NEXT STEPS IN THE APPLICATION OF THE CIRCULAR ASSESSMENT MODEL

QuCAS 2.0

EXPERT SUPPORT TO FIRMS AND FINANCIAL INTERMEDIARIES BY CBA

CIRCULAR BUSINESS ACADEMY

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CBA is a business venture built upon a year-long organic development by Gm in cooperation with members of CBA Faculty, its programme and service partners.

All contained information in this presentation is intended solely to destined CBA proramme participants and parties who are aspiring business partners of CBA with the best intention to encourage their engagement and collaboration.

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$Gm \mid {\rm partners} \\ {\rm in \ change}$

About CBA

<u>CBA, launched in 2019 as</u> an advisory unit of Gm, is destined to become a strand-alone organisation. Organised as a dedicated knowledge platform enables entrepreneurs, managers, experts, investors and policy-makers to embrace circular business model innovation by creating, exchanging and sharing specific competence and thrive on the civilisational paradigm shift.

Our opportunity derives from the ambitions of our clients to develop good business by going circular. We thrive on filling the gap in specific competencies, risk-related information and trust and establish ourselves as game-changing enablers of the circular economy for businesses, investors, financing intermediaries, as well as for cities, regions and countries.

CBA unique value proposition for the planet, society and business by is realised by:

- (1) Knowledge transfer capacity building (courses, seminars, conferences, reports)
- (2) Business model transformation advisory and facilitation in various formats
- (3) Innovation ecosystems design incubation and monitoring, and
- (4) New ventures identification, evaluation of investment opportunities, financing facilitation, acceleration and governance.

CBA provides its services in cooperation with programme and service partners by following the principles of sharing resources, channels and benefits. This is made possible by designing and maintaining a decentralised organisational concept supported by the core team, CBA Faculty, Circular expert practitioners, aiming to ignite "CBA Investor Network". All these actors are being considered partners of the CBA.

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Background

Gm engages with the Slovenian Government in the exploitation of opportunities deriving from the transition towards a greener and a more circular economy.

2016, 2017 Gm engages with successful circular front-runners, including **Fonda** (sustainable fish farming of Piran sea bass) and Valtex (today **Circular Shield**, a circular enabler of **Lucart Group**; Pulp and Paper Institute)

May 2016 First **Circular Change Conference** is organised in Ljubjana.

August 2016Gm launches Circular Change, a multi-stakeholder platform aiming to raise
and the engage relevant actors in the circular transition. The platform is later
outsourced as a non-profit organisation.

2017-2018 Gm organises a consortium of experts to prepare the **Roadmap Towards the Circular Economy in Slovenia**. The expert team was lead by **dr. Janez Potočnik** former EC Commissioner for the Environment (2010-14), who at the time prepared the first EU package for the Circular Economy.

2018 **META** and Gm initiate the development of a new instrument (private equity fund) intended to invest in mature startups, SMEs and small caps with a high circularity potential. Active screening of investment opportunities continues.

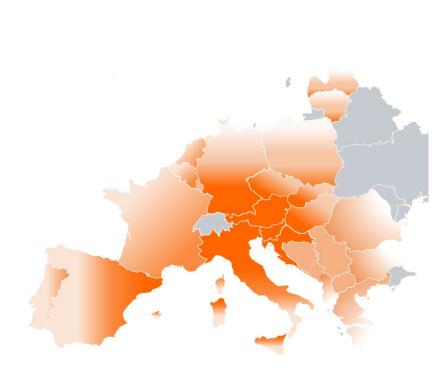
Autumn 2019 Circular Business Academy is launched. CBA Faculty is established and contiuously innovation partnerships, highfirms; private investors,, with promotes Circular Expert Talks in cooperation with the former EC 2019) Violeta Bulc.







Target market



RELEVANT REGION

Principally, target geographies comprise the entire market of the EU and EEA.

Pimarily countries, regions and cities primarily within the EU, in the range of some 600 km around Ljubljana, the seat of the CBA: Budapest, Belgrade, Bratislava, Innsbruck, Milan, Munich, Rijeka, Salzburg, Trieste, Venice, Wien, Zagreb...

STANDARD SERVICE FORMATS

- Circular opportunities webinars
- Full-track and compact cba
- In-company initiation programmes
- Advisory and mentorship
- Circular scale-up modules
- Investment readiness modules
- Investment opportunities
 pipeline
- Investment target screening
- Investment target evaluation (due diligence)

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Our opportunity in going circular

In the framework of a new development paradigm, respecting environmental and social (planetary) constraints, our opportunity derives from a chance to make good business by going circular.

- How can we identify opportunities at the company level?
- 2. How can we tell that a

- 3. Where are the gaps?
 - Insufficient knowledge and record to:
 - carry out circular business model transformations
 - evaluate investment opportunities (understand and manage risks)
 - realise meaningful innovations
 - = incubate new firms
- Weak knowledge transfer, contents, capacity and methods
- Insufficient systemic incentives (awareness, capacity, legislation, regulation)



On this journey we are looking for more circular frontrunners like Aquafil Group...!

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CBA Faculty

Jurij Giacomelli, Founder, Managing Director, Gm and CBA

Violeta Bulc, Former EC Commissioner (2014-2019), advisor, leacurer and author; curator of the Ecocivilisation

Luigi Amati, CEO META Group; President of Business Angels Europe

Christiaan Kraaijenhagen Founder, Innoboost

Karin Huber Heim, Founder, Executive director,

Circular Economy Forum Austria Christoph Püntmann, Founder, Hibrook

Senior banking professional Slaven Mičković, Senior risk expert, NKBM Massimo Sbarbaro, Founder, Rubedo

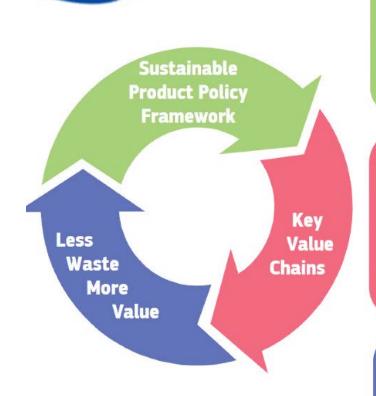




Evolving map of programme and service partners: shared ^O resources, channels and benefits



New CE Action Plan



35 actions

Changing the way Europe consumes and produces

Make sustainable products the norm in the EU Empower consumers and public buyers Sustainable production processes

Electronics and ICT Batteries and vehicles Packaging Plastics Textiles Construction and buildings Food, water and nutrients

Reduce Waste Reduce Waste Exports Boost market for high quality and safe secondary raw materials Making circular economy work for people, regions and cities

Circular economy as a requisite for climate neutrality

Getting the Economics Right

Financial Markets

Investments and R&I

Global Level Playing Field

Monitoring





Focus on value chains rather than industries





What to expect in 2021: Highlights

- Start roll-out of the Sustainable Product Policy Framework:
 - Sustainable Products Initiative



- Legislative proposal on substantiating green claims & Legislative proposal empowering consumers in the green transition
- Apply the framework to:
 - EU Textiles Strategy
 - Circular Electronics Initiative
 - Review of **Packaging** and Packaging Waste Directive
- Revision of the rules on **waste shipments**
- Kick-start the negotiations on the international agreement for plastics & launch of the Global Alliance on Circular Economy and Resource Efficiency



European Commission



Taxonomy and Financial intermediation



Key issues changing the perspective

Understanding of linear and circular risks in decision-making and investing



Forward-looking context of circular business model typology

The understanding of the type of the circular business model a firm pursues is crucial to identify financing needs and adequate financing sources, even though the firm may have not yet arrived at its full circular potential.

Each business model type generally has its own peculiar risk profile and in relation to other firm's characteristics.

Circular risk	Linear risk
Shift of mind-set needed to see (used) products as valuable sets of modules and/or materials instead of waste.	Dependency on virgin resources (risk of supply chain disruption).
Required initial investment can cause deterioration in short-term margins.	Exposure to resource price volatility.
Balance of short-term margin versus long-term stability.	Increasing environmental legislation.
Market demand for the offered products: customers and companies are currently used to owning products.	Growing population and increasing financial wealth.
Dependency on supply chain collaboration.	Effects of climate change.
Unknown residual value of many products, due to small market of circular output companies (i.e. companies that upcycle, re-use, remanufacture or refurbish).	Demand for environmentally sound products.
Supply chain lock-in risk.	Businesses/products that become obsolete by holding onto old linear business practices (stranded assets).

When is a firm considered circular?

Unlike the economy as a whole, for a firm to be considered circular, that is, **to practice a circular business model**, it does not need to maximise its capability to recover and regenerate resources deployed within its own value-creating processes.

It should be rather evaluated against its potential cababilities to integrate into a circular economy and the actual level of such performance.

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



Note the difference: measuring against 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

Circularity assessment score (CAS)

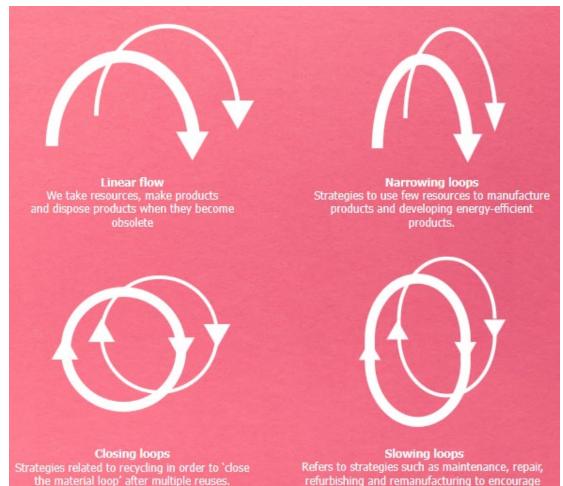


product reuse

A composite measurement tool of multiple criteria, allowing to assess the potential and the ability of a firm for closing, narrowing or slowing the loops, based on a standardised and validated questionnaire.

The 2.0 questionnaire has been further attuned to the needs of CIRCULAR4.0. Interreg Alpine Space project.





the material loop' after multiple reuses.

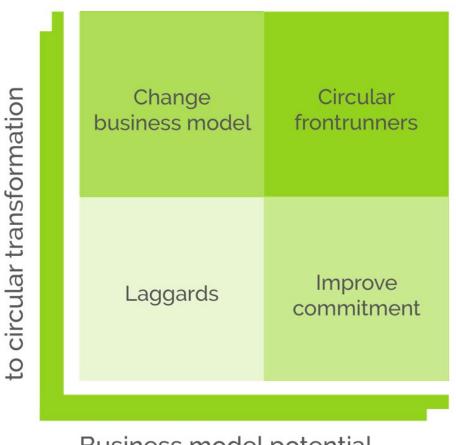
How circularity of a firm is assessed in the CAS model?

The circularity of a firm as a firm's strategic orientation is assessed through its application of a circular business model is manifested by its potential to sustainably contribute to the circular economy and capabilities of a firm to seize it.

So, it is manifested by a set of criteria demonstrating to what extent a firm uses its capabilities to contribute to the circular economy. Therefore, by CAS we authonomously assess two somewhat interrelated dimensions:

- Business model potential
- Commitment to circular transformation

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Commitment

Business model potential

Circular business model potential and firm's commitment to the circular transformation

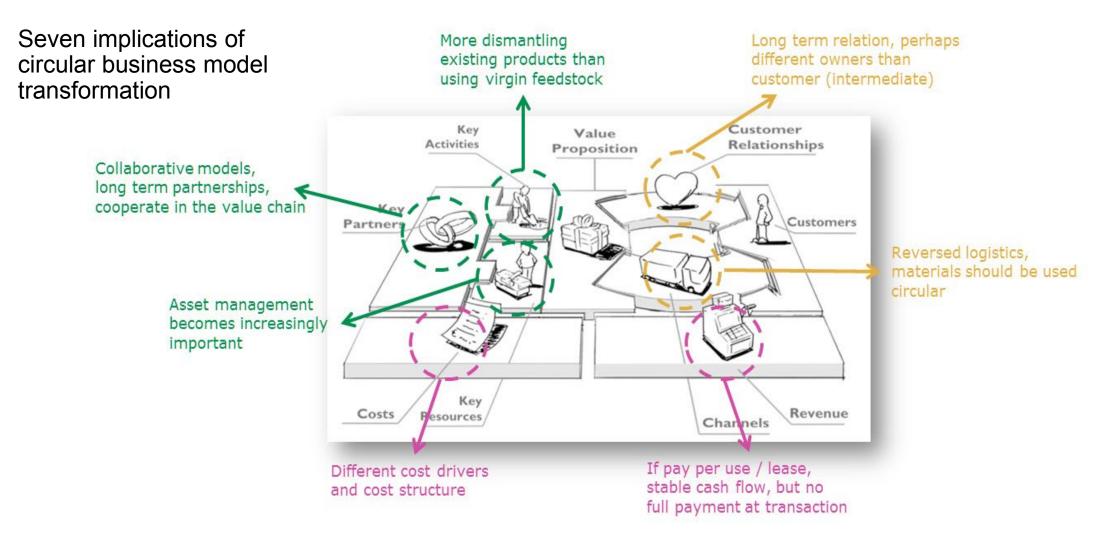


While business model potential can be consistently evaluated across the firm's value chain (circular potential), the actual level of competencies and practices depends on the managerial abilities and overall organisational practices to seize the business model potential (commitment).

Here is why the Circularity assessment model figures as a useful assessment construct (or a tool) of the firm's circularity, considered its composite characteristic, represented by a score, which is a result of this measurement, **focused on the evaluation of a firm's business model**.

Aquick version of the tool is freely available here: <u>https://www.circularbusiness.academy/#score</u> .

Focus on business models



Business model canvas (source: Osterwalder & Pigneur, 2010).

10-step circular transformation journey



Key phases

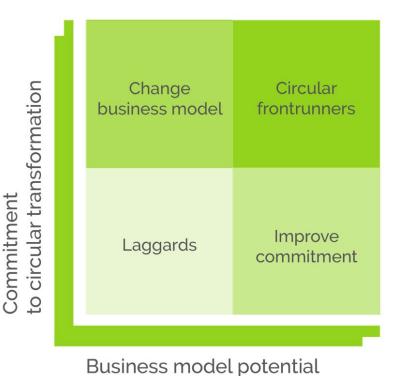
- Leadership: visioning a new purpose
- Selecting your pilot
- Stakeholder engagement
- Internal transformation
- Business model innovation
- Scaling up to a circular business



Source: "Circular Business, Collaborate and Ciirculate, by Nancy Bocken, Christiaan Kraaijenhagen, Cecile Van Oppen (2016)

How the Circularity Assessment Score is composed

In order to evaluate the relationship between the circular transformation of a business model and the value creation in a firm, we have to understand the nature of the circular transformation and its impact on the economic value creation.



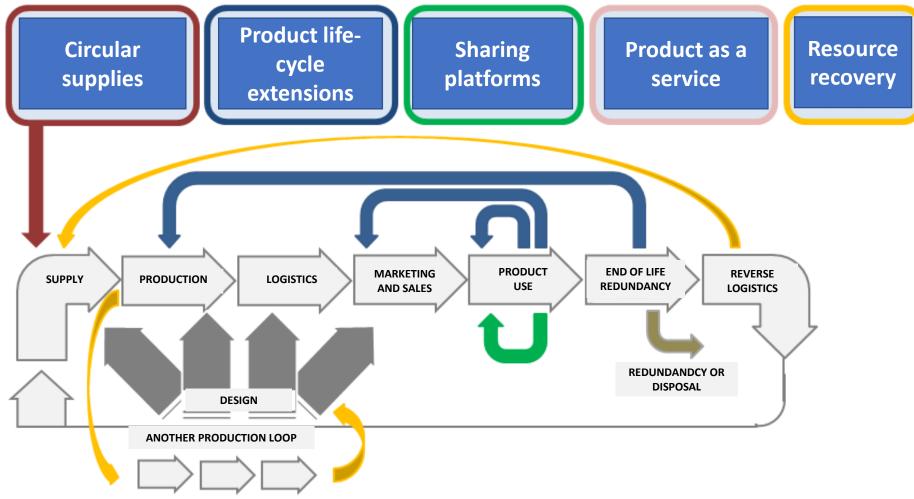
We can assess the increase of the economic value with the improvement of the firms' profitability (multiple measures), competitiveness, level of internationalisation and the total factor productivity. However, to evaluate the degree of circularity, we the apply Circularity assessment model.

Unlike the economy as a whole, for a firm to be considered circular, that is, to practice a circular business model, it does not need to maximise its capability to recover and regenerate resources deployed within its own value-creating processes. Circularity as a firm's strategic orientation, exercised through the functioning of an organisation according to circular business models, is manifested by a set of capabilities to contribute to the circular economy.

Circularity Assessment Score is intellectual property of Gm (CBA).

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Understanding opportunities of circularity along the value chain



Understanding the typlogy of linear and circular risks in a circular transformation process

Five generic

models and

profiles in a

value chain

other value chains.

business

financing

three

END-OF-LIFE SALES AND PRODUCT/ REVERSE PROCUREMENT LOGISTICS OPERATIONS DISPOSAL MARKETING SERVICE USE LOGISTICS DESIGN Circular use models - CUM Circular output models - COM Optimisation of product use. Focused on the use of products after the maintenance of the added value of end of their life cycle, regeneration and **Circular innovation models - CIM** the product (life extensions, reuse in subsequent value chains. Product- and process- related innovation, enabling maintenance); focused on total lifecycle ownership and liability; or reuse and regeneration of end-of-life disposal from

product-service systems or sale-

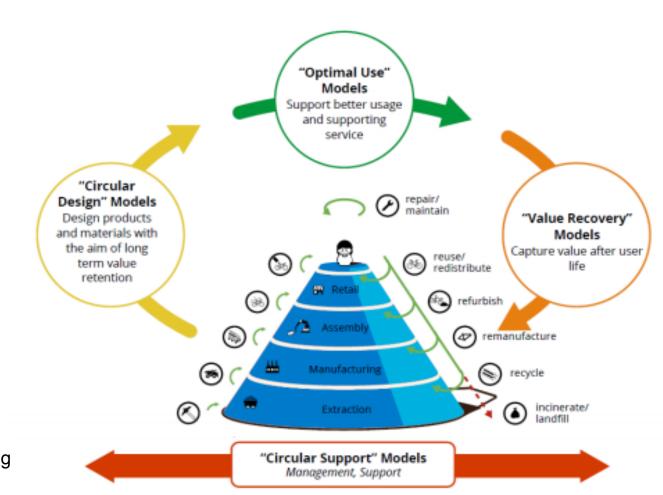
and-lease-back models.

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Each circular business model type is characterised by its own risk profile



Understanding the circular and digital maturity help investors understand risks incured in the implementation of a business model a firm pursues and managers mitigate them...!



The Value Hill

Source: Achterberg Elisa,, Jeroen Hinfelaar, Nancy Bocken: The Value Hill Business Model Tool: identifying gaps and opportunities in a circular network, 2016

Extensions 2.0 I. Linking CAS and DMA at the level of Circular potential:



Traceability of supplies and inputs

2.	Does your organisation trace the origin of material inputs (primary and secondary sources) by digital means:
<u>a)</u>	before the acquisition
0	- No
1	- In a minor part of supplies (less than 20%)
2	- In significant or predominant quantities (20% or more)
b)	through its own internal processes (production, inbound logistics, etc.)
0	- No
1	- In a minor part of supplies (less than 20%)
2	- In significant or predominant quantities (20% or more)
<u>c)</u>	after the outputs are sold to buyers and/or enter the consumption phase
0	- No
1	- In a minor part of supplies (less than 20%)
2	- In significant or predominant quantities (20% or more)

Extension 2.0 II. Linking CAS and DMA (Commitment):



Self-assessment of digital maturity

9. Please, assess the level of digitalisation maturity of your organisation

Very low (basic or no connectivity)

0

- Low (basic connectivity supporting information flow among organisational units, partially autonomous maintenance of digital (IT) systems
- 2 Middle (standard connectivity, mainly autonomous maintenance of digital (IT) systems

3 – High (autonomously supported processes mainly autonomous maintenance of digital (IT) systems and active involvement in digital development)

4 – Very high (own digital development of supported processes, mainly autonomous maintenance of digital (IT) systems)

Extension 2.0 III. Business Model Typology



(This question doesn't add up to the Score!)

1. What is your organisation's primary focus in tackling circular opportunities?

- a. Circular product or service design model
- b. Optimal product / service use model
- c. Value recovery model
- d. Circular support model

(Design products and materials with the aim of long-term value creation) (Support better and more efficient usage and support service) (Capture value of material and energy resources after user life) (Management support to circularity enhancement)

(Please, choose one.)



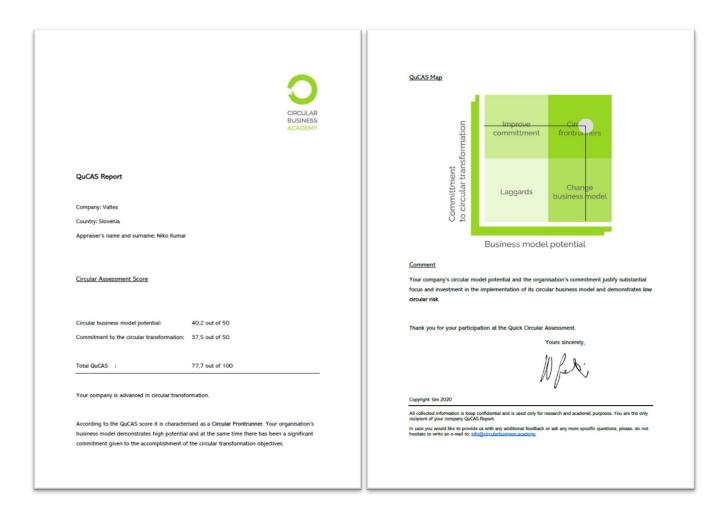
Enhancements of the CAS Report

Three layers of references and benchmarking to be introduced:

- Positioning within the growing database of responses

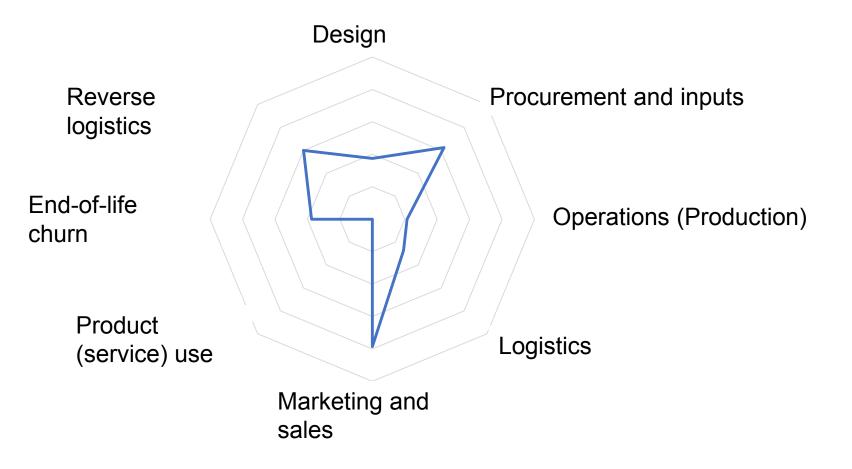
- Correlations with financial performance (if disclosed or available at individual respondent's level)

- Specific transformation guidelines based upon in-debt session with the management



Example: Circularity profile of a Newco





Join in to the Circularity accleration training (CAT4.0) course coming up in March..!

Initiation workshop (a part of the CAT4.0) scheduled for <u>17th March 2021</u>

Organised in cooperatron with Circular4.0 – Interreg Alpine Space project

Alpine Space Circular4.0

The CAT4.0 course is developed around each participating firm's pilot project.

Key principle: every firm is a story of its own.

