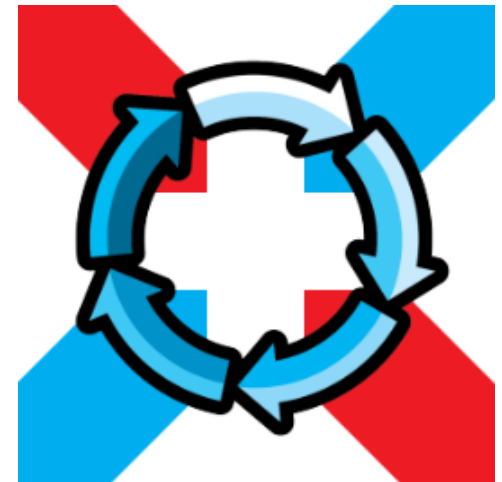


SMOOTH TRANSITION TO A CIRCULAR ECONOMY

INSIGHTS FROM MECO'S EXPERIENCE WITH THE
CIRCULAR DATA SET INITIATIVE

23/04/2024

Jérôme Petry

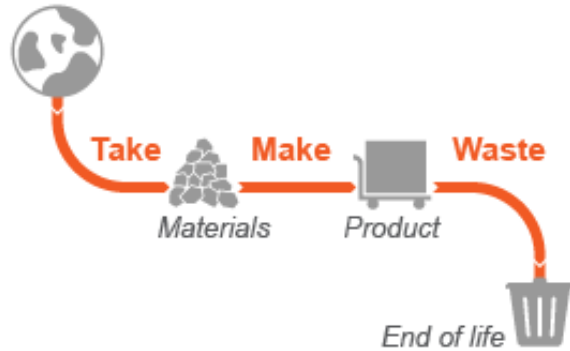


LE GOUVERNEMENT
DU GRAND-DUCHÉ DE LUXEMBOURG
Ministère de l'Économie

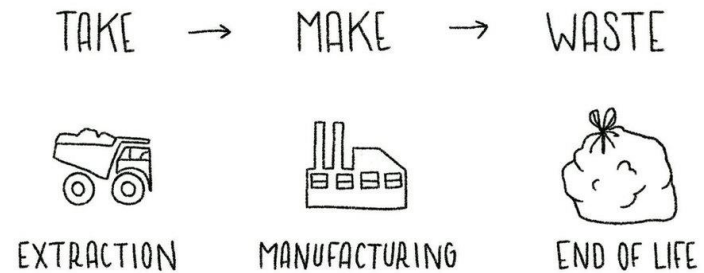
CONCEPT OF A CIRCULAR ECONOMY

Resource scarcity calls for a paradigm change

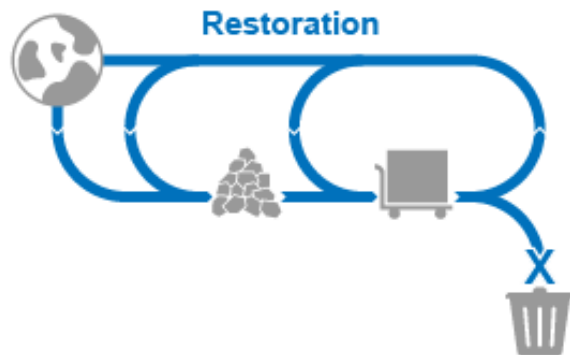
The linear economy



LINEAR ECONOMY



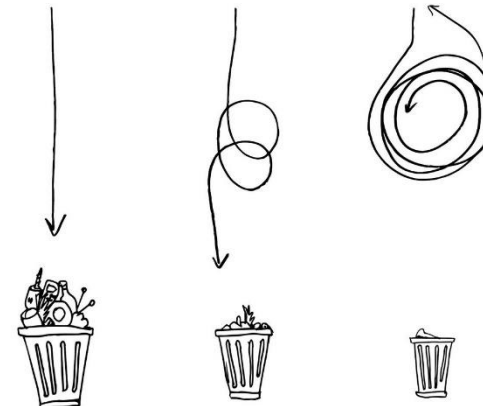
The circular economy



LINEAR ECONOMY

RECYCLING ECONOMY

CIRCULAR ECONOMY

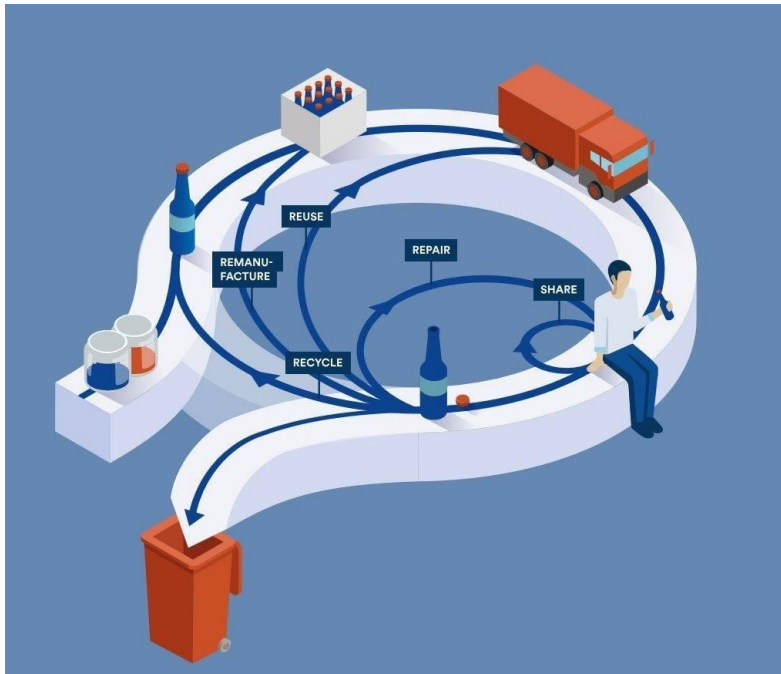


Source: circulflanders



CONCEPT OF A CIRCULAR ECONOMY

Circular Loops

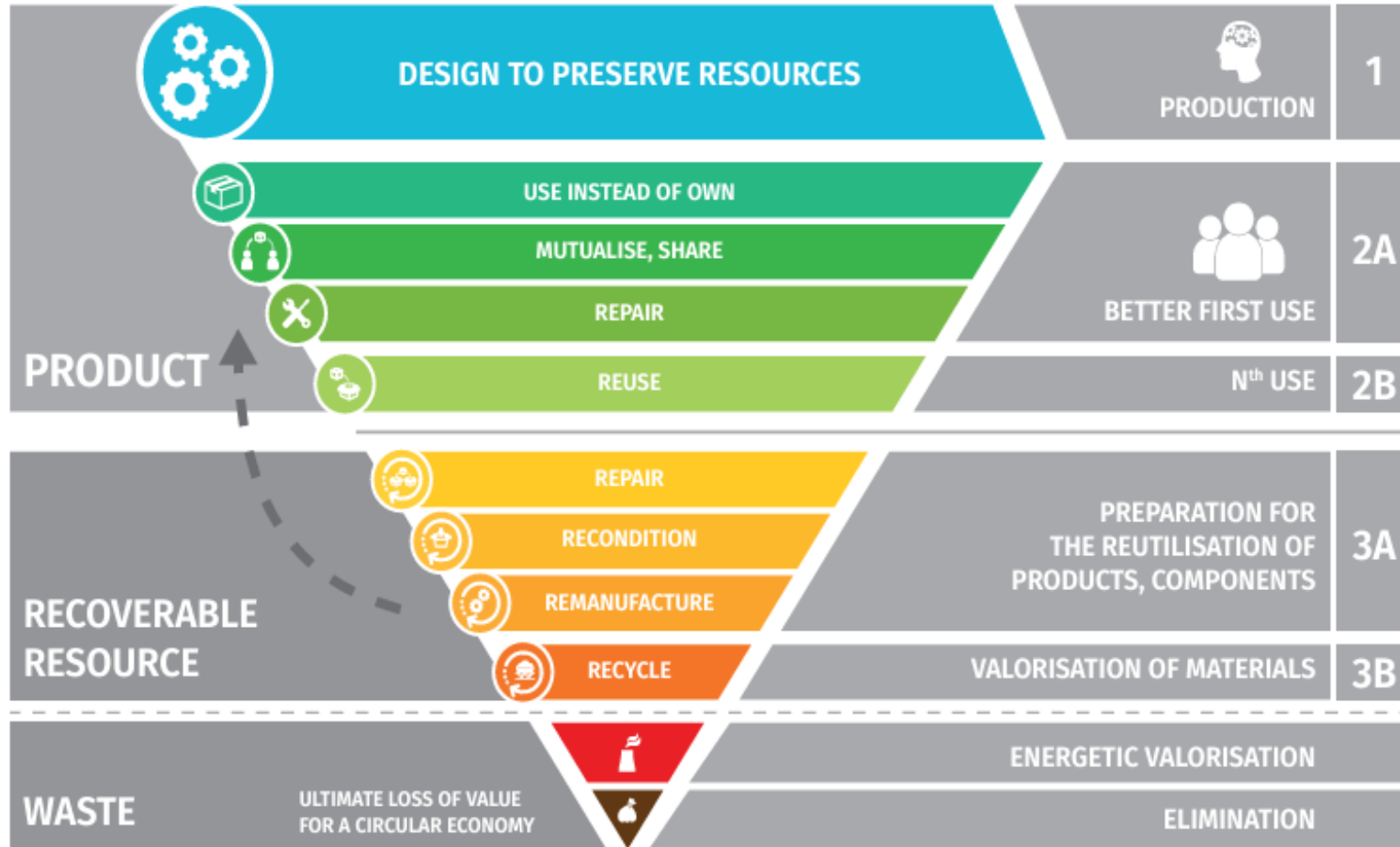


« Value Hill »



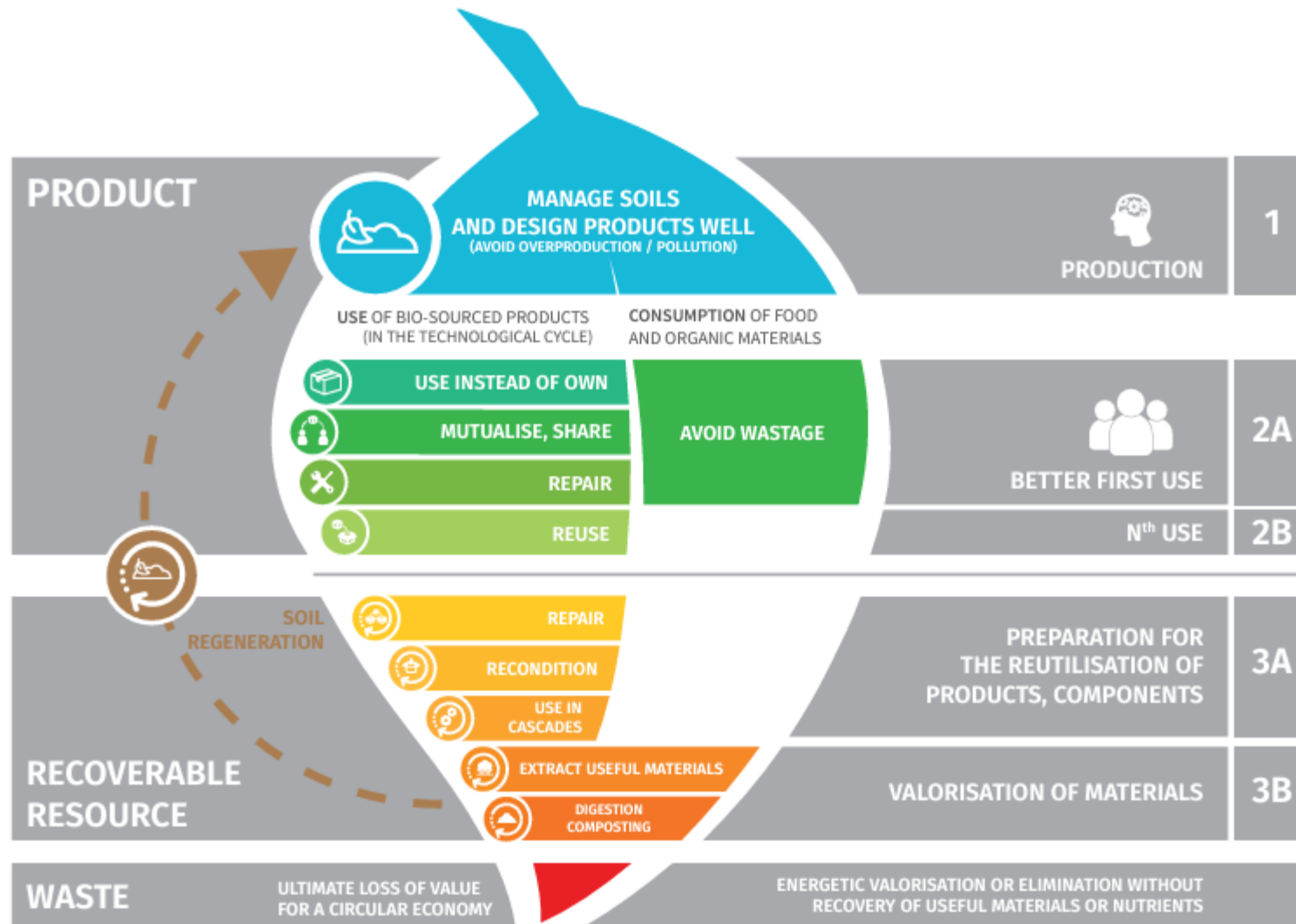
RESOURCE DIAMOND

10 R's to promote a transition towards a circular economy



RESOURCE LEAF

Consideration of both the technological and biological cycle



CIRCULAR ECONOMY STRATEGY

Public support to promote a transition towards a circular economy

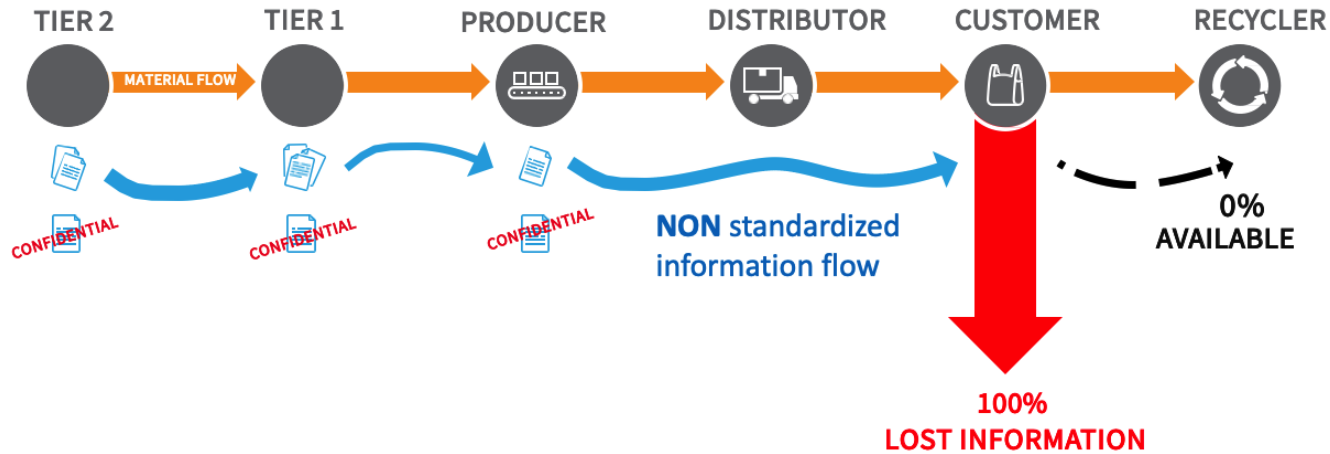
	CATEGORY 1	CATEGORY 2	CATEGORY 3
LEVEL RESOURCE TRIANGLE	REGULATIONS AND STANDARDS	FINANCIAL ASPECTS	KNOWLEDGE CREATION AND MANAGEMENT
(1) CREATE VALUE	<ul style="list-style-type: none"> - Public procurement procedures include circular business models and criteria - Quality criteria and labels for circular products and services - Resource management regulation, including spatial planning 	<ul style="list-style-type: none"> - Business and accounting models taking into account the full cost of ownership (e.g. product as a service) - Subsidies for supporting the development of circular business models, projects and infrastructures 	<ul style="list-style-type: none"> - Transparent data and information on labels, criteria, and the circularity of products and services along value chains - Tools, methods and guidelines for circular design and production, e.g. eco-design, considering the whole use/life cycle and systemic impacts - Information and training for all stakeholders with respect to circularity - RDI activities, including pilot projects
(2) MAINTAIN VALUE	<ul style="list-style-type: none"> - Regulatory framework to guarantee value conservation (e.g. right to repair) - Regulatory framework and standards for reuse, repair and sharing activities, including liability and insurance issues 	<ul style="list-style-type: none"> - Incentives (such as support schemes, subsidies or taxation) for correcting market distortions (e.g. economic valuation of ecosystem services) - Incentives that encourage resource efficiency and value conservation (e.g. repair, maintenance, take-back) 	<ul style="list-style-type: none"> - Quality information on repair, reuse & sharing services (e.g. digital platforms)
(3) RECOVER VALUE	<ul style="list-style-type: none"> - Quality criteria and standards for the reuse of materials, components and products²² 	<ul style="list-style-type: none"> - Incentives that encourage reuse and recycling of materials, components and products 	<ul style="list-style-type: none"> - (Digital) information on quantities, composition and functionality of reusable materials, components and products



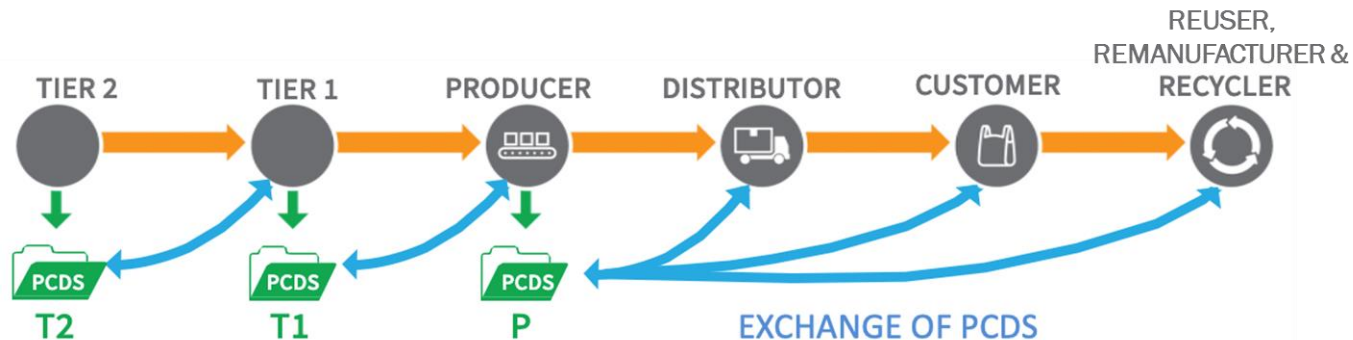
PRODUCT CIRCULARITY DATASHEET



Collecting circularity data is expensive, difficult and non-standardized



Standardized way to share circularity data at each step of the value chain



PRODUCT CIRCULARITY DATASHEET

Solution: PCDS system with 3 pillars



A data template with standardized product information on the circularity properties without infringing *Intellectual Property*



A third-party verification process to validate the content of the PCDS



A standardized IT exchange protocol & format to share efficiently trusted data without relying on a centralized database

- Create a common language about product circularity
- Make product information more transparent without infringing IP using true/false statements
- Facilitate the collection of trustworthy data from suppliers
- Support your design team to improve product circularity
- Reduce redundant labor with a standardized format published once and for all your customers
- Save time with an automated process allowing the assembly of information from your suppliers' PCDS



PRODUCT CIRCULARITY DATASHEET

Circularity Dataset initiative launched by the Ministry of the Economy

- Participation of +50 companies representing 12 countries in co-creation
- Drafting of an international standard ISO 59040 on PCDS promoting a methodology for communicating the circular properties of a product in favor of circular business models
- Establish a communication scheme on circular product properties using a common language
- Additional information: www.pcds.lu
- Creation of the Terra Matters economic interest group to market the solution TerraDS (www.terramatters.net)



TerraMatters



Thank you for your attention

