



**CircularStart**

**CIRCULAR START INTO BUSINESS**

## **Manual for Instructors**

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## INTRODUCTION TO THE MANUAL

The aim of this manual is to **provide** trainers, instructors, coaches and tutors **with some guidelines** in order **to support start-ups and entrepreneurs when developing a business model towards circularity**, with circular economy (CE) considerations, using **CircularStart eLearning materials**.

To that objective, the manual presents the **main training topics (“units”)** of each of the **4 stages** of a business model development process, integrated and developed in the CircularStart eLearning platform, together with some **practical guiding questions** that will help trainers, instructors, coaches and tutors to know how to guide start-ups and entrepreneurs in each of these stages. At the same time, a **direct link is established between the training topics (“units”) and the main elements of the Circular Business Model Canvas**. So...:

- Which are the questions that instructors should address to entrepreneurs **to make them reflect on how to make their business model more circular?**
- At which **moment** of the business model development process?
- In relation to **which topics, units?**
- In relation to **which element of the circular business model canvas?**

Note that these guiding questions are **similar but different** from the questions already included in the Guidance Tool and the Business Model Canvas, as they are **intended to support reflection** in a complementary way.

This way, this document, following the same index of the CircularStart eLearning platform, is structured according to the **4 main stages of the business model development process**:

- Stage 1: Ideation
- Stage 2: Integration
- Stage 3: Validation
- Stage 4: Implementation

**For each of these stages**, the following elements are presented:

- Objectives
- Activities (units)
- Learning outcomes
- Guiding questions and link to the Circular Business Model Canvas

At the same time a **short introduction to the Guidance Tool** is presented; as the **starting point** and as an **easy way to structure the training contents** distributed in each of the four stages, together with the **CircularStart Assessment Tool**; to help start-ups to **holistically integrate and assess circularity** aspects of the business model, **integrated** as well as a training resource into the different modules and units.



## 1. GUIDANCE TOOL

The Guidance Tool is a 10-step process framework to implement CE and sustainability principles in the business model; it is the framework and the starting point that provides the basic structure for the modular eLearning course.

It is based on the ten Circular Economy Readiness levels (CERLs), aligned with both the well-established Technology and Market Readiness Levels (TRLs and MRLs). Similarly to the TRLs which estimate the maturity of technologies and MRLs which describe the process for entering the market, the CERLs provide a typical process from generic (e.g. identifying a relevant circularity strategy) to specific (e.g. implementing a circularity communication strategy).

| TECHNOLOGY READINESS LEVELS (TRLs)  | MARKET READINESS LEVELS (MRLs)     | CIRCULAR ECONOMY READINESS LEVELS (CERLs)               |
|-------------------------------------|------------------------------------|---|
| 0 Idea                              | Hunch                              | <b>Understand circularity</b>                           |
| 1 Basic Research                    | Basic Research                     | <b>Relate to circularity</b>                            |
| 2 Technology Formulation            | Needs Formulation                  | <b>Analyse existing circular solutions</b>              |
| 3 Needs Validation                  | Needs Validation                   | <b>Define a Circular Value Proposition</b>              |
| 4 Small Scale Prototype             | Small Scale Stakeholder Campaign   | <b>Analyse the circularity of your value chain</b>      |
| 5 Large Scale Prototype             | Large Scale Early Adopter Campaign | <b>Specify the circular value chain</b>                 |
| 6 Prototype System                  | Proof of Traction                  | <b>Analyse the Circularity Performance</b>              |
| 7 Demonstration System              | Proof of Satisfaction              | <b>Improve and Validate the Circularity Performance</b> |
| 8 First of a kind commercial system | Proof of Scalability               | <b>Communicate Circularity</b>                          |
| 9 Full commercial application       | Proof of Stability                 | <b>Maintain Circularity</b>                             |

The contents of the CircularStart learning program cover all 10 steps, within four different courses. This way, the defined 10 CERLs are aligned with and divided into 4 training modules; each module corresponds to each of the 4 stages of the business model development process described in the introductory section: Ideation, Integration, Validation and Implementation.

At the same time, the guidance tool provides some guiding questions which are treated in the referenced sections of the course. By browsing through the questions you can see which contents of the learning program are most relevant for a start-up at her/his current development stage. However, it is recommended to go through the learning program from the beginning (from the first stage), as the contents are designed in a progressive manner. It gives the start-up the opportunity to review each of the elements of the business model canvas, from a circularity perspective, as an iterative process.



| CERL   | GUIDING QUESTIONS   | RELATED UNITS                                  | BMC FOCUS   | COURSE MODULE   |
|--|---|--|---|---|
| 0 Understand circularity                           | Which Sustainable Development Goals (SDGs) exist?<br>What is a Circular Economy and why do we need it?<br>What are the drivers and enablers of a Circular Economy?  | Unit 1<br>Unit 2<br>Unit 3                     |   |   |
| 1 Relate to circularity                            | How do Circular Economy and SDGs relate to your idea?<br>Other than economic value, does your activity also create environmental and societal value?  |  |    | <b>Ideation</b><br><a href="#">go to the course</a>       |
| 2 Analyse existing circular solutions              | What kind of circular business models and strategies can be distinguished?<br>What are the economic opportunities and financial implications?<br>How can the circularity and sustainability of business models be analysed and measured?                    | Unit 4<br>Unit 5<br>Unit 6                     |   |   |
| 3 Define a Circular Value Proposition              | How are you able to provide circularity to your customer segments?<br>How can you design a Value Proposition, which includes strategies which narrow, slow, close and/or regenerate resource flows?   | Unit 7<br>Unit 8                               |   |   |
| 4 Analyse the circularity of your value chain      | What is a circular value chain and how can it be assessed?<br>With which strategies can a circular value chain be achieved?<br>What are the key activities making your value chain circular?<br>What role could reverse logistics play in your value chain? | Unit 1<br>Unit 2<br>Unit 3<br>Unit 4<br>Unit 5 |    | <b>Integration</b><br><a href="#">go to the course</a>    |
| 5 Specify the circular value chain                 | How can you identify, prioritize and integrate additional stakeholders needed in order to make your value chain circular?   | Unit 6<br>Unit 7                               |   |   |
| 6 Analyse the Circularity Performance              | How can you identify relevant circularity and sustainability indicators?<br>How can you use the CircularStart Assessment Tool to measure circularity?   | Unit 1<br>Unit 2                               |    | <b>Validation</b><br><a href="#">go to the course</a>     |
| 7 Improve and Validate the Circularity Performance | How can you continually improve and validate the circularity and sustainability performance?  | Unit 3   |   |   |
| 8 Communicate Circularity                          | What are the benefits of communicating circularity?<br>How can you best communicate your circular approach to customers?<br>Which tools and standards exist for communication?  | Unit 1<br>Unit 2                               |  | <b>Implementation</b><br><a href="#">go to the course</a> |
| 9 Maintain Circularity                             | How can you maintain, monitor and improve the circularity efforts over time?  | Unit 3<br>Unit 4                               |   |   |

It can be found here: <https://www.circularstart.eu/guidance-tool/>



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## 2. eLEARNING TRAINING COURSE - <https://learn.circularstart.eu/>

### 2.1. 4 STAGES OF THE BUSINESS MODEL DEVELOPMENT PROCESS

#### 2.1.1. IDEATION STAGE

In the ideation stage, the start-up/entrepreneur will explore and come up with as many ideas as possible, focusing on quantity of ideas rather than on quality. Possible solutions will take into account CE by thinking at the impact of the idea on the environment and on the society as a whole. Start-ups will think about the gains that CE can bring to their business, potential clients..., in order to improve the value proposition to offer.

#### Objectives of Ideation Stage:

- To identify the customer segments and their needs, and how to address them in a circular and sustainable way.
- To define the mission, vision and values of a project, from a circularity and sustainability perspective.
- To define a first circular value proposition.

#### Activities to define a circular value proposition:

**Unit 1 - Sustainable development:** To reflect on whether the initial idea is aligned with the sustainable development and sustainable development goals.

**Unit 2 - Circular economy:** To reflect on whether the initial idea is aligned with circular economy principles.

**Unit 3 - How to capture and retain value through circular economy:** To understand how to capture and retain value through circular economy.

**Unit 4 - Circular business models and circular business strategies:** To understand what a circular business model is and to know about circular business strategies.

**Unit 5 - Economic opportunities and financial implications – from linear to circular:** To understand the economic opportunities and financial implications of moving from linear to circular businesses.

**Unit 6 - Analysis of circular and sustainable business models:** To understand specificities to consider when working in a circular economy.

**Unit 7 - The circularity performance:** To know how to identify influence factors that promote a more circular business.

**Unit 8 - Circular Business Model Canvas – customer segments:** At this unit the start-up will be able to fill the customer segments field of the Circular Business Model Canvas.



**Unit 9 - Circular Business Model Canvas – value proposition:** At this unit the start-up will be able to define the initial circular value proposition of the business idea.

**Learning outcomes:**

- To understand the alignment of the initial idea of the project with the Sustainable Development Goals
- To understand the alignment of the project with the Circular Economy Principles.
- To understand how to capture and retain value through circular economy
- To select the Circular Business Strategies that best fit the project
- To understand and select the sustainability and circularity elements of the Business Model
- To identify the sustainability impacts the project may have and the lever for improvement
- To (re)identify the customer segment the project is addressing according to the sustainability and circularity dimension
- To (re)build the value proposition the project is offering according to the sustainability and circularity dimension

**Guiding questions and link to the Circular Business Model Canvas:**

The following table presents a proposal of guiding questions that instructors may use to guide start-ups and entrepreneurs when defining activities and elements of their business idea, during the Ideation Stage. These guiding questions are classified according to each learning unit, and directly linked to some of the elements of the Circular Business Model Canvas. **Note that only close direct links are specified.** However due to the interaction between all the elements, **links to other elements may exist in many cases; even links to the canvas as a whole** (not specified in table below).

| Guiding questions   | Specific Link to the Circular Business Model Canvas |
|---|---|
| <b>UNIT 1: Sustainable development</b>  |   |
| <ul style="list-style-type: none"> <li>- How does your business idea relate with ecological sustainability?</li> <li>- And with social sustainability?</li> <li>- Can you identify elements of your business idea that have a positive and a negative influence on sustainability (environmental and social)?</li> <li>- Can you explain how your business idea contributes to Sustainable Development Goal (SDG) 12 - Responsible consumption and production?</li> <li>- Can you relate your business idea with other SDGs?</li> </ul> | Value proposition                                   |
| <b>UNIT 2: Circular economy</b>   |   |
| <ul style="list-style-type: none"> <li>- Is your initial idea related to any key Circular Economy principles?</li> <li>- Which Circular Economy strategies do you follow with your business idea (Narrow, slow, close, regenerate resource flows; supporting strategy: inform)?</li> </ul>  |   |



- What elements of the BMCanvas are affected most in comparison to a linear solution? What needs to be adapted or changed? Who would be affected?
- Which strategy would offer a high reduction potential for resource use?

**UNIT 3: How to capture and retain value through circular economy**

- Does your activity create value that is different from economic value? Are you creating value for the environment and for society?
  - What other types of value does your activity generate?
  - Do you identify any uncaptured value? Any value that is missed or destroyed when developing your activity? At which stage of the lifecycle of your product or service?
  - Do you identify opportunities to transform uncaptured or lost (missed/destroyed) value into new or additional value?
- Value proposition

**UNIT 4: Circular business models and strategies**

- Do you think you could maintain and extend the value created by your business idea as long as possible?
  - How could you do that? During the design phase (Uphill)? During the use phase (Tophill)? During the end-of-life phase (Downhill)?
  - And how the resource flows would be modified? (slowing, narrowing, closing regenerating)
  - Do you feel identified with some Circular Start-up business model?
- Value proposition

**UNIT 5: Economic opportunities and financial implications**

- Does your Circular Business model lead to an increase of the revenue streams, reduction of production costs or both?
  - Please think about how you could increase your revenue streams or reduce production costs through your circular business model.
  - Does any of the available financial tools encourage the revenue stream increase or the production cost reduction of your business? If yes, how could you implement them?
- Value proposition

**UNIT 6: Analysis of circular and sustainable business models**

- Does your business model satisfy or benefit other stakeholders than customers?
- Does your business model affect any stakeholders positively?, and does it affect them negatively?
- Does your business model have an impact on the environment? Is this impact negative or positive? In which field of BMcanvas does it fit best?
- Does your business model have an impact on society (working conditions, health, etc.)? is this impact negative or positive? In which field of BMcanvas does it fit best?





**UNIT 7: Circularity performance**

- How to create positive impacts not only for you but also for other stakeholders, like partners, customers or society as such?
- How can you shift from negative impacts to positive ones (environmental, economic, social?)
- Do you have an idea of the circularity performance of your business? Value proposition
- What are the influencing factors for promoting a more circular business?
- Have you identified key performance indicators (KPIs) regarding the circularity of your business idea? Are they SMART?

**UNIT 8: Circular Business Model Canvas - Customer segments**

- What product or service are you creating and for whom?
- What problem are you solving?
- Did you validate your idea on the market? Customers Segments
- Have you been able to include circularity in your business model? How? Value proposition

**UNIT 9: Circular Business Model Canvas - Value proposition**

- Is your value proposition exploring a new market, where competition does not yet exist?
- Have you identified the competitive factors of your business?
- How can circular economy principles support you in exploring new markets, outperform competitors, lower costs and create high value?
- Does your value proposition go beyond creating value to the company and its clients and include other stakeholders? Value proposition
- Does your value proposition create environmental and social value? Customer segments
- Does your value proposition combine strategies to narrow, slow, close and regenerate resource flows?
- Which circular business strategy(ies) are integrated in your value proposition?
- Besides generating value, does your value proposition include multiple environmental and social goals?



### 2.1.2. INTEGRATION STAGE

At this stage, the start-up/entrepreneur will learn to analyse the circularity of the value chain, in order to identify opportunities for circularity performance and therefore, to specify a business model based on a circular value chain.

#### Objectives of Integration Stage:

- To select the key resources that will make the business and the value chain circular
- To define the key activities to integrate circularity in the business and the value chain
- To identify and prioritise the key partners that will make the business and value chain circular
- To define the key channels to guarantee the circularity of the value chain
- To establish the type of customer relationship needed to integrate circularity in the business and value chain

#### Activities to specify a circular value chain:

**Unit 1 - What is a circular value chain?:** To understand what a circular value chain is and why it is important to make a business project circular. As a first step, the start-up should map the activities of the value chain to have a clear idea of the starting point. It will be helpful as well to understand the benefits of a circular value chain, as well as the drivers and barriers to make it possible.

**Unit 2 - Analyzing the circularity of your value chain - Resources:** To analyse the key resources and material flows (ins and outs) of those mapped activities, to spot opportunities for a circular approach. The start-up will get to know how to map and analyze the material flows and will reflect on that.

**Unit 3 - Circular value chain strategies:** To know about the different circular value strategies that could be applied to a business idea; from industrial symbiosis, to take back management schemes, virtualization, or alliances and cooperation with customers and other stakeholders among others.

**Unit 4 - Which are the key activities that can make your value chain circular?:** To reflect on the key activities that can make the value chain circular is another important aspect at this stage. The start-up will learn about the different circular design strategies and how they are linked to circular business strategies. At the same time, the start-up will be inspired by current trends on circular technologies, processes and materials that could be integrated in a business idea.

**Unit 5 - Reverse logistics as key element for circular value chains:** To understand what reverse logistics are and why they are important when developing some kind of circular business strategies, as they support the circularity of value chains through the implementation of take-back management schemes.

**Unit 6 - Mapping and involving stakeholders in your circular value chain:** To map relevant stakeholders and key partners in order to prioritise and select those that will help a business and value chain to become circular.

**Unit 7 - Now define your Business Model Canvas!** Finally, from all this analysis, the start-up will be able to define five out of the nine Circular Business Model Canvas Elements:



- The key activities to develop to make a start-up circular
- The key resources needed to make a start-up circular
- The channels to be used to make a start-up circular
- They key partners needed to make a start-up circular
- The relationships to be established with customers to make a start-up circular

**Learning outcomes:**

- To understand what a circular value chain is and why it is important
- To know the different circular value network strategies that could be applied to a project
- To identify and prioritise key stakeholders and key partners that may support the integration of circularity
- To (re)evaluate the resource flows and assess the circularity of the value chain to identify hotspots and leverage points for a circular value chain
- To know about different design strategies and select the ones that best fit
- To be aware of and to get inspired by circular technologies, processes and materials to realise a circular economy strategy and make the value chain circular
- To understand the role of reverse logistics to make the value chain circular
- To re(build) the Business Model Canvas design in order to integrate circular economy requirements
- To get ready to test/prototype the project with regard to technology and market readiness levels in the next validation stage

**Guiding questions and link to the Circular Business Model Canvas:**

As described in Ideation Stage, the following table presents a proposal of guiding questions that instructors may use to guide start-ups and entrepreneurs when defining activities and elements of their business idea, during the Integration Stage. These guiding questions are classified according to each learning unit, and directly linked to some of the elements of the Circular Business Model Canvas. Same considerations already mentioned in Ideation Stage apply in this case.

| Guiding questions   | Specific Link to the Business Model Canvas      |
|---|---|
| <b>UNIT 1: What is a circular value chain?</b>  |   |
| - Which are the main activities of your value chain? Is your value chain, linear or circular? Why?  | Key activities<br>Key partners<br>Key resources |
| - Where in the value chain - in relation to which activities, links - do you identify the value creation opportunities that you thought of in Unit 3 of the Ideation Stage? |   |
| - Which are stakeholders involved in each of the activities of your value chain?  |   |
| - Would a circular value network support the implementation of your activity in a more circular/sustainable way?  |   |



- Which would be the benefits that you would get transiting from a linear value network to a circular value network? Would you acquire new knowledge and capabilities? New ways of doing things? A better performance (technical, financial...)? New markets?
- Which type of stakeholders should be involved in this network, in order to create more circular value along the value chain? (value that will last longer)
- Taking into account the 4 archetypes of supply chains and loops defined by Ellen Macarthur Foundation, which is the archetype that best describes your activity?
- Could you move to a more circular and sustainable archetype? How?

**UNIT 2: Analyzing the circularity of your value chain - Resources.**

- What are the key activities and main steps of providing your solution?
- What key resources (inputs) are needed for each activity and step? Can you source them in a more sustainable and circular way (e.g., local resources, recycling material, re-use of components or products)?
- What outcomes do you produce? Products or services? What about emissions and waste (outputs)?
- Can you spot any losses and inefficiencies? Is there uncaptured value along your value chain?
- How can one gain profit from uncaptured or lost values? Can you spot opportunities for value capture?
- Try to (re)evaluate your resource flows to identify hotspots and leverage points for a circular value chain.

Key activities  
Key resources

**UNIT 3: Circular value chain strategies**

- In case you already defined your value chain: do you find any link or relationship between the activities of your value chain and the different circular value chain strategies?
- Is any of the six circular value chain strategies presented applicable to your business idea?
- Do you think that the circularity of your business idea could be improved thanks to the implementation of any of these strategies? Which one/ones? How would you do that? What would involve the implementation of those strategies that could work well for you?
  - o Establishing a take-back system to return back a product for maintenance or for disposal?
  - o Participating in an industrial symbiosis project?
  - o Delivering a service or sharing a product or other resources through a sharing platform?
  - o Offering a virtual or digital product or a service?
  - o Involving customers as a necessary key stakeholder and not just the final target?
  - o Focusing on your local environment?

Channels  
Customer relationships



- Through which channels are you reaching your customers? Which channels could work best to make your value chain more circular?
- Are customers contributing actively to the implementation of your business idea? How could they contribute?
- Whom would you need to collaborate with in order to implement these circular value chain strategies that could support the circularity of your business idea?

**UNIT 4: Which are the key activities that can make your value chain circular?**

- Do you find any link between your business model idea or strategy and the different circular design strategies presented?
- Could any of the presented design strategies improve the circularity of your business idea? Which of those strategies could work best for you? Those strategies focused on ....
  - o slowing resource flows?
  - o narrowing resource flows?
  - o closing resource flows?
  - o regenerating resource flows?
- What elements of the design process would you change or what would you do in a different way?
- In which stages of the lifecycle of your product or service would you focus? In the pre-use (uphill), use (tophill) or after-use (downhill) phases?
- Can you provide a service to improve the circularity of your product or service? How?
- What influence do the materials and/or processes of your product or service have on circularity?

Key activities

**UNIT 5: Reverse logistics as key element for circular value chains**

- Could reverse logistics improve the circularity of your business idea? Why?
- In case reverse logistics would work well for your business idea; would centralised or decentralised reverse logistics would be more convenient? Why?
- Which elements of the reverse logistic infrastructures should you consider?
- Which types of revalorisation would you consider? What could you recover in each case?
- From the 3 reverse logistics archetypes defined by the Ellen Macarthur Foundation, would any of them fit well in your business idea?

Channels

**UNIT 6: Mapping and involving stakeholders in your circular value chain**

- Do you count on the necessary capabilities internally in order to make your business idea more circular?
- Do you need additional capabilities and resources from other stakeholders? In which of the activities of the value chain?
- Do you know what you need from whom?
- Which is the role of these stakeholders to make your value chain more circular? How can they contribute? Which activities should

Key partners



they perform? In the pre-use (uphill), use (tophill) or after-use (downhill) phases?

- Are all the stakeholders equally important or relevant to make your business idea more circular?
- Do you identify links between these stakeholders?
- Which are the stakeholders you should prioritize?
- Can you involve them? Do you identify any barrier to get them on board?
- What elements would support the necessary involvement from them? (enablers)
- How do you plan to involve those stakeholders that you consider the most relevant to improve the circularity of your business idea?

#### **UNIT 7: Now define your Business Model Canvas!**

Practical unit to define 5 elements of the Business Model Canvas

Key resources  
Key activities  
Key partners  
Channels  
Customer relationships



### 2.1.3. VALIDATION STAGE

At validation stage the start-up will learn to validate and improve the business models' sustainable and circularity performance in relation to the next execution progress steps in Market Readiness Level (MRL), Technology Readiness Level (TRL) and Circularity Readiness Level (CRL). The aim of this stage is to reach market/solution acceptance and fit, gain a final value proposition definition and position the business in the market environment.

#### Objectives of Validation Stage:

- To gain quantitative evidence of market demand for a more circular and sustainable solution - Proof of acceptance of the solution
- To gain insight on the level of satisfaction for the solution and how circularity and sustainability aspects have contributed
- To gain evidence for the technical/operational success of the solution - does the more circular and sustainable solution work/work better than already existing solutions?
- To gain a full circular and sustainable business model including pricing verified on customers like Market Readiness Level (MRL)
- To gain inputs for shaping the value chain and how the start-up is cooperating with partners in a more circular and sustainable manner

#### Activities to match circular value within prototyping, demonstration and product/market fit:

**Unit 1 - Identifying relevant circularity & sustainability indicators:** To identify fitting circularity indicators corresponding to the defined key performance indicators (KPIs). Get a glimpse on circularity assessment methods and the CircularStart Indicator List to be applied on your solution.

**Unit 2 - Assessing the circularity & sustainability performance of your Business Model:** To assess the circularity and sustainability performance with the support of the CircularStart Assessment Tool. To interpret the results, as well as to integrate them into the start-up's KPIs.

**Unit 3 - Improving and validating the circularity & sustainability performance:** To improve the circularity and sustainability performance by adjusting the business model design.

#### Learning outcomes:

- To be able to apply a suitable assessment method based on selected indicators and integrate the results into the KPIs to follow on
- To understand the sustainability/circularity leverages of the business model, its positive benefits and negative impacts, its value and options to improve
- To know how to define, evaluate, and prioritize a sustainable vision and mission for the start up in the context of economy and social rationality over time



- To acquire input on delivering customer demand with a more circular internal value chain and alternative forms of cooperating
- To be able to execute selected sustainability/CE performance indicators and results
  - o To reach market industrialisation acceptance for the e.g. service/product/technology up to market and sales certification (TRL)
  - o To reach market readiness at pre-commercial sales level (MRL)
  - o To finalize/define the value proposition and its positioning in the market environment and its value chain
- The start-up is able to identify, specify, validate and improve the sustainability and CE performance of the business model and its readiness in execution.
- The start-up has gathered enough background information about the prototype/demonstration system (e.g. resources used, manufacturing processes, transports, etc.) to get input/output data for CE assessment methods

### Guiding questions and link to the Circular Business Model Canvas:

As presented in Ideation and Integration Stages, the following table proposes a list of guiding questions that instructors may use to guide start-ups and entrepreneurs when defining activities and elements of their business idea, during the Validation Stage. These guiding questions are classified according to each learning unit, and directly linked to some of the elements of the Circular Business Model Canvas. Same considerations already mentioned in previous stages apply in this case.

| Guiding questions  | Specific Link to the Circular Business Model Canvas |
|--|---|
| <b>UNIT 1: Identifying relevant circularity &amp; sustainability indicators</b>                          |   |
| - How to select relevant circularity & sustainability indicators?  |   |
| - What is relevant for a Circular Business Model? How to compose it?                                     |   |
| - How to measure impacts & performance?  |   |
| - How to measure the circularity performance?  |   |
| - Which indicators apply to my business model?   |   |
| - How central is circular economy or sustainability to your value proposition?                           | To the whole canvas as a whole                      |
| - To what extent are processes set up to support a circular business model?                              |   |
| - To what extent is suitable infrastructure in place to support a CE business model?                     |   |
| - To what extent do you engage with suppliers to increase sourcing based on circular economy principles? |   |





**UNIT 2: Assessing the circularity & sustainability performance of your Business Model**

- How to work with the Circular Start Assessment Tool?
- What is relevant for start-ups?
- What is feasible to answer and assess?
- What to focus on in different development stages?
- What if I do not have enough data yet for the assessment of my business idea/business model? To the whole canvas as a whole
- Do I perform better than the average in terms of sustainability and circularity?
- How far or how close you are on your way towards a more circular solution?

**UNIT 3: Improving and validating the circularity & sustainability performance**

- Does your business model work on the market?
- Does the more circular & sustainable solution work?
- Does it work better than already existing solutions?
- MRL – Market Readiness Level: Has your solution already reached market fit? Are customers willing to pay for it?
- TRL – Technology Readiness Level: Is it ready from the technological point of view? Does it work and fulfil defined requirements?
- CERL – Circular Economy Readiness Level: To what extent does your solution contribute to the Circular Economy Principles?
- Do you create benefits only for you or other stakeholders as well? E.g. do you create value for local communities? Cost structure
- Do you create long term value or only short-term benefits? Revenue Streams
- Are there incentives to save resources? To the whole canvas as a whole
- How might your business model help create other types of value? Human, social or natural capital?
- How might new services increase revenue from existing products, assets or your delivery systems?
- Can you identify uncaptured value like avoidable waste, or unused opportunities for value creation?
- Which costs could be shared or lowered through other users and partners? Which measures to be taken to reduce financial risks?
- What eco-social costs are you creating, how could you lower them and find balance for a fair distribution?



#### 2.1.4. IMPLEMENTATION STAGE

The implementation stage is the culmination of the entire process developed in the previous stages, where the entire circular and sustainable business model was structured. The implementation will consist of structuring and taking advantage of an entire communication strategy, which should also be based on ethical, transparency and sustainability values. In addition, it is essential to define how to execute, monitor and innovate the business model.

##### Objectives of Implementation Stage:

- To have a consistent, valuable circular business model which can continuously monitored and improved with specific sustainability/circularity performance indicators/measures (KPIs)
- To define and implement a suitable communication strategy (sustainability labels, marketing, etc.)
- To establish and validate the channels to maintain the sustainability/circularity-oriented business model.

##### Activities to implement a circular solution:

**Unit 1 - Introduction to communicating circularity:** To be aware of the importance of communicating and to know the basic principles of communicating the circularity. Currently, to justify the existence of the business, it is not only important to do the things well and to gain the trust of stakeholders in order to achieve the intended market share. There must be an effective and ethical process to communicate what the company develops and how it positively contributes to society.

**Unit 2 - Defining a communication strategy for circular economy:** To define a circularity communication strategy, not only from the inside out, but also within the company itself. Employees and departments must be aligned to achieve the same goal. The main objective is to be aware of the dynamics of change, but mainly to feel that they are a fundamental part of the whole gear and that work towards the same goal.

**Unit 3 - Tools to communicate circularity to your customers and other stakeholders:** To identify the available set of tools and instruments to communicate that have a systemic approach and that consider the different stages of the life cycle, the value chain, towards sustainability and circularity.

**Unit 4 - Monitoring your circular business model and your organization:** To adjust the indicators system to evaluate the business model and to see how well prepared the start-up is to continue working with circular economy and adopting its principles.

##### Learning outcomes:

- To understand the importance of communicating the circularity of the business model
- Being able to define a well-developed communication strategy
- To be acquainted with tools to communicate circularity, including certification



- To understand the need to do a final evaluation of the business model using indicators previously defined and extending the object of the evaluation from the business model to the company/organization
- To be familiar with tools and frameworks for that purpose
- To be able to close the cycle and, if applicable, restart the process of innovating the business model and building upon what the start-up has learned with this course.

### Guiding questions and link to the Circular Business Model Canvas:

This last table presents a proposal of guiding questions that instructors may use to guide start-ups and entrepreneurs when defining activities and elements of their business idea, during the Implementation Stage. These guiding questions are classified according to each learning unit, and directly linked to some of the elements of the Circular Business Model Canvas. Same considerations already mentioned in all previous stages apply in this case.

| Guiding questions   | Specific Link to the Circular Business Model Canvas |
|---|---|
| <b>UNIT 1: Introduction to communicating circularity</b>  |   |
| <ul style="list-style-type: none"> <li>- Which are the benefits you would get by communicating in an adequate and effective way? And by communicating the circular approach of your business?</li> <li>- Benefits for your product or service? For your customers? For other stakeholders? For society?...</li> <li>- Is your communication strategy following the principles of communication for circular economy? How?</li> <li>- Are you doing greenwashing? Why?</li> </ul>  | Channels  |
| <b>UNIT 2: Defining a communication strategy for circular economy</b>   |   |
| <ul style="list-style-type: none"> <li>- Why is it important to define a strategy focusing on communicating the circularity aspects of your business?</li> <li>- The definition of a communication strategy can be a systematized process in your startup. Which are the main key steps to keep in mind when developing a circular economy communication strategy?</li> <li>- The transition to a circular economy offers opportunities to improve and innovate the businesses models. how can we communicate it efficiently?</li> <li>- To which aspects should you pay particular attention and consider in the definition of your marketing approach?</li> </ul> | Channels<br>Customer relationships                  |
| <b>UNIT 3: Tools to communicate circularity to your customers and other stakeholders</b>  |   |
| <ul style="list-style-type: none"> <li>- Think about the customers and other stakeholders of your business model and product. Think also about the environmental and social benefits you bring to each of them.</li> </ul>  | Channels<br>Customer relationships                  |



- Reflect on each key element of the Circular Economy Communication Canvas
- Is there a standardised instrument to get the message across? If not, apply the principles of self-declarations according to ISO 14021 and you could even use a symbol. Have a look at how Bovea et al., 2018 suggests doing this.

#### **UNIT 4: Monitoring your circular business model and your organization**

- What is the need and what are the main benefits of a business monitoring system?
- Why is it so important to set objectives and goals with a time horizon?
- What types of monitoring methods can and should be used to make the business more sustainable and circular?
- Is there a method that can be applied to your company? Or will it have to adapt to your needs? To the whole canvas as a whole
- What are the most important KPIs for your company from a sustainability perspective?
- How should the relevant information be measured, monitored and adjusted to a continuous improvement process oriented towards sustainability and circularity?



## 2.2. CIRCULARSTART ASSESSMENT TOOL

The CircularStart Assessment Tool goal is to help start-ups holistically integrate and assess circularity aspects of the business model. It has been developed as part of the online course and is integrated into the different modules and units. Contents about the tool have been specifically introduced in Module 1 (Unit 7) and Validation 3 (Unit 1 and Unit 2).

The tool is composed of 3 sections:

- Introduction
- Assessment Tool
- Result overview

The **Introduction section** presents the aim of the tool, and main ideas to better understand how it works:



Welcome to the Circular Start Assessment Tool!

Bevor starting the assessment we kindly ask you to read the short introduction.

The Circular Start Assessment Tool - CSAT - supports you in assessing the circularity & sustainability performance of your business model. You can do so in the various phases of your business model development, e.g. in the Ideation, Integration or Validation phase. Between the phases we highly recommend to consult the 4 Modules on the **Circular Start Learning platform** (<https://learn.circularstart.eu/>) for getting inspiration and knowledge on how to implement circularity and sustainability strategies into your BM. The core of Circular Start is to create value not only for you and your customers but also for others in the value chain or the society and environment as such.

**In Module 3: VALIDATION, the Circular Start Assessment Tool is introduced. Unit 2 explains how to work with it.**

We also like to recommend to work with the Business Model Canvas (template available on the platform). After filling/adapting the elements of your business model you can repeat the assessment and see how the adaptations lead to the improvement of the circularity & sustainability performance of your business model.

For more information visit our website on <https://www.circularstart.eu/>.

We would be very happy to get feedback from your experience working with the CircularStart materials.

The Circular Start team



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The **Assessment Tool** section presents all the indicators to be assessed, through different questions that must be answered by the start-ups. The assessment questions are classified according to the Assessment Category and to different topics. Some of them are related to Enablers and Outcomes:

| CircularStart       |                                       | Co-funded by the Erasmus+ Programme of the European Union |                           | Circular Start Assessment Tool  |  |                       |                                     |                                     |
|---------------------|---------------------------------------|---|---------------------------|---|--|-----------------------|-------------------------------------|-------------------------------------|
| Enablers / Outcomes | Assessment Category                   | No.   | Topic                     | Assessment Question   | Answer   | Assessment per answer | Circularity Assessment per category |                                     |
| Enablers            | Strategy & Innovation                 | 11  | Mission / Vision / Values | To what extent is CE relevant in your value/mission/vision?   |  | not rated             | minimum number of filled answers: 3 |                                     |
|                     |                                       | 12  | CE related opportunities  | Have you identified Circular Economy-related opportunities to attract new customers, enter new, unexploited markets and strengthen your value proposition?  |  | not rated             |                                     |                                     |
|                     |                                       | 13  | Measurable CE target      | Do you have measurable CE targets for your business idea?<br>E.g. Key Resources: Raise the share of renewable materials for my product up to 50% within the next 2 years. Customer relationships: Establish a take-back system till the end of next year.             |  | not rated             |                                     |                                     |
|                     |                                       | 14  | Innovative solution       | To what extent are you offering an innovative value proposition in line with Circular Economy principles?<br>You may consider: design out waste, built-up resilience through diversity and be ready for changes, shift to renewable resources or think in capacities. |  | not rated             |                                     |                                     |
|                     | People & Skills                       | Human well-being/ fundamental needs                       | 21                        | CE competences of staff   | Do you have competences in developing circular solutions in your start-up?   |                       | not rated                           | minimum number of filled answers: 2 |
|                     |                                       |   | 22                        | Human well-being/ fundamental needs   | To what extent does your value proposition promote the satisfaction of fundamental needs (subsistence, protection, participation, understanding, affection, identity, creation, identity and freedom) of your customers?                                 |                       | not rated                           |                                     |
|                     |                                       |   | 23                        | Local jobs/wealth   | To what extent will your business model create economic benefits in your local/regional context?<br>E.g. creation of new jobs, economic opportunities...   |                       | not rated                           |                                     |
|                     | Operations                            | IT and digital systems to support CE                      | 31                        | IT and digital systems to support CE  | To what extent are suitable IT and digital systems in place to support the circularity of your business model, products or services?<br>E.g. platforms, waste or asset utilisation tracking...   |                       | not rated                           | minimum number of filled answers: 3 |
|                     |                                       |   | 32                        | Processes to support CE   | To what extent are processes set up to support the circularity of your business model?<br>E.g. manufacturing process, procurement process, repair programme...   |                       | not rated                           |                                     |
|                     |                                       |   | 33                        | Plant, property and equipment assets  | To what extent are suitable plant, property, and equipment assets (PPE) integrated to support the circularity of your value chain?<br>E.g. reverse logistic infrastructure, factory assets that collect by products/waste...                             |                       | not rated                           |                                     |
|                     |                                       |   | 34                        | Regeneration of ecosystems  | To what extent does your value proposition support the regeneration of ecosystems?<br>E.g. fostering human building in sustainable way, soil loss through combating erosion or carbon/capacitation of biodiversity or regeneration of natural resources. |                       | not rated                           |                                     |
|                     | External Engagement with Stakeholders | Engage with suppliers for circular sourcing               | 41                        | Engage with suppliers for circular sourcing   | To what extent do you plan to engage with suppliers to increase sourcing based on Circular Economy principles?<br>(including suppliers of materials/product/plant, property, and equipment assets)   |                       | not rated                           | minimum number of filled answers: 4 |
|                     |                                       |   | 42                        | Fair business relationships   | Will you establish fair contracts and financial conditions with partners/suppliers?  |                       | not rated                           |                                     |
|                     |                                       |   | 43                        | Local partners and suppliers  | Do you create value and opportunities for partners and communities in your region?<br>Local can include the surrounding community, a region within a country or a country.   |                       | not rated                           |                                     |
| 44                  |                                       |   | Customer Engagement       | To what extent do you plan to engage with potential customers on introducing circular solutions?<br>E.g. take-back programme, repair programme, product as a service, refill scheme, collection and conversion centre.  |  | not rated             |                                     |                                     |

Finally, the result of the assessment is depicted in the **Result Overview** section in a graphical way, showing the circularity level of the designed business model, identifying this way in which areas improvements could be made:

