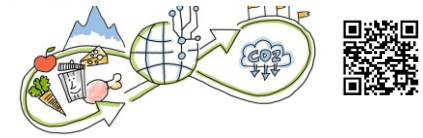




Artificial intelligence and circular innovation: Status quo of B2B platforms in agri-food settings

Project Circular Economy: Mapping Food Streams and Identifying Potentials to Close the Food Cycle

Salzburg, Austria | December 2023
compiled by Salzburg University of Applied Sciences – www.fh-salzburg.ac.at



B2B platforms and circular innovation

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
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<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

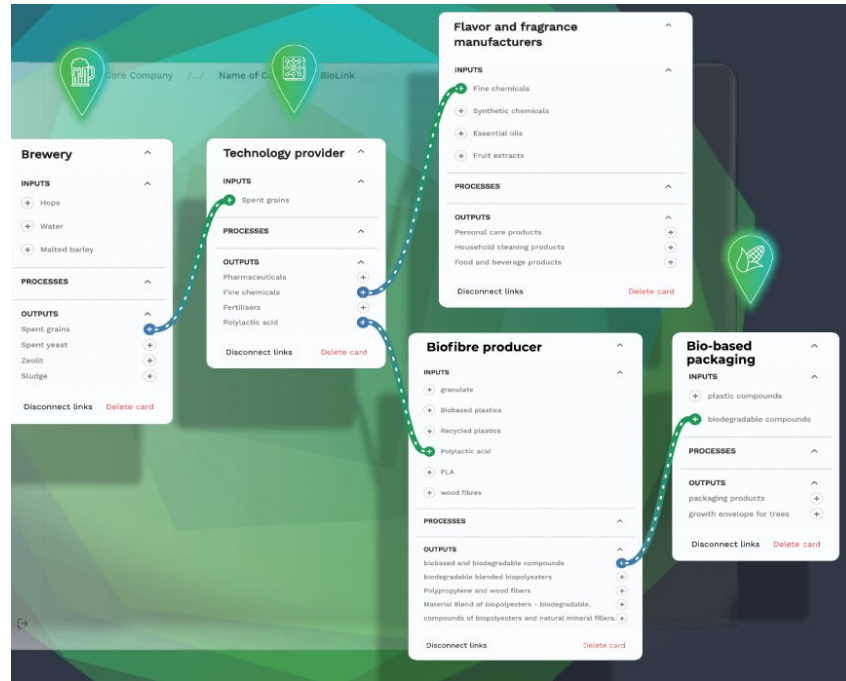
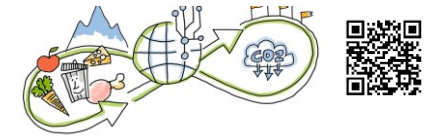


Finds sustainable solutions for industrial processes and entire value chains to turn industrial residual materials into valuable resources.

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

Industry type	Country	Cluster	NACE Codes	Search text	Reset Filters	Display mode: List	
View all	View all			Search			
Company	Size	Type	Country	Cluster	Capacity	Used in BioLinks	Last update
 Alkion Biopharma SAS https://alkinnov.com/	Large Firm	Manufacturer	France	2 clusters	0 Inputs 0 Processes 0 Outputs	None	March 23, 2023 11:39 AM GMT
 Ampack Handels GmbH https://www.ampack.at	SME	Manufacturer	Austria	Furniture and Timber Construction Cluster	0 Inputs 0 Processes 0 Outputs	None	March 23, 2023 11:39 AM GMT

Where does the data come from?

??? -> to be clarified with VCG

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

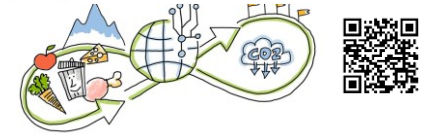
Other



<https://actif-cci.fr/>

- 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



TARGET AUDIENCE



Businesses



COMPANY MATCHING



Companies can share resources on an interactive platform



SOLUTION MATCHING



Life-Cycle-Assessment



Database



Inscription Étape 3 / 5

Code d'identification de la structure*

SIRET

Numéro d'identification

Si vous vous déclarez comme porteur de projet, votre compte devra être validé par un membre de la CCI avant que vous puissiez n'y accéder. En choisissant cette option la saisie du numéro d'identification devient optionnelle.

Suivant >

Inscription Étape 4 / 5

Informations de l'entreprise

Nom de l'entreprise Numéro de téléphone

Entrez votre adresse, pays, code postal et ville et cliquez sur 'Localiser' pour vous positionner sur la carte. Vous pouvez aussi directement cliquer sur votre position sur la carte.

France

Adresse postale

Ville / Code Postal

Localiser

Effectifs

Filière

NAF / APE

--- Ajouter votre logo Site web

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,...)

Paletten
Holzverpackungen (Kiste, Palette, Kiste, Palox)



Suchanzeige	
Beschreibung	
Keine Beschreibung	
Verfügbarkeit	
Menge : 24.000 Einheiten Verfügbar / 24.000 Einheiten insgesamt	
Ablaufdatum : 5. Oktober 2025	
Stadt	
Villers-Cotterêts - Frankreich	

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

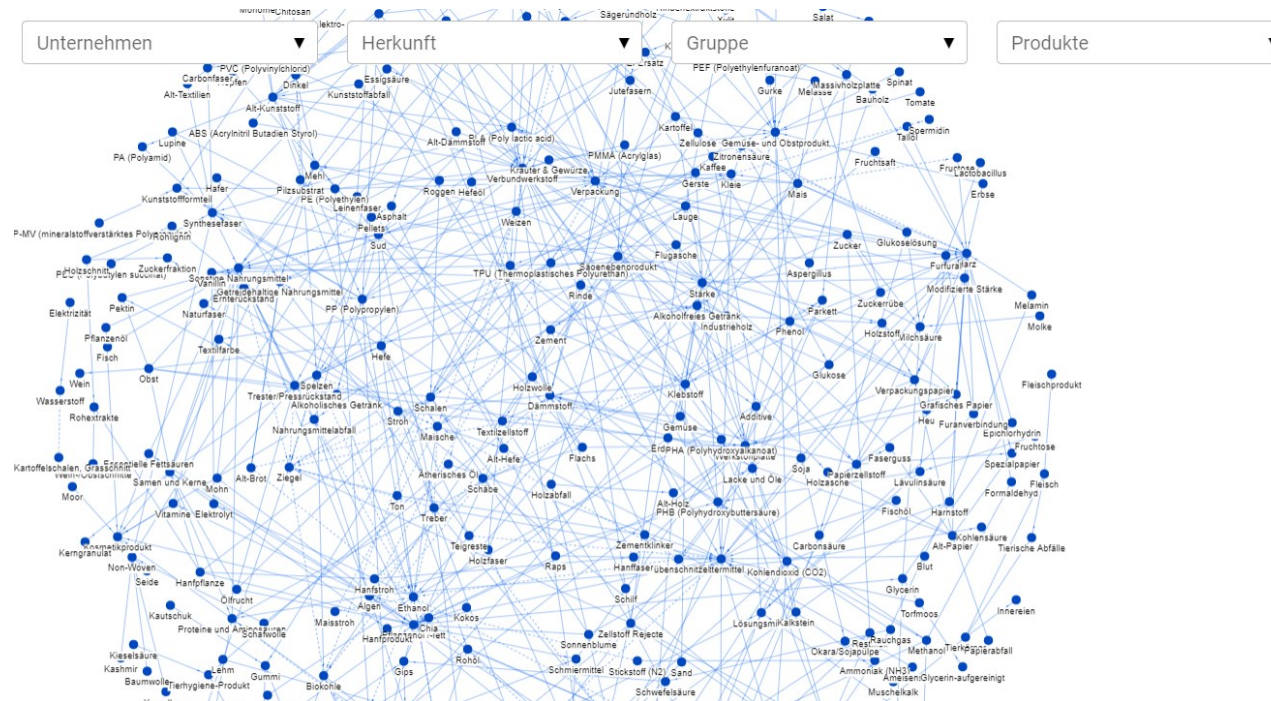


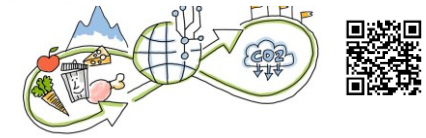
Image source © <https://biobase.at>

Regional Coverage:	Austria	France	Germany	Italy	Slovenia	Other
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<https://biobase.at>

BioBASE Kompass



TARGET AUDIENCE



Businesses



COMPANY MATCHING



Information hub that provides partners a platform to cooperate and coordinate



SOLUTION MATCHING



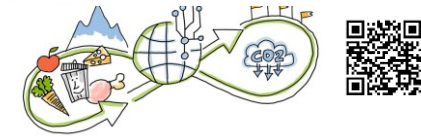
Exchange of knowledge and experience with research initiatives



Life-Cycle-Assessment



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



PROJEKTÜBERBLICK AKTUELLES PARTNER KONTAKT



Image source © <https://ki-reif.de/>

Regional Coverage:

Austria

France

Germany

Italy

Slovenia

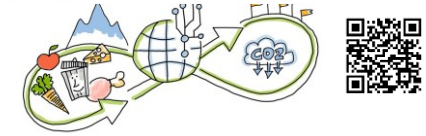
Other



<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



Lebensmittel retten!

Wie funktioniert der Marktplatz?

KI-Services ▾

Kontakt

MARKTPLATZ

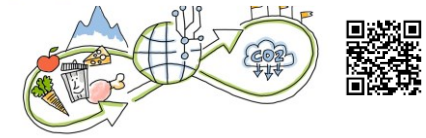
**Der KI-Marktplatz:
Ressourcen schonen und
Kosten senken**

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

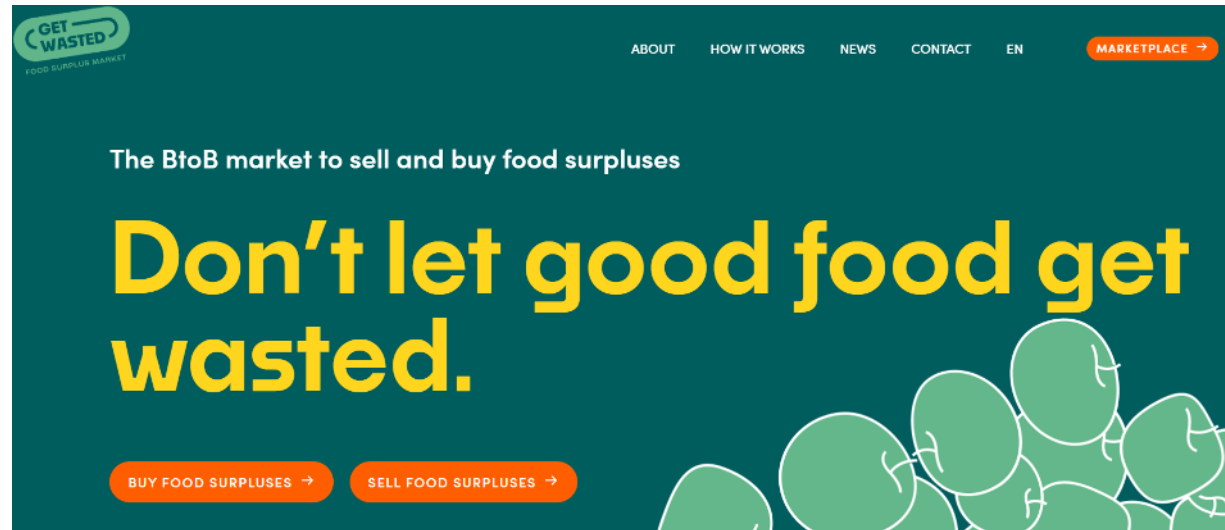


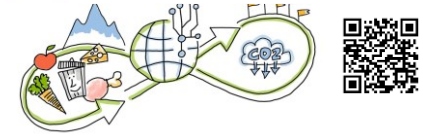
Image source © <https://getwasted.eu/>

Regional Coverage:	Austria	France	Germany	Italy	Slovenia	Other
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<https://getwasted.eu/>

Get Wasted



TARGET AUDIENCE



B2B market to sell and buy surplus food



COMPANY MATCHING



Connects sellers and buyers or surplus food



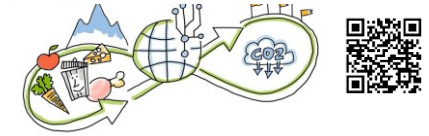
SOLUTION MATCHING



Life-Cycle-Assessment



Database



What's available today

☰ Hide filters

Vendors

Boerencompagnie CV

DV Fresh

Groentenhof

Vanhoebroek LV

den Boogerd

Price

Under €1.00

€1.00 - €3.00

Over €3.00



**Vastkokende
frietaardappel (Allians):
zak van 5 KG**
€3.50



**Mengeling bloemige
kookaardappel
(Fontane), per 5 kg**
€2.90



**Mengeling bloemige
kookaardappel
(Fontane), per 10 kg**
€5.80



**Bloemige frietaardappel
(Fontane, groot), per zak
van 5 KG**
€3.50

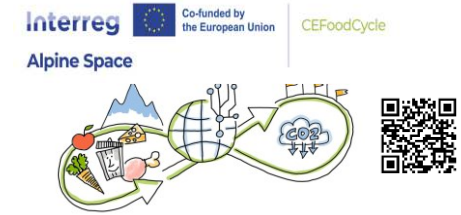
Registration

- 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

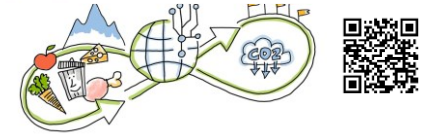


Image source © <https://optifood.eu/>

Regional Coverage:	Austria	France	Germany	Italy	Slovenia	Other
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Optifood



TARGET AUDIENCE



B2B market to sell and buy food/beverage surpluses; donations



COMPANY MATCHING



Connects sellers and buyers or surplus food



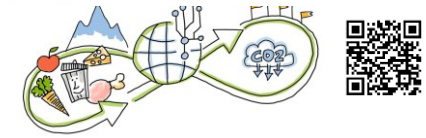
SOLUTION MATCHING



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)

the

lin

Register for Free

Name*

E-mail*

Phone*

—Please choose an option—

Message*

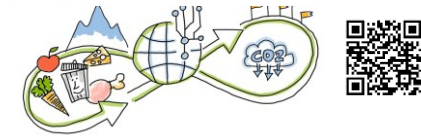
Permission to Store your Form Information

Checking this box indicates you understand and accept that the information you submit will be stored in order to process your submission, and viewed according to our [Privacy Policy](#).

Yes, I understand and accept my information will be stored and viewed.

SEND

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

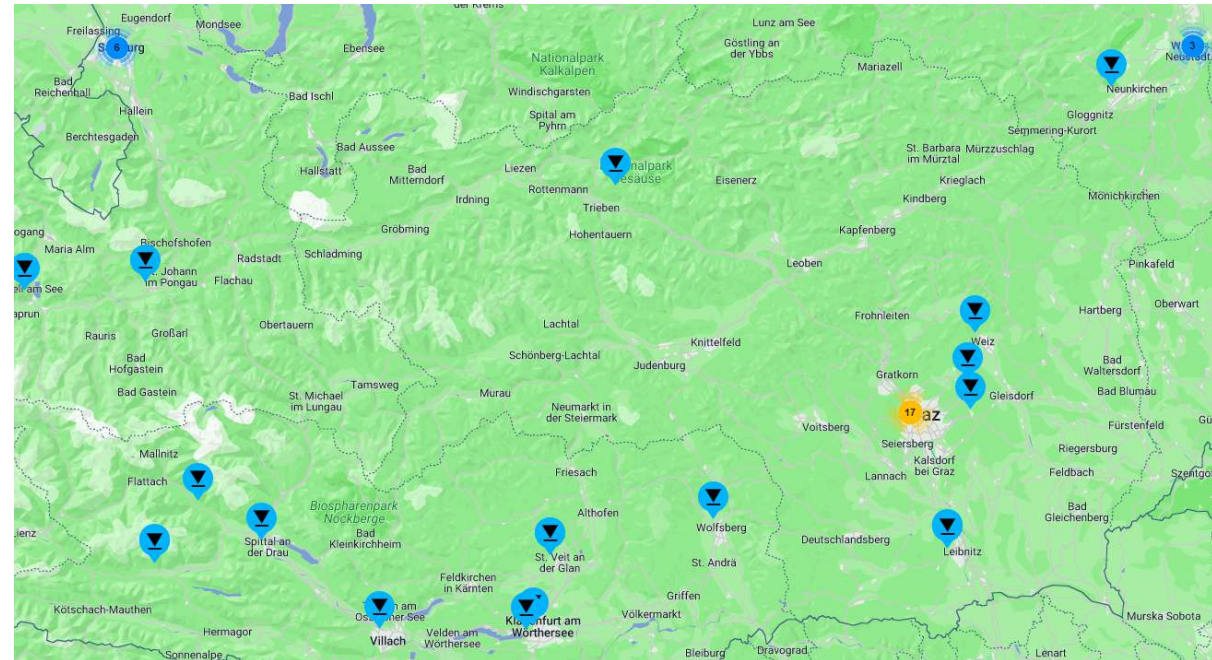


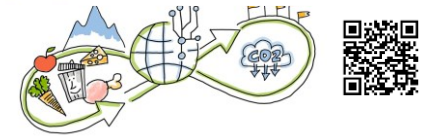
Image source © <https://kreislaufwirtschaft.at/karte/>

Regional Coverage:	Austria	France	Germany	Italy	Slovenia	Other
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<https://kreislaufwirtschaft.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



Adresse eintippen oder  verschieben

Österreich

[Koordinaten anzeigen/ausblenden](#) | [Meinen Standort benutzen](#)

Ortstyp auswählen

Fairteiler Sozialmarkt Sonstiges

Website

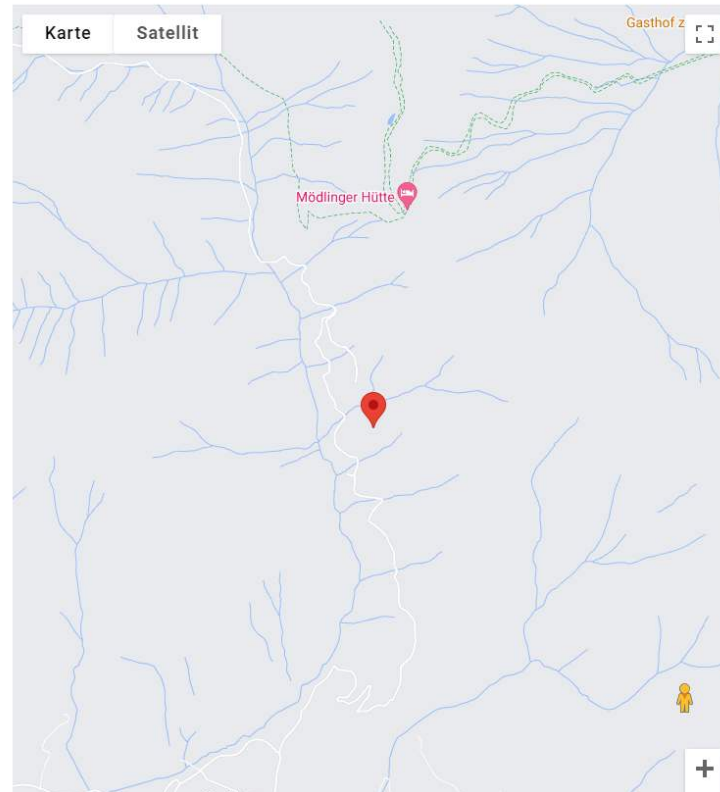
Öffnungszeiten

Kurze Beschreibung

Bild hochladen

Keine ausgewählt

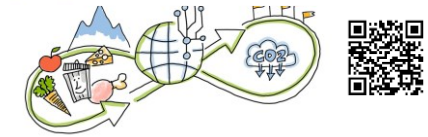
Ich bestätige, dass die hier im Sinne der Bewältigung der Klimakrise zur Verfügung gestellten Informationen in der kreislaufwirtschaft.at Datenbank auf der Website kreislaufwirtschaft.at veröffentlicht werden dürfen. Die [Datenschutzerklärung](#) habe ich zur Kenntnis genommen.



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

 Agro2Circular

Why • What • How • Where • Who



The hidden value of agrifood sector residues



Image source © <https://agro2circular.eu/>

Regional Coverage:

Austria

France

Germany

Italy

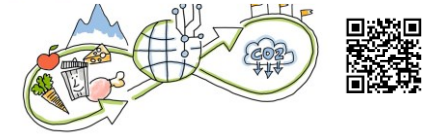
Slovenia

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



Contacts

Get in contact with Agro2Circular
and meet the partners.

Project coordinator, CETEC (Spain)

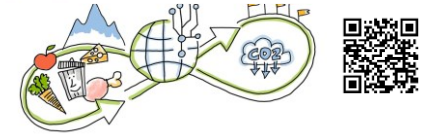
fuensanta.monzo@agro2circular.org





Communication, ICONS (Italy)

info@agro2circular.eu

Contact by e-mail

Overview



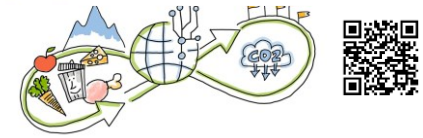
TARGET AUDIENCE		VCG.AI	ACTIF	BioBASE	REIF	Get Wasted	Optifood	Kreislaufwirtschaft.at	Agro2Circular
	COMPANY MATCHING	✓	✓	✓	✓	✓	✓	✓	✓
	SOLUTION MATCHING	✓	✗	✓	✗	✗	✓	✗	✗
	Life-Cycle-Assessment	✗	✗	✗	✗	✗	✗	✗	✗

Résumé



- Various software tools offer (partly) support for circular innovation
- AI promises and shows huge potential
 - 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)
- Actual approaches have the status of ideas, potentially research
 - E.g. AI based modelling of a specific, existing LCA (single product)
- Main software tool developers (SimaPro, Umberto,...) more than likely work on AI-based features already

Overview



Others:

