Interreg

Co-funded by
the European Union

Alpine Space

CEFoodCycle

Artificial intelligence and circular innovation: Status quo of B2B platforms in agri-food settings
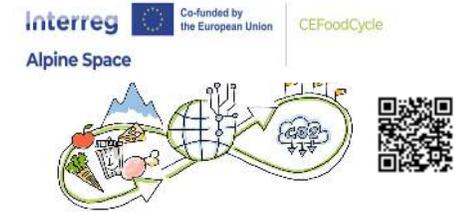
Salzburg, December 2023

compiled by Fachhochschule Salzburg GmbH

VCG.AI - Value Chain Generator

- Using AI and big data to find circular solutions and repurpose industrial residual materials

- Utilizing data to identify and implement circular business models

- Time-to-Value solutions

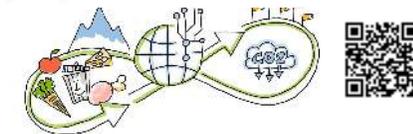- Across a variety of industries

- Entered market in 2023

Image source © https://vcg.ai/

Regional Coverage:	Austria	France	Germany	Italy	Slovenia	Other

https://vcg.ai/

VCG.AI - Value Chain Generator

TARGET AUDIENCE

Regional Development Agencies; Businesses

COMPANY MATCHING

✔ Matching companies based on their input and output needs, as well as their capacity to invest.
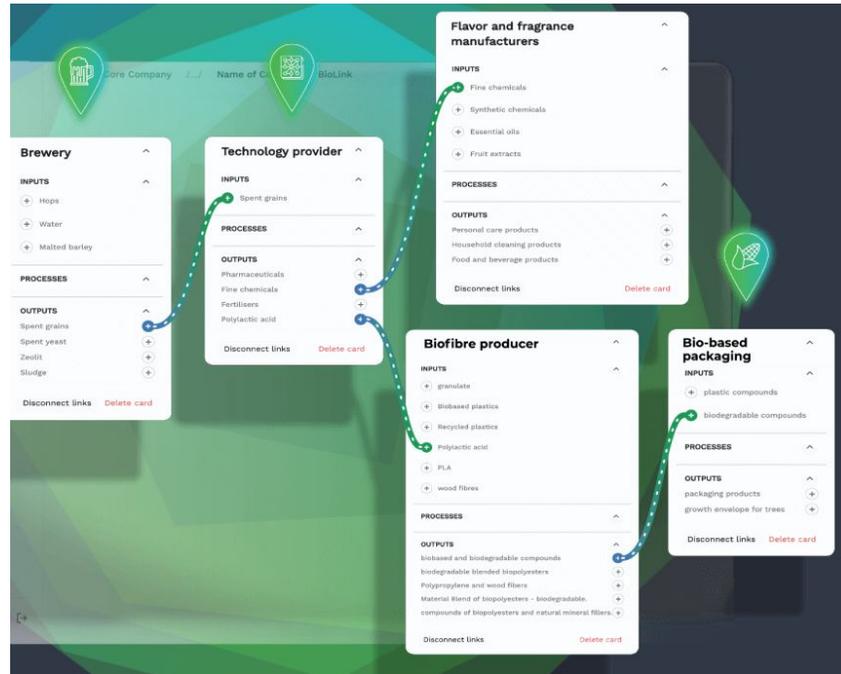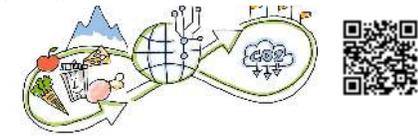
SOLUTION MATCHING

✔ Finds sustainable solutions for industrial processes and entire value chains to turn industrial residual materials into valuable resources.

Life-Cycle-Assessment
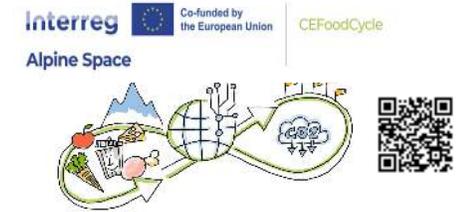
✘

Database

Database:
- NACE codes: For the classification of economic activities, e.g. manufacture of beverages.
- Company information: Name, website, size of the company
- Location data: Addresses of the companies
- Company description: brief characterization of the business activity
- Type and country: type of company (e.g. solution provider) and country of domicile (e.g. Austria, USA)
- Cluster affiliation: affiliation to specific company clusters
- Resources: Information on input resources, processes and outputs
- Available technology: List of technologies and processes including maturity level and relevant industries

Where does the data come from?
??? -> to be clarified with VCG

ACTIF

- Companies can share resources such as materials, equipment, energy, and even skills to enhance their environmental footprint and streamline costs

- The platform is interactive, geo-locates resources within an area, identifies potential synergies and tracks them

ACTIF

ACTIF · Entreprise · Collectivité · Concept · Actualités · SE CONNECTER / CRÉER SON COMPTE

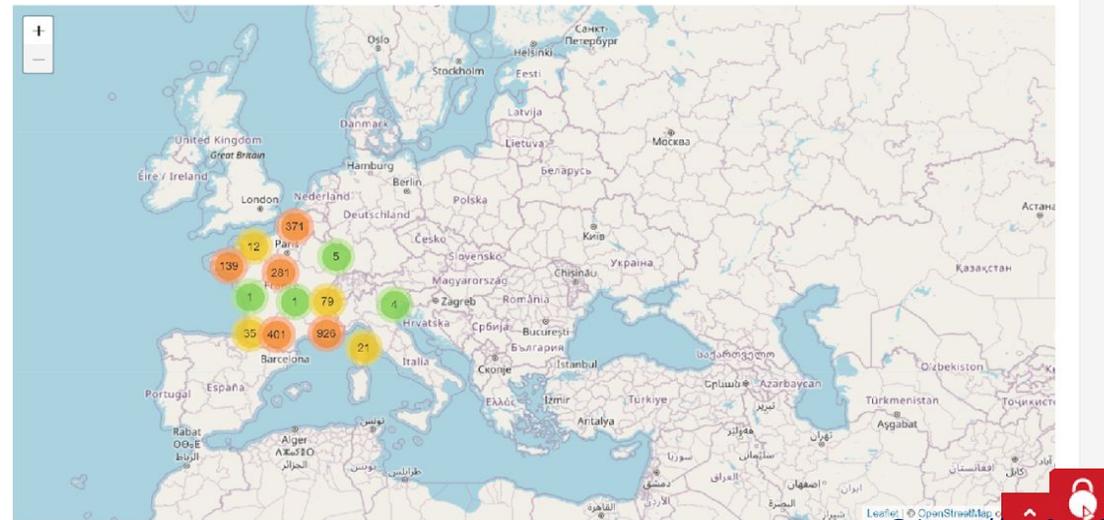**ACTIF, la plateforme de l'économie circulaire**

Accueil /

Image source © https://actif-cci.fr/

Regional Coverage:	Austria	France	Germany	Italy	Slovenia	Other

ACTIF

ACTIF

TARGET AUDIENCE		Businesses
COMPANY MATCHING	✔️	Companies can share resources on an interactive platform
SOLUTION MATCHING	❌	
Life-Cycle-Assessment	❌	

Database

Registration based on following data:
- Name
- E-Mail
- Identification number
- Name of the company
- Phone number
- Country (France or Italy)
- Adress
- Employees
- Industry
- Logo
- Website

Upload of Ressource:
- Product
- Description
- availability (quantity and expiry date)
- city, country
- specialities (shared ressources, in exchange,…)

BioBASE Kompass

- Database listing stakeholders and activities in the field of bioeconomy and circular economy

- Connects business sectors with research and educational institutions as well as governmental entities, depicting dynamic process chains
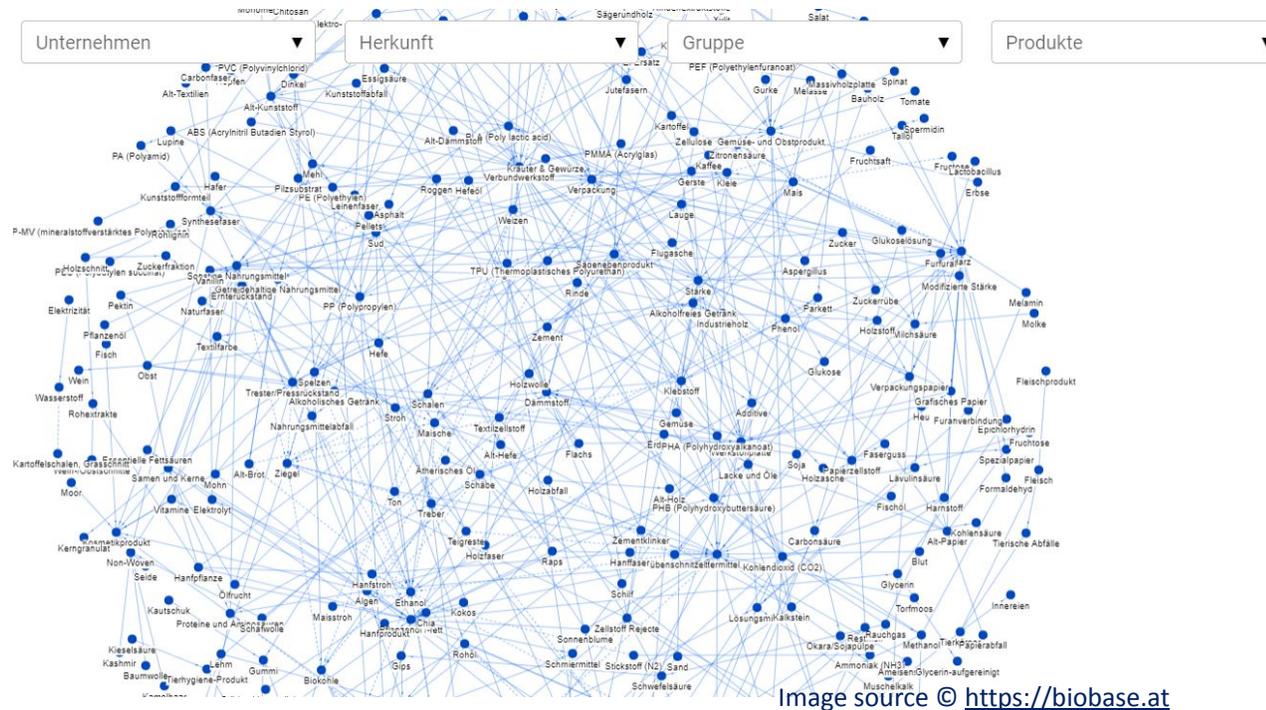
- Showcasing interactive dynamic process chains by linking actors, resources, and activities
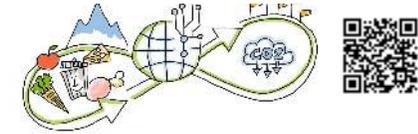
- Founded 2018

Image source © https://biobase.at

Regional Coverage:	Austria	France	Germany	Italy	Slovenia	Other

https://biobase.at

BioBASE Kompass

TARGET AUDIENCE

Businesses

COMPANY MATCHING

✔ Information hub that provides partners a platform to cooperate and coordinate
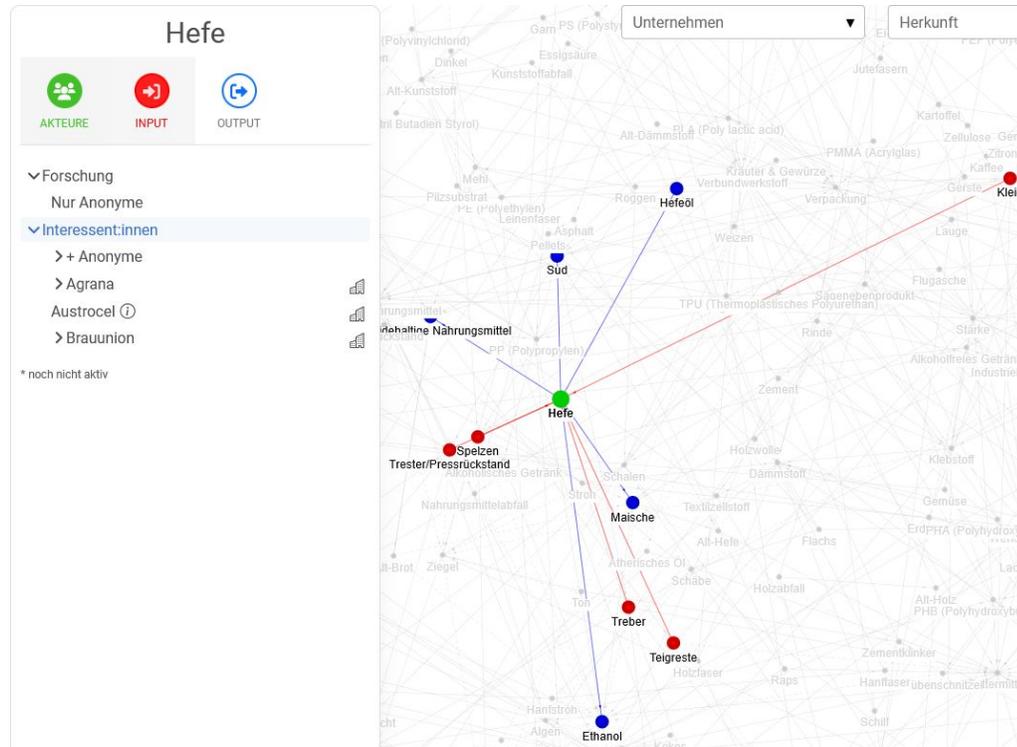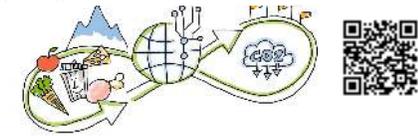
SOLUTION MATCHING

✔ Exchange of knowledge and experience with research initiatives

Life-Cycle-Assessment

✘

Database

Database:
- Company information: Name, website, size of the company (e.g. large, SME, research organization).
- Location data: Addresses of the companies.
- Company description: brief characterization of the business activity.
- Resources: Information on input resources, processes and outputs.
- Available technology

Where does the data come from?
Self-research. Entered company data is all public. No consent is therefore required from the registered companies.

REIF

- Utilization AI to reduce food waste in the value chain

- specifically, within three sectors: meat or sausage products, baked goods, and dairy products

- AI ecosystem based on conceptualizing innovative approaches to identify potential within learning value networks

- Project duration 2020-2023

RESOURCE-EFFICIENT, ECONOMIC AND INTELLIGENT FOODCHAIN

Verschwendung in der Lebensmittelindustrie durch Künstliche Intelligenz verringern.

Image source © https://ki-reif.de/

PROJEKTÜBERBLICK   AKTUELLES   PARTNER   KONTAKT

Regional Coverage:	Austria	France	Germany	Italy	Slovenia	Other

https://ki-reif.de/
https://ki-lebensmittelretter.de/

REIF

TARGET AUDIENCE		Businesses
COMPANY MATCHING	✔	Digital marketplace for AI, where experts can exchange know-how and AI services
SOLUTION MATCHING	✘	Digital marketplace for AI services against food waste
Life-Cycle-Assessment	✘	

Database

Registration based on following data:

- Category Seller or Buyer
- Name
- E-Mail
- Icon
- Name of the company
- Adress

(No registration possible)

Get Wasted

- Matches all stakeholders in the food supply chain, from farmers, the food processing industry and even schools

- The platform enables users to buy and sell surplus food that would otherwise have been wasted
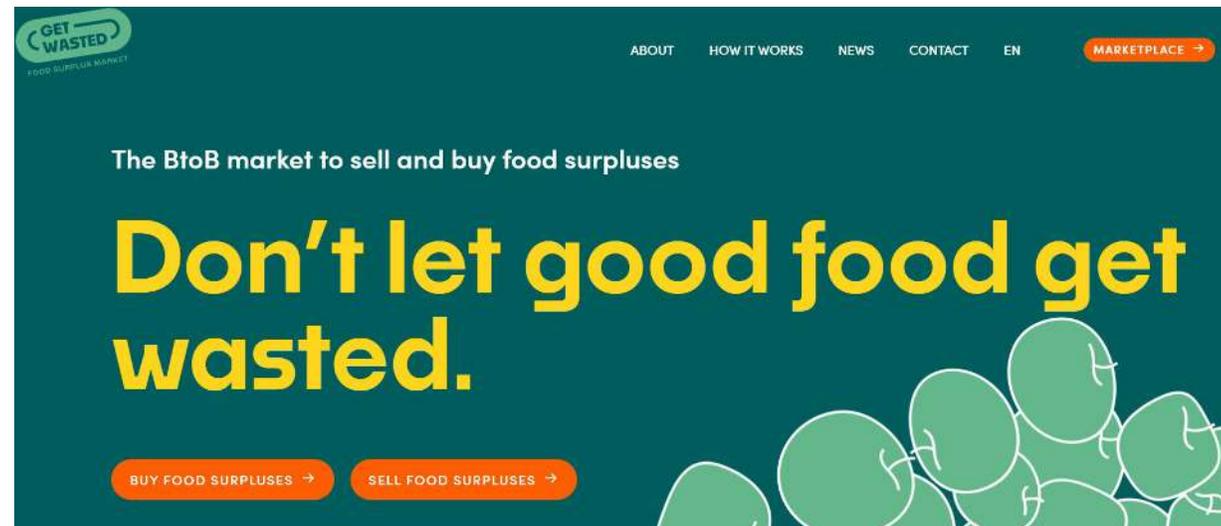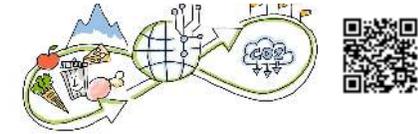
- Started in 2020

Image source © https://getwasted.eu/

Regional Coverage:	Austria	France	Germany	Italy	Slovenia	Other

https://getwasted.eu/

Get Wasted

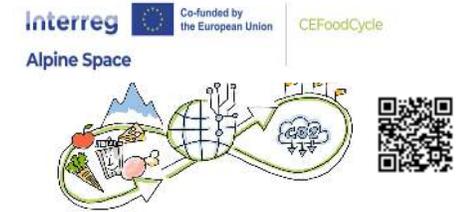|		
TARGET AUDIENCE		B2B market to sell and buy surplus food
COMPANY MATCHING	✔	Connects sellers and buyers or surplus food
SOLUTION MATCHING	✘	
Life-Cycle-Assessment	✘	

Database

Registration
- E-Mail
- Name
- Name of the company
- Adress
- Phone number
- identification number
- Country
Preferred volume of surpluses

Uploading of products
- Product (fruit or vegetables)
- Price
- Quantity
- Delivery method

Optifood

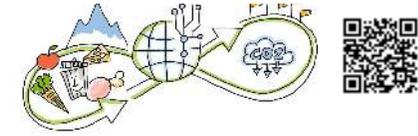- Digital B2B marketplace for supply and demand of surplus food

Image source © https://optifood.eu/

Regional Coverage:		Austria	France	Germany	Italy	Slovenia	Other

https://optifood.eu/

Optifood

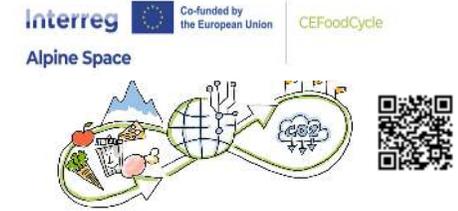|	
TARGET AUDIENCE	B2B market to sell and buy food/beverage surpluses; donations
COMPANY MATCHING ✔	Connects sellers and buyers or surplus food
SOLUTION MATCHING ✘	
Life-Cycle-Assessment ✘	

Database

Seller

Registration for Sellers, Buyers und Charity

For Sellers:

- Company name, contact information, description of the products, food category, surplus products, monthly amount of surplus

- Product information: expiration dates, storage conditions and relevant certifications, price (Optifood charges a commission on each sale from the final price)

Kreislaufwirtschaft.at

- Interactive map serving as a platform for existing projects and initiatives in the circular economy

- Facilitating the exchange and rescue of various resources and food items
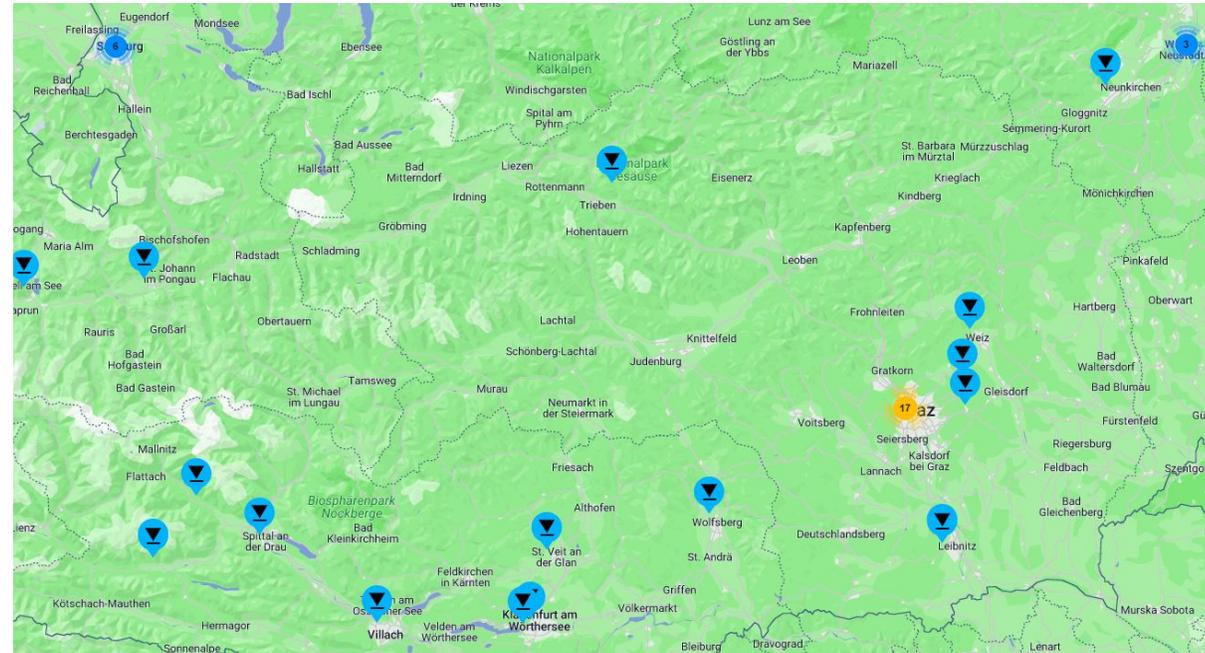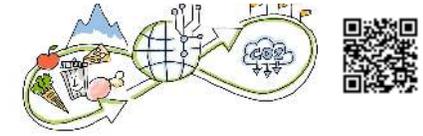
- Project duration 2021-2023

Image source © https://kreislaufwirtschaft.at/karte/

Regional Coverage:	Austria	France	Germany	Italy	Slovenia	Other

https://kreislaufwirtsc haft.at/karte/

Kreislaufwirtschaft.at

TARGET AUDIENCE		Food sector stakeholder (businesses and customers), infrastructure stakeholder (e.g. empty buildings)
COMPANY MATCHING	✔	Infrastructure and resources which can be used
SOLUTION MATCHING	✘	
Life-Cycle-Assessment	✘	

Database

Database

- Adress

- Sozialmarkt, Fairteiler or something else

- Website

- Opening hours

- Brief description
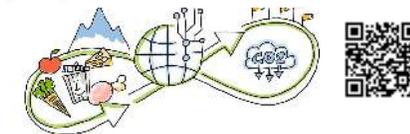
- Picture

Agro2Circular

- Offers an interactive map serving as a platform for existing projects and initiatives in the circular economy

- Exchange or rescue of resources and food as well as mobilization or joint use of free space for new projects

Image source © https://agro2circular.eu/

Regional Coverage:	Austria	France	Germany	Italy	Slovenia	Other

https://agro2circular.eu/

Agro2Circular

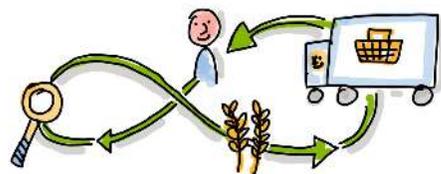|		
TARGET AUDIENCE		From website: Public administrations, control authorities, "Producers-Managers-Valuers", industrial sector
	COMPANY MATCHING	✔️ Decision support tool to have innovative routes of valorization
	SOLUTION MATCHING	❌
	Life-Cycle-Assessment	❌

Database

Contact by e-mail

Overview

TARGET AUDIENCE		VCG.AI	ACTIF	BioBASE	REIF	Get Wasted	Optifood	Kreislaufwirtschaft.at	Agro2Circular
	COMPANY MATCHING	✔	✔	✔	✔	✔	✔	✔	✔
	SOLUTION MATCHING	✔	✘	✔	✘	✘	✔	✘	✘
	Life-Cycle-Assessment	✘	✘	✘	✘	✘	✘	✘	✘

Résumé

- Various software tools offer (partly) support for circular innovation

- AI promises and shows huge potential

    o e.g. data collection, predictive analytics, enabling automatic LCA, scenario analysis, real-time monitoring, optimizations in general

- No commercial solution in the agri-food sector at this time (status Dec.23)

- Acutal approaches have the status of ideas, potentially research

    o E.g. AI based modelling of a specific, existing LCA (single product)

- Main software tool developers (SimaPro, Umberto,…) more than likely work on A-based features already

Others: