

# CESME Circular Economy & Return On Investment Toolbox

An introduction and short training course  
for Business and Support Agency Staff and Consultants  
and to be subsequently used in advisory/support sessions with SME's

# Training Objectives

- To demonstrate a methodology and a set of tools/templates to be used by business support agency staff & consultants to support SME'S in their adoption of circular economic practices and products, and demonstrate the added Social, Economic and Environmental value of these practices/products to the SME and the Territory!
- Experiment with a green and circular and assessment tool
- Understand the logic and practice of Social, Economic and Environmental Return On Investment



# Training approach

- ▶ This slideset represents a step by step methodology, based on six key steps to enable advisors and SME's to better understand and evaluate the process and impact of the adoption or uptake of circular products and processes, and the added value to the business and the territory
- ▶ It is an integrated approach where the understanding and use of a Green assessment tool is integrated with exercises which help demonstrate and evaluate Social, Economic and Environmental Return on Investment
- ▶ Use of role play and simulations to understand tools and templates (and help advisors use them in support/consultancy sessions with SME's)
  - ▶ To undertake this exercise\* staff/consultants should to form a team which represents a selected SME from their region (note: the SME selected should be based on a real life example with circular potential)



## Overview of Training Course Steps to Assist SME's Circular Profiling & Social/Economic/Environmental Return On Investment Process

1: Establish SME goals

2: Identify, prioritise and map stakeholder and their desired impacts

3: Identify, Map and design for SME circular transformation

4: Identify outcomes, indicators for SME circular transformation

5: Identify economic and proxy values for indicators

6: Undertake Return on Investment Analysis

# Programme: Content

- ▶ Stage One - Identify a local SME with unlocked circular potential and its key stakeholders
  - ▶ Fill in CESME Template 1: SME FACT SHEET to establish baseline details of your selected SME
  - ▶ Fill in CESME Templates 2A + 2B: Define the goals /challenges of the business, breakdown and prioritise the goals
  - ▶ Fill in the Template 3: Identify the Stakeholders who will be directly impacted by the changed direction the business will take
- ▶ Presentation of preparatory work for peer review (if working with multiple groups)
  - ▶ i) SME characteristics; ii) Goals and challenges;

# Your SME, its goals, challenges and key stakeholders

## TEMPLATE 1: SME FACT SHEET

Name of the SME: Alpha

Sector: Agricultural equipment

Product/Services offered on the market:  
Tractors and other agriculture equipment.  
Service (maintenance, repair)

Resources used (tangible, intangible) to provide the product/Service:  
Production facilities in Finland  
Highly trained employees.  
A network of resellers.

Main turnover: small and medium business turnover in Euro turnover. France, Germany, Belgium: 25%

## TEMPLATE 2: GOALS OF THE SME

Name of the SME: ALPHA equipment

Instructions:

- Use the current strategic goals of the SME (e.g. product innovation, etc...)
- For each goal, describe intended outcomes
- Prioritise results, list potential unintended or
- Fill up the breakdown of goals table

SME GOAL	INTENDED OUTCOMES
SME GOAL 1 Provide increased level of service to key customers	Improved retention Improved satisfaction
SME GOAL 2 Extend lifetime of products to improve quality image	Improve
SME GOAL 3 Reduce the ecological footprint of our key products	Improve C /

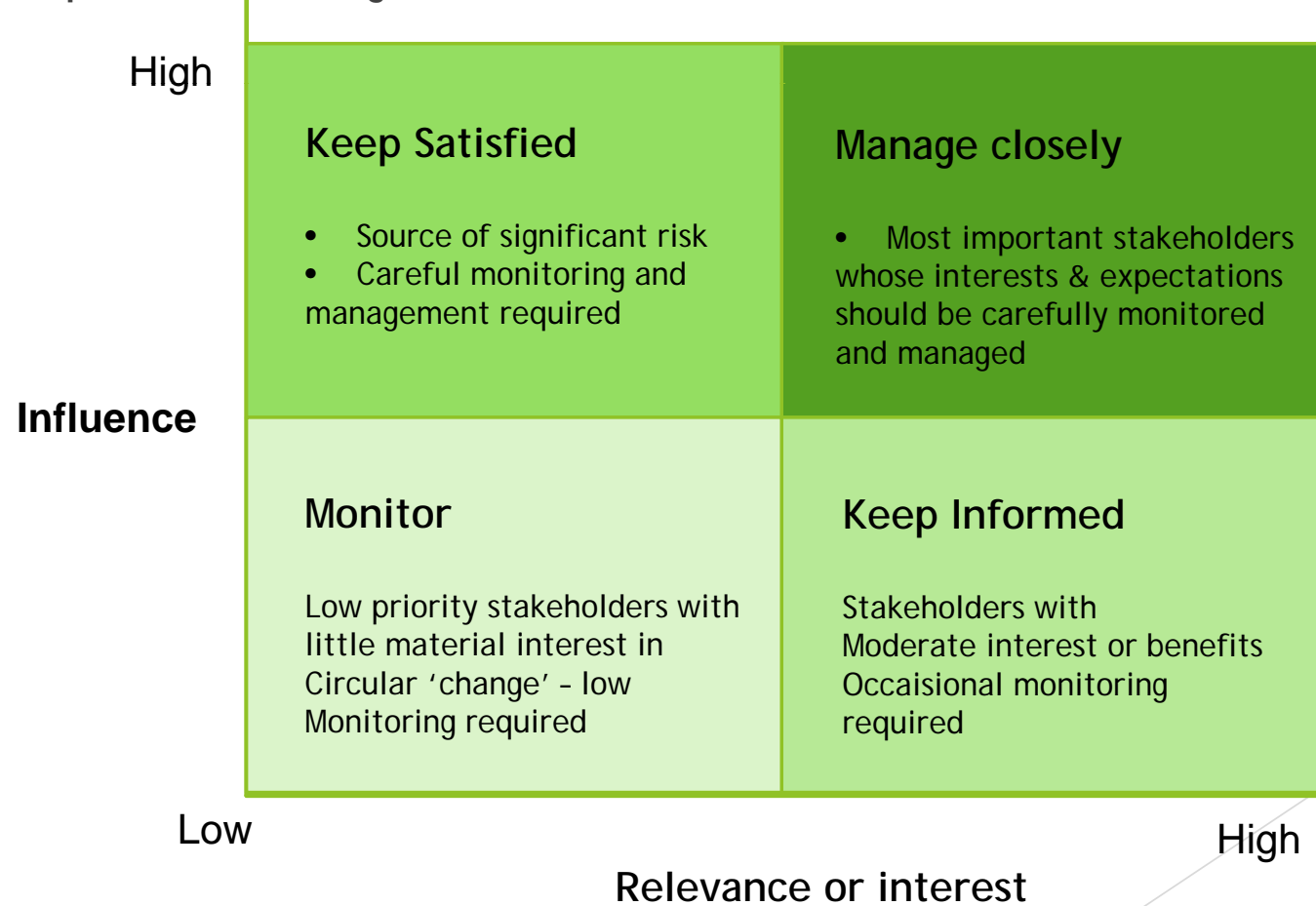
## CESME TEMPLATE 3: STAKEHOLDER PERSONAS and SELECTION

Instructions: Identify 5+ key stakeholders for your SME (at least one per category). Why? In order to fully understand and calculate the value that your adoption of circular practices/products will bring, you need to identify the key stakeholders that will be materially impacted by your change and to understand the benefits or added value that they will experience as a result of your circular 'change' (\* A recognisable significant change that can be measured)

STAKEHOLDER CATEGORIES	SUB-CATEGORIES (non-exhaustive list)	FINAL CHOICE OF STAKEHOLDERS FOR SME
customer/end user	Final or intermediate (where customer adds value)	
public institution (local authority or agency)	a) economic development b) environmental c) social (care + health) b) strategic territorial/policy	
Partner/supplier	a) generic (electricity/waste...) b) specific (components and services needed to implement circular strategy...) c) sales/marketing/logistics	
Employee or representative union (etc.)		
(local NGO) or Civil society organisation	a) environmental b) social or c) sectoral	

# Prioritising Stakeholders II

Stakeholder power/interest grid



2. Stakeholders

Prioritise

# Green and circular Assessment tool

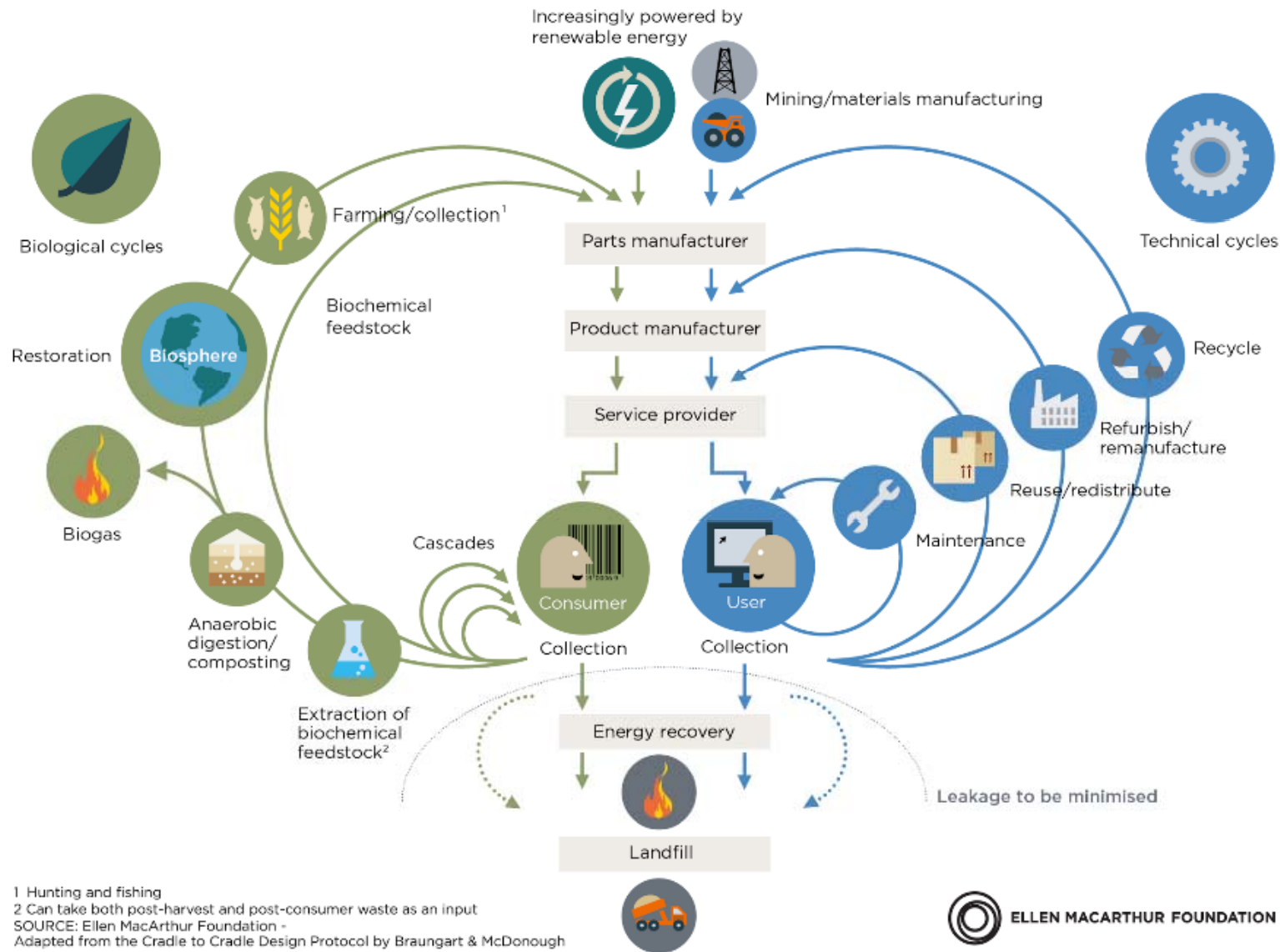


Programme:

## Green and circular assessment tool: presentation

- ▶ Stage 2: Circular opportunities
  - i. Overview and inspiring examples
  - ii. Presentation and use of the Tool
  - iii. Circular assessment exercise
  - iv. Circular strategies brainstorming and prioritization
  - v. Presentation of circular strategies
  - vi. Stakeholder assessment exercise

**CIRCULAR ECONOMY - an industrial system that is restorative by design**



<sup>1</sup> Hunting and fishing

<sup>2</sup> Can take both post-harvest and post-consumer waste as an input

SOURCE: Ellen MacArthur Foundation -

Adapted from the Cradle to Cradle Design Protocol by Braungart & McDonough



# Design, manufacture and distribute



We are Yuma: circular sunglasses



Toast ale: brewing from surplus bread

# Usage

*Flint  
AND  
Tinder*  
ESTD 2011



Flint and tinder: 10 year warranty hoodie



Dyson: Energy efficient air-dryer

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# Reuse, redistribute



Toronto tool library



Patagonia reuse platform

# Refurbish, remanufacture



Valtra: remanufactured gear boxes

# Recycle



Lassila & Tikanoja: wood pallet recycling

# Product as a service



Lease a jean (mud jeans)



Lighting as a service (Philips)



# Identifying the benefits: Circular economy toolkit

- ▶ The Circular Economy Toolkit supports businesses in developing more environmentally sound decisions which will create new opportunities, save money and attract new customers.
- ▶ With the vast number of possibilities for creating value out of the Circular Economy, it can be challenging to assess all the options.
- ▶ The Circular Economy Toolkit has consolidated all the opportunities and provided information on how a company could start finding benefits.
- ▶ [www.circulareconomytoolkit.com](http://www.circulareconomytoolkit.com)



# Circular Economy Toolkit

Resources for an Evolving World

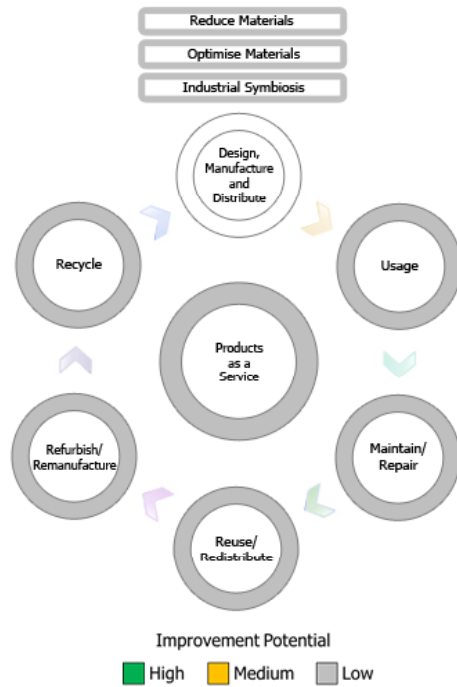
[The Circular Economy](#)

[Toolkit](#)

[Assessment Tool](#)

[Workshops](#)

[About](#)



Answer the questions below to find potential improvements in your organisation:

\* Company type:

\* Product type:

\* Use:  Just playing  Serious

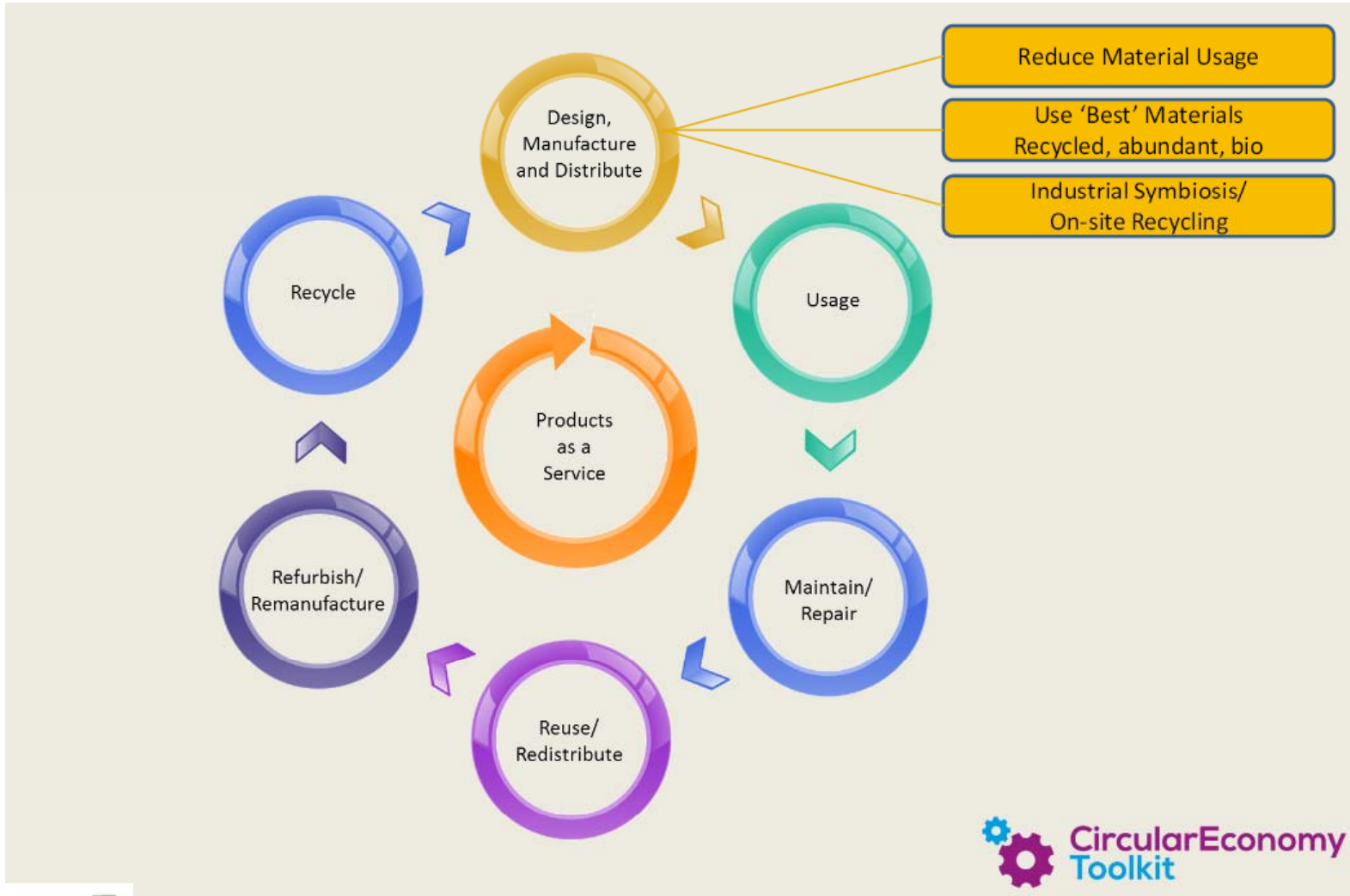
### Design, Manufacture and Distribute

No material is used in excess, product is totally dematerialised  High waste of material, could be reduced through redesign

100% Biodegradable  High percentage of technical, non-biodegradable materials

100% Recycled materials used  High percentage of virgin, non-recycled materials

## Overview of opportunities



# Exercise: online assessment

- ▶ In your team, browse the website to understand the strategies and take the assessment online ([www.circulareconomytoolkit.com](http://www.circulareconomytoolkit.com))

The screenshot displays the 'Circular Economy Toolkit' website. At the top, the logo features two interlocking gears (one purple, one blue) next to the text 'Circular Economy Toolkit' and the tagline 'Resources for an Evolving World'. Below the logo is a navigation menu with links for 'The Circular Economy', 'Toolkit', 'Assessment Tool', 'Workshops', and 'About'. The main content area is titled 'Answer the questions below to find potential improvements in your organisation:'. On the left, a circular flow diagram illustrates the circular economy process: 'Design, Manufacture and Distribute' leads to 'Usage', which leads to 'Repair', 'Reuse', 'Recycle', and 'Waste-to-Energy', which then feeds back into 'Design, Manufacture and Distribute'. A legend below the diagram indicates 'Improvement Potential' with a color scale: High (green), Medium (orange), and Low (grey). On the right, an assessment form is shown with the following fields: 'Company type' (dropdown menu set to 'Manufacturer'), 'Product type' (text input), and 'Use' (radio buttons for 'Just playing' and 'Serious'). Below these are three assessment questions with sliders and corresponding descriptions: 1. 'No material is used in excess, product is totally dematerialised' (slider at 0) with the note 'High waste of material, could be reduced through redesign'. 2. '100% Recyclable' (slider at 0) with the note 'High percentage of technical, non-biodegradable materials'. 3. '100% Recycled materials used' (slider at 0) with the note 'High percentage of virgin, non-recycled materials'.

# Exercise: Brainstorm on circular strategies

- ▶ Based on your assessment, brainstorm on possible circular opportunities

**TEMPLATE 4 circular brainstorming exercise**

**Idea title**

What is the idea in a nutshell? (in 1, max 2 sentences).

What and whose need is our proposal satisfying?

What are the key steps to implement this strategy?

What expected benefits are foreseen (for your SME and your stakeholders)

What ex SME are...

# Exercise: prioritize your circular strategies

- List your circular ideas and proceed with a first evaluation in order to prioritize your options and detail the benefits

**TEMPLATE 4a: STRATEGY PRIORITIZATION**

CESME

Name of the SME: \_\_\_\_\_

Instructions: assess each idea based on these five criteria. Give a score to each aspect

Idea	Practical viability	Economic value	Environmental value	Social value	Total

Scores: -1 Negative; 0 Neutral; 1 Minimal; 2 Moderate; 3 Significant

Interreg Europe

**TEMPLATE 4b: Preliminary (Social) Cost Benefit Analysis**

**The new circular product/process you have decided to take up:**

*Try an exercise, for example using reclaimed wood in the manufacture of furniture*

List changes this will bring to your business practices*	List investments require to make these change	List benefits to business from the changes	List benefits to other stakeholders	List benefits to territory

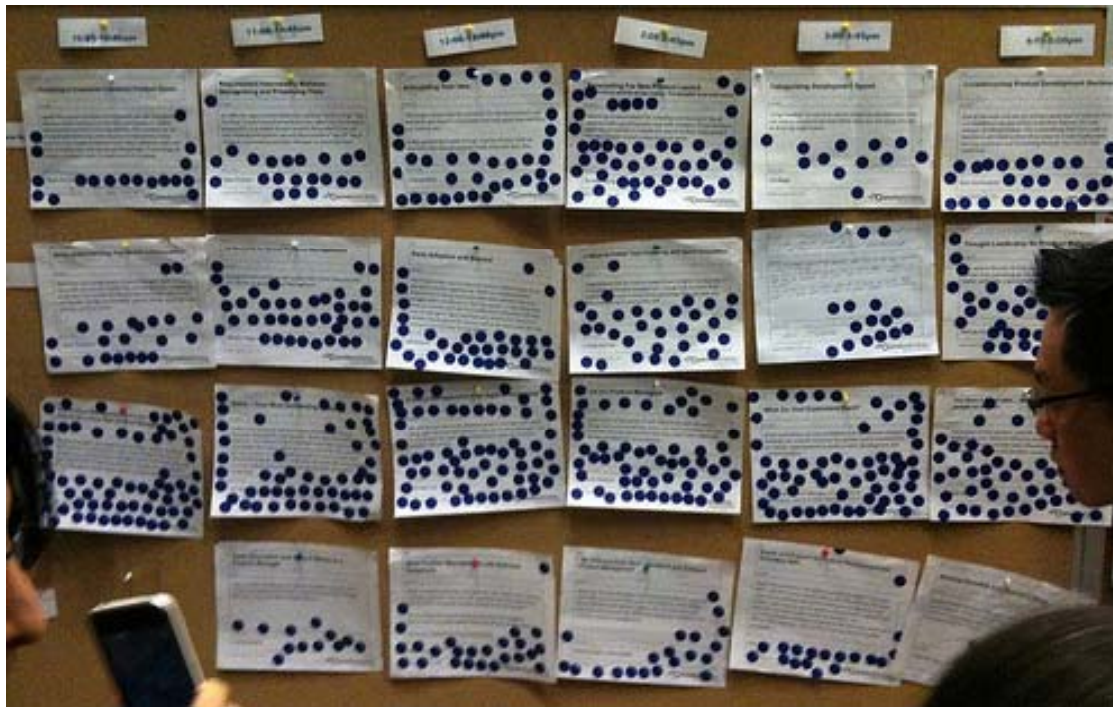
\*advised to develop a map or chart, which visualises the "life-cycle" of the new circular product or process; To visualise each stage and understand the implications to the business in question

Circular economy training - CESME

Interreg Europe

# Circular Economy forum

- ▶ Each team presents its 2-3 most promising circular ideas
- ▶ Each participant can vote for the best ideas among all the groups



Identify & prioritize circular products & processes that enable you to meet business objectives

# S(EE)ROI process

Identify

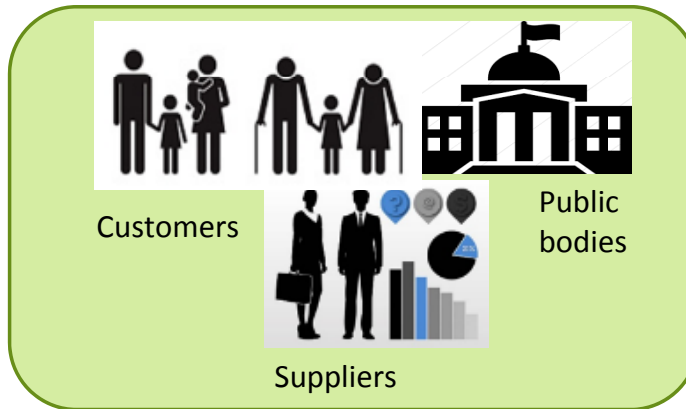
Outcomes and Indicators

Assign values to indicators

Define your business objectives/goals:

Together with:

Together with:



Together with:

Prototype circular product/process

Predict and monitor Impact and Return on Investment relating to your business goals



Increase Jobs & Productivity



Keep key staff



Improve Environmental Footprint



Increased Profits/reduce costs



Decrease Commuting



Better Employee/personal health



## Social (Economic & Environmental) Return on Investment

Social Return on Investment (SROI) is an outcomes-based measurement tool that helps organisations to understand and quantify the social, environmental and economic value they are creating.

Developed from traditional cost-benefit analysis and social accounting, SROI is a participative approach that is able to capture in monetised form the value of a wide range of outcomes, whether these already have a financial value or not. An SROI analysis produces a narrative of how an organisation creates and destroys value in the course of making change in the world, and a ratio that states how much social value (in €) is created for every €1 of investment.

SROI measures change in ways that are relevant to all the people or organisations that experience or contribute to it - *the stakeholders*. It tells the story of how change is being created by measuring social, environmental and economic outcomes and uses monetary values to represent them.

# Stakeholder interest assessment

## ► Determining stakeholders' interests:

You need to investigate the roles, relative influence/power and capacity to contribute to the project, in order to draw out principal interests for each stakeholder group.

Key questions could include:

- What are the contributions the stakeholder can give to the project and what resources are they likely to commit (or avoid committing) to the project?
- What interests the stakeholder has in the project and what are the benefits it can get?
- What are the stakeholder's expectations and requirements of the project?
- What other interests does the stakeholder have that may conflict with the project?
- What actions can be taken to address the stakeholder's conflict of interests?

# Stakeholder interest assessment

## TEMPLATE 5: STAKEHOLDER Interest and Benefits

Name of the SME: \_\_\_\_\_

Instructions:

- a) Read your 5 stakeholders persona sheets again
- b) Fill up the stakeholders mapping template below

Stakeholder	Interests and benefits from the circular innovation	Contributions and resources they can provide	Expectations from the circular innovation	Do they have any conflicting interests with the proposed change	Are there actions you can take to address these conflicts

## Overview of Circular Profiling & Social/Economic/Environmental ROI Process

Module 1:  
Establish SME goals (or PP  
strategic goals)



Module 2: Identify and map  
stakeholders and desired  
impacts



Module 3:  
Identify, Map and design for  
SME circular transformation



Undertake Return on  
Investment Analysis

Module 5: Identify economic  
and proxy values for indicators

Module 4: Identify outcomes,  
indicators for SME circular  
transformation

# Overview of the next steps you will be taking in modules 4 + 5

- ▶ **Clarification of the impacts**
  - *Which process or product?*
  - *What are the impacts for each stakeholder (group)*
- ▶ **Identify one indicator for each impact**
  - That allows you to measure the impact and which is reliable, robust, continuously available etc.
- ▶ **Define measurement and analysis**
  - ▶ Define and decide on how to practically conduct the measurement and how often.
  - ▶ Define how to analyse and judge/rate the output data with regards to the prioritised goals.
  - ▶ Define baseline or benchmarking method to account for external influences on indicators (if needed).
- ▶ **Circular requirements**
  - ▶ Define Process/product Requirements -Goals/Business, Functional and Non-Functional.
  - ▶ Take into consideration the above *indicators* and how it will affect the requirements.

# Examples of circular impacts

Recup Design: upcycling of old furniture

Environmental impact: waste reduction, landfill reduction

Social impact: employment of socially/economically excluded

Economic impact: value creation from discarded material



[www.labeur.be/recup-design/over-recup-design](http://www.labeur.be/recup-design/over-recup-design)

# Examples of circular impacts

Permafungi: urban mushroom production

Environmental impact: coffee waste reduction, less landfill, reduced CO2

Economic impact: value creation from waste (no-cost raw material)

Social impact: Self-esteem through new skills, improved mental health



[www.permafungi.be](http://www.permafungi.be)

# Examples of circular impacts

Taleme: leasing of ethical maternity clothes

Environmental impact:  
Reduction of  
fertilisers/pesticides through  
use of organic clothes, longer  
product life

Economic impact on  
families: access to good  
quality clothing at lower  
than 'bought' price

Social impact: fair trade/  
ethical working contracts  
with suppliers (investment in  
medical centre/schools....)





[www.taleme.be](http://www.taleme.be)



# Identification of Circular Impacts

- ▶ Using Slides 11 - 16 (or your own examples) identify two impacts for each category
- ▶ Economic
- ▶ Social
- ▶ Environmental

# Impact Map

 **TEMPLATE 6: Stakeholder IMPACT** 

Name of circular strategy: \_\_\_\_\_  
Associated product or service: \_\_\_\_\_

STAKEHOLDER	IDENTIFIED IMPACT

# Indicators

- ▶ Task: identify one (only 1) indicator for each impact.
- ▶ An indicator provides evidence that certain results have or have not been achieved. This is the information that you need to collect to determine whether your outcome has been met. The indicator will need to, by whom and when.
- ▶ Start with the ones with the highest impact.
- ▶ The ambition now is to find a set of indicators that are *common to each 'Circular' Group*; besides this there may be additional indicators that are specific to each product, process or region.

# Indicator requirements

- ▶ Relevant and understandable (by stakeholders)
- ▶ Robust (low dependency on external factors)
- ▶ Measurable/Quantifiable
- ▶ Traceable
- ▶ Statistically significant



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# Data collection and analysis

1. Describe and decide on how to practically conduct the measurement and how often
2. Define how to analyse and classify the output data with regards to your prioritised circular product or process goals.
3. Define baseline or benchmarking method(s) to account for external influences on indicators (included in model impact map).

# Collection of data

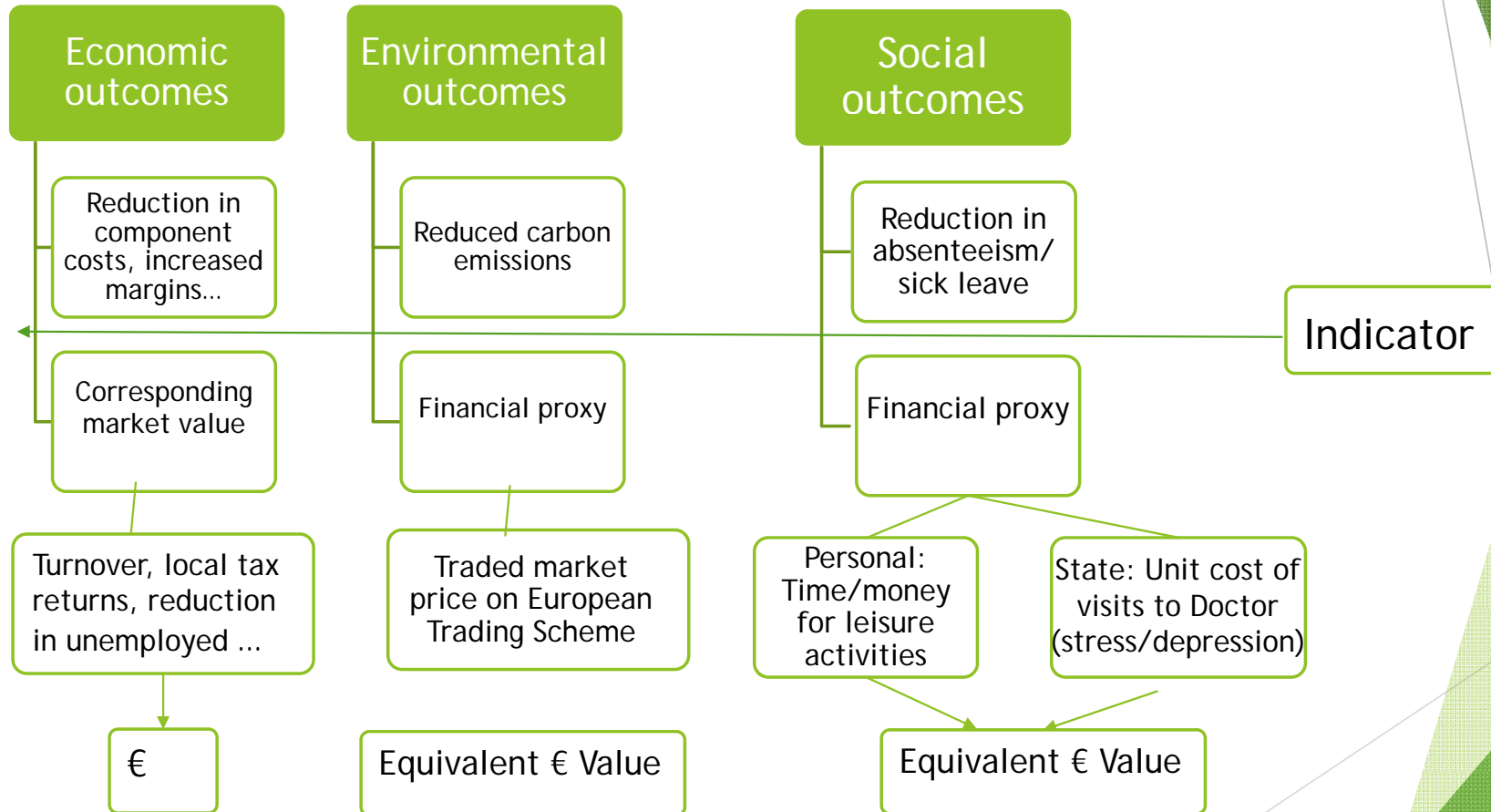


## TEMPLATE 7: INDICATORS



Circular Product or process	Outcome: What is the change or desired effect in short/ medium (+ long) term?	Indicator: What will you collect to measure change	Data source: How will you collect data

# Valuation techniques for indicators



# Proxies as means of allocating value to social and environmental outcomes

- ▶ Well being (QALYS - Quality Adjusted Life Years) Mental Health 0.352 Quality value of €12000 per year
- ▶ Personal Well-Being: Emotional

Well-being domain		Proportion of overall value	Financial value
Personal well-being	Emotional well-being	10%	£1,056
	Satisfying life	10%	£1,056
	Vitality	10%	£1,056
	Resilience and self-esteem	10%	£1,056
	Positive functioning	10%	£1,056
Social well-being	Supportive relationships	25%	£2,640
	Trust and belonging	25%	£2,640

- ▶ Valuing Carbon:
- ▶ Methods:

Social cost of carbon (SCC) i.e. damage done by a tonne of carbon emissions (source Stern Review 2009) value: 70 - 240€ /T

Traded Market Price on European Trading Scheme (electricity): (Value 2014 0-20€/T (EC)

Direct: Equating Emissions reduction with fuel use reduction and real-life vehicle costs, road-wear and tear etc.



# Identifying Values

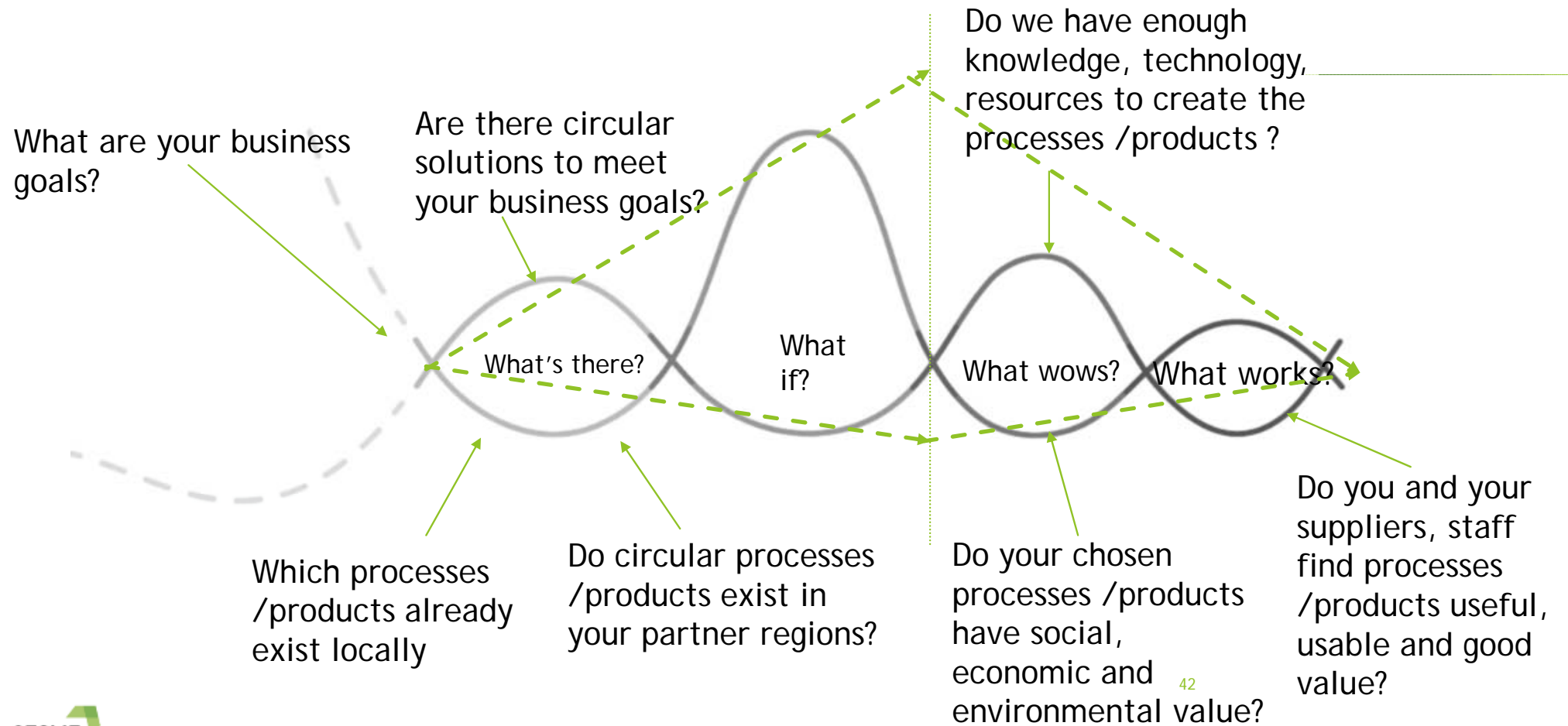


## TEMPLATE 8: VALUES



PRODUCT OR PROCESS INDICATOR	PROXY/MARKET VALUE	FINANCIAL VALUE PER UNIT	INFORMATION SOURCE

# Circular - process/product?



# CESME Return on Investment Calculator

CESME Circular Return on Investment  
Calculator

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THANK YOU!