February 2021

CIRCULAR BUSINESS ACADEMY

Overview of Circularity Assessment Tools

Jana Franziska Fireoved, Programme Manager Gm & CBA

KOC 3.0
Kompetenčni centri
za razvoj kadrov

Javni štipendijski, razvojni,
invalidski in preživninski
sklad Republike Slovenije

REPUBLIKA SLOVENIJA
MINISTRSTVO ZA DELO, DRUŽINO,
SOCIALNE ZADEVE IN ENAKE MOŽNOSTI

EVROPSKA UNIJA
EVROPSKI
SOCIALNI SKLAD
NALOŽBA V VAŠO PRIHODNOST

What are most circularity assessment tools for?

- Introduction to the circular economy

- Familiarisation with the key elements of circularity

- Analysis of status quo

- Presentation of opportunities

- Basis for further targeted recommendations

- Potential basis for future company targets (especially more advanced tools)

Measuring or assessing circularity?

MEASURING	ASSESSING
'Determining how big, how long or how wide something is.'	'Having an opinion about something.'
Quantitative	Qualitative
Clear yardstick	Judgement-based, no clear yardstick
Objective	Partly subjective

Source: Van Oppen Cécile, Croon G., Bijl de Vroe D. (2018). Circular Procurement in 8 Steps. First edition, Copper, 2018.

An overview of circularity assessments (non-exhaustive)

- Greencycle Questionnaire of Best CE Practices
- Circularity Check
- Circulytics
- Circular Economy Toolkit
- Readiness Assessment Tool for the Circular Economy of MATChE
- Circular IQ

An overview of circularity assessments (non-exhaustive)

- Circular Economy Standard (Intesa Sanpaolo)
- ING
- European Investment Bank
- Circularity Assessment Score (CAS)
- Related assessments:
  - Resource efficiency (e.g. Self-Assessment Tool by EREK)
  - Life cycle assessments (e.g. Fraunhofer Institute)
  - Sustainability assessments
  - Environmental assessments
  - ESG score
  - For specific industries

Greencycle Questionnaire of Best CE Practices

- Identification of existing local CE practices

- Practice must fall in at least one of the following categories: circular product design & innovation; product reuse, repair & remanufacturing; innovative business models; materials substitution; effective supply chain & cross-sectoral collaboration; reuse of waste, heat & energy

- Minimum criteria to initiate assessment: effectiveness; efficiency; relevance; sustainability; possibility of duplication; involvement of partnerships; community involvement; political commitment

Greencycle Questionnaire of Best CE Practices (2)

- Documentation:
  - Context: the problem, how the practice affects the region, benefits
  - Implementation: what are the actions, who are the implementers
  - Results
  - Lessons learned: what works, what doesn't, why?
  - Conclusions: wider benefits & recommendations
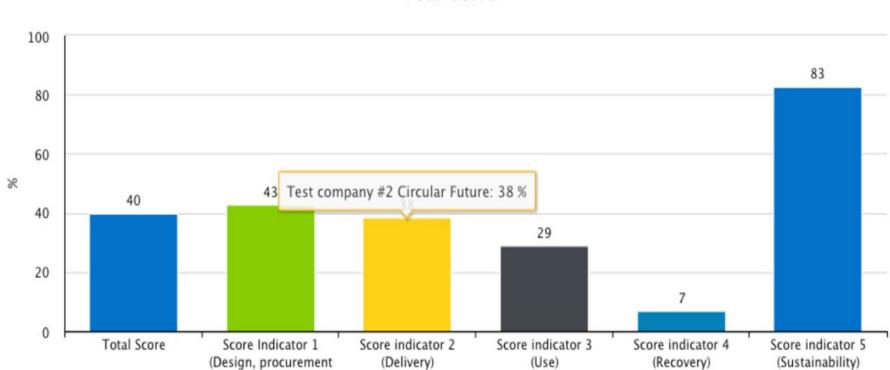
➢ Relevance:
  ➢ Identifying best CE practices in the region can serve as an inspiration
  ➢ Identifying circular frontrunners, i.e. the implementers, can help building a CE network
  ➢ Lessons learned are valuable information to newcomers

Circularity Check

Circularity Check (2)

Circulytics

ELLEN MACARTHUR FOUNDATION

18
INDICATORS

18
(each company is assessed using 4-15 indicators out of 18, depending on industry and type of business)

THEMES

Strategy and planning
People and skills
Innovation
Operations
External engagement

Products & Materials
Services
PPE Assets
Water
Energy
Finance

CATEGORIES

ENABLERS

OUTCOMES

OVERALL SCORE

HOW IS THE SCORE CALCULATED?

Companies are measured using a sum of weighted indicator scores resulting in an overall grade from A to E. The score card will provide tailored insights by theme.

Circular Economy Toolkit

CircularEconomy Toolkit
Resources for an Evolving World

Reduce Materials

Optimise Materials

Industrial Symbiosis

Design, Manufacture and Distribute

Recycle

Usage

Products as a Service

Refurbish/ Remanufacture

Maintain/ Repair

Reuse/ Redistribute

Improvement Potential

High Medium Low

Opportunity
(Financial viability and market growth opportunity)

Feasibility
(by current design)

Readiness Assessment Tool for the Circular Economy of MATChE

- Readiness assessment along 8 key dimensions:
    - Organisation: internal business capabilities, change management knowledge and skills
    - Strategy and business model innovation
    - Product and service innovation
    - Manufacturing and value chain
    - Use, share and data
    - Support and maintenance
    - Take-back and end-of-use
    - Policy and market

Readiness Assessment Tool for the Circular Economy of MATChE (2)

- Results:
    - Readiness profile
    - Internal benchmarking: which parts of the company are doing better
    - External benchmarking: comparison with other anonymous companies

Circular IQ

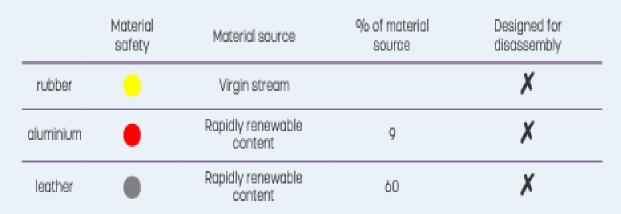*Powered by KPMG, Circle Economy and MVO NL*

CIRCULAR IQ

PRODUCT CIRCULARITY
BICYCLE

| 3 Materials | 3.00 Weight of materials | 15 % of product weight listed |

Circular IQ (2)

Powered by KPMG, Circle Economy and MVO NL

PRODUCT CIRCULARITY BREAKDOWN

	Material safety	Material source	% of material source	Designed for disassembly
rubber	🟡	Virgin stream		✗
aluminium	🔴	Rapidly renewable content	9	✗
leather	⚫	Rapidly renewable content	60	✗

🟢 Material has been assessed by an independent third party, using supplier declarations and an assessment report

🟡 Material is free of substances that are on the C2C Banned List Substances, taking into account accepted thresholds. Information based on supplier declaration

🟠 Material is free of substances that are on REACH Banned List Substances, taking into account accepted thresholds. Information based on supplier declaration

🔴 Material contains C2C Banned list substances, or substances on REACH above accepted thresholds

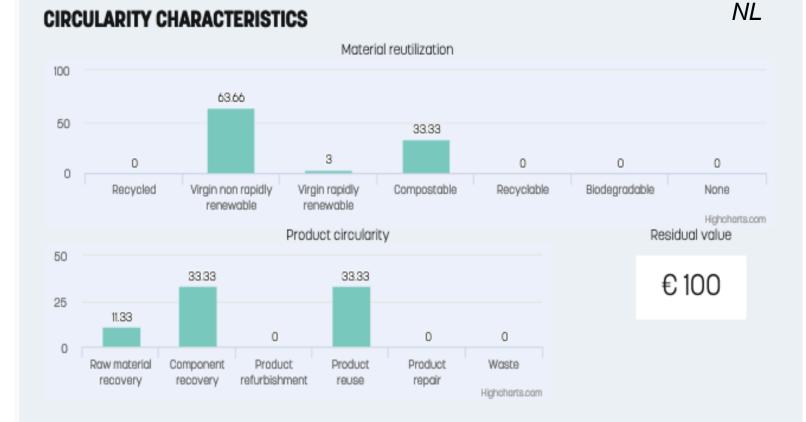⚫ Material component safety unknown and/or absence of supplier declaration

This Product Circularity report provides an overview of the key circularity characteristics of this product. These characteristics are based on authorized information from company and its supply chain partners. It shows insights in key circularity supply chain information and provides transparency. For questions visit http://www.circular-iq.com/circularity
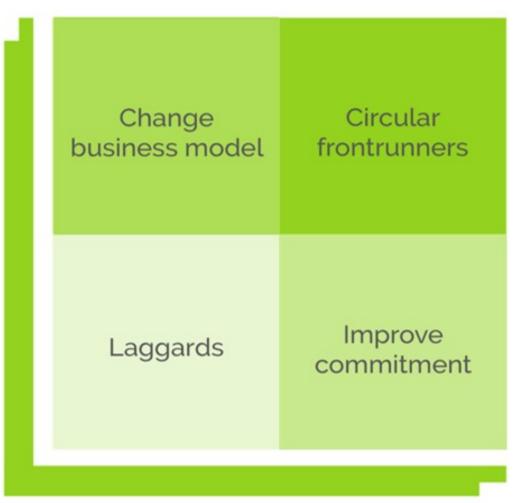
Circular IQ (3)
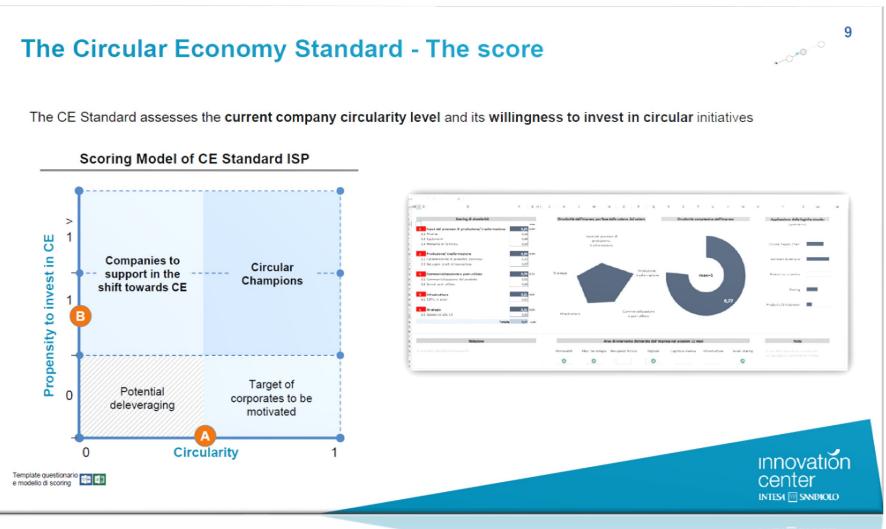
CIRCULARITY CHARACTERISTICS

Material reutilization

Recycled	Virgin non rapidly renewable	Virgin rapidly renewable	Compostable	Recyclable	Biodegradable	None
0	63.66	3	33.33	0	0	0

Product circularity

Raw material recovery	Component recovery	Product refurbishment	Product reuse	Product repair	Waste
11.33	33.33	0	33.33	0	0

Residual value

€ 100

Circularity Assessment Score (CAS)

Circular Economy Standard by
Intesa Sanpaolo

Self-Assessment Tool

Comparison of tools

Tool	Author / publisher	Aim	Focus	Pros	Cons
Greencycle	Interreg Alpine Space	For regions to identify circular frontrunners, but could also help SMEs	Best practices	Serves as a first idea and overview of circular practices, no detailed information needed	No graphs or visuals as a result, very general
Circularity Check	Ecopreneur, MVO Nederland, WeSustain	For SMEs, as well as bigger companies, investors, procurement officers, subsidy scheme officers to assess the circularity of the company's products	Products and services (life cycle approach), strategic, systemic	Good simple overview with five indicators that can be examined in detail	Extensive questionnaire (60 questions)

Comparison of tools (2)

Tool	Author / publisher	Aim	Focus	Pros	Cons
Circulytics	Ellen MacArthur Foundation	Supports a company's transition towards the CE, aimed towards bigger companies	Company level, entire operations	Simple structure, but detailed information, access to a vast amount of resources supporting the tool, such as videos	Big effort to fill in this extensive questionnaire, some questions are very relative and hard to answer
CE Toolkit	Circular Economy Toolkit	For companies to understand opportunities in the CE	Products and services	Includes an introduction and case studies	Doesn't consider difficulties in tackling change, doesn't consider the customer
MATChE	MATChE, C-Voucher	For companies to understand their CE and internal readiness to change	8 dimensions (see slides)	Readiness profile (including capabilities) and recommendations	Time-consuming and rather complex, no overall score

Comparison of tools (3)

Tool	Author / publisher	Aim	Focus	Pros	Cons
Circular IQ	Circular IQ, European Commission, powered by KPMG, Circle Economy and MVO NL	For companies to understand circularity in their supply chain	Products, materials	Detailed analysis of products including the supply chain	Does not include other aspects of circularity in the company, not suited for services
Circularity Assessment Score (CAS)	Giacomelli media, Circular Business Academy	For SMEs and larger companies, as well as for banks and investors	Business model	Result is simple and easy to understand (matrix), concise questionnaire	Difficult to perceive potential of business potential

Comparison of tools (4)

Tool	Author / publisher	Aim	Focus	Pros	Cons
Self-Assessment Tool	EREK	For SMEs to explore the CE and understand their status quo	Resource efficiency (mostly energy) in daily operations	Visualisation, entertaining, no need to finish in one session	No connection to the product / service the company offers, in-depth knowledge of resource use needed

Conclusions

➢ Target of most assessments:
  ➢ SMEs
  ➢ No or little experience in CE, but interest

➢ Focus of most assessments:
  ➢ Products (life cycle) and services

➢ Struggle between many complex questions to provide in-depth report and user friendliness to make it accessible for SMEs without CE experience

➢ Measurement vs. assessment

➢ All tools need more submissions to improve and increase their relevance

Relevant links

- https://www.alpine-space.eu/projects/greencycle/deliverables/d.t.1.2.2_guidelines-for-identification-of-existing-local-ce-practices.pdf

- https://ecopreneur.eu/circularity-check-landing-page/

- https://ellenmacarthurfoundation.wufoo.com/forms/circulytics-application/

- https://www.ellenmacarthurfoundation.org/assets/downloads/Circulytics-question-indicator-list.pdf

- http://circulareconomytoolkit.org/Assessmenttool.html

- https://c-voucher.com/circularity-marketplace/online-tools/

- https://ec.europa.eu/environment/ecoap/scalingcircularbusiness/solution/circular-iq_en

- https://www.resourceefficient.eu/tools#/?image=demo

- https://group.intesasanpaolo.com/en/sustainability/environment/green-products/support-to-circular-economy

- https://www.circularbusiness.academy/circularity-assessment-score/