CIRC4LIFE

THE ROLE OF TECHNOLOGIES IN A CIRCULAR ECONOMY

Presented by [...]
[Date]

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 776503

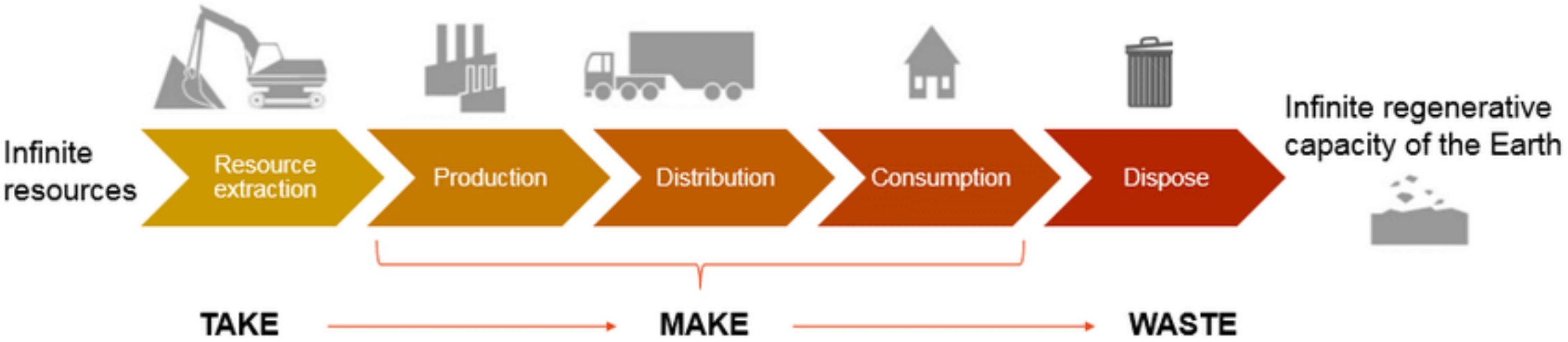
Basic information about CIRC4Life

- CIRC4Life is an international collaborative innovation project (May 2018 until April 2021) with the aim to develop and implement a circular economy approach for sustainable products and services through their value and supply chains.
- Coordinator Nottingham Trent University
- Partner organisations

Enviro Data (ENV), Jonathan Michael Smith (JS), Kosnic Lighting Limited (KOS), Centre of Research for Energy Resources and Consumption (CIR), European EPC Competence Center GmbH (EECC), The Institute for Ecology of Industrial Areas (IETU), RISE IVF AB (SWE), Make Mothers Matter (MMM), ONA PRODUCT (ONA), INDUMETAL Recycling (IND), GS1 Germany GMBH (GS1G), Laurea University of Applied Science (LAU), Center for European Policy Studies (CEPS), Institute of Communication and Computer Systems (ICCS), Recyclia (REC), S.A.T. Alia (ALIA)

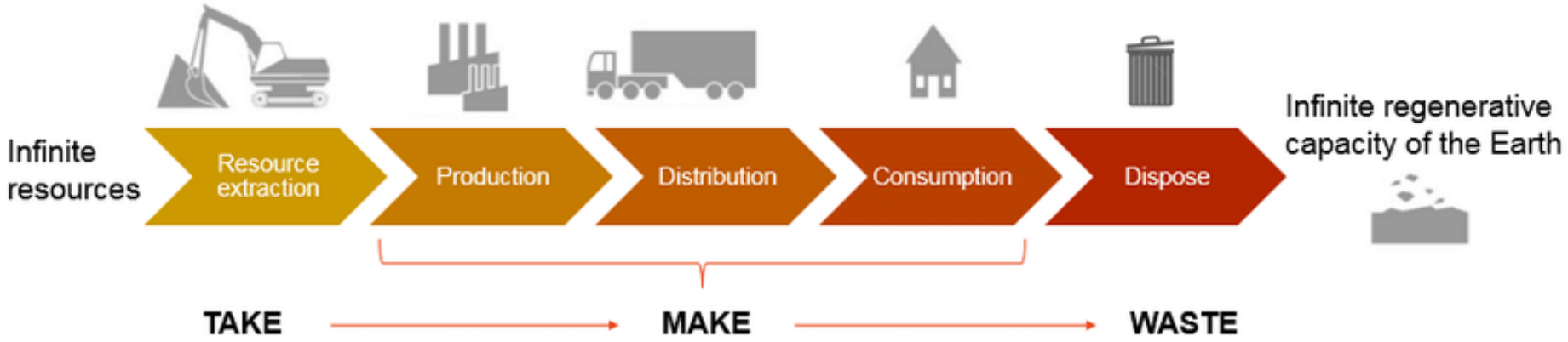
- Content specific for this module tool produced by

FROM LINEAR TO CIRCULAR ECONOMY



Wautelet, 2018

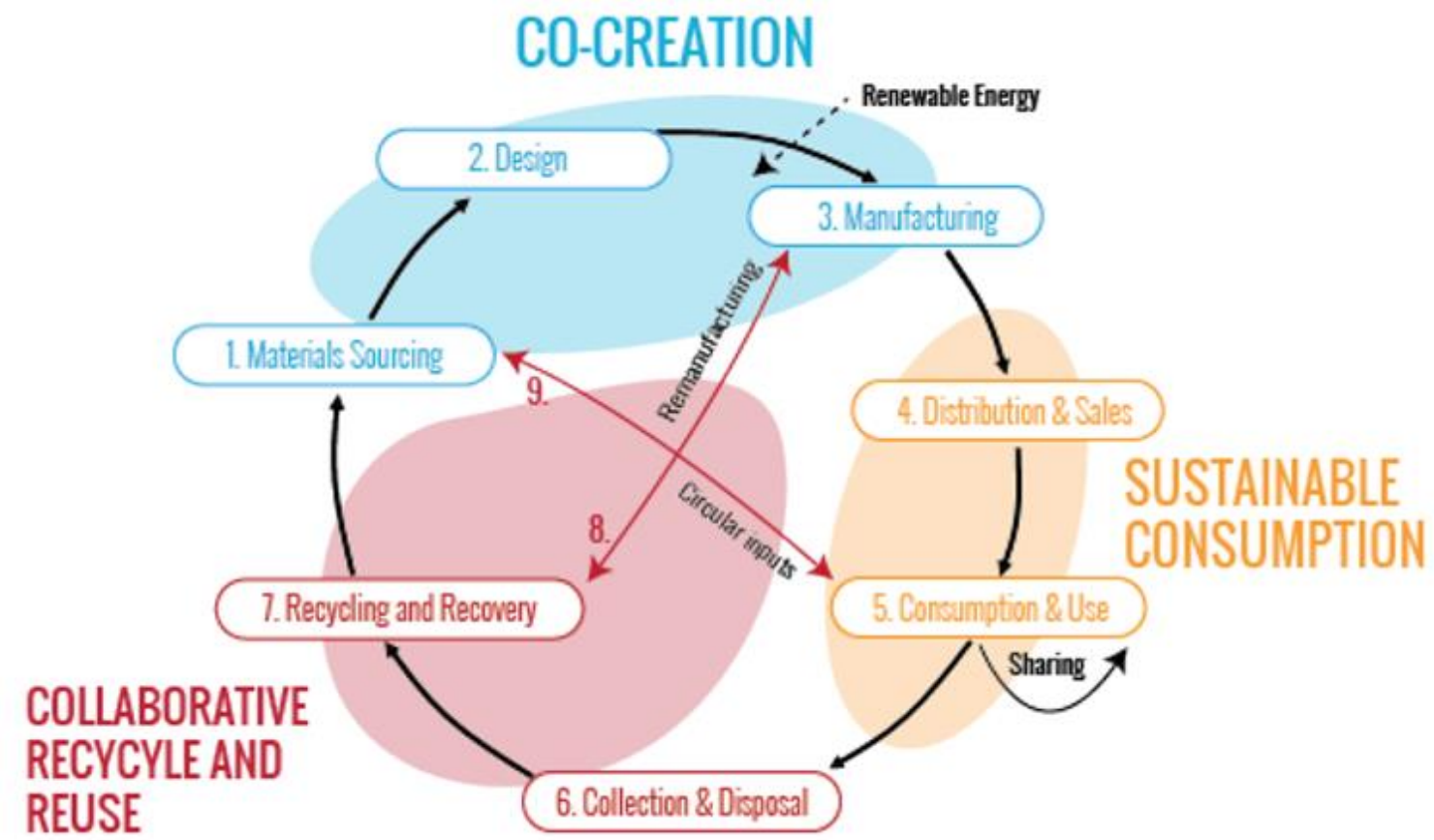
FROM LINEAR TO CIRCULAR ECONOMY



Main problems:

- We do not have infinite resources.
- We consume every year more resources than the earth can generate.
- Climate changing is growing and growing.
- This system is not sustainable and has to end.
- Solution? CIRCULAR ECONOMY.

FROM LINEAR TO CIRCULAR ECONOMY



Kalmykova et al., 2018

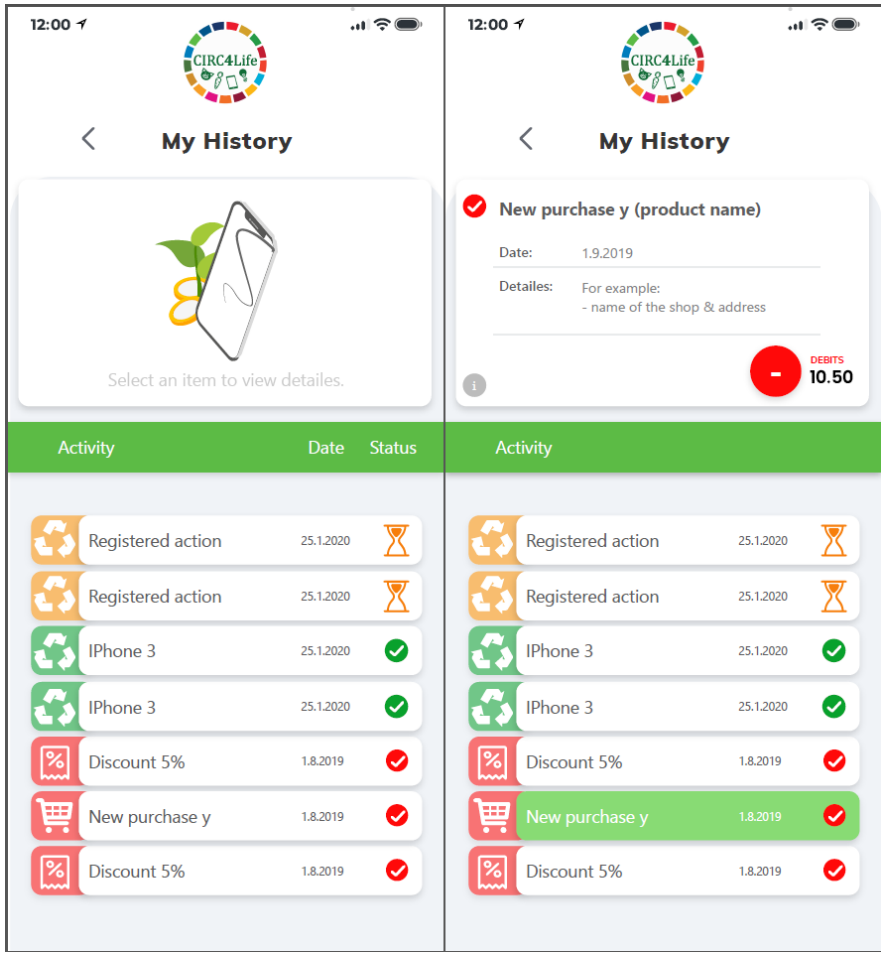
THE ROLE OF TECHNOLOGIES

- Technologies plays a major role in every aspects of our daily life - and for promotion of sustainable consumption habits among consumers.

- A key aspect for nowadays industries:
  - To define user friendly tools which everybody can have access to
  - To develop the necessary technological infraestructure
- The main interactions between end-users and companies will be done through mobile apps
  - Important to develop them according to end-users needs.

THE ROLE OF TECHNOLOGIES

- To develop end-user app is a process in which the end-users must be involved for a successful result.
- To enable end-users to monitor their consumption habits so they can easily understand that they are conducting a sustainable behaviour or not is a good idea to promote sustainable habits.
- Apps can be used as a tool of offering incentives to users with sustainable behaviour. Different organizations can join the approach so a huge range of them are offered.



THE ROLE OF TECHNOLOGIES

Product supply/value chains

- **Eco-cost** value indicates product's impact on the environment
- **Eco-credits** are awarded to the user who recycles an EoL product or bio-waste.
- **Eco-account** records consumer's footprints with the eco-costs and eco-credits.

Information & Communication Technology, Traceability Technique

Eco-costs → Assessment of production sustainability

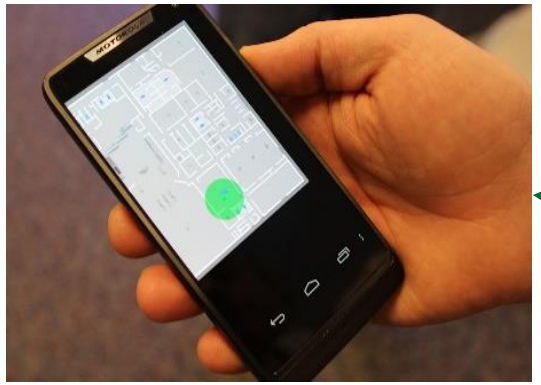
Eco-shopping

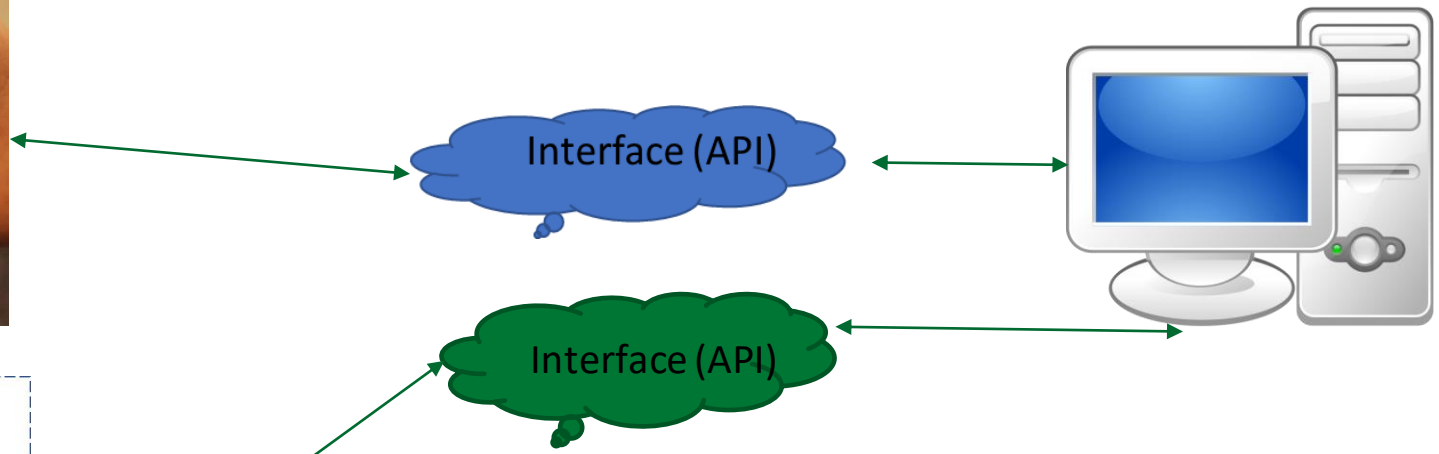
Eco-costs

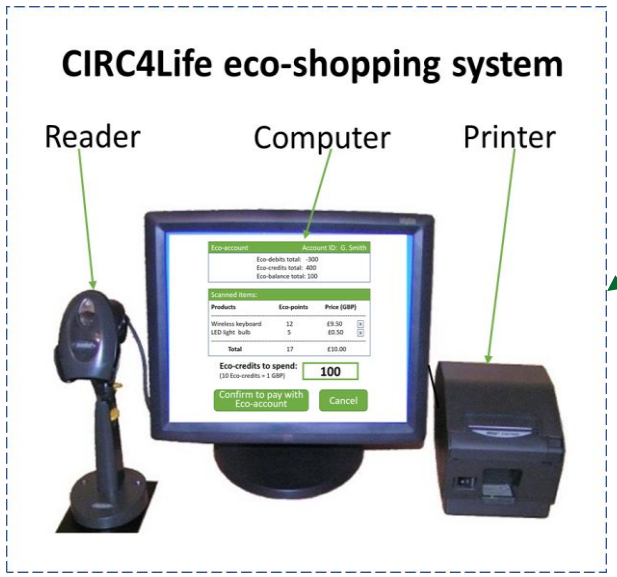
Eco-credits → Consumer eco-account

Recycling / reuse

THE ROLE OF TECHNOLOGIES







Before a consumer can check all this required info, it is necessary to develop a whole technological infrastructure behind it.

THE ROLE OF TECHNOLOGIES

- The role of technologies is important in order to get insights from consumers.
- Key areas where technology plays a major role:
  - To develop webpages and social media in which users can easily interact and give their opinion, or
  - To use big-data tools, or
  - To address a huge number of people when developing a survey or marketing campaign it is also a field in which technology plays a major role.
- To invest in technology is to invest in the future.

THANKS

CIRC4Life

PRESENTER CONTACTS

Name
Organization
name@org

Name
Organization
name@org

Name
Organization
name@org

www.circ4life.eu

INDUSTRY TRAINING PACKAGE
PRODUCED BY RISE RESEARCH
INSTITUTES OF SWEDEN, WWW.RI.SE

References

- Kalmykova, Y., Sadagopan, M., & Rosado, L. (2018). Circular economy–From review of theories and practices to development of implementation tools. *Resources, conservation and recycling*, *135*, 190-201.
- Kirchherr, J., Reike, D., & Hekkert, M. (2017). Conceptualizing the circular economy: An analysis of 114 definitions. *Resources, Conservation and Recycling*, *127*, 221-232.
- Wautelet, T. (2018). Exploring the role of independent retailers in the circular economy: a case study approach. https://www.researchgate.net/publication/323809440_Exploring_the_role_of_independent_retailers_in_the_circular_economy_a_case_study_approach?channel=doi&linkId=5afd39c70f7e9b98e03eab1c&showFulltext=true