

Challenges of the circular transition

EU competitiveness and the banking sector

LJUBLJANA, 11th DECEMBER 2019





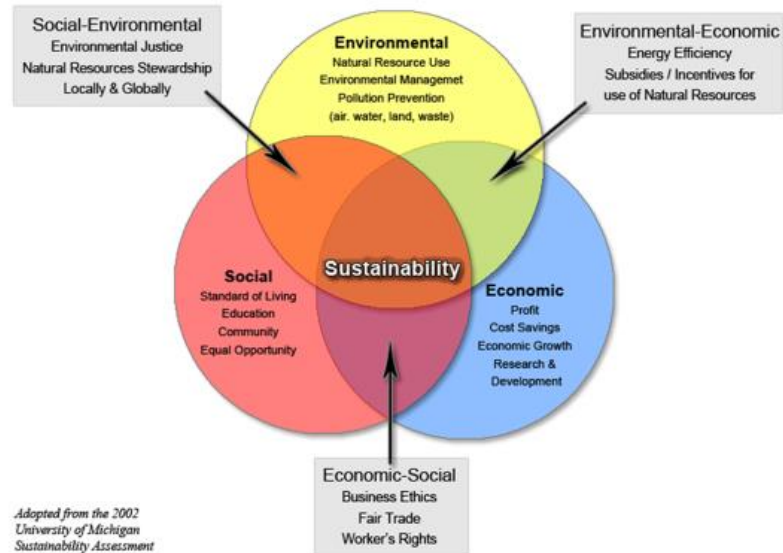
The intent of this document is to present the purpose, formats and stakeholder context of the Circular business Academy to attendees, aspiring partners and clients.

The document is subject to subsequent changes and improvements. All contained information is intended solely to destined parties with the best intention to encourage engagement and collaboration in the project and not in a sense of a legally binding commitment by Gm.

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Sustainability and the circular transition

Three spheres of sustainability



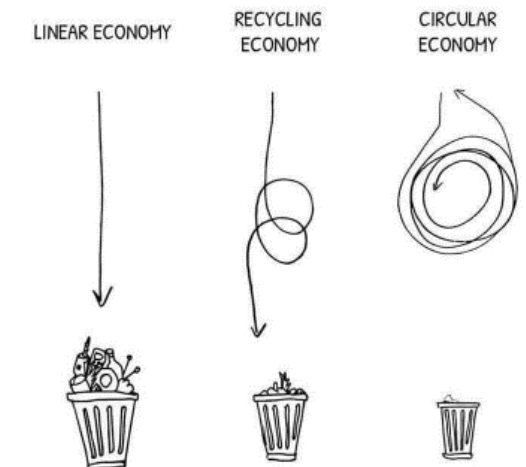
UN Sustainable Development Goals



On September 25th 2015, countries adopted a set of goals to end poverty, protect the planet, and ensure prosperity for all as part of a new sustainable development agenda. Each goal has specific targets to be achieved over the next 15 years.

<http://www.un.org/sustainabledevelopment/sustainable-development-goals/>

What is the circular economy



Challenging questions

- How does the transition to the circular economy contribute to the overall societal crisis of climate and resources?
 - a) Characteristics of the circular transition
 - b) References to the regulatory framework

- Challenges and opportunities in for the banking sector overall
 - a) Anticipate changes in regulation and self-regulation
 - b) **Focus on clients' business models:** in search for a proof client assessment
 - c) Understanding linear and circular risks
 - d) Understanding risk along value chains
 - e) Monitoring companies and the evolution of their potential
 - f) Understanding the broader range of financial options

- Here is why the CBA

What is the circular economy?



"Looking beyond the current "take, make and dispose" extractive industrial model, the circular economy is restorative and regenerative by design. Relying on system-wide innovation, it aims to redefine products and services to design waste out, while minimising negative impacts. Underpinned by a transition to renewable energy sources, the circular model builds economic, natural and social capital."

Ellen MacArthur Foundation

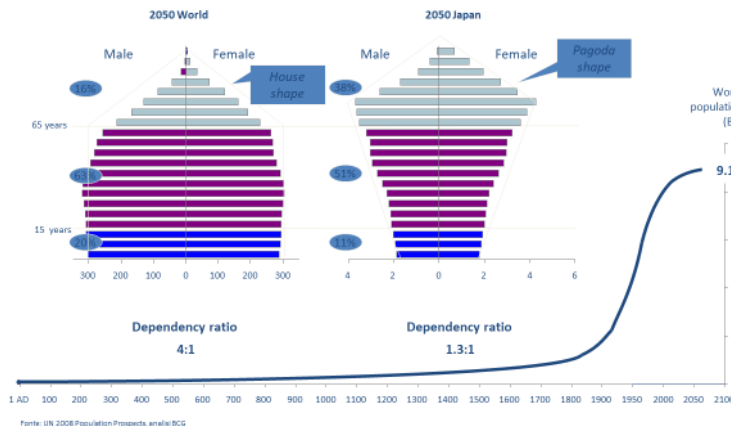
Source: <https://www.ellenmacarthurfoundation.org/circular-economy>

How does the transition to the circular economy contribute to the overall societal crisis of climate and resources?

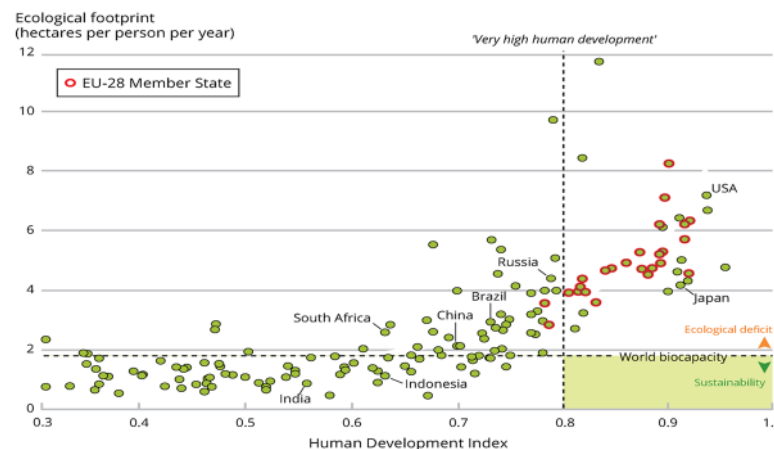
It is scientifically proven that we can not ensure a sustainable future of humanity at the forecast population and economy growth at the present level of exhaustion of natural resources (at the present technology matrix and the aggregate production function).

We need to substantially innovate in order to assure wellbeing for our and future generations.

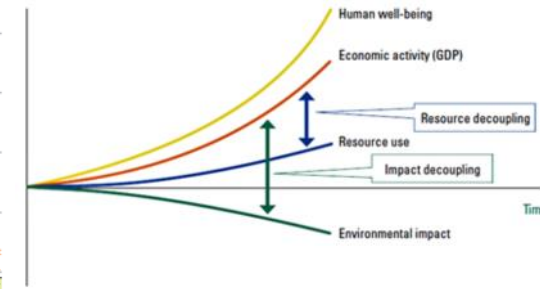
Population ageing changes the pyramid of the last 2000 years



Humanity outside the area of sustainable development



Two aspects of decoupling



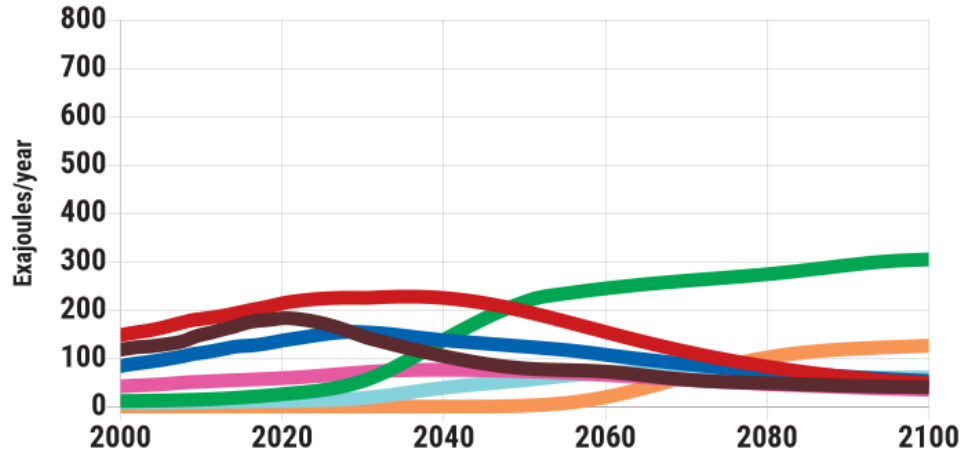
Source: Decoupling Natural Resource Use and Environmental Impacts from Economic Growth, UNEP International Resource Panel Report, 2011

Decoupling

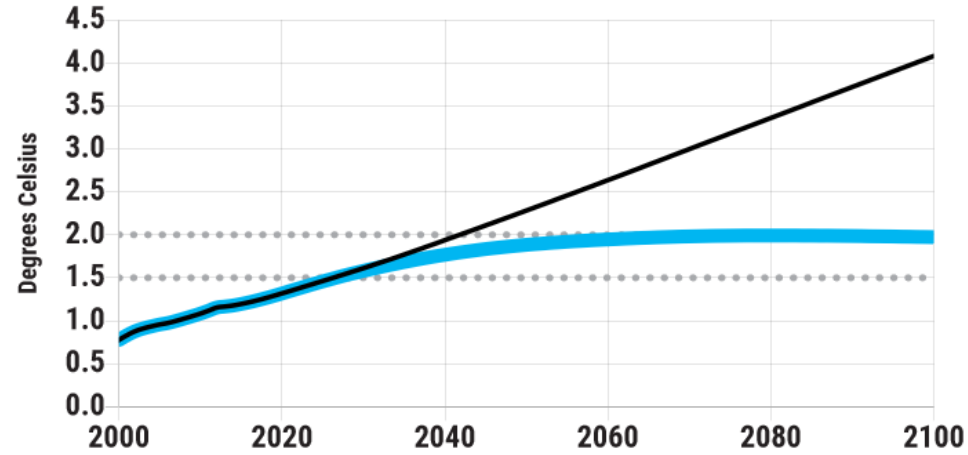
The ability of an economy to grow without a proportional increase in the use of primary materials and energy.

An economy that is able to sustain GDP growth without having a negative impact on environmental conditions, is said to be decoupled.

► Global Sources of Primary Energy



► Temperature Change



+2.0°C

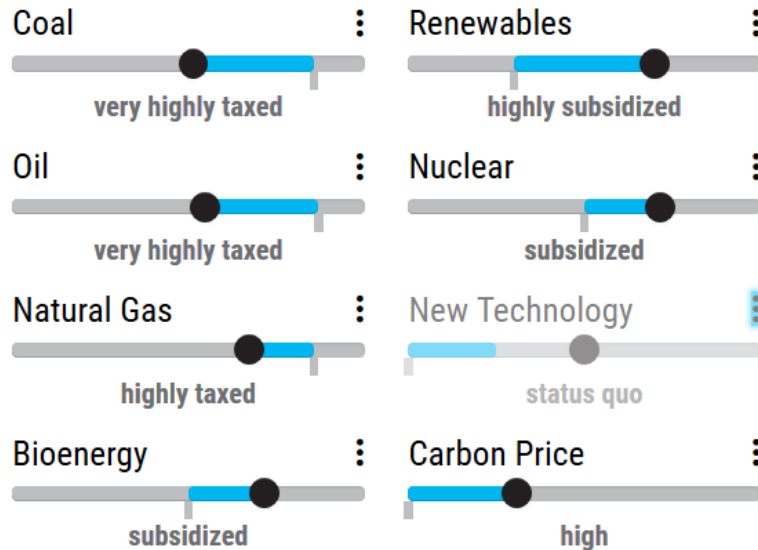
+3.5°F

Temperature Increase by 2100

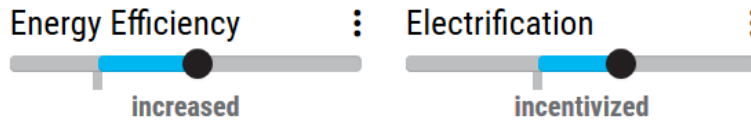
COAL OIL GAS RENEWABLES BIOENERGY NUCLEAR NEW TECH

BUSINESS AS USUAL CURRENT SCENARIO

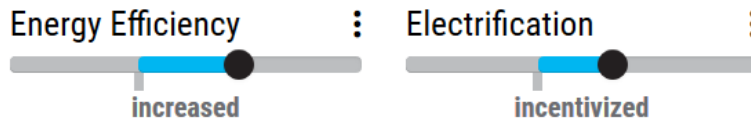
Energy Supply



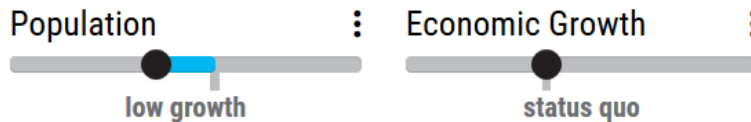
Transport



Buildings and Industry



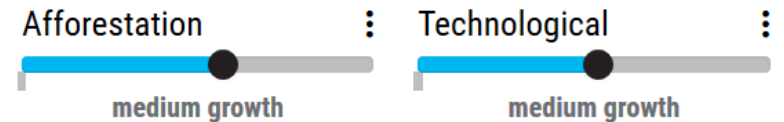
Growth



Land and Industry Emissions



Carbon Removal



A half of the overall contribution to reduce the CO2 emissions should derive from the circular economy.



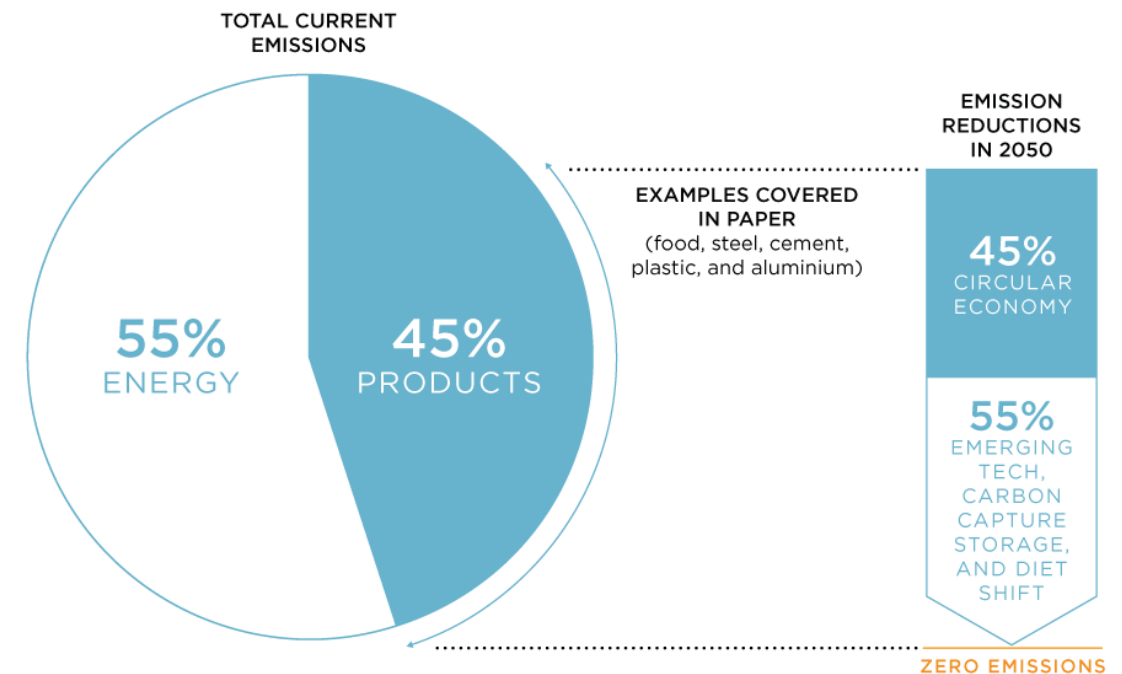
But the world in 2019 is only 9% circular.

The Circularity Gap Report 2019 finds that the global economy is only 9% circular: just 9% of the 92.8 billion tonnes of minerals, fossil fuels, metals and biomass that enter the economy are re-used annually.

Climate change and material use are closely linked. Circle Economy calculates that 62% of global greenhouse gas emissions (excluding those from land use and forestry) are released during the extraction, processing and manufacturing of goods to serve society's needs; only 38% are emitted in the delivery and use of products and services.

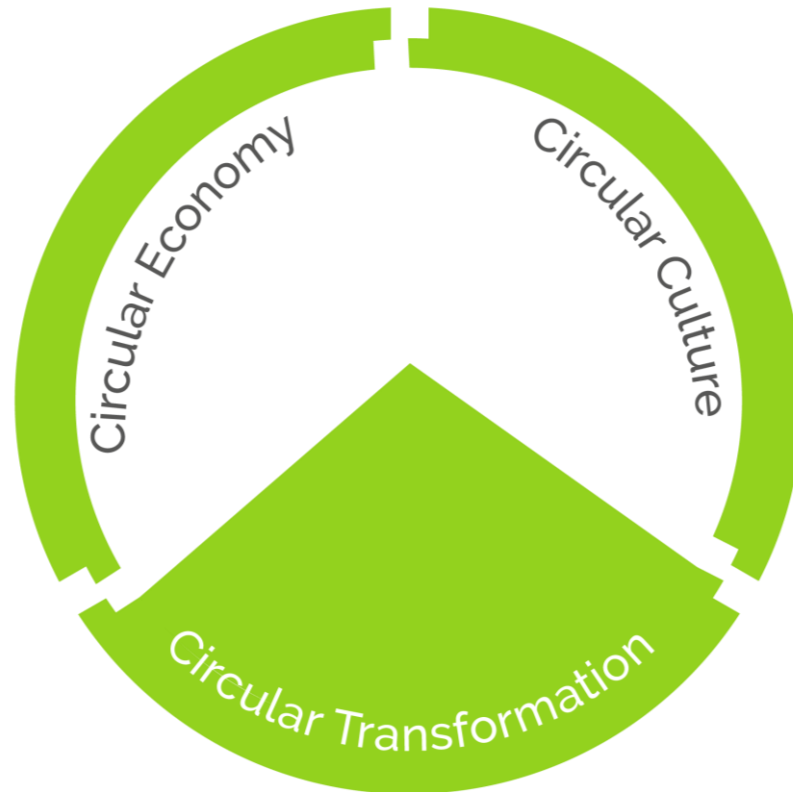
Yet global use of materials is accelerating. It has more than tripled since 1970 and could double again by 2050 without action, according to the UN International Resource Panel. Circle Economy's CEO, Harald Friedl, said: "A 1.5 degree world can only be a circular world. Recycling, greater resource efficiency and circular business models offer huge scope to reduce emissions. A systemic approach to applying these strategies would tip the balance in the battle against global warming.

COMPLETING THE PICTURE: TACKLING THE OVERLOOKED EMISSIONS



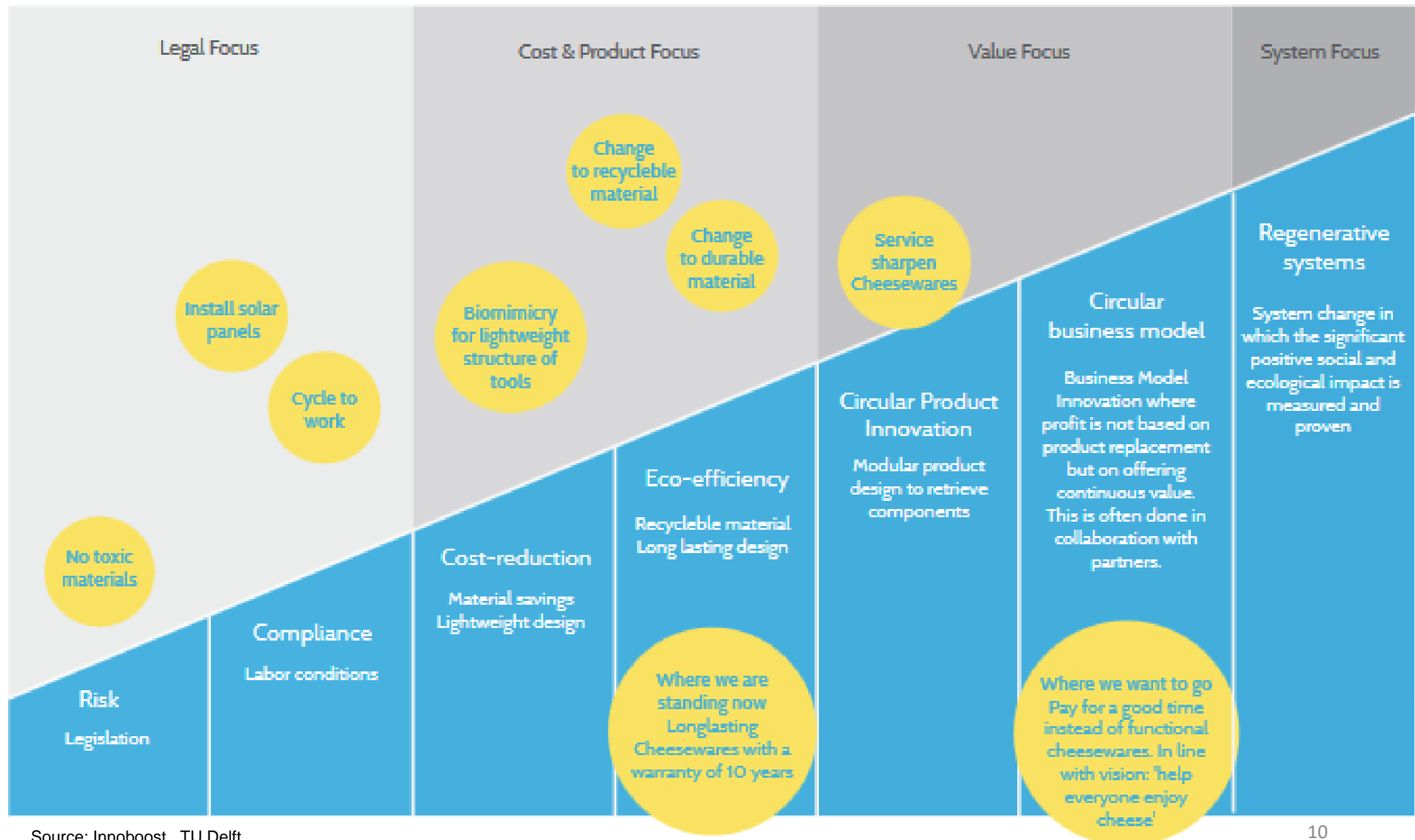
Underpinned by a transition towards renewable energy, a circular economy can help tackle the overlooked 45% of emissions by transforming the way goods are made and used.

Characteristics of the circular transition



The Circular Triangle

-  An evolutionary process
-  A multi-level economy- business- and societal transformation
-  Innovation is imperative
-  Innovation is embedded into the sustainability mindset:
 - Absolute limitations of resources
 - Rethinking of the business purpose
-  End of growth: wellbeing (welfare) comes before growth



Regulatory framework: global governance in the making

UN SDGs

On September 25th 2015, countries adopted a set of goals to end poverty, protect the planet, and ensure prosperity for all as part of a new sustainable development agenda. Each goal has specific targets to be achieved over the next 15 years.

<http://www.un.org/sustainabledevelopment/sustainable-development-goals/>

United Nations Framework Convention on Climate Change, 1994

The UNFCCC, later „The Rio Convention“ entered into force on 21 March 1994. 197 countries have ratified the Convention.

Kyoto Protocol, 1997

The Kyoto Protocol is an international agreement linked to the United Nations Framework Convention on Climate Change, which commits its Parties by setting internationally binding emission reduction targets.

Paris Agreement 2015

The Paris Agreement builds upon the Convention and for the first time brings all nations into a common cause to undertake ambitious efforts to combat climate change and adapt to its effects, with enhanced support to assist developing countries to do so. As such, it charts a new course in the global climate effort.

The Paris Agreement central aim is to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. The Paris Agreement requires all Parties to put forward their best efforts through nationally determined contributions (NDCs).

The UN Climate Change Conference – COP 25

Madrid 2 to 13 December 2019
Countries negotiate more ambitious plans to limit global warming to 1.5°C, in line with the Paris Agreement.

https://unclimatesummit.org/?gclid=CjwKCAiA27LvBRBOEiwAPc8XWTM_HiDXlv76iMkPW5NPfZnktgnTVRCGyt-yvnPda1IKDbp9r7_gYxoCOyMQAvD_BwE

Regulatory framework: EU taking the lead

European Commission:

Autumn '14:	First CE package proposed
Dec 2015:	First CE package adopted
Jan 2017:	Second CE package
Dec 2019:	EU Green Deal proposed






Sustainability finance

Financing Instruments

Junker Plan – EFSI
EIB
R&D: H2020

Slovenia, environmental sustainability and the circular transition

Changing role of the banking sector

-  A broader understanding of risk
-  Responsible financing
-  Bank as a Circular Enabler
-  Bank as a market maker
-  Bank as a responsible warrant

Challenges and opportunities in for the banking sector

- Anticipate changes in **regulatory environment and self-regulation** both in banking and in the real sector
- **Focus on clients' business models:** in search for a proof client assessment
- Broaden the understanding of **linear and circular risks** and understanding business (linear, circular) risks along clients' **value chains**
- Assessing the level of sustainability in clients' strategies
- Monitoring companies and the **evolution of their circular (innovation) potential**
- New services development: understanding the broader range of financing options for clients' circular transformation

Here is why the CBA

- Assist managers to **master business transformations of from linear to circular**;
- Offer support to entrepreneurs in the **development of circular businesses** and seize their circular potential;
- Develop **competencies and skills** needed to embrace circular business models and support implementation;
- **Facilitate investment decisions** into sustainable business and facilitate financing of sustainable projects;
- **Promote best practices and develop learning tools.**

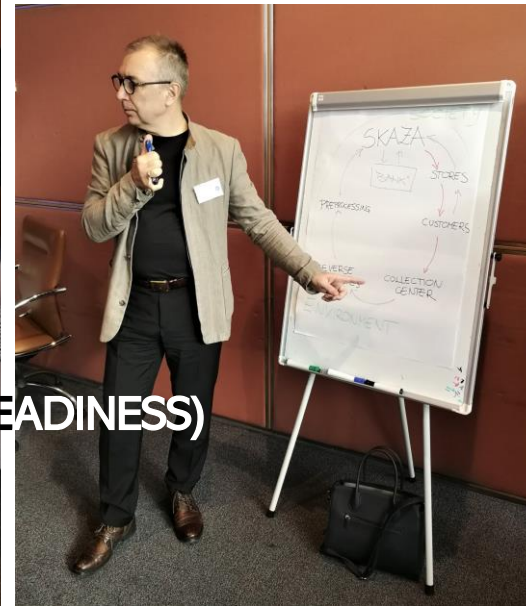
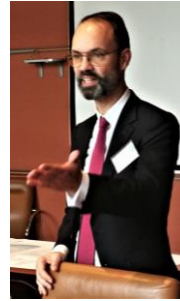


Tailored professional training programmes, enabling **entrepreneurs, managers and policy-makers** to embrace circular business model innovation.



Formats

- CIRCULAR OPPORTUNITY DAYS
- FULL-TRACK CBA
- IN-COMPANY INITIATION PROGRAMMES
- ADVISORY AND MENTORSHIP
- CIRCULAR SCALEUP MODULE (INVESTMENT READINESS)
- FINANCING FACILITATION





Clients and partnerships

CLIENTS

Circular
frontrunners

Programme
partners

(aspiring)



Renwable
Matter



Aquafil
Iskraemeco
ICP (Pulp and
paper institute)
OMV



Materia
rinnovabile

Business
Angels
VC Funds
Private Equity
Banks



Tromba

CEC



...

...

...


COMPETENCE PARTNERS

CIRCULAR NETWORKS

Innovation
networks and
associations

Media and
Platforms

CB Investor
Network

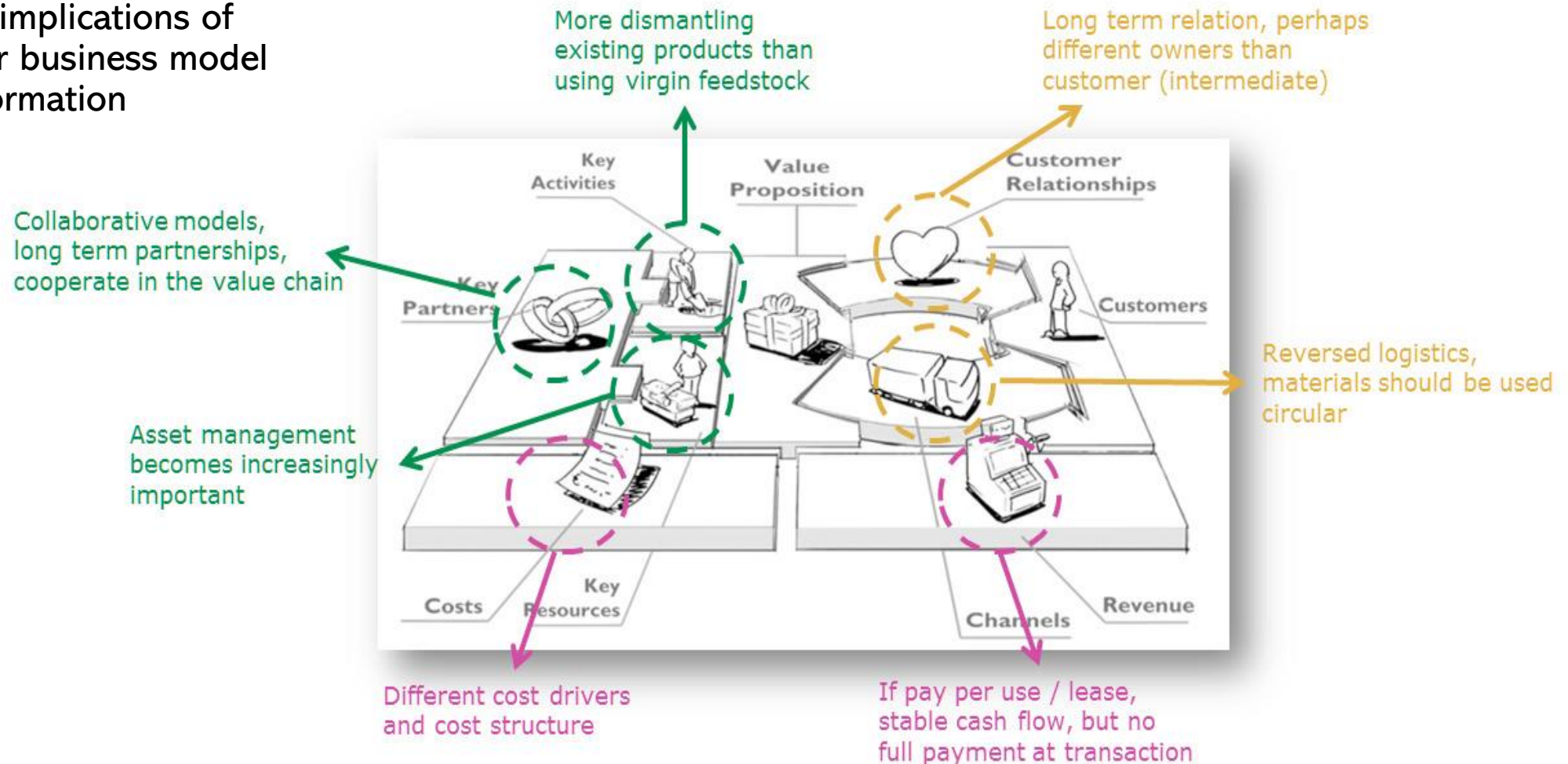


How can we support
entrepreneurs, investors,
facilitators and financial
intermediaries to accelerate the
circular transition and do good
business?



I. Focus on business models

Seven implications of circular business model transformation

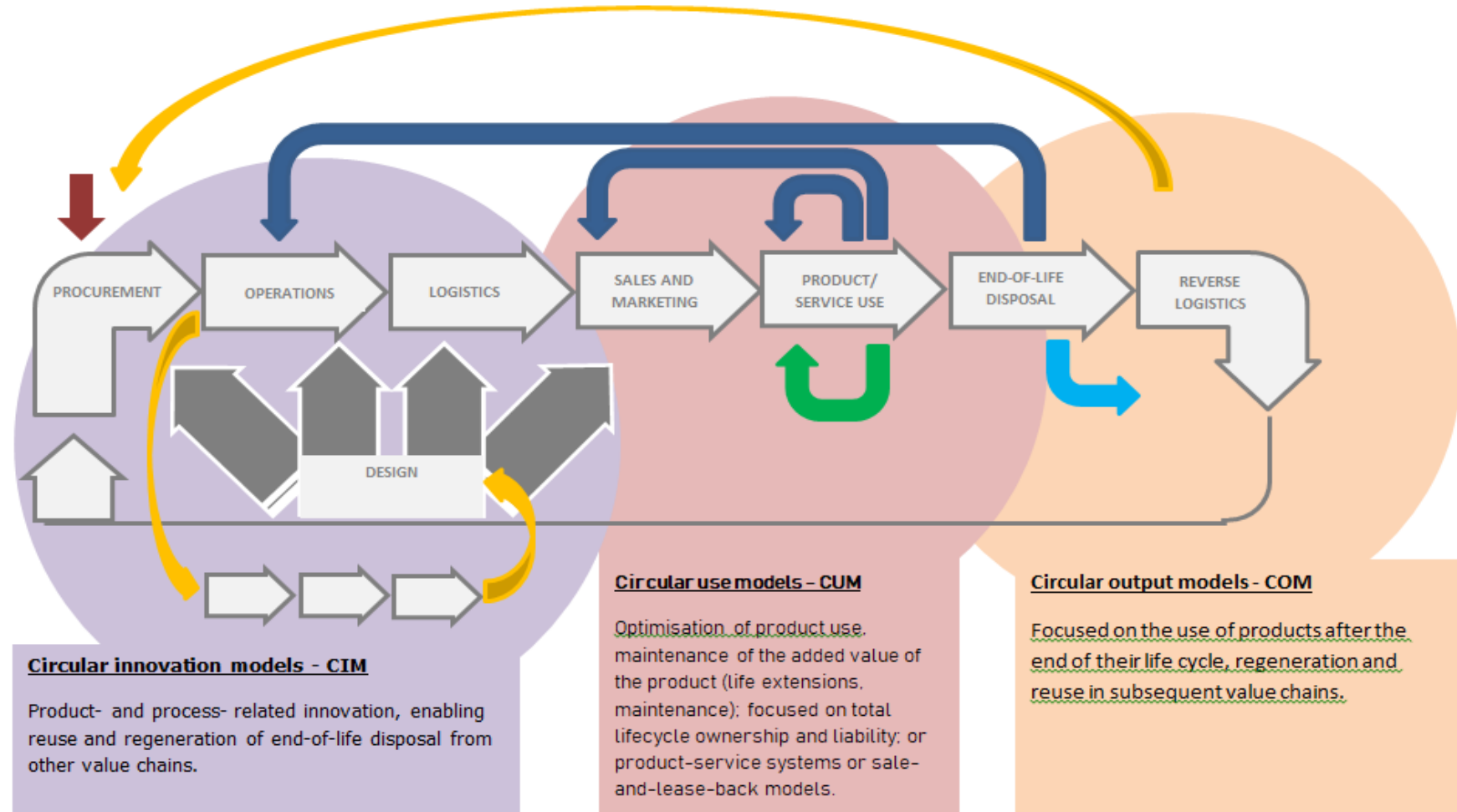




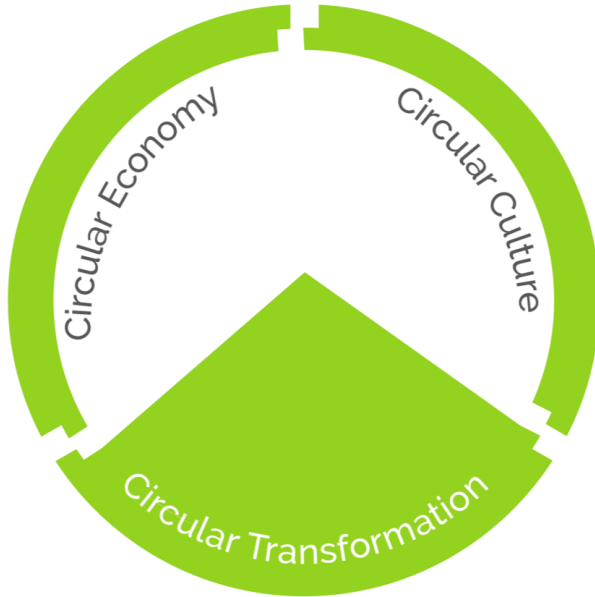


3. Understanding the typology of linear and circular risks in a circular transformation process

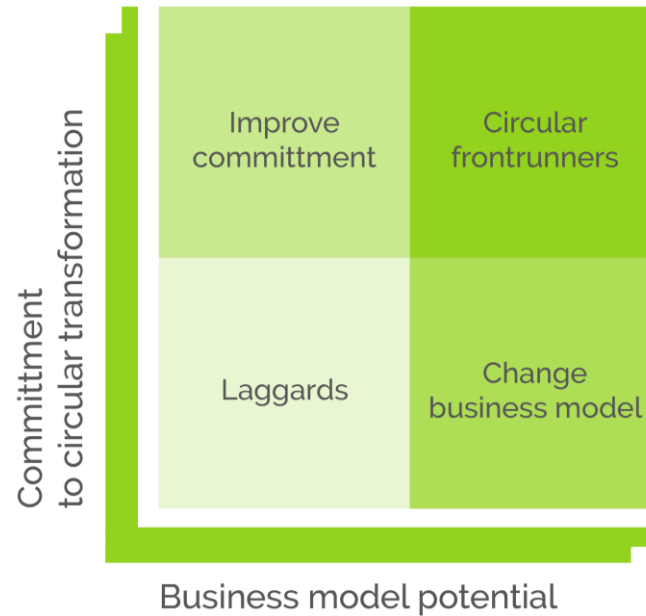
Five generic business models and three financing profiles in a value chain



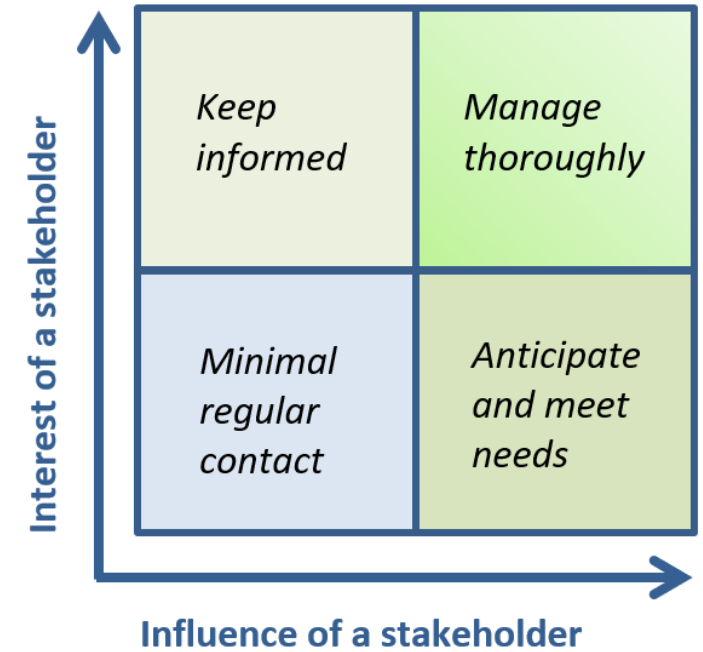
Tools and methods



The Circular Triangle



Circularity Assessment

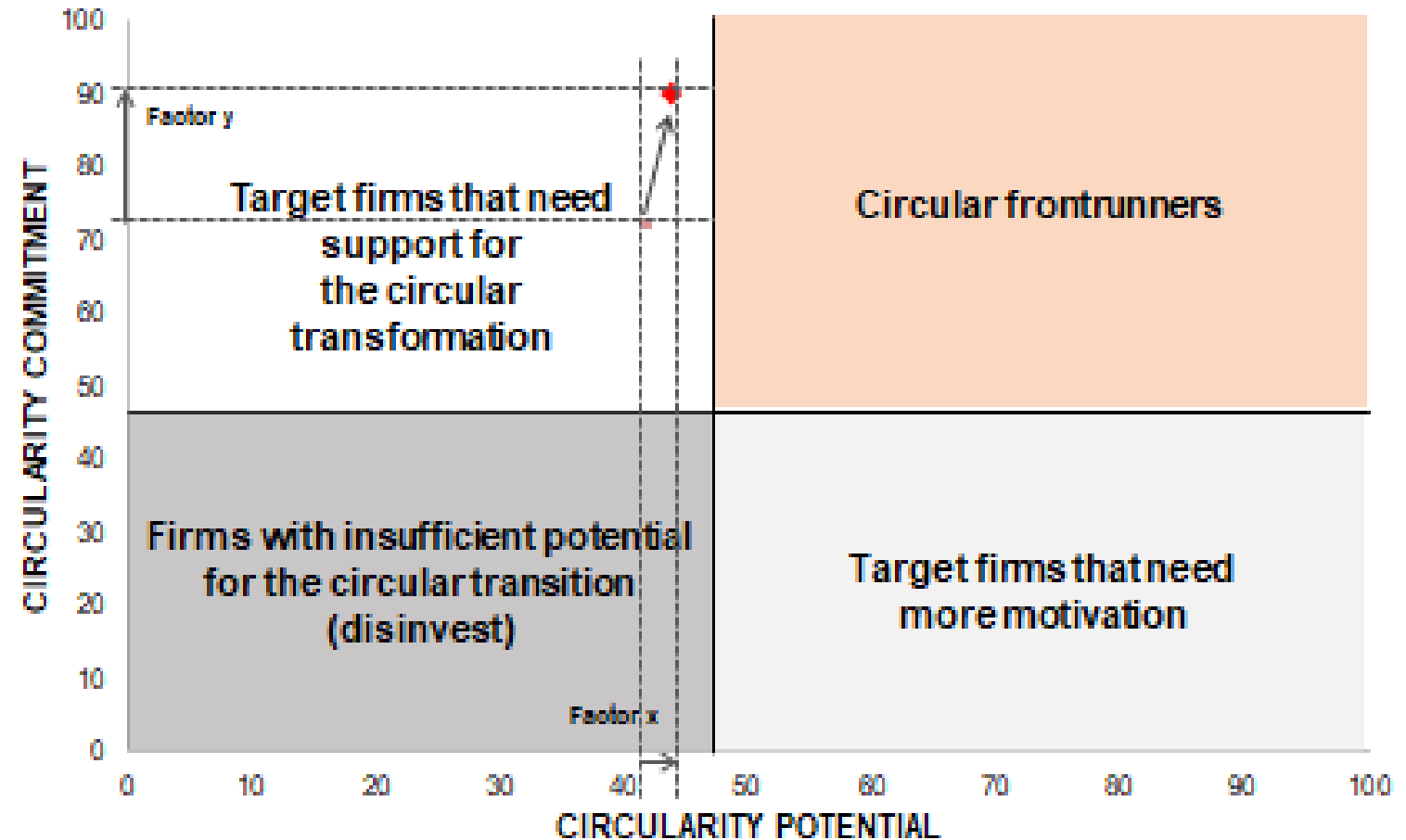


Stakeholder mapping grid



Circularity assessment matrix representing a hypothetical example

An example deriving from the current model developed for - and in use at – SID banka



Tools and methods



META Challenge-based innovation platform

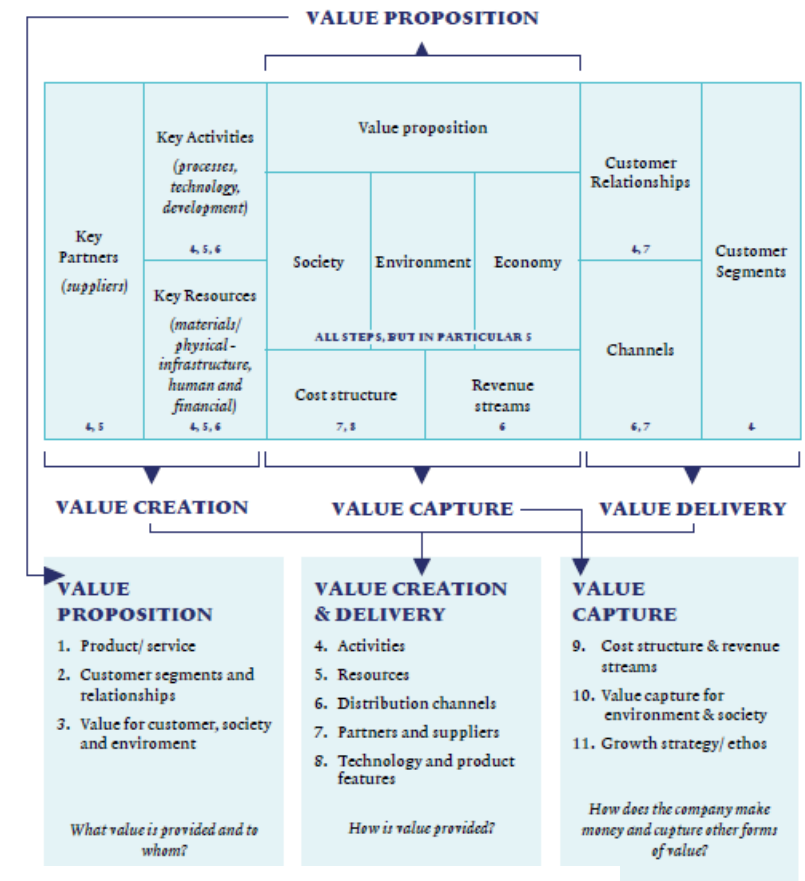


META PI Booster and Investment-readiness tools



10-step circular transformation journey

Source: „Circular Business, Collaborate and Circulate, by Bocken, Kraaijenhagen, Van Oppen (2016)



Adapted business model canvas

Figure 9.1 Conceptual sustainable business model framework.
Source: Bocken and Short (2016), adapted from Richardson (2008) and Osterwalder and Pigneur (2005), Bocken et al. (2014) and Short et al. (2014)



Circular expert practitioners

We can do it together. Welcome to apply and get selected into the initial class..!

You will:

Be **publicly promoted** as a selected expert on the CBA web site.

Commit to promote the Academy's programme, share knowledge and contribute to its development

Attend two seminars or programmes per year as an active "expert" (speaker, discussant, working group leaders or facilitator or as a mentor.

Undertake other expert roles at your own initiative:

- Develop research survey
- Propose, prepare and implement your own **formats** and **case studies**

We will prepare update and support:

- (1) competence guidelines
- (2) dedicated seminars and
- (3) knowledge exchange meetups

... to make our knowledge grow.

First seminar to be scheduled for January 2020.

We will foster the network, commit to and maintain clear criteria to be a part of the Circular expert practitioners.



CB Investor Network

Intended to support firms pursuing circular transformations and sustainable growth strategies across the EU with the focus on the Alpine and Adriatic-Ionian EU macro-regions.

Intended to:

Support growth of innovative startups and scaleups (SMEs and small caps) with a high growth potential and the capability to transit towards sustainable and circular economy business models, by thriving on the fundamental dynamics of the circular transformation

Geographic focus: EU, focus on the Alpine or Adriatic-Ionian EU macro-regions

By:

- Target selection process of potential investees by
 - Screening
 - Sustainability evaluation
 - Circularity assessment
 - Advisory

... through the CBA programmes.

- Advising on active investment readiness and partnerships monitoring, challenging, supporting and supervising the invested companies
- Fund Raising



Next appointments

8TH NOVEMBER: ~~Challenges of the circular transformation, The Case of Skaza~~

21ST NOVEMBER: ~~Investing into circular business~~

11TH DECEMBER: ~~Sustainable financing and circular business models~~

JANUARY 2020: Expert practitioners seminar

MARCH – JUNE 2020: Full Track CBA

SPRING 2020: Circular scaleup modules (tbd)
Circular opportunity days
(Topics: Investing; Circular cities; Food value chain; Open BM
Transformation workshop;)

AUTUMN 2020: Second Sustainability Financing and Circular Investing Conference with ZBS



[What is CBA](#)

[Opportunity Days](#)

[CBA formats](#)

[International CBA Faculty](#)

[Circularity Assessment Score](#)

[The Circular Triangle](#)

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BUSINESS
ACADEMY**

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makers to embrace circular business model
innovation*

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*Opportunity days – Dnevi
priložnosti*

*'The Challenges of Circular
Transformation'*

Ljubljana, 8. November 2019

www.circularbusiness.academy