

**COURSE:** HOW TO CONSUME IN CIRCULAR WAY - CIRCULAR ECONOMY IN EVERYDAY LIFE

**AUTHOR:**

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**THEME:**

- RENEWABLE ENERGY,
- SUSTAINABLE HOUSING,
- SUSTAINABLE FOOD SYSTEM,
- **CIRCULAR ECONOMY:**
  - DESIGN AND PRODUCTION,
  - **CONSUMPTION,**
  - RECOVERY AND WASTE MANAGEMENT.

**MODULE:** CIRCULAR ECONOMY

**SESSION:**

**LECTURE TOPICS:** CIRCULAR ECONOMY, CIRCULAR CONSUMPTION, CIRCULAR BEHAVIOURS

1. THE IDEA OF CIRCULAR ECONOMY
2. PROS AND CONS FOR CIRCULAR ECONOMY
3. HOW I CAN INCORPORATE THE CIRCULAR ECONOMY INTO MY DAILY LIFE?

**TARGET GROUP:** SEE MEMBERS, STUDENTS, HE TEACHERS

**INTEGRATION INTO CURRICULUM:** possible integration into the course „Sustainable consumption“ on Bachelors‘ and Masters‘ degree in the field of Social Economy; the element of the diploma seminar’s subject

**LEARNING OUTCOMES:** *maximum 5 learning outcomes based on Bloom’s Taxonomy in terms of students’ knowledge, comprehension, application, analysis, synthesis.*

- **Knowledge:** to explain the idea of circular economy and the process of its implementation,
- **Comprehension:** to understand how to implement the circular economy into everyday life,
- **Application:** to provide the achievable actions taken up by ourselves,
- **Analysis:** to analyse the benefits of taken up the circular behaviours,
- **Synthesis:** to transform non-circular behaviour into behaviour that fits into a circular economy.

**LECTURE OBJECTIVES:**

The aim of the module is to explain the concept of the Circular Economy (CE) and illustrate with real-life examples how it can be adopted as a sustainable way of thinking and acting in everyday life, especially in professional work of social economy entities.

**LECTURE DURATION:** 25 LESSONS HOURS (10 HOURS WITH TEACHER & 15 HOURS SELF-LEARNING)

**GREEN SKILLS ADDRESSED:** (KEEP RELEVANT ONES FROM THE LIST) DESIGN SKILLS, LEADERSHIP SKILLS, **MANAGEMENT SKILLS,** CITY PLANNING SKILLS, LANDSCAPING SKILLS, ENERGY SKILLS, FINANCIAL SKILLS, PROCUREMENT SKILLS, **WASTE MANAGEMENT SKILLS,** COMMUNICATION SKILLS

**SDGS ADDRESSED:** GOAL 12: RESPONSIBLE CONSUMPTION AND PRODUCTION, GOAL 13: CLIMATE ACTION.



LECTURE DEVELOPMENT

BEFORE: *preparation prior to the lesson*

CONSIDER HOW LONG IT TAKES TO FILL YOUR WASTE BIN. IF YOU SEPARATE YOUR RUBBISH, ESTIMATE HOW LONG IT TAKES TO FILL THE BINS FOR EACH FRACTION.

INTRO: *ideas for activating the student's background knowledge or ice breaker:*

USING A BRAINSTORMING TECHNIQUE, FIND 15 USES FOR AN EMPTY PLASTIC WATER BOTTLE. WHEN GIVING A USE SAY YOUR NAME FIRST.

DURING:

**1. THE IDEA OF CIRCULAR ECONOMY**

TIME	TYPE OF ACTIVITY	LEARNING ACTIVITIES	(VISUAL) AIDS
20 minutes	listening	Short presentation about social economy and green transition	PowerPoint presentation
30 minutes	reading	reading scientific materials about the history of circular economy <i>/i.e.: (Szczygieł, 2021a; Winans et al., 2017)</i>	hard copy or digital version of materials
15 minutes	writing	list the reasons for the emergence of the concept of a circular economy	Paper and pencil/computer
25 minutes	discussion	discussion in small groups about the for the emergence of the concept of a circular economy and preparing a rank form the most important to the least on flipchart and share with class	Paper and pencil/computer, flipchart
45 minutes	reading	reading scientific materials about the relation of circular economy with quality of life <i>/i.e.: (Szczygieł, 2020)/</i>	hard copy or digital version of materials



25 minutes	writing	find the newest data about circular economy indicators on Eurostat and Human Development Index on <a href="http://hdr.undp.org">hdr.undp.org</a>	Paper and pencil/computer
20 minutes	discussion	discussion in small groups about the current situation in the field of circular economy and quality of life; presentation the result for class	Paper and pencil/computer, flipchart
<b>2. PROS AND CONS FOR CIRCULAR ECONOMY</b>			
TIME	TYPE OF ACTIVITY	LEARNING ACTIVITIES	(VISUAL) AIDS
45 minutes	reading	reading scientific materials about the benefits and limitation of the circular economy /i.e. (Araujo Galvão <i>et al.</i> , 2018; Cavallo & Cencioni, 2017; Korhonen <i>et al.</i> , 2018)/	hard copy or digital version of materials
45 minutes	writing	Write the most important barriers and advantages for implementation of circular economy	Paper and pencil/computer,
45 minutes	discussion	discussion in small groups about barriers and advantages and prepare common SWOT analysis on the flipchart	Paper and pencil/computer, flipchart
<b>3. HOW I CAN INCORPORATE THE CIRCULAR ECONOMY INTO MY DAILY LIFE?</b>			
TIME	TYPE OF ACTIVITY	LEARNING	(VISUAL) AIDS

		ACTIVITIES	
45 minutes	reading	reading scientific materials about the circular behaviours /i.e. (Kowalska <i>et al.</i> , 2022; Lakatos <i>et al.</i> , 2016; Szczygieł, 2021b; Szczygieł & Kowalska, 2021; 2018; Korsunova <i>et al.</i> , 2021)/	hard copy or digital version of materials
25 minutes	writing	divide the behaviours into two groups: those that are personal and those that you can implement in your work; take the notes	Paper and pencil/computer,
65 minutes	discussion	discussion in small groups about the differences between the behaviours (in private and professional life); Answer the questions: - Which of them could be a new habit and which ones require a change in the way the organisation operates? - Will specific circular behaviour be required in social economy entities as a result of the rules governing such entities?	Paper and pencil/computer, flipchart
15 hours	homework	See below	Paper and pencil/computer,
BEYOND:			

**Homework:** Analyse your daily activities and make a list of all those in which you consume resources. Evaluate how many of these resources you are using unnecessarily and propose activities to reduce their use. Try to apply them for 2 days and make a list of the costs and benefits of your new way of doing things.

- Which of these activities would you like to undertake in the future?
- Which were the easiest and which were the most difficult to apply?
- Do the benefits of applying circular behaviour outweigh the costs?
- Is the limiting factor for undertaking circular behaviour financial costs or is it more of a habit?

**Assessment:** A written report after the assignment will be reviewed by the course leader.

**Recommended additional materials:** *any website or video material that can be provided as additional material, categorize them (website, video, podcast, etc. and include a description of the material, e.g. TED Talk about creative thinking and turning harmful pollution into something useful:*

### 1. Webpages:

<https://www.ellenmacarthurfoundation.org/explore/the-circular-economy-in-detail> - Principles of a circular economy

<https://www.mckinsey.com/business-functions/sustainability/our-insights/mapping-the-benefits-of-a-circular-economy> - Benefits of a circular economy

<https://youmatter.world/en/definition/definitions-circular-economy-meaning-definition-benefits-barriers/> - Principles of a circular economy

<https://ec.europa.eu/environment/circular-economy/> - EU action plan for a circular economy

[https://knowledge4policy.ec.europa.eu/foresight/topic/changing-nature-work/impact-shift-circular-economy\\_en](https://knowledge4policy.ec.europa.eu/foresight/topic/changing-nature-work/impact-shift-circular-economy_en) - Changing the impact of a circular economy

<https://www.circle-economy.com/resources/disruptors-how-circular-start-ups-can-accelerate-the-circular-economy-transition> - University of Utrecht Report (2019), “Disruptors: How can circular start-ups accelerate the circular economy transition”

Circle Economy. The Circularity Gap Report: An analysis of the circular state of the global economy. (2018)

### 2. Scientific papers (on-line available):

Araujo Galvão, G.D., de Nadae, J., Clemente, D.H., Chinen, G., de Carvalho, M.M. (2018). Circular Economy: Overview of Barriers, *Procedia CIRP*, 73, pp. 79-85, (DOI: <https://doi.org/10.1016/j.procir.2018.04.011>).

Cavallo, M., Cencioni, D. (2017). *Circular economy, benefits and good practices*. Edizioni Ambiente.

Korhonen, J., Honkasalo, A., Seppälä, J. (2018), Circular Economy: The Concept and its Limitations, *Ecological Economics*, 143, (C), pp. 37-46 (DOI: <https://doi.org/10.1016/j.ecolecon.2017.06.041>).

Korsunova, A., Horn, S., Vainio, A. (2021). Understanding circular economy in everyday life: Perceptions of young adults in the Finnish context. *Sustainable Production and Consumption*, 26, pp. 759-769 (DOI: <https://doi.org/10.1016/j.spc.2020.12.038>).



- Kowalska, K., Szczygieł, E., Szyja, P., Śliwa, R. (2022). *SDG Labs Research Report. Green skills in the field of Social Economy. The theoretical model of Socially Driven Green Labs programme*, Pedagogical University of Krakow (<https://sdglabs.uom.edu.gr/sdg-labs-research-report/>)
- Lakatos, E.S., Dan, V., Ionel Cioca, L., Bacali, L., Ciobanu, A.M. (2016). How Supportive Are Romanian Consumers of the Circular Economy Concept: A Survey. *Sustainability*, 8, pp. 789 (DOI: <https://doi.org/10.3390/su8080789>)
- Szczygieł, E. (2020). Circular economy as an answer to the challenge of improving the quality of life, *Hradec Kralove Economic Days 2020 Conference Proceedings*, 10, pp. 770-781 (DOI: <https://doi.org/10.36689/uhk/hed/2020-01-087>).
- Szczygieł, E. (2021a). Circular economy – a new concept or necessity, *International Affairs*, 74(3), pp. 147-168 (DOI: <https://doi.org/10.35757/SM.2021.74.3.12>).
- Szczygieł, E. (2021b). The circular behaviours undertaken by Polish households – a preliminary analysis of research results, *Studies of the Industrial Geography Commission of the Polish Geographical Society*, 35(4), pp. 188-204 (DOI: <https://doi.org/10.24917/20801653.354.12>).
- Szczygieł, E., Kowalska, K. (2021). Meeting halfway - understanding circular behaviour among households as a starting point for business practices, *European Research Studies Journal*, XXIV(3B), pp. 967-980 (DOI: <https://doi.org/10.35808/ersj/2550>).
- Szczygieł, E., Lwowska, A., Hajduk-Stelmachowicz, M., (2022). Between declaration and action – an analysis of the results of research on circular behaviours taken up by the households and perceived benefits from them, *Studies of the Industrial Geography Commission of the Polish Geographical Society*, 36(3), pp. 122-133 (DOI: <https://doi.org/10.24917/20801653.363.9>).
- Winans, K., Kendall, A., Deng, H. (2017). The history and current applications of the circular economy concept, *Renewable and Sustainable Energy Reviews*, 68(1), pp. 825-833 (DOI: <https://doi.org/10.1016/j.rser.2016.09.123>).

### 3. Scientific tools

- Szczygieł, E. (2020). *Circular behaviours in households and the quality of life of their inhabitants – research questionnaire*

