identify and debate on **sustainable practices**.

*Tick those indicators that you want to further develop so you can come back and check your progress!*



*The ability to analyse complex systems across different domains (society, environment, economy) and different scales (from local to global).*

# Systems Thinking

## INDICATORS

### Potential

- ☐ I recognise that a system is composed of **interrelated parts**.
- ☐ I identify and understand **how a system works**.
- ☐ I identify the **inputs and outputs** of a system.
- ☐ I identify the **feedback loops** in a system.

### Aware

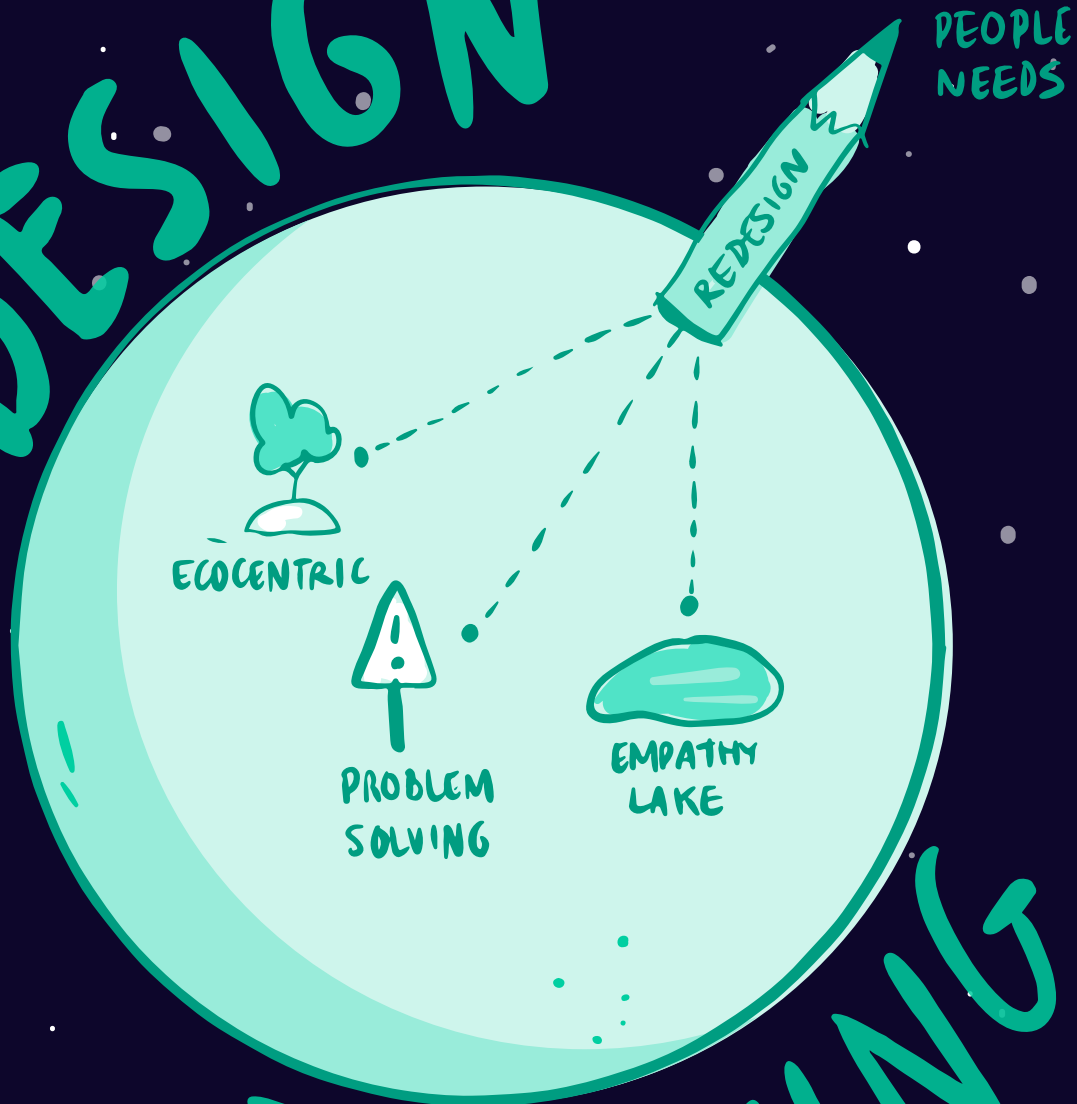
- ☐ I understand how different parts in a **system** are **interrelated**.
- ☐ I identify the **boundaries** of a system.
- ☐ I identify the **levers** in a system.
- ☐ I understand how a system **changes over time**.

### Proactive

- ☐ I **predict** how a system will **respond** to a change.
- ☐ I **analyse questions and issues** both at a local and global level.
- ☐ I make **links between different contexts and domains** and to present them to others **clearly**.
- ☐ I **connect economy, environment and society** in my systems thinking.

*Tick those indicators that you want to further develop so you can come back and check your progress!*

# DESIGN



# THINKING

*The ability to design activities, empathising with people and their needs, interpreting problems from different points of view and leaving room for ambiguity. This competence makes you able to redesign the means to satisfy these people's needs and achieve the desired results. In order to be a design thinker it is necessary to adopt an "ecocentric" attitude, focused on nature over a more narrow ego-centric view, because we take into account the ecosystem in which we live.*



# Design Thinking

## INDICATORS

### Potential

- ☐ I identify the **key elements of a design problem**.
- ☐ I use **design thinking principles**.
- ☐ I connect design thinking **solutions** with improvement in our **ecosystem**.

### Aware

- ☐ I effectively **apply** design thinking principles to **real-world problems**.
- ☐ I understand the **user-centred and "ecocentric" design** process.
- ☐ I **apply** design thinking principles to the Circular Economy and ecological **transition challenges**.

### Proactive

- ☐ I **solve complex design problems** with ease.
- ☐ I **create innovative and "ecocentric" designs**.
- ☐ My designs are consistently **user-friendly**, aesthetically **pleasing** and bring a change to the **community**.

*Tick those indicators that you want to further develop so you can come back and check your progress!*



*The ability to manage projects, initiatives and activities creating a group spirit, which transcends the boundaries of the project team and creates intellectual and emotional involvement, engagement and contribution of the different stakeholders such as employees, families, customers, education, and other companies, thus boosting possibilities for successful project completion, where the interests of all parties are satisfied.*

# Participative Project Management

## INDICATORS

### Potential

- ☐ I recognise the importance of **engaging** a diversity of stakeholders in **participative** processes.
- ☐ I make **decisions** in a **participatory** and **transparent** way.
- ☐ I identify **different types of stakeholders** and the benefit from their **contribution**.
- ☐ I understand the importance to **consider the interests and needs of all** stakeholders.
- ☐ I understand the importance of **inclusive** stakeholder **engagement**.

### Aware

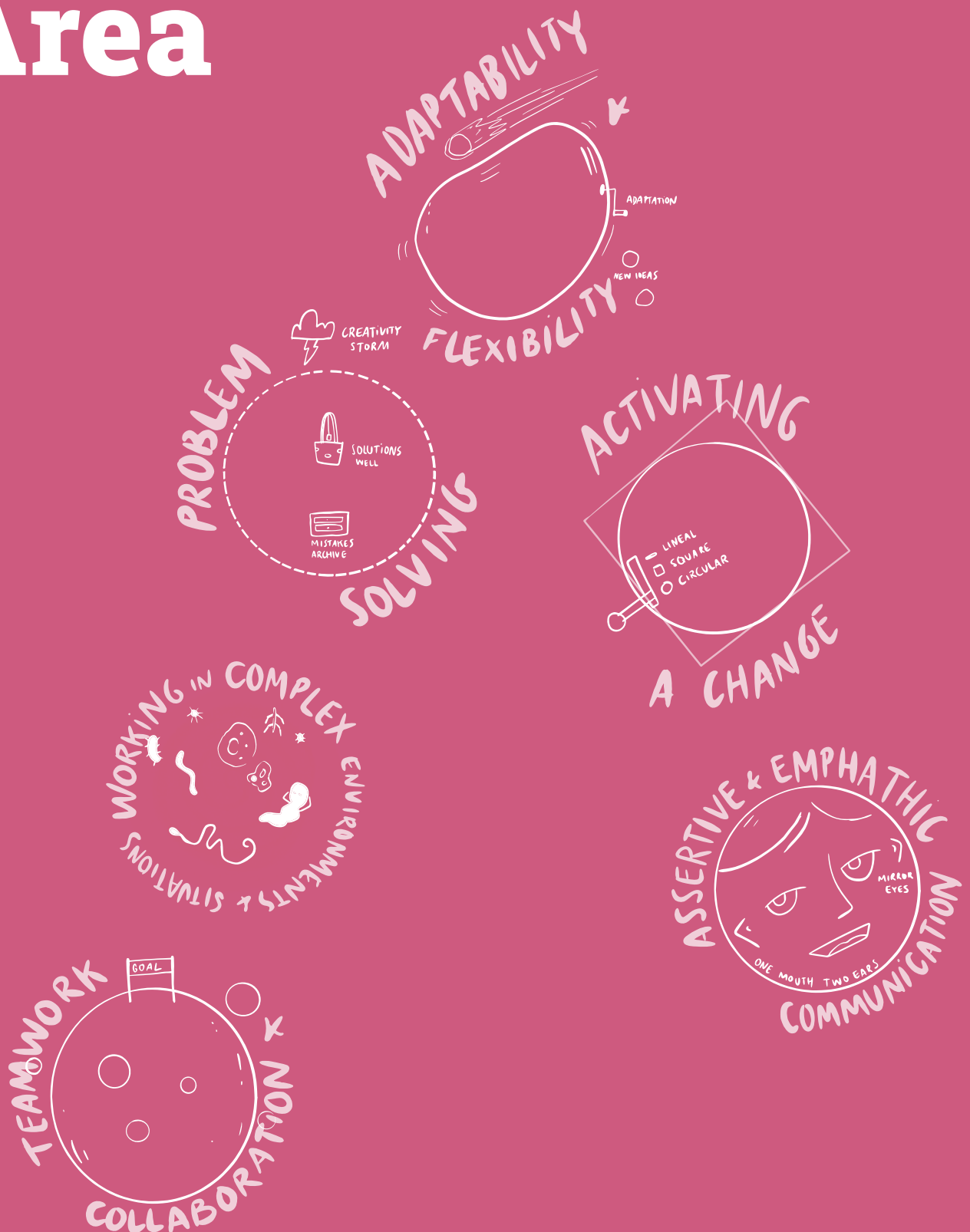
- ☐ I **monitor and report** stakeholders' engagement.
- ☐ I manage stakeholders' **expectations and interests**.
- ☐ I build **consensus** among stakeholders.
- ☐ I know how to contact/liase stakeholders in a project for a **long-term process**.

### Proactive

- ☐ I **design** a project **including** the interests and expectations of all relevant stakeholders.
- ☐ I manage and implement a project visualising and valuing **all stakeholders' contributions**.
- ☐ I create a **group spirit** among different stakeholders, able to face any challenges and lead to a successful completion of a project/initiative.
- ☐ I **delegate authority and responsibility**.

*Tick those indicators that you want to further develop so you can come back and check your progress!*

# Innov-Action Competences Area



**T**his area is focusing on the competences that lead young people to act according to the values and attitudes they stand for and to the knowledge, and skills acquired on CE, using innovative tools and approaches.

The main competences we have identified under this area are:

- **ADAPTABILITY and FLEXIBILITY**, in the constantly changing CE environment, represent the capacity to provide creative responses to problems and to unforeseen situations and to modify or adjust one's behaviours while meeting different situations, circumstances or even diverse people. "Adaptability" refers to the ability to proactively anticipate and prepare for change while "flexibility" refers to the ability to change and adapt in response to a changing environment.
- **PROBLEM SOLVING** is the capacity to overcome difficulties, achieve plans that move from a starting situation to a desired goal, or reach conclusions using reasoning and creative thinking, and learning from mistakes.
- **TEAMWORK AND COLLABORATION** is the capacity to work in a group to achieve a common goal or to complete a task in the most effective and efficient way. The main characteristics of teamwork include: having a shared goal, being interdependent, having the ability to manage one's own work and internal process, leading one's responsibilities using a democratic approach and operating in a bigger social system engaging within the team.
- **ASSERTIVE AND EMPATHIC COMMUNICATION** is the capacity to socially interact in a direct and honest manner without intentionally hurting anyone's feelings, sensing other people's emotions, feelings, and thoughts, using verbal, nonverbal and paraverbal channels.
- **ACTIVATING A CHANGE** is the capacity and motivation to design, develop and implement a personal or societal change respecting all living beings and the environment. Change is a transparent common process with contributions that make it a shared vision for societal and environmental improvement.
- **WORKING IN COMPLEX ENVIRONMENTS AND SITUATIONS** is the capacity to handle the complexity of specific circumstances and the complexity of specific activities and situations over a given time.



*In the constantly changing CE environment, these competences raise capacity to provide creative responses to problems and to unforeseen situations and to modify or adjust one's behaviours while meeting different situations, circumstances, or even diverse people.*

*"Adaptability" refers to the ability to proactively anticipate and prepare for change while*

*"flexibility" refers to the ability to change and adapt in response to a changing environment.*

# Adaptability and Flexibility

## INDICATORS

### Potential

- ☐ I adopt other **ways of thinking and seeing the world**.
- ☐ I understand the importance to be **flexible and adapt to change**.
- ☐ I understand the importance to **learn from changes** and to **adjust my behaviours**.
- ☐ I adapt to change and see things from **different perspectives**.
- ☐ I am receptive to **new ideas** and willing to consider different options.

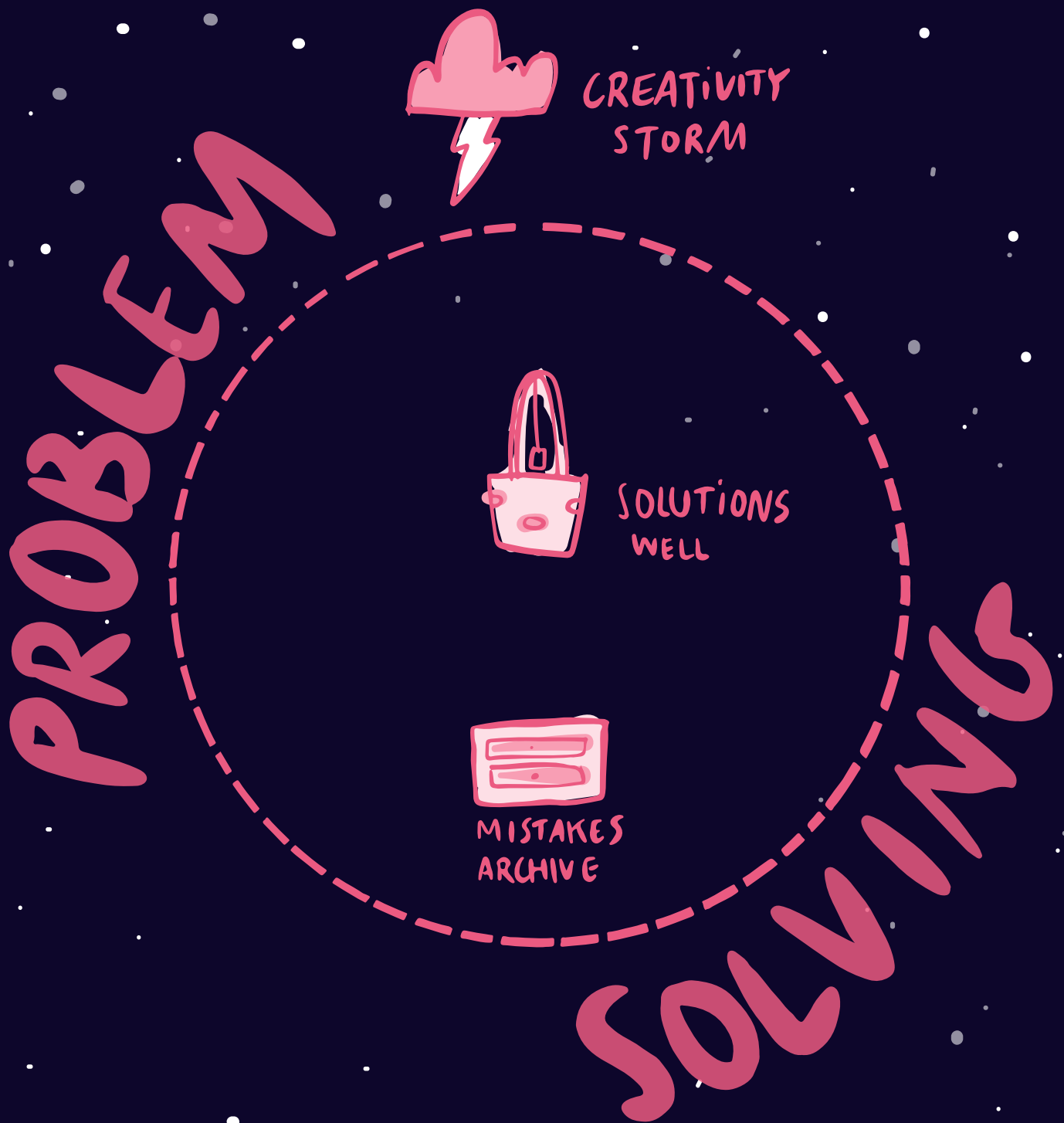
### Aware

- ☐ I **reflect on my own position** regarding other ways of thinking and seeing the world.
- ☐ I **learn from changes** and adjust my behaviours according to changing situations and contexts as it can be the case in CE.
- ☐ I learn from changes and foresee possible **adjustments in my behaviours**.
- ☐ I identify appropriate **responses to changing situations**.
- ☐ I manage different **tasks simultaneously**.
- ☐ I make **decisions quickly**.

### Proactive

- ☐ I **anticipate change**, adapting and changing my own position and perspective of a situation.
- ☐ I demonstrate that change can be **managed** effectively.
- ☐ I **support** those resisting change and stimulate other people to be adaptable.
- ☐ I lead **collaboration** in changing situations.
- ☐ I **stimulate** others to be **flexible** in changed situations.

*Tick those indicators that you want to further develop so you can come back and check your progress!*



*The capacity to overcome difficulties, achieve plans that move from a starting situation to a desired goal, or reach conclusions using reasoning and creative thinking and learning from mistakes.*



# Problem Solving

## INDICATORS

### Potential

- ☐ I **identify** and define **problems**.
- ☐ I come up with **potential solutions** for a given problem.
- ☐ I **learn from mistakes** and adapt accordingly.
- ☐ I **work diligently** until the problem is solved.

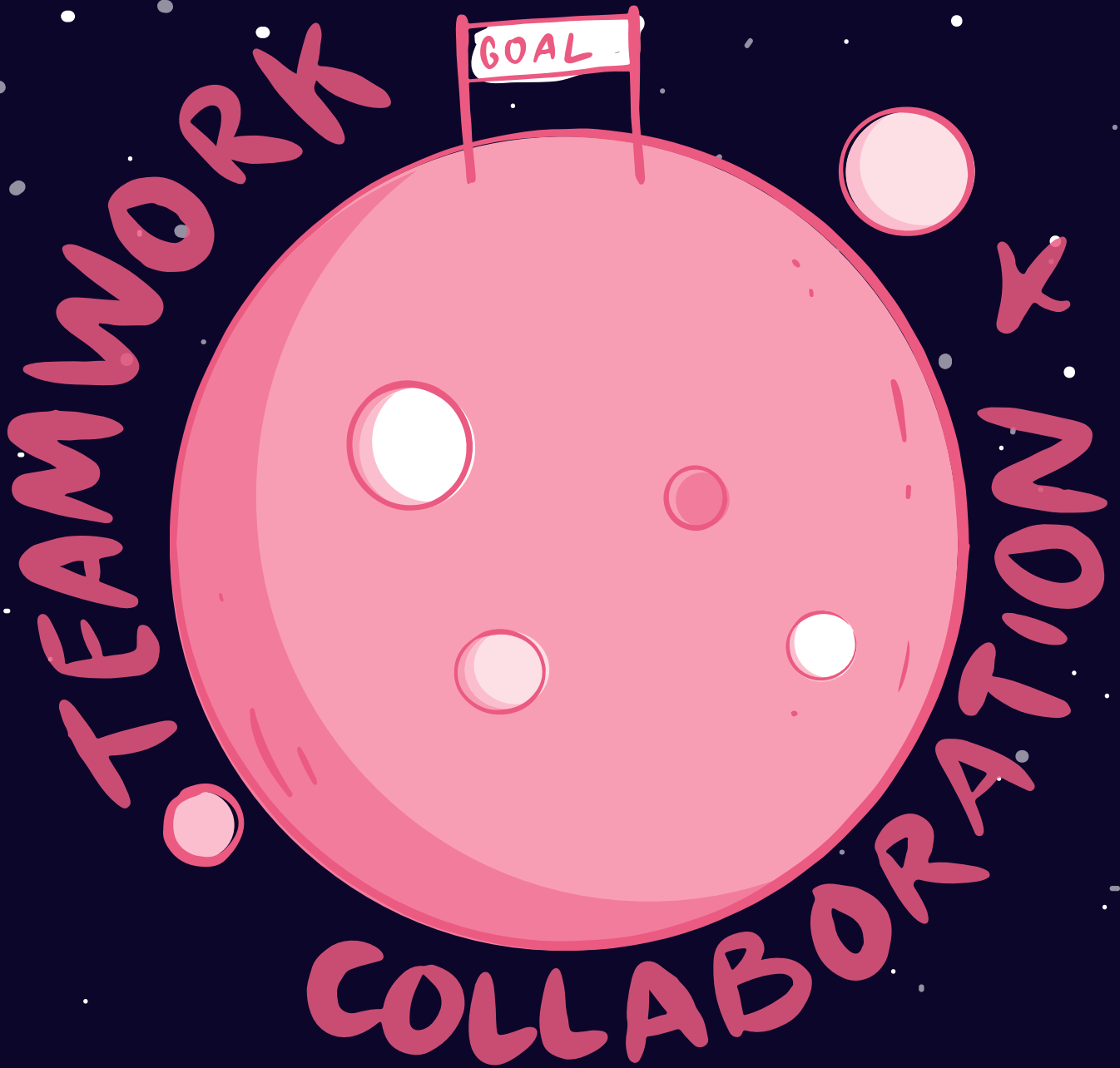
### Aware

- ☐ I **isolate the main problem**.
- ☐ I **generate and evaluate different options** and choose the best solution.
- ☐ I use my **logic, creativity**, and **past experiences** to find useful solutions.
- ☐ I feel comfortable with **failing** as a preliminary **step to success**.
- ☐ I **support colleagues** in need of assistance.

### Proactive

- ☐ I **implement** the chosen solution and monitor its effectiveness.
- ☐ I **adapt and adjust** the solution as needed.
- ☐ I solve problems at a **root cause** rather than at symptom level.
- ☐ I **anticipate and plan** for potential problems.

*Tick those indicators that you want to further develop so you can come back and check your progress!*



*The capacity to work in a group to achieve a common goal or to complete a task in the most effective and efficient way. The main characteristics of teamwork include: having a shared goal, being interdependent, having the ability to manage one's own work and internal process, leading one's responsibilities using a democratic approach and operating in a bigger social system engaging within the team.*

# Teamwork and Collaboration

## INDICATORS

### Potential

- ☐ I understand the importance of working cooperatively with others to achieve a **common goal**.
- ☐ I encourage team members to express their opinions and **contribute** to the **decision-making** process.
- ☐ I **share tasks and responsibilities**.
- ☐ I understand the **added value** of **collaboration** within the team.
- ☐ I **participate** in **team building** and getting to know my colleagues.

### Aware

- ☐ I **communicate** with team members **effectively**.
- ☐ I **build relationships** across boundaries and with key stakeholders by developing informal and formal networks.
- ☐ I create a **positive and productive team environment**.
- ☐ I work in **virtual teams** successfully.
- ☐ I **provide space** for everyone to contribute to a team.
- ☐ I **encourage collaboration** with other departments and sectors.

### Proactive

- ☐ I lead a team and motivate team members to **achieve results**.
- ☐ I troubleshoot team problems and **resolve conflicts**.
- ☐ I **monitor** team progress and make necessary **adjustments**.
- ☐ I apply knowledge of **team behaviour** to help achieve CE goals.
- ☐ I create **opportunities to learn** with other team members.
- ☐ I **identify the best suiting roles** for team members to achieve our common goal.

*Tick those indicators that you want to further develop so you can come back and check your progress!*



*The capacity to socially interact in a direct and honest manner without intentionally hurting anyone's feelings, sensing other people's emotions, feelings, and thoughts, using verbal, nonverbal and paraverbal channels.*

# Assertive and Empathic Communication

## INDICATORS

### Potential

- ☐ I understand the importance of listening to **other points of views and experiences**.
- ☐ I express **myself** clearly and concisely.
- ☐ I practise **active listening**.
- ☐ I **ask questions** to clarify understanding.
- ☐ I **share information** openly and honestly.
- ☐ I am aware of other **intercultural** contexts.

### Aware

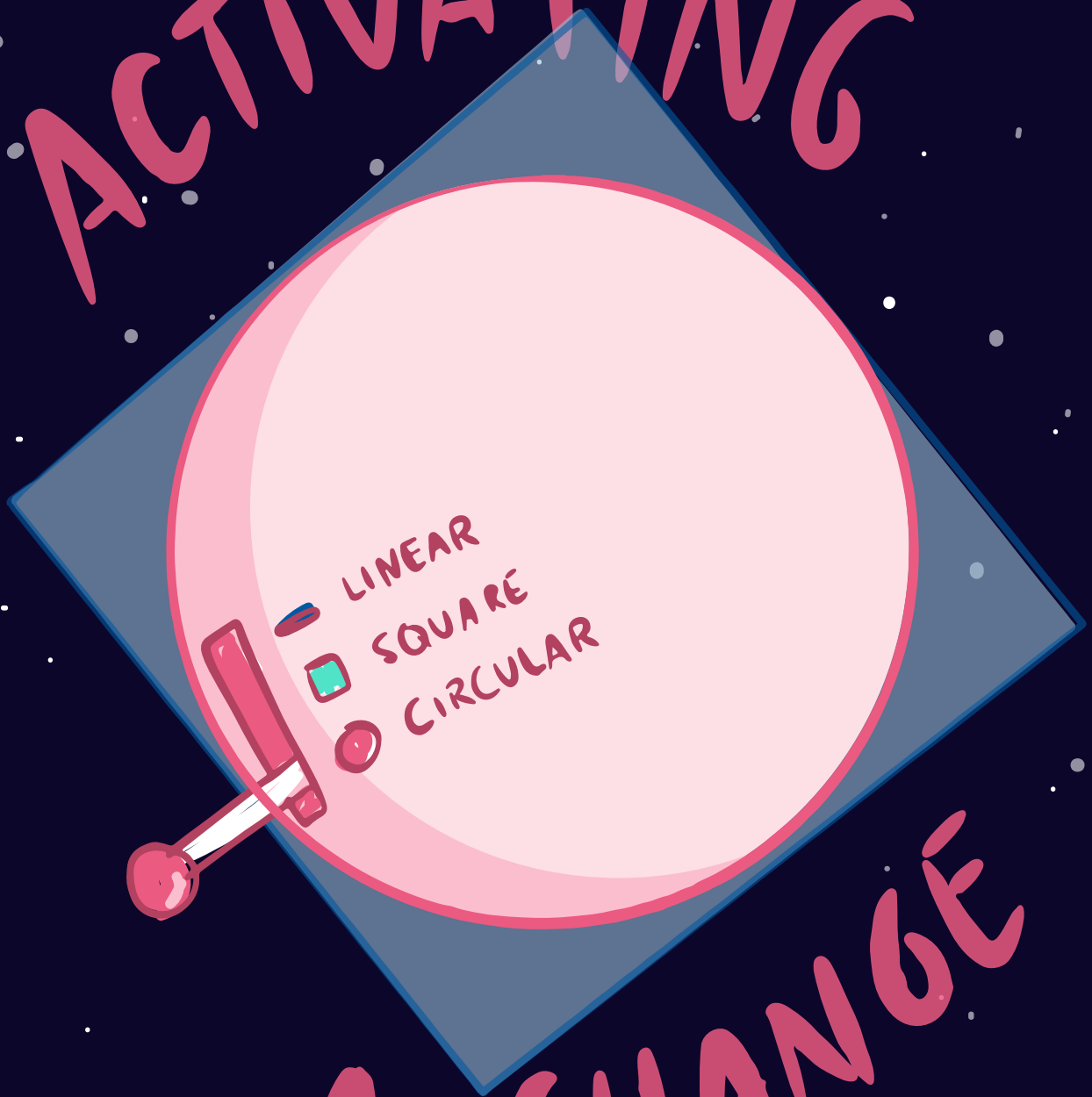
- ☐ I **understand** the thoughts, decisions, and actions of **others around me**.
- ☐ I demonstrate awareness of **nonverbal cues** and can react to them.
- ☐ I communicate **assertively**.
- ☐ I express **empathy** towards others.
- ☐ I know different **moral concepts** and can apply them.
- ☐ I **put myself** in the **position** of the **experience** of others.

### Proactive

- ☐ I stand up for myself while **respecting** other people.
- ☐ I **manage difficult conversations constructively**.
- ☐ I **negotiate and resolve conflicts building consensus**.
- ☐ I provide **feedback** and encourage team members to grow.
- ☐ I feel comfortable collaborating in intercultural settings for a **societal change**.

*Tick those indicators that you want to further develop so you can come back and check your progress!*

# ACTIVATING



# A CHANGE

*The capacity and motivation to design, develop and implement a personal or societal change respecting all living beings and the environment. Change is a transparent common process with contributions that make it a shared vision for societal and environmental improvement.*

# Activating a Change

## INDICATORS

### Potential

- ☐ I am comfortable with **ambiguous and challenging situations**.
- ☐ I **identify changes** happening and their reasoning.
- ☐ I **support new initiatives** for organisational changes to improve effectiveness.
- ☐ I embrace change and **overcome resistance** without trying it.

### Aware

- ☐ I **communicate** the change to those **affected**.
- ☐ I develop and implement a **plan of action**.
- ☐ I **evaluate** different **options** and choose the best solution.
- ☐ I **mobilise resources** and support.
- ☐ I **work effectively in new** environments, with new team members in uncertain environments.

### Proactive

- ☐ I **sustain the change** over time.
- ☐ I implement the chosen solution and **monitor** its **effectiveness**.
- ☐ I **manage resistance** to change.
- ☐ I **evaluate the impact** of the change and make necessary adjustments.

*Tick those indicators that you want to further develop so you can come back and check your progress!*



*The capacity to handle the complexity of the role that a young person is supposed to play in a specific circumstance and the complexity of the activities that the same person is supposed to manage at a given time.*



# Working in complex environments and situations

## INDICATORS

### Potential

- ☐ I understand **complexity** as normal.
- ☐ I **cope with stress and adversity**.
- ☐ I stay **patient and calm**.
- ☐ I manage **time and priorities**.

### Aware

- ☐ I identify and assess **environmental factors** that may **impact** the **success** of a project.
- ☐ I **renew plans and strategies** in response to changing circumstances.
- ☐ I make decisions in **uncertain and ambiguous** situations.
- ☐ I **coordinate and collaborate** with multiple stakeholders.

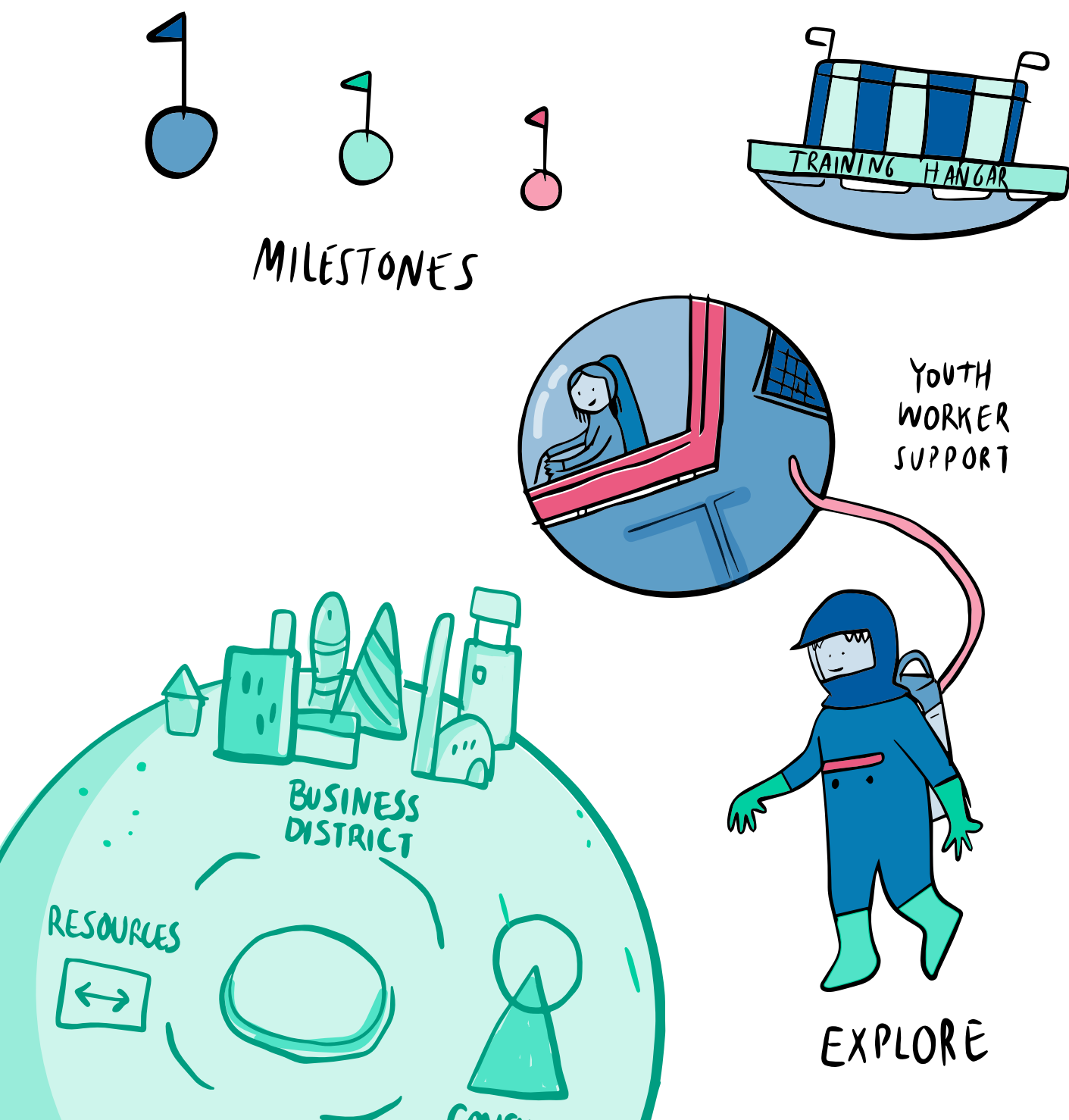
### Proactive

- ☐ I develop and implement strategies to **mitigate risks**.
- ☐ I manage **multiple tasks and priorities** simultaneously.
- ☐ I act **decisively** in a frequently changing and uncertain environment.

*Tick those indicators that you want to further develop so you can come back and check your progress!*

## 2.4. CESCYP Self-assessment

Within the CESCYP Competences' framework, partners have developed a self-assessment tool to support young people to evaluate their own competences and to plan further learning paths. The self-assessment is a tool for learning, and it should be used in a mentoring process, where young people, especially the ones living in marginalised conditions, are accompanied by a youth worker, an educator or a mentor.



To effectively use the self-assessment youth workers and youth should consider that

- It is a tool for identifying own performances and plan future learning and development.
- It must be used within a learning process and not to engage young people.
- It must be readapted to different realities, contexts, and target groups, using a language that is understandable.
- It serves as starting point to empower young people, underlying the competences they already have, and to motivate them to engage in future learning paths for personal and professional development.
- it serves also to orientate or re-orientate personal and professional choices of young people.

## How to use it CESCY Self-assessment?

Here the basic steps to be followed:

- **STEP 0:** Be sure that, as youth worker, you are in a trustful relationship with the young people, and they are motivated to discover more on CE or to live in a better world.
- **STEP 1:** Engage them in a session, where they identify what they would like to improve in their community and in their life.
- **STEP 2:** Ask them to look at the CESCY competences and identify which ones can be useful to improve their community/ life.
- **STEP 3:** Ask them to reflect on which CESCY competences they do have and to mention some situations where they have used them (cases).
- **STEP 4:** Focus on the CESCY competences they have used and check the indicators to underline their level, motivating them to further development.
- **STEP 5:** Let young people have a look on the competences they would like to develop and choose at least one they would like to work on.
- **STEP 6:** Support young people to identify possible paths to improve the competence/s they want to, in relation to the indicators and their own ideas.
- **STEP 7:** Follow up the learning paths of the young people. Set with them the first milestones they want to reach.

Young people can use the following table to evaluate their own competences, being aware that the scale from 1 to 6 should be used as follows:

1. Low proficiency
2. A few/a little
3. Average
4. Quite
5. A lot
6. Fully competent

The following table can be replicated for the competences you want to further develop from the previous chapter. Start providing examples for the Potential level, and move on further to Aware and Proactive as you can show ongoing positive examples of situations where you used it. Afterwards, decide a path for improvement with at least one specific milestone and a deadline for you to come back, check your improvement and continue your development updating or with new goals.

COMPETENCE <i>Design Thinking</i>		
DEFINITION	Design thinking is an innovative approach to generating creative ideas that center on the needs of people. - Analyzing users and their problems - visualizing ideas into solutions - developing prototypes that change through feedback.	
EVIDENCES	I ask for feedback before making the final version of a proposal, and I have experienced that quality is higher for the group involved. When we built the park recycling space, thinking about the design process made us use more time planning but supported the quality of the process.	
INDICATORS		1-6 scale
POTENCIAL	I identify the key elements of a design problem.	4
	I connect design thinking solutions with improvement in our ecosystem.	2
AWARE	I effectively apply design thinking principles to	4
	I apply design thinking principles to the circular economy and ecological	3
PROACTIVE		
MILESTONES		
In 2 months I have read more on sustainability and ecological transition design. I will involve my colleagues at work to make the next budget proposal.		

COMPETENCE		
DEFINITION	Definition of the competence with your own words. Rephrase our definition or create one for yourself to make it yours.	
EVIDENCES	Specify situations when you used the above-mentioned competences, and what the results have been.	
INDICATORS		1-6 scale
POTENCIAL		
AWARE		
PROACTIVE		
MILESTONES		
Choose a path and milestones for you to develop the parts of the competence you find relevant.		

# 3. The role of the youth work within Circular Economy opportunities for young people

## 3.1. Why is the youth – Circular Economy connection so important?

The youth-Circular Economy connection is important for, at least, two reasons.

Firstly, we are witnessing a sudden widening of opportunities within the framework of the Circular Economy. New jobs have been created, new working areas have been designed, media attention to this phenomenon is increasing, choices made by large and small companies as well as institutional decisions foster and support the adoption of a Circular Economy culture. Even if some companies are using Circular Economy models to greenwash their primary business, as in the case of the oil companies, there are many small and medium size companies that are contributing to an authentic growth of the Circular Economy culture.

This is a frenetic but positive movement that significantly raises the opportunity to find a place in cultural processes and identify jobs that are finally virtuous.

Secondly, this growing area that underlines the importance and the respect due to the environment, the reuse, the recycling processes, has to do with the reconstruction of strong ties within the community, with attention to the context where young people live. The theme of participation (which for youth workers has always had to do with civic responsibility, active participation, solidarity) is crucial in the educational trajectories of the new generations within the Circular Economy framework.

## 3.2. New skills and new horizons for new professions

Youth workers play a fundamental role to accompany young people in the acquisition of competences and in the identification of possible paths in Circular Economy processes.

The CESCYP project team's research shows that there are, at least, five key horizons for youth workers that aim at supporting young people in understanding, living, and working in Circular Economy contexts.

The five horizons can be summarised as follows:

### Understanding how to work in complex situations and contexts

In other words, it means supporting a person to develop the ability to understand that a need, a problem can be sorted out and an opportunity can be taken. Alternatively, that needs, problems and opportunities can evolve in relation to how people look at the relationships between different situations and facts. A young person that is asking for an economic contribution to "feel better" and to "be more autonomous" should be helped not only economically. The well-being and autonomy depend in fact on whether the person lives in a healthy and inspiring context, whether the person has a relationship with the community, whether his/her educational and cultural poverty decreases. Youth workers should look at things, situations, and contexts from an overall perspective, preparing young people to be equipped to live in a complex and changing world.

Murtin Mudler<sup>5</sup> says, in fact, that "the most needed skills are the ability to deal with complexity and ambiguity, argumentative reasoning (not just "how to do", but "why" to do), resilience, balancing interests. Many say they want to prepare young people to manage change in a fast-changing world, but that is not enough: young people need to prepare themselves to transform reality, to build their future".

---

5 Martin Mulder is an expert in education studies, Professor emeritus at Wageningen University, has published a book entitled 'Competence-based Vocational and Professional Education'.

## Understanding how to connect

Connecting means facilitating the growth of a young person by focusing on the priorities identified along with other needs. For example, if training is the priority for the young person we are working with, this must be accompanied by the ability to consider other needs without which this same training could be difficult to be attended: just think of those who want to attend an online training course but do not have the same computer facilities or simply a good connection. The training could be of poor quality; just think of a training course that does not take care of the aspects of responsibility and of building coherence between what people learn and what they do in their daily life. The training could be fragile, just think of the need to always train whatever the subject or discipline is. Therefore, youth workers should be able to understand how to connect different needs and priorities to support young people in their growth. Finally, youth workers must have transversal skills that are not rhetoric but serve to support young people in making decisions and choices in their life.

## Understanding how to be “in between”

Being in between has a lot to do with the ability not to make one's own thoughts and knowledge absolute, but to liaise with other thoughts and knowledge brought in by different people and subjects. It also has a lot to do with being able to be flexible and mobile professionally to build up more and more transversal skills. But not only that, it has a lot to do with the ability not to categorise everything by labelling it too much because otherwise it only increases the separations in a society that is admittedly and increasingly liquid. Youth workers should support young people that are exposed to new different experiences, and that are in the process of identifying their way along paths that are very often not yet clear and codified. In order to support young people in experiencing new dimensions, new working fields, new professions such as the ones in the Circular Economy, and new approaches in existing jobs and personal paths, as to be more circular, it is necessary to support them to experience uncertainty and fluidity without anxiety.



## Learning to grow through mistakes

Youth workers should support young people to learn through mistakes and from mistakes: reversing the binary logic of the right/wrong into the trial logic that recognises the mistake as a source of information and a tool for learning and growing.

Indeed, Stefano Laffi says:

*“a young person knows that the only possible action is by trial and error, that s/he is not given to betting on the long causal chains of linear time. The logic of trial and error is not the logic of parents, nor is it the logic of studying at school, where there is only one method, one practice, the binary right/wrong scheme.*

*If you try, you must be able to retrace your steps, change, try again: choices are reversible and mistakes are fundamental, they are your source of information.”<sup>6</sup>*

## Learning through ethics and human rights

Dealing with Circular Economy and promoting a Circular Economy culture in youth work implies that youth workers stand for sustainability, for a healthy environment, for sharing goods and providing everyone with fair conditions and possibilities. Adopting this horizon, the youth workers wear human rights lenses in the work they do and express their ethics throughout their behaviours and actions. Value-based youth work and human rights-based youth work may support young people in looking at Circular Economy as an opportunity to create inclusive, healthy environments. In these environments, everyone can explore their potential while respecting and safeguarding the other human beings, the available resources, and the environment.

In this framework, the competences that are necessary for the youth workers are in line with those that are necessary for young people, as detailed in the next chapter. To them, it is important to add a further area, that of transformative competences.

### 3.3. Transformative competences of youth work

Nowadays, youth work is in many ways less codified as it happens in different settings, less regular as it happens in different ways and periods of time, less predictable as reality is changing fast, but much more capable of penetrating the educational and formative dimensions of youth. In this way, youth work can experience mutation: uniting the past and the present. Mutation means that people do not lose the past, the memory, what they have built, but make it continuously capable of relating to the present with what is happening.

Let's think, for example, of volunteering today, which is much more of a transitory activity: you do it for a while and then you change. An organisation capable of changing is the one that continues to tell volunteers that one of the cornerstones of volunteering is belonging. Belonging means feeling that newcomers belong to the organisation and, above all, to its values. Belonging also means accepting that there is, however, a new belonging, much faster than volunteering used to be. This is very often the case today, no longer a belonging forever, which used to keep volunteers loyal for a long time.

That mutation does not build new departures but variations of the same path. This, today, is not a mere narrative or semantic ambition, but a real new way to stay deeply in the present to "perceive the reticular, open, intermittent, hybrid, non-linear, inclusive logics that configure the crossover along which many young people move, express themselves, learn, act".<sup>7</sup>

For these reasons, the main characteristics of the transformative competences are:

- Reading and analysing the context to recognise the innovative paradigms in action.
- Facilitating the identification of solutions starting from a correct problem setting.
- Building and maintaining unusual networks that can support young people's projects.
- Leading and collaborating in real and virtual worlds.
- Recognising and activating processes of re-imagining the future as a capacity for aspiration on the part of young people.
- Connecting theoretical scenarios and daily practices by linking them to the capacity of continuous re-planning.

---

<sup>7</sup> "Nuove generazioni in cerca di altre generatività" di Marchesi, Marmo, Floris da Animazione sociale n 303

### 3.4. Challenges that youth workers must consider while supporting young people to acquire competences in the Circular Economy framework

While supporting young people to acquire or develop competences in the Circular Economy framework, youth workers face challenges that can be identified as follows:

#### **First challenge:**

#### **Are all young people ready and able to be in the transition to Circular Economy?**

The main goal of the 2030 Agenda for Sustainable Development is integrating economic growth, well-being, environmental protection, and social equity. To achieve these goals, connections between education, work and identity are highlighted. The relationship among these domains is clear to youth workers and to the ones working in the youth field. But how understandable is it to those young people who struggle, who do not have a matching culture, who feel the bite of the need for autonomy but are not driven to connect virtuous motivations to this need?

Green jobs and green skills indicate promising paths regarding new jobs and the employability of the younger generation. Personal empowerment, the ability to make choices and responsibly interpret one's own life project. Active participation in the local community and in production processes are essential elements for knowing how to deal with today's social and work contexts characterised by uncertainty and precariousness. And all this brings us back to the point raised in the previous sentence: is everyone able to see and make connections in uncertain conditions?

The answer, as we can imagine, is no. So, in this open challenge, what can youth workers do?

Youth workers should- for example - first start addressing "employment" issues as a means of economic survival and then explaining that it is an instrument that helps to give meaning to one's beliefs and contributes to self-identification and self-image. Without this second part, certainly not assimilated but at least started and partly understood, no instrument (course, study, etc.) has any reason to be at the beginning.

So, what does all this mean? It means that we are facing new frontiers, and the one of Circular Economy is a real new frontier, as it brings remarkable change and innovation in the economic and social systems together with social and cultural challenges. However, the style and educational approaches used to work with young people cannot be the same for everyone. Those who struggled before are struggling even more now to understand this new and great challenge. So, it is precisely from the point of view of taking small but conscious steps that the educational approach of the youth worker remains the same as always. Basic acquisitions and then a subsequent effort to understand can be the next value step of the work to be done with the young person. A step-by-step approach is the only possibility to involve all young people in this process.

## Second challenge:

### Will the circular youth worker also be able to be “hybrid”?

When working with young people, it is essential to have a posture which is avant-garde in outlook, which seeks to go beyond the limits, which looks at experiences from their start, which leads us to use different perspectives. It is a posture which is appropriate nowadays, which allows us to look at young people and then take action, identifying programmes and projects together with them.

In this way, we can focus on the two main levels of the youth dimension (autonomy and inclusion<sup>8</sup>), holding together (either because it is already present what young people bring with them or because it is proposed by us) the theme of the development of the community, of one's own community.

In the last decades for a youth worker “standing at the borders, at the margins<sup>9</sup>” was an innovative option while working with young people. Nowadays, it is a social requirement. Only standing at the borders and not “in front or at the centre”<sup>10</sup>, youth workers can be able to understand the nuances of young people's perspectives and their potential. Thus, they can identify appropriate ways of dealing with lifelong learning processes and growth.

- 
- 8 “Autonomy” is meant as the ability to be independent, acting on his/her own values and interests. “Inclusion” is meant as the capacity to support the access to everyone to the same opportunities and to the possibility to live together in a community
  - 9 “At the margins”: we mean that youth workers should observe, listen, and understand the different nuances of young people's perspectives and lifestyles.
  - 10 “Not standing in front or at the centre”, means that youth workers should accompany young people in a smooth way, giving the centrality to young people themselves and their ideas and perspectives.

This approach, pedagogically, means that youth workers should not act as a guide anymore. Instead, they should stand close to the young people, in a position where they are able to observe the displacements, the reversals of their plans and ideas, being immediately able to accompany the disorientations and the re-orientations. In practical terms, it is a continuous work of observation and listening, and then of immediate and true horizontal cooperation.

From this point of view, in a Circular Economy framework, a youth worker is a hybrid profession. In fact, today, a youth worker is also (or must be) a bit of a planner, a bit of a visionary, a bit of a value-based educator, a bit of a mediator. Consequently, any educational and training organisations should be ready to be influenced by other stakeholders and other contexts, where learning processes take place.

### **Third challenge:** **Are the institutions ready for inclusive, emancipatory, and circular policies...together with youth?**

Alongside the challenges just described, even if in extreme synthesis, which require us to look both at the young person and his or her status and at the posture of the youth worker, the last challenge we imagine is related to the capacity of the social and environmental institutional system to walk together. The cooperation of the fields is necessary for youth work evolution within a Circular Economy framework.

Without this strong institutional legitimacy, which guarantees a framework of possible work for youth workers within the paradigms and practices of the Circular Economy, it becomes difficult to think of work that truly evolves with respect to this great opportunity.

It is not a matter of putting policies side by side, but of seeing policies for youth empowerment highly connected (almost fused) with those for ecological transition. A difficult step but a necessary challenge that all stakeholders should consider as a potential starting point for an authentic cross-sectoral cooperation.

### 3.5. What is the role of youth work in supporting young people in a Circular Economy?

The youth worker in accompanying young people in their growth in the framework of the Circular Economy can take two interrelated positions.

On the one hand, some opportunities for young people are, for the first time since youth policies have been consciously moving to Europe, potentially and strongly consistent with the world we want. The Circular Economy is an opportunity for young people and at the same time it is also the way towards a society that is based on humanised economic theories, attentive to the fate of this earth and deeply respectful of integral ecology (i.e. social and environmental aspects held together and finally no longer separated).

On the other hand, youth workers find themselves, for the first time, at a very interesting crossroad, but one that is new and deeply challenging. The current challenge is to be “borderline” youth workers, i.e. able to effectively stand in the middle between general youth issues and issues related to responsible and sustainable youth autonomy. Today, in the challenge of the Circular Economy, youth workers can have the opportunity to first build awareness processes and then play an important role in accompanying those young people who can find both meaning and opportunities within the “circular” paradigm.

Youth workers can play an essential role to support young people in their growth and in the transition to the Circular Economy model, raising their awareness and supporting them to adopt new lifestyles and behaviours in respect of the natural resources and of the planet.

# 4. Circular Economy, Civil Economy and Climate Crisis

## 4.1. Circular Economy and climate crisis.

*"Nothing is lost,  
nothing is created,  
everything is transformed,"*

Antoine-Laurent de Lavoisier  
(French scientist who lived in the second half of the eighteenth century)

Climate change has always existed throughout our planet's history but global warming that we have been experiencing in the last 150 years is anomalous and the result of human activity. This phenomenon is called the anthropogenic greenhouse effect and occurs in addition to the natural greenhouse effect. Since the Industrial Revolution, emissions of greenhouse gases due to human activities have increased from a negligible level to more than 40 billion tons a year. As these emissions have accumulated in our atmosphere, they have increased the average annual temperature by about 1 degree Celsius compared with the pre-industrial era. Temperature increases have led to glaciers and ice caps melting, sea levels rising, and more frequent and extreme meteorological events, such as heat waves and droughts, with cascading effects on ecosystems, agricultural yields, human health, and livelihoods. For around 15 years, the data researched by thousands of scientists all over the world, analysed and organised by the Intergovernmental Panel on Climate Change (IPCC), has confirmed that 97% of global warming derives from the anthropogenic greenhouse effect caused by human activity.

The impact of global warming is already evident: Arctic ice is melting; sea level rises and temperatures are higher and higher. In addition to this scenario, we are observing the increasingly extreme weather events and the displacement of plant and animal species that move from one ecosystem to another, creating damage to biodiversity.

Defining all this with the term climate change is accurate but does not give the full picture of what is happening. We should rather use the term climate crisis because the climate has always been changing, but never so quickly and never in the presence of such rigid and complex infrastructure such as modern cities and production systems of industrialised countries.

Circle Economy<sup>11</sup> calculates that 62% of global greenhouse gas emissions (excluding those from land use and forestry) are released during the extraction, processing, and manufacturing of goods to serve society's needs; only 38% are emitted in the delivery and use of products and services.

Most of the damage is caused by the consumption of coal, oil and gas, which represent the majority of greenhouse gas emissions. According to McKinsey's Global Energy Perspective 2019, it is estimated that the current trend of CO<sub>2</sub> emissions due to burning coal is responsible for around a third of the increase of 1°C in average annual temperatures above pre-industrial levels, making it the largest source of emissions in all human history.

Moreover, it is necessary to underline how climate crisis is also due to the quantity of unrecycled human-made material that exceeds the living nature<sup>12</sup>. The 2022 Global Circularity Gap report underlines that the world is 8.6% circular. This tells us that we send most of these precious resources (and the energy used to make them) to landfills, incinerators and even to pollute nature.

To address the climate crisis and its negative impacts, world leaders at the United Nations Conference on Climate Change (COP21) in Paris reached a turning point on December 12, 2015, with the historic Paris Agreement.

---

11 For more details: <https://unfccc.int/news/circular-economy-crucial-for-paris-climate-goals#:~:text=Circle%20Economy%20calculates%20that%2062,use%20of%20products%20and%20services>.

12 For more details: <https://www.smithsonianmag.com/smart-news/human-made-materials-now-weigh-more-all-life-earth-combined-180976522/>



The agreement, partially disregarded in subsequent years, set long-term goals to lead all nations:

- ➔ Substantially reduce global greenhouse gas emissions to limit the global temperature increase this century to 2 degrees Celsius, continuing efforts to further limit the increase to 1.5 degrees;
- ➔ Reviewing countries' commitments every five years;
- ➔ Providing funding to developing countries to mitigate climate change, to strengthen resilience and to improve adaptation capacities to climate impacts.


Despite the success of COP21, many questions concerning the Agreement have remained unresolved. Although the implementation guidelines of the Paris Agreement (the so-called Paris Rulebook) were approved at COP24 in Katowice, Poland, in 2018, COP25, held in Spain in 2019, was described by the UN Secretary-General António Guterres as a missed opportunity.

The Paris Agreement provides a lasting framework that will guide the global effort for decades to come. It marks the beginning of a move towards a net-zero emissions world.

More than ever, a transition to a Circular Economy is needed to provide solutions to the climate crisis. The transition from linear to Circular Economy implies, among the different possible measures, also an energy transition from an energy mix focused on fossil fuels to one with low or zero carbon emissions based on renewable sources. Consequently, a strong cultural change is needed, that is to say, a real paradigm shift to translate into reality what everyone now agrees on.



## The “climate” is changing



*And you better start swimmin’  
Or you’ll sink like a stone  
For the times they are a-changin’*

(Bob Dylan)

The alarm is concrete, and the challenge is clear: we have time between now and 2030 to contain the increase in the global average temperature within the critical threshold of 1.5°C compared to pre-industrial levels. All this is possible, but only by halving the current level of emissions by 2030 and net-zero by 2050. To achieve this, a sudden and radical change is needed, leveraging technological innovation and the individual conscience of each of us, citizens, businesses, and institutions. We must give ourselves concrete objectives: a new energy model, the exit from fossil sources, an adaptation and regeneration strategy that starts from the cities and involves inland areas, the protection of forests and the soil, the reduction of hydrogeological risk to respond to the drought emergency, energy and seismic redevelopment interventions for buildings, new sustainable agriculture, sustainable zero-emission mobility, among others. Moreover, we must not forget a concrete industrial and economic conversion in favour of the circular paradigm in order to reduce consumption, an organisation of new ways of collaboration across the value chain, a design for disassembly providing access over ownership, and an offer of products as a service.

Furthermore, Ellen Macarthur Foundation, after COP26 clearly stated that “The transition to renewable energy is vital to tackle climate change – but it’s only half the story. 45% of global greenhouse gas emissions come from the way we make and use products and food. That means we need to redesign our economy – eliminate waste and pollution, circulate products and materials, and regenerate nature – to reduce emissions and meet the targets set out in the Paris Agreement. We need a Circular Economy to complete the picture.”

As said in the previous chapter, more than ever, a cultural change is needed where every single person is aware of the challenges to be faced and co-responsible for implementing solutions from micro to macro levels, where Circular Economy replaces linear economy models. Individuals and communities are asked to act, adopting sustainable lifestyle and behaviours. Youth workers play a vital role in their communities and while working with young people, as they can stimulate and support the adoption of different behaviours, raising awareness about the need to safeguard natural resources and our planet.

## A just ecological transition: Environmental justice and social inequalities

In recent decades, global economic growth has lifted millions out of extreme poverty and reduced inequalities between countries. However, unmanaged climate change threatens to set back that progress by damaging poverty eradication efforts worldwide, and disproportionately affecting the poorest regions and people.

The evidence is mounting: a World Bank report<sup>13</sup> estimated that an additional 68 to 135 million people could be pushed into poverty by 2030 because of climate change.

Another research<sup>14</sup> shows that if the direct projections of future economic damages in the current scientific literature hold, climate change would reverse the gains of the past few decades and cause inequality between countries to rise again. Within countries the impacts of climate change also risk worsening inequality.

At the same time, actions taken to curb warming could have an unwelcome effect on inequality, if climate policies prove too burdensome for poor countries. Such actions need to be complemented by measures to offset the costs on the poor and vulnerable across and within countries.

We view mitigating climate change as a necessary condition for sustainably improving living standards around the world. At the same time, we maintain that distributive and procedural justice must be at the forefront of every stage of environmental policymaking. In planning, development, and implementation, the effort to reduce emissions must be at the service of broader objectives of development, such as poverty and inequality reduction, the creation of decent jobs, improvement of air quality, and improvement of public health.

While the effects of climate change are global, and their projected impacts concern every area in the world, a wide scientific literature<sup>15</sup> suggests that climate risks disproportionately affect the poorest countries and people, who are more exposed and more vulnerable to their impacts.

In the poorest economies, a large part of the population depends directly on activities that may be the most affected by climate change, notably, the agricultural, forestry, and fisheries sectors. People with the lowest incomes are the most likely to depend for their survival on resources provided by nature. Rising temperatures are exacerbating pre-existing disparities in access to clean water and affordable food. Most of the time, the poorest populations do not benefit from insurance mechanisms or have access to basic health services, making them particularly vulnerable to any shock hitting their assets and income streams.

---

13 For more details: [Un'azione globale urgentemente necessaria per fermare le minacce storiche alla riduzione della povertà \(worldbank.org\)](https://www.worldbank.org/en/news/press-release/2018/07/11/un-azione-globale-urgentemente-necessaria-per-fermare-le-minacce-storiche-alla-riduzione-della-poverta)

14 For more details: <https://link.springer.com/article/10.1007/s10584-019-02637-w>

15 <https://www.oecd.org/env/cc/2502872.pdf>

## Rich countries and people

It is the populations of these economies, which are the most vulnerable to climate change, who contribute the least to the accumulation of greenhouse gases.

Greenhouse gas emissions today are mainly linked to the level of a nation's wealth: the richest countries represent only 16 percent of the world population but almost 40 percent of CO<sub>2</sub> emissions. The two categories of the poorest countries in the World Bank classification account for nearly 60 percent of the world's population, but for less than 15 percent of emissions. On a per capita basis, emissions are about 20 metric tons of CO<sub>2</sub>-equivalent a person a year in the United States—approximately double the amount per person in the European Union or in China, and almost 10 times the amount in India.

This cross-country inequality is rooted in history: the contribution of the developed economies to global warming is greater than their share of current emissions because they have added to the accumulation of greenhouse gases in the atmosphere for a longer period. For example, the contribution of the United States to cumulative emissions is 25 percent of the total, the European Union's 22 percent, China's 13 percent, and India's 3 percent.

## Reducing inequalities

Without action to limit and adapt to climate change, its environmental impact will continue to amplify inequalities and could undermine development and poverty eradication. While inequality refers to differences in income or wealth across the whole range distribution, poverty concerns individuals below a given income threshold, or lacking access to basic needs. By hitting the poorest the hardest, climate change risks both increasing existing economic inequalities and causing people to fall into poverty.

Limiting the global temperature increase to 1.5°C requires reaching net-zero CO<sub>2</sub> emissions by 2050, thus reducing global emissions by approximately 50 percent in 2030, compared with 2010 levels. Limiting the increase in temperature to 2°C means net-zero CO<sub>2</sub> emissions should be reached by 2070, and global emissions should be reduced by 25 percent by 2030. Every fraction of a degree counts because the impacts of climate change increase with rising temperature in a nonlinear way. For instance, while an increase of 1.5°C would expose 245 million people to a new or aggravated water shortage, this number becomes 490 million at +2°C.

The need is urgent for policies to transform the way we use energy and transportation rapidly and profoundly, to produce, and consume food as well as other goods, and shelter ourselves. The question is how to design these policies. Within the CESC project we have elaborated recommendations for policy makers to speed up the adoption of Circular Economy models.<sup>16</sup>

## Mitigation efforts

Reducing emissions will ultimately limit climate change impacts and their unequal effects; however, mitigation policies must not neglect their own impacts on inequalities. As they affect energy or food prices, mitigation policies may also slow down progress in energy access and affect the poorest, who spend a higher share of income on these goods.

Thus, mitigation efforts should be shared fairly to ensure they serve the broader objectives of development, poverty and inequality reduction, improvement of air quality, health, and so forth. Given their greater historical contribution and greater ability to pay for mitigation, rich countries should pave the way by taking ambitious climate action. Financial transfers between countries can also reduce the burden of mitigation for poorer countries and increase participation in mitigation efforts.

Within regions and countries, policy design is key to making sure climate policies do not hurt the poorest. For instance, redistribution plans for the revenues generated by carbon prices can offset the negative impacts on poor people and even lead to net benefits for the poorest. Conversely, concerns about the regressive effects of policies have prevented strengthening existing carbon tax levels, for instance the Yellow-Vest movement in France. Other policies, such as investment in low-carbon technologies or building standards, can also have unequal effects on individuals, depending on their design.

## Promoting adaptation and resilience

In parallel to reducing emissions, adaptation policies must be put in place to decrease the exposure of the most vulnerable populations to climate change impacts. This means devising rules regulating construction in risky areas, such as flood zoning, land entitlement, and building standards. The poorest communities must be provided with better health services and new insurance mechanisms.

As the poorest tend to be excluded from the decision-making process, there is always a risk of underinvestment in actions that would be particularly beneficial to them. Policies need to be tailored to ensure they do not impose undue financial constraints on those who have the fewest resources. Policymakers must guarantee that adaptation policies will actually benefit those most in need and will not be hijacked by the wealthiest or by political interests.

Another idea of interest is the creation of adaptation funds that would ensure technological transfers from rich countries, which produce most patents, to poorer ones.

Increasing countries' mitigation ambitions has been one of the main topics of the United Nations Climate Change Conference of the Parties (COP26) in November 2021. The success of those negotiations is a precondition to limiting inequality-ex-



acerbating climate change. At the same time, careful attention to the equity and fairness of actions for vastly unequal countries will be key for the success of the negotiations themselves.

Jointly tackling climate change and inequality reductions requires paying attention to the intricate links between these issues. Limiting climate change is essential to reduce the risks it would impose, notably on the poorest. However, to design climate policies, the recognition that individuals and countries differ in their ability to mitigate emissions and to cope with climate change impacts is essential. Poorly designed policies risk amplifying existing inequalities, but just transitions to low carbon and more resilient economies can foster more equal societies.<sup>17</sup>

Doing environmentalism today means practising sustainability. Over the last 10 years the commitment of associations and pioneers of environmentalism has been to advocate by inserting terms such as renewable, integral sustainability, green economy, secondary raw materials in policy papers at all levels. Now, that this challenge, thanks also to the global youth movements, has been won, we are entering another delicate phase.

Convincing all those who are not aware of the urgency to change behaviours and economical models, that Circular Economy is viable, using shared and scientifically valid environmental practices. This opens the need for new skills, taking risks, opening to social and environmental innovation.

For example, the new regulation on financial taxonomy issued in January 2022 as well the EU Circular Economy action plan constitute a very important milestone for the future of Europe, but in the delegated act energy lobbies managed to classify gas and nuclear energy as renewables sources.



17 This article is based on the paper "Influence of Climate Change Impacts and Mitigation Costs on Inequality between Countries" published in the journal Climatic Change from the International Monetary Fund.

This clarifies the evolution of the new skills required for environmental activism. Sustainability has succeeded as a political message, but linear and old economic models are trying to rebrand themselves to fit in this new paradigm. Despite having nothing to do with the future of sustainability, the linear economy model tycoons do not want to lose resources and be put on the dark side of development, so they recycle themselves with new formulas and new terminology.

The theft of words is underway, as well as the attempt to get on the winning side of history. To preserve the historic revolution that is in progress it will be necessary to have the competences, the courage and the consistency to exclude those who are not sustainable, welcoming the positive and innovative forces that are sporadically present in Europe.

## Good economic recipes: linear versus circular model

Zygmunt Bauman in "The solitude of the global citizen", speaking of modern industrial society, points out that "for modern liberalism all limits are off limits ... the only big predictable scenario is that (to quote Cornelius Castoriadis) of the continuous accumulation of garbage".

The proliferation of garbage (and of the most varied forms of pollution), far from being understood as a joke of Bauman, seems to be the most evident and unequivocal indicator of a system that is unable to be sustainable because it is structurally innate the aversion to any kind of self-limitation and which feeds on exploitation and economic and social imbalances, to the detriment of nature and other human beings.

In this regard Claude Levi-Strauss, in the second of the lectures he gave in Japan in 1986, published in the volume "Anthropology in the face of the problems of the modern world", tells us more about the structural nature of this imbalance, when, to explain the resistance to development of traditional so-called primitive societies, he says:

*"Development presupposes that culture becomes more important than nature, but this is almost never admitted, with the exception of industrial civilizations ... among the so-called primitive peoples the notion of nature always shows an ambiguous character: nature is pre-culture, and it is also sub-culture, but it constitutes the ground on which man hopes to meet his ancestors, spirits, gods".*

The notion of nature therefore includes a supernatural component. This sacredness of nature leads these societies to accept the limit and contemplates self-limitation which is the basis of a balance between the need to meet the needs of the community and the equally necessarily need to respect nature.

## Four fundamental principles for an ecological life

Today, for the protection of creation, we are certainly witnessing a significant change in attitude towards the environment, starting with Papa Francesco encyclical *Laudato sii*, but the challenge of change must be played out across the board also in terms of ethics and secular culture, as a mass educational challenge, asking some fundamental questions.

Considering the unsustainability of development, are we forced to give it up to save the Planet? In other words, is Western-style scientific, technological and economic development possible, without inevitably resulting in the dramatic breakdown of the balance between man and nature and the inevitable “accumulation of garbage” that this imbalance brings with it?

To put it another way, on what indispensable assumptions must human cultures rest so that development (understood as economic growth, connected to the growth of the technological capacity to manipulate nature) can be capable of self-limitation in order to avoid being inevitably unlimited and destructive?

The inevitable step could be the assumption in the widespread mass culture of four general principles, to be assumed in structuring concepts of an effective and complete vision, also for the validity of the didactic work that touches the school and all educational agencies.

### 1. Essentiality is a great resource for the environment and for the creation of a right company

Essentiality means that the accumulation of wealth and goods is limited when essential needs are met.

Introducing the concept of “less is more” is important to raise awareness of what is essential and what is superfluous but responds to an induced need. It is not a question of a pauperesses model of society, but the recognition of the senselessness of a social and economic model entirely centred around consumption and consumers as models of contemporary citizenship. Sobriety in a lifestyle today represents a form of reappropriation also of a sense full of freedom to consume in a responsible and conscious way.

### 2. The use of a good does not necessarily mean its possession

The race for property leads to living possession as an end and not as a means to build well-being and happiness. Well-being and happiness can also be achieved through the sustainable use of common goods that belong to the community and not to individuals.

The reasonable use of common goods avoids multiplying the production of an enormous mass of waste and goods, unused or underused, such as are often privately owned goods, the use of which is rarefied or null, since they represent a material surplus for the owners and are removed from the availability of those who do not possess them, not having the means to be able to acquire them.



### 3. Sharing and community life are the basis of sustainability

Cohesive and supportive societies are ready for the sharing economy revolution. It represents an economic model capable of building greater well-being with fewer goods and of understanding economic exchange with a different meaning than that of the taxation of consumption. The consumer isolated from a social context consumes and spends more than a citizen who lives in sharing with his/her social group and co-manages services and goods with it.

### 4. The care of the common goods as a civic objective

The common space is the place where the resources that remain available to everyone reside and reproduce. From the most essential ones for keeping individuals alive, such as air, water and energy sources (including food), to those apparently secondary such as leisure, sociality, educational resources, which are vital for life of a community.

Protecting common goods as a citizen and as a consumer with the right actions and choices must also be the basis of an educational model that embraces the values of ecology. If the educating community has contributed to building these four awareness's in individuals and in the culture of contemporary communities, it would lay the cultural foundations for an effective and effective change in individual behaviour and collective choices.

## Daily practices for an ecological life

Circular Economy is possible on condition where these principles become common heritage. At the same time, it is precisely the concrete practice of ecological lifestyles and practices that can contribute to changing contemporary culture in the right direction. The indication of the route to take and the determination to follow concretely this path are both essential for forming new generations capable of changing the system of life and production, arriving at a circular paradigm. Youth work can play a very important role in raising awareness of young people on the importance to adopt sustainable behaviours, supporting them to acquire and/or develop competences to understand and practise CE in their own life.

In fact, as youth work is value-based, youth workers are supposed to promote values that are also and above all built with the adoption of concrete lifestyles that represent them. The daily practice and the discipline of life that we express in our choices are sometimes a consequence of our beliefs, but most of the time they are themselves the matrix of our beliefs, which they help to form thanks to the shaping power that constant practice has on our consciences and our value system. It is therefore necessary to change in our everyday life, practically doing things that have a high environmental and social value and that end up also having an ethical, political, social, economic and educational value. In short, revolutions take place in the concrete of life and the ecological revolution is no exception.

Taking a cue directly from the nature that we want to protect and conserve not only for us, but also for those who will come tomorrow, imitating and making the principles that guide it our own, we must learn to be able to resist or be resilient to the changes we have to face every day, in logic of practising that circular revolution which, in addition to guiding the production processes, can also guide the growth of children.

## Linear Economy vs Circular Economy

Circular Economy is an economic model with an aim to reduce and avoid leakage of products and materials out of the system, meaning being landfilled or incinerated. Important role here lies within the design of products, as they need to be designed durable, shareable, repairable, modular, refurbishable and, in the end, recyclable. In addition, consumers have to be ready to consume products through new business models (for example renting instead of owning) and care for them longer than they're used to now.

Ellen MacArthur Foundation brings out 3 principles of a Circular Economy:

- **Design out waste and pollution**
- **Keep products and materials in use**
- **Regenerate natural systems**

The European Union has taken a strong stand and direction towards Circular Economy with its second Circular Economy Action Plan. In addition to bringing out focus areas such as textiles, electronics, here are also targets set for the Member States regarding recycling rates to enhance the use of secondary raw materials and reduce dependency on virgin materials.

As Circular Economy requires a change in our regular ways of thinking and consumption, it is necessary to promote its awareness even among the youngest to start changing our behaviours, making them more sustainable, promoting virtuous actions, involving, and raising awareness of those around us.

## Resources and the problem of raw materials

Each year the quantity of raw materials extracted to supply goods, products, energy and services, continues to increase. 22 billion tons in 1970, 70 billion tons in 2010<sup>18</sup>. The UN estimates that at this rate we could reach 180 billion tons a year in 2050 (when the Planet will be inhabited by nine billion people).

If we analyse the consumption of raw materials, still today there are enormous inequalities between the different countries (tons / year per person): 25 in the USA, 20 in Europe, 14 in China, 13 in Brazil, 9-10 in Asia-Pacific, Latin America, the Caribbean and We.

Paradoxically, the countries that consume the rawest materials are also those that do not have them and must therefore import them from other countries.<sup>19</sup>

- **SILVER:** expected to run out in 2029
- **GOLD:** expected to run out in 2030 - Fun fact: 1 gram of gold can be extracted from 1 tonne of gold ore, vs. 240 grams from 1 tonne of old cell phones.<sup>20</sup>
- **COPPER:** depletion expected for 2044
- **LITHIUM:** depletion expected for 2560 - Although the demand for this mineral is increasing (it is an essential component in batteries) the reserves are still considerable, but the environmental impact caused by its extraction is very high.



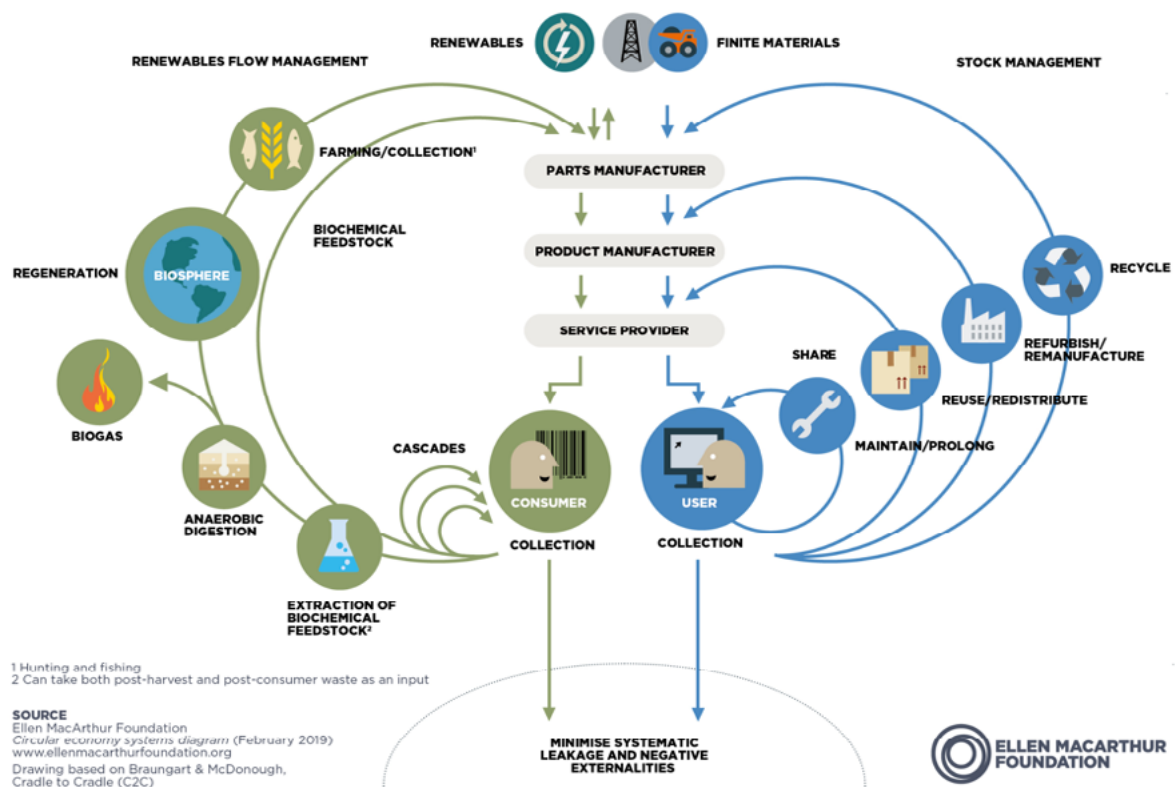
*The Pacific Trash Vortex, a real waste island in the middle of the Pacific Ocean with a size of about 700,000 sq km, equal to those of the State of Texas.*

The global production of waste<sup>21</sup> has reached alarming levels, by 2025, 4.3 billion urban residents will produce about 1.42 kg of waste per person per day, for a total of 2.2 billion tons per year.

19 <http://www.materialflows.net/global-trends-of-material-use/> -

20 <https://grass-metall.de/en/goldmine-vs-smartphone-was-liefert-mehr-gold/>

21 What a Waste : A Global Review of Solid Waste Management



Source: Ellen MacArthur Foundation, 2019.

Contrary to linear economy, Circular Economy activates a process of self-generation: one's waste becomes another's resource.

In the picture above we can see the Circular Economy systems diagram also known as the butterfly diagram. It separates biological materials (grown) on the left and technological ones (mined) on the right. In the middle it shows the linear economy process: we get materials, put them in the production process, make products, sell them, use them and finally get rid of them.

The aim of Circular Economy is to minimise and avoid materials leakage out of the system. In order to achieve that, it proposes loops where all the products and materials find their way back to the circulation.

On the biological (renewables) side the first step is to redistribute and donate edible food. On an individual level no bio material should end up in landfills or incinerators. There are many ways for all that to get back to the system through compost, biogas, biochemicals, etc.

On the technological side there are all the materials that we simply put mine and extract from the Earth. The first choice here should be to keep the existing products in use through sharing, reusing and renting them. In order to do so successfully, durable and repairable design of products becomes important. Next opportunities for circulation come through refurbishing and remanufacturing, where parts can be changed and the product given back to users. If all the previous



steps are exploited, then the last option should be to separate the materials and send them to recycling so they can enter again as raw materials to the system.

The Environment Committee of the European Parliament approved the package of measures<sup>22</sup> on Circular Economy. This represents an extraordinary opportunity to carry out the hoped-for revolution in optimising the use of natural resources and waste management, scrapping the use of landfills and recovering waste for energy purposes, but not only. It is positioned as a turning point for the fight against food waste, also forcing the separate collection of the organic fraction, extending the life of the products, imposing restrictions on their recyclability and repairability (eg household appliances) or putting an end to the phenomenon of programmed durability. Another aspect, no less important, is the competitiveness, innovation and economic advantage of the proposal. This package considerably improves the 2015 proposal made by the European Commission, in particular as regards the 2030 recycling targets, raised to 70% for municipal solid waste and 80% for packaging.



## The role of waste in Circular Economy

Producing waste means consuming resources that are necessary for their own production.

Waste has grown over time and not only in per capita quantities, but also in complexity. The materials from which they are made are technologically more advanced and if, for some, it is easier to dispose of them, for others it is not so simple at all, because they are more resistant to the canonical decomposition processes.

So what can be done? Often some objects become waste before they are even consumed. In fact, in many cases they have a very short life cycle, such as the packaging of some products that end up in the garbage immediately after purchase. The reduction of waste therefore concerns, before consumption, the design, production and distribution of goods, whose sales marketing is linked to the packaging of the products.

---

22 [www.europarl.europa.eu/RegData/etudes/BRIE/2017/599288/EPRS\\_BRI%282017%29599288\\_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/BRIE/2017/599288/EPRS_BRI%282017%29599288_EN.pdf)

## Green Economy for young people

The effects of the sustainability transition will be pervasive in economy and society, with important transformations in the labour market. On the one hand, new opportunities will open up for emerging sectors involved in the production of renewable technologies and sustainable products and services, which may express a need for Green Jobs. On the other hand, the production sectors responsible for releasing most emissions and exploiting most natural resources risk freeing up part of the workforce employed by them. Reaching the Paris Agreement's targets could result in the creation of 24 million jobs and the destruction of 6 million jobs by 2030, with the net effect of the energy transition amounting to 18 million positions globally. Differentiated results depend on countries and production sectors (ILO, 2018).

The employment effects of the transition to renewable energy depend on a number of structural local labour market factors. Promoting the mobility, reconversion and retraining processes of the workers concerned is essential to maximise the positive growth and employment effects of energy and environmental policies on the labour market.

In this perspective, seizing the opportunities of green economy will be essential to be able to assess in advance which professional skills will be needed to accompany and accelerate the transition process.

From this point of view, education and vocational training systems have to support workers and businesses by revising and integrating current training curricula, defining new standards, and introducing mechanisms for recognising acquired qualifications and new professions.

One of the points of greatest interest is studying the impact of the green revolution on the economy and the world of work related to the demand of businesses for Green Jobs. The EU and its Member States will work to ensure inclusive and sustainable growth in the EU, which is a sine qua non for reducing inequalities.

To this end, they aim to combine efficient, effective and adequate social protection and support services, good education with equal opportunities for all, and well-functioning labour markets supported by effective employment policies.

The labour market:<sup>23</sup> a net gain of 5 million jobs but retraining and support are needed. The net-zero transition would create about 11 million jobs, while eliminating 6 million, a net gain of 5 million jobs. Many of the new jobs would be in renewable energy (1.54 million), agriculture (1.13 million) and construction (1.1 million). For example, in the construction sector, the EU would need 1.1 million skilled workers to retrofit houses with higher insulation and install environmentally friendly heating and cooking systems. Although regions may experience different levels of labour displacement, most would see a net increase in employment. Achieving

net-zero emissions could require up to 18 million workers to be retrained, mainly to fill jobs that do not currently exist (nearly 3.4 million by 2050) and those lost during the transition (2.1 million by 2050). Some of the new jobs would require similar skills to those disappearing. For example, engineers in the oil and gas sector could move to the CO2 Capture and Storage (CCS) sector. Retirements in industries with older workforces, such as coal mining, could reduce the number of job changes and retraining required.

Achieving the objectives of the package of directives on the Circular Economy would enable 580,000 jobs to be created, with annual savings of EUR 72 billion for European businesses thanks to a more efficient use of resources and thus a reduction in imports of raw materials. The number of jobs could also rise up to 867,000 if the 70% recycling target were accompanied by ambitious reuse measures at European and national level, particularly in the furniture and textile sectors. According to a study carried out by the University of Padua and Legambiente, 52% of the companies interviewed that have invested in the Circular Economy sector have increased employment and the number of employees within the company (EPA, 2002 - Interreg Surface project data - Cooperativa Insieme).

Legambiente  
action during  
CESCY  
seminar  
in Campi  
Bisenzio



## 4.2. Circular Economy in the framework of the civil economy: Circular Inclusion, The many Rs and civil economy districts

Is Europe ready to transform its economic paradigm into a civil economy model capable of reducing the environmental impact and encouraging positive and constructive processes of social inclusion?

To be truly sustainable, development must necessarily be inclusive. Sharing the benefits of sustainable growth means not leaving people behind in conditions of marginalisation and allowing everyone to participate in the change while enjoying the advantages of the transition, both in terms of opportunities and in economic terms. To achieve this goal, we believe it is essential to work on the concept, born in Italy within the best-known environmental association at a national level, Legambiente, of Circular Inclusion, born from the encounter between social inclusion and Circular Economy.

Circular Inclusion is the principle according to which the benefits linked to environmental sustainability can and must guarantee the participation of everyone, especially the weakest sections of society, in public life with a view to inclusive growth capable of reducing inequalities and offering opportunities, also and above all work.

In fact, it is businesses, public bodies, cooperatives, schools, and students themselves that implement this need for change. Not only by addressing the climate crisis and ecological transition but, at the same time, by looking at social inequalities.

These elements faced together have given rise to the theme of circular inclusion, a necessary combination of environmental and social challenges, highlighted even more by the pandemic crisis. There are patchy experiences throughout Europe that implement inclusive and directed paths to Circular Economy". So, we need to insist on allowing these worlds to co-design new economic solutions.



## Community Circular Economies for the environmental, social, and cultural regeneration (Italy)

FINANCED BY MINISTERO DEL LAVORO E DELLE POLITICHE SOCIALI

[www.economiecircolari.eu](http://www.economiecircolari.eu)

The project aims to create favourable conditions for disseminating the culture and practice of the Circular Economy at a national level among companies, young people, public administrations and schools.

The hubs are created in all Italian regions and their activities focus on some supply chains with a high impact on lifestyles and social cohesion, and which are able to generate widespread income: cyclomechanics and sustainable mobility, regeneration of IT equipment, community gardens and gardens, repair of objects (upcycling), self-production, appliance repair.



## **“R” MODEL**

### **REFUSE**

Refusing is saying “no” to what we do not need. It is about not making, accepting or using unnecessary things. You can, for example, either create a common practice at the organisation level in order not to give out goodie bags at events or refuse goodie bags as an individual.

### **REDUCE**

In an emergency situation, such as the one in which we find ourselves, preventing the production of waste is essential. The reduction, therefore, appears to be the necessary solution to achieve the goal of an integrated, virtuous and sustainable waste cycle. Fundamental, in this scenario, is a reflection on the amount of packaging that accompanies our consumption choices which was estimated at 177.4 kg per inhabitant in the EU (data updated to 2019).

### **REPAIR**

Extending the life of objects is important to save economic resources and to prevent them from becoming waste. Repair, in addition to being a good habit, sustainable in every sense, is also an excellent solution to counter the rules of the “uncivilised” market as well as protecting the professions connected to them. In fact, handicraft works aimed at extending the life of common goods are dying out. With the project ECCO Circular Economy of Communities ([www.economiecircolari.eu](http://www.economiecircolari.eu)) we will be, among others, on the side of upcyclers, tailors, grinders, shoemakers and cyclomechanics, repairers par excellence.

### **RETHINK**

The Circular Economy community that we imagine is made up of second thoughts. Indeed, rethinking means reconsidering something (or someone) to correct it (or to complete it) or transform it (and improve it) and, at the same time, face the fear of marginalisation by committing to face them, thus rethinking one’s role as an active citizen.

### **REUSE**

Reuse represents a valid alternative to the disposable concept and is a further alternative to landfilling, thanks to the “concession” of a new appearance or an additional function to an object that has fulfilled its duty in its first life. Reusing means blending material, potential and creativity to offer a new opportunity to a quasi-refusal.

## RECYCLE

The recycling of waste is the set of operations that allow the reuse of specific materials contained in urban or industrial waste. Recycling is a last resort, the last thing we do before going for landfill or incineration. Together with the upstream reduction of waste and its reuse, it contributes decisively to energy saving and the reduction of polluting and climate-altering emissions.

## REGENERATE

Urban regeneration and human regeneration, collective processes whose protagonists are spaces and minds to “regenerate”, on the basis of collective processes designed to imagine collaborative cities capable of offering spaces, physical or mental, to those who live there. For our civil and Circular Economy projects, regenerating means reinterpreting lifestyles in a specific territory through a relational process that finds its strength in diversity and hospitality.

## REHABILITATE

The Circular Economy becomes a tool to “contain” fragility to allow individuals and communities to “become eligible” to carry out any activity. Rehabilitation, in a welcoming community, starts from the vision that accompanies the challenge, from the opportunity to build new networks of relationships and feel part of the processes of change.

## RESTART

Circular Economy can and must be considered an area for restarting processes and people, through the enormous resource that is active citizenship. The latter, in the encounter between the profit and non-profit worlds, can generate work and help restore dignity to people and economic sectors that can bring value starting from the inclusion and sharing of knowledge and objectives.

To facilitate this approach to these issues, it is useful to build favourable ecosystems capable of decreasing conflicts. A gymnasium to train the territories to the new necessary development path. In fact, the transition will not happen naturally, but must be accompanied by new skills, information sharing and an awareness of the path that is being undertaken.

You can find from diverse sources combinations with different number of R and new ones we didn't include, as repurpose and refurbish. These Rs mentioned above are very relevant for a youth worker supporting CE in a youth community. When teaching circularity in everyday life to youth, the first concepts work perfect for giving practical suggestions and tasks to shift actions and mindset. For more advanced reflection, bring them all to your process.

## **We must ask ourselves: Is the city where I live being prepared for the new challenges?**

There are several experiences working on this issue in Europe, in Italy, precisely in Campi Bisenzio where the training of the CESC project took place, the network between local authorities and administrations was born in response to the needs and potential of the territories and their communities: the Network of Districts of Civil Economy, a new reality promoted by Legambiente and the Municipality of Campi Bisenzio (Fi) from the stage of the Festival of Civil Economy.

The process that leads to the establishment of these districts is inspired by a different idea of territorial development that has found vision and concreteness in a working method based on the mapping of the needs and strengths of each community and on the adoption of tools, shared and innovative administration. The aim of the initiative is to strengthen social cohesion, create new job opportunities and, at the same time, improve the environmental quality of individual contexts.

In addition to the Municipality of Campi Bisenzio, Empoli, Lecco, Grottole (AP), Naples, Marigliano (CE), Pontecagnano (SA), the Province of Lucca and the mountain community of Castelli Romani and Prenestini have also established Civil Economy Districts. But there are several local administrations that have initiated similar processes.

A trend that, combined with the crucial role that territories and communities will have to assume in the country's ecological and digital transition, indicates that the time is now ripe for the establishment of a Network of Italian and European Civil Economy Districts.

In this scenario, it will be precisely the territories that will concretely measure themselves with the quality and effectiveness of the projects carried out: therefore, the birth of a Network of Civil Economy Districts is configured as a territorial ecosystem capable of resilience and innovation, of creating new opportunities and to attract resources, involving all the actors affected by this process of change, from local authorities to businesses, from the third sector to active citizenship, up to universities and schools.



*Festival of Civil Economy at Campi Bisenzio*

# 5. CESC Y and European Commission Frameworks of Competences

## Providing context to circular economy and sustainability competences for Youth

The plans have been set to reach a circular economy by 2050. The CESC Y framework is designed to prepare young people for this transition.

If you are a young learner or a youth worker that is already drowning in the abundance of competence frameworks out there, here you will see a contextualization of ours with others you might want to check. We are not here to confront you with new and fancy formulated competences, actually, a great deal of the CESC Y competences have already been taught for decades. In this article we show how these competences relate to three leading competence frameworks: Entrecomp, GreenComp and Life-Long Learning, all of them created by the research center of the European Commission to support learning. In this way we aim to support you in recognizing the competences that you already possess and show you how you may apply them in the transition to a CE.

In the following sections, each competence framework is briefly introduced, followed by a description of how it relates to the CESC Y model. Then some suggestions for further consulting the concerning framework are made. The chapter concludes with a schematic overview of the relation between the frameworks.



## 5.1. EntreComp

The EntreComp framework<sup>24</sup> was published by the Joint Research Center of the European Commission in 2016. The goal of the framework is to promote the development of entrepreneurial capacity of European citizens and organizations. Since its publication it has become a widely acknowledged framework to foster entrepreneurship.

The EntreComp framework consists of 15 competences, equally divided in three competence areas: 'Ideas and Opportunities', 'Resources' and 'Into Action' :



*The EntreComp Framework*

24 Full version of the EntreComp: <https://publications.jrc.ec.europa.eu/repository/handle/JRC101581>

## Connection to CESC

The circular economy requires new modes of production and consumption. Therefore, a great deal of taking initiative and entrepreneurship is needed in the transition to a CE. Both in the CE and in the EntreComp framework, entrepreneurship is defined in a broader sense than the conventional idea of setting up a business for the sake of profit. It is defined here as a ‘transversal competence, which applies to all spheres of life: from nurturing personal development, to actively participating in society, to (re)entering the job market as an employee or as a self-employed person, and also to starting up ventures (cultural, social or commercial)’ (p. 6).

The competences under ‘Ideas and Opportunities’ overlap to a great extent with the Core competences in the CESC model. Ethics and Vision are represented in both frameworks. Spotting Opportunities, Valuing Ideas and Creativity all relate to Lateral Thinking in the CESC model, since they are all about opening our minds to new approaches and ideas. If the concept of Lateral Thinking is a bit hard to grasp, it may help to see the related competences in EntreComp as different aspects of it.

The other competence areas show a less clear 1-to-1 translation with the CESC model (see Table on page 96). Mobilizing Resources and Financial Economic Literacy relate most to the Knowledge and Critical Understanding of Circular Business Models in the CESC framework. However, they include some detailed aspects that are not covered in the CESC framework. An asterix(\*) is used in table on page 96 to indicate that this competence reveals additional features.

## What’s more?

The EntreComp framework includes a comprehensive 8-scale progression scale ranging from value creation achieved through external support up to transformative value creation. For the CESC self-assessment tool only three main levels of proficiency have been selected that apply to all citizens: Potential, Aware and Advanced. The expert level in the EntreComp framework describes a level of performance that is well above average, and is therefore not included in the CESC model. The EntreComp model can be consulted as guidance to further advance in the competences mentioned in the CESC model. Besides, EntreComp defines 442 learning outcome statements that help to make the framework actionable.

## 5.2. GreenComp

The GreenComp framework<sup>25</sup> appears in 2022 as CESCO and has been developed by the European Commission as part of the European Green Deal to support learning about environmental sustainability.

The framework consists of 12 competences clustered in four interrelated competence areas:



*A visual representation of the GreenComp framework*

The aim of the framework is to support educational practitioners in shaping systemic and critical thinkers that think, plan and act with empathy, responsibility, and care for our planet. It is meant to provide a common reference to educators in the field of environmental sustainability. The essence of the framework can be summarized by the following definition of what sustainability means as a competence:

A **sustainability competence** empowers learners to embody sustainability values, and embrace complex systems, in order to take or request action that restores and maintains eco- system health and enhances justice, generating visions for sustainable futures.

25 Full version of the GreenComp report : <https://publications.jrc.ec.europa.eu/repository/handle/JRC128040>



## Connection to CESCOY

The GreenComp framework addresses the entire green transition that the EU is facing. The Circular Economy is only one dimension of this transition. Therefore, GreenComp can be seen as a broader framework than the CESCOY framework. It is broader in the sense that it 'aims to nurture ... the understanding that humans are part of and depend on nature' (p. 13). Even though this resonates with the zero waste concept of CE, the CESCOY model translates this broad aim to a practical approach: how do I produce, consume and dispose in a sustainable way?

Even though the scope of the frameworks is slightly different, the underlying competences are very similar. The 'Embodying Sustainability Values' & 'Envisioning sustainability futures' competence areas of the GreenComp framework directly relate to the Core competences of the CESCOY model. The competence areas 'Embracing complexity' and 'Acting for Sustainability' relate to the CESCOY Technical competences and Innov-Action competences respectively (see Table 1). The difference here is that the CESCOY model contextualizes the general sustainability competences. It gives a more tangible and specific definition to the broad concept sustainability.

## What's more?

Because of the broader nature of the GreenComp framework, it includes aspects that are not included in the CESCOY framework. First, there is the Political Agency competence to effectively navigate through the political system while advocating for sustainability policies. Youth focusing on Activating a Change can further build their advocacy here. Second, the aspect of social equity and justice is less represented in the CE narrative in general and therefore also not directly mentioned in the CESCOY framework.

The GreenComp framework is operationalized by providing Knowledge, Skills and Attitude (KSA) statements and a practical example for each competence.

### 5.3. Life-long learning

In May 2018, the Council of the European Union updated their recommendation for key competences on lifelong learning<sup>26</sup>. These are competences that are essential to all citizens for personal fulfilment, a healthy and sustainable lifestyle, employability, active citizenship and social inclusion.

The framework consists of 8 equally important competences that are interrelated, meaning that the developing aspects of one competence supports the development of other competences as well:



### A visual representation of the Life-long learning framework

26 Key competences for lifelong learning,: <https://op.europa.eu/s/wDyi>

## Connection to CESCOY

The relationship between the life-long learning and CESCOY framework is less straightforward than the other models mentioned in this chapter. Yet a lot of transversal competences such as critical thinking, problem solving, team work, communication, creativity, negotiation, analytical and intercultural competence are embedded in both frameworks. As a youth worker working with a variety of competence frameworks, it can be valuable to gain a deeper understanding of how these transversal competences develop when applied in different contexts.

Given the significant differences, the connection between CESCOY and the life-long learning framework is not represented in Table on page 96. Apart from a relation to communication and collaboration skills, the life-long learning competences Literacy, Multilingual and Cultural Awareness and Expression are not represented in the CESCOY framework.

The competences Digital and Mathematical, Science, Technology and Engineering do have a strong relevance to the Circular Economy. In the end, the use of digital technologies and technological innovation play an important role in the transition to a CE. However, these competences are related to specific jobs in the CE and are not necessarily to be acquired by all citizens. Therefore, they are not included in the CESCOY model.

This brings us to the Citizenship and Entrepreneurship competences of the life-long learning framework. The connection with CESCOY and entrepreneurship has been discussed with the EntreComp framework. As mentioned, entrepreneurship goes beyond setting up a business to make profit. The concept of active citizenship helps to understand this. Active citizenship is about fully participating in civic and social life, also in relation to global developments and sustainability. In the context of CE, this entails conscious consumerism, repairing equipment and sorting out waste.

The final life-long learning competence is called Personal, Social and Learning to Learn. It incorporates many elements that are represented in the CESCOY framework such as dealing with complexity, reflecting upon oneself and constructively working with others. What's more important is the notion of learning to learn. All competences that are mentioned in this paper "are developed throughout life, through formal, non-formal and informal learning in different environments, including family, school, workplace, neighbourhood and other communities" (p.5)

## What's more?

The life-long learning framework takes on a similar approach by describing the KSA dimensions of each competence. In the end, developing competences is a messy process that does not follow a clear and well-defined path of progression. Sometimes it is about finding the right words for describing your skills and qualities. Taking a look at different characterizations of competences might help to find the right narrative that allows you to grow.

## 5.4. The CESCYP framework in relation to other framework

CESCYP Framework	EntreComp	GreenComp
<b>Core competences</b> <ul style="list-style-type: none"> <li>Ethics in CE</li> <li>Motivation in CE</li> <li>Vision for CE</li> <li>Lateral Thinking</li> </ul>	<b>Ideas and opportunities</b> <ul style="list-style-type: none"> <li>Ethical and sustainable thinking</li> <li>Vision</li> <li>Valuing ideas</li> <li>Creativity</li> <li>Spotting opportunities</li> </ul>	<b>Sustainability values</b> <ul style="list-style-type: none"> <li>Valuing sustainability</li> <li>Supporting fairness*</li> <li>Promoting nature</li> </ul> <b>Sustainable futures</b> <ul style="list-style-type: none"> <li>Futures literacy</li> <li>Adaptability</li> <li>Exploratory thinking</li> </ul>
<b>Technical competences</b> <ul style="list-style-type: none"> <li>Critical understanding of CE, CBM, Sustainability</li> <li>Systems Thinking</li> <li>Design Thinking</li> <li>Participative project management</li> </ul>	<b>Resources</b> <ul style="list-style-type: none"> <li>Self-awareness and self-efficacy*</li> <li>Motivation and perseverance</li> <li>Mobilizing resources*</li> <li>Financial and economic literacy*</li> <li>Mobilizing others</li> </ul>	<b>Embracing complexity in sustainability</b> <ul style="list-style-type: none"> <li>Critical Thinking</li> <li>Systems Thinking</li> <li>Problem Framing</li> </ul>
<b>Innov-action competences</b> <ul style="list-style-type: none"> <li>Adapt and Flexibility</li> <li>Problem Solving</li> <li>Teamwork and Collaboration</li> <li>Communication</li> <li>Activate change</li> <li>Working in complex environments</li> </ul>	<b>Into action</b> <ul style="list-style-type: none"> <li>Taking initiative</li> <li>Planning and management</li> <li>Working with others</li> <li>Learning through experience</li> <li>Coping with uncertainty, ambiguity and risk</li> </ul>	<b>Acting for sustainability</b> <ul style="list-style-type: none"> <li>Individual initiative</li> <li>Political agency*</li> <li>Collective action</li> </ul>





2022

