

1.2. Circular economy business models in food supply chain

1.2.3 How to create a circular economy business model in food supply chain

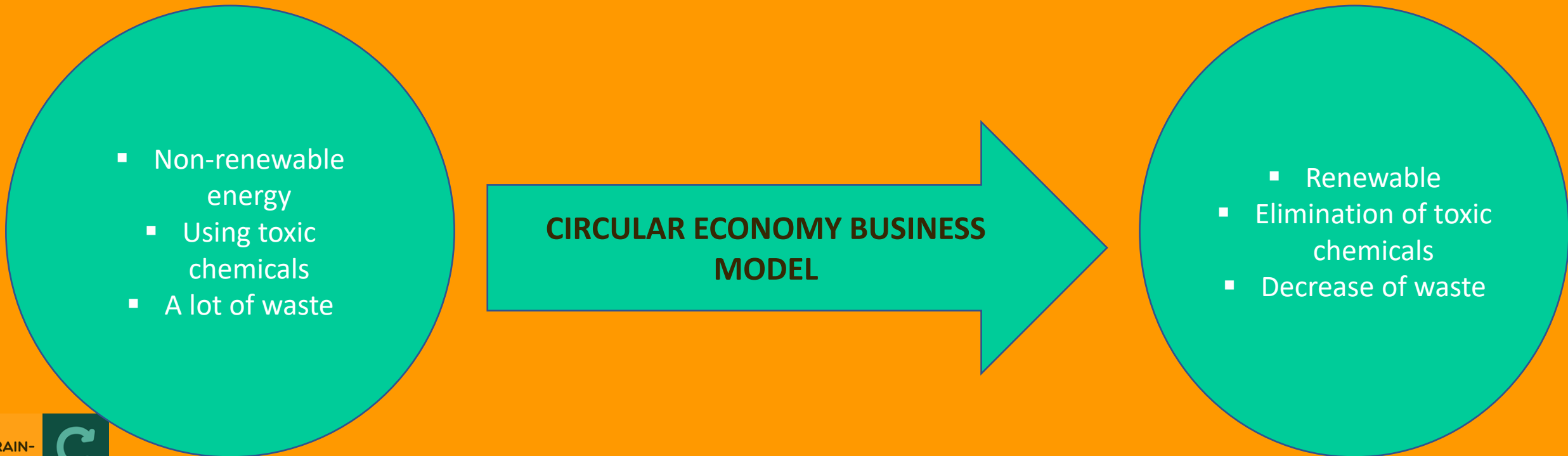


e-module 1 Circular economy and food supply chain
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CIRCULAR ECONOMY BUSINESS MODEL

The circular economy is not just a trend; it has evolved to a whole new vision that encompasses and moves around the treatment of resources, energy, value creation and entrepreneurship.



ReSOLVE framework

6 BUSINESS ACTIONS TO IMPLEMENT THE PRINCIPLES OF THE CIRCULAR ECONOMY:

Regenerate:

- ✓ the shift to renewable energy and materials
- ✓ returning recovered biological resources to the biosphere
- ✓ it aims to reclaim, retain, and regenerate the health of ecosystems

Share actions:

- ✓ maximizing utilization of products by sharing them among users
- ✓ it may be realized through peer-to-peer sharing of private products or public sharing of a pool of products
- ✓ reusing products as long as they are technically acceptable to use
- ✓ prolonging their life through maintenance, repair, and design-enhancing durability

Optimize actions:

- ✓ increasing the performance/efficiency of a product and removing waste in the production process and in the supply chain
- ✓ leveraging big data, automation, remote sensing, and steering.

Loop actions:

- ✓ keeping components and materials in closed loops

Virtualize actions:

- ✓ assume to deliver particular utility virtually instead of materially

Exchange actions:

- ✓ replacing old materials with advanced non-renewable materials and/or with applying new technologies (e.g., 3D printing)
- ✓ choosing new products and services”

DEVELOPMENT OF A MORE CIRCULAR MODEL



According to Mentink, the changes of business model components required for a more circular model to be developed are:

- ❑ Value proposition — products should become fully reused or recycled, which requires reverse logistics systems, or firms should turn towards product-service system (PSS) and sell performance related to serviced products
- ❑ Activities, processes, resources, and capabilities — products have to be made in specific processes, with recycled materials and specific resources, which may require not only specific capabilities but also creating reverse logistics systems and maintaining relationships with other companies and customers to assure closing of material loops
- ❑ Revenue models — selling product-based services charged according to their use
- ❑ Customers or customer interfaces — selling “circular” products or services may require prior changes of customer habits or, if this is not possible, even changes of customers.



Examples of “traditional” business models



These “traditional” business models have been tested and evaluated through several business ventures and they have been established as useful tools for entrepreneurship. Some examples of widely spread business models are:

- Manufacturer Model
- Distributor Model
- Franchise Model
- Retailer Model
- Subscription Model
- Bundling Model
- Product to Service Model
- Freemium Model



- ❖ All these models were not developed as circular and/or sustainable business models, so they cannot fully serve the purpose of circularity and especially in the food supply chain.
- ❖ It is necessary to compile and obtain comprehensive knowledge to design and implement circular business models because the existing business models have limited transferability.
- ❖ To create new and innovative business models for circular economy, there should be a combination of research conducted so far and personal experience in the field.
- ❖ The groups will consist of university students whose study field is in the agriculture sector.



SUGGESTED CIRCULAR BUSINESS MODELS: (1)



Activity 1: World Café

This is a good, simple, effective, and flexible exercise for hosting large group dialogue, brainstorm ideas and foster team building.

You will need: small, round tables, chairs, papers, post-it notes, color pens and coffee

1. The purpose of this activity is to brainstorm ideas about the content and the format of circular business models.
2. The trainer will divide the participants into groups of 4-5 people.
3. Each group will have in their availability one table, a paper, post-it notes, colored pens, and coffee.
4. Each group must find a new business idea or propose an existing one. This idea must include circular economy elements and belong to the food supply sector. Based on the idea chosen, the members of the group must indicate what characteristics and section the new business model will have. They can use their knowledge from other business models and/or from the previous parts.
5. All groups will share their ideas.
6. In the end, all participants should agree on the elements that must be present to a circular business model.

Activity 2:

Find your Values from Black to Blank

You will need: Big flipcharts papers, A3 papers, markers, trainer's presentation

1. The purpose of this activity is participants to visualize their ideation and present to their peers the first value propositions for their circular business model.
2. The trainer will divide the participants into groups of 4-5 people.
3. The participants will be called to fold an A3 paper so that they create 8 sections, and then they will have 10' to create images that depict the most important values for them.
4. All participants should start exchanging their personal values and the values related to their business with his/her group.
5. After finishing, each participant will have 3' to present within his team his storyboard with the 3 most important values for him/her, and then the team will see all the ideas together and try to come up with a common Vision - Mission – Value within 15' of time.
6. After this, they will use the flipchart paper and try to schematize their idea. They will have 20' for that, and in the end every team will present it in the classroom.

SUGGESTED CIRCULAR BUSINESS MODELS: (3)



Activity 3:

Find out the profile of
your customers!

You will need: A4 papers, pens, the Empathy Map template printed

Helpful material: Customer Empathy Map - YouTube

1. The trainer will divide the participants in groups of 4-5 people.
2. Each group will get one paper and a template of the Empathy Map.
3. Based on the previous business idea, each group has to write down the characteristics of their potential customers, using the Empathy Map to complete their customers' profile.
4. All groups will present their customers' profile and their map to the rest of the groups.



Activity 4:
PEST Analysis

You will need: color pens, PEST analysis template printed

Helpful material: PEST Analysis - YouTube, Intro to PEST Analysis (with PEST Examples)

1. The purpose of this activity is to create the PEST analysis for the business idea.
2. The trainer will divide the participants in groups of 4-5 people.
3. The groups should watch the video and check the example! Then, the trainer will give some information and/or help on how to complete the analysis.
4. Based on the business idea discussed so far, each group will get color pens and one PEST analysis template to fill the empty boxes of the template, taking into consideration the current situation in their field and that their business model addresses circular economy.
7. Each group has to present their work and try to convince the rest of the team why they should vote for their PEST analysis.
8. All the groups have to vote for the most well-structured PEST analysis.

SUGGESTED CIRCULAR BUSINESS MODELS: (5)



Activity 5: Evaluate your yesterday!

You will need: papers, examples of existing business models

1. The trainer will divide the participants in groups of 4-5 people.
2. Each group will be given papers and 2-3 different business models cases.
3. The group discusses the models they were assigned and take notes of which elements can be kept in the new circular business models and what should be adapted, based on their business idea discussed, on circular economy features and on the food supply chain.
4. Each group will present the final lists with the proposed characteristics for the new circular business models, according to the business models they investigated.
5. A final list with characteristics will be created with the most important characteristics by every team.

FutureLearn offers a very interesting course regarding circular business models: Circular Business Models for Sustainable Urban Food Systems.

- ❑ It is a 4-week free course which offers an accreditation, too.
- ❑ The participants will have the opportunity to explore the Circular Economy and its principles and the transition to Sustainable Urban Food Systems.
- ❑ They will recognize and evaluate challenges and opportunities when designing Circular Food Systems and they will be engaged in the process of developing and accessing Circular Business Models, thus developing skills and practical tools for this field.





TRAIN-CE-FOOD project

<https://trancefood.si/en/home-english>

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