

WG 4 – Valorisation of agrofood waste and a circular bio-economy

Start Month (M1) – October 2023

End Month (M48) - October 2027

FoodWaStop Conference Cordoba, Spain, 4-6 March 2025

Jessica Girardi, WG4 leader





Memberships

WG 4 members: 504!

37 European Countries (293)

+ 14 extra Europe: Algeria (211)

Armenia

Azerbaijan

Egypt

Israel

Jordan

Kenya

Morocco

Pakistan

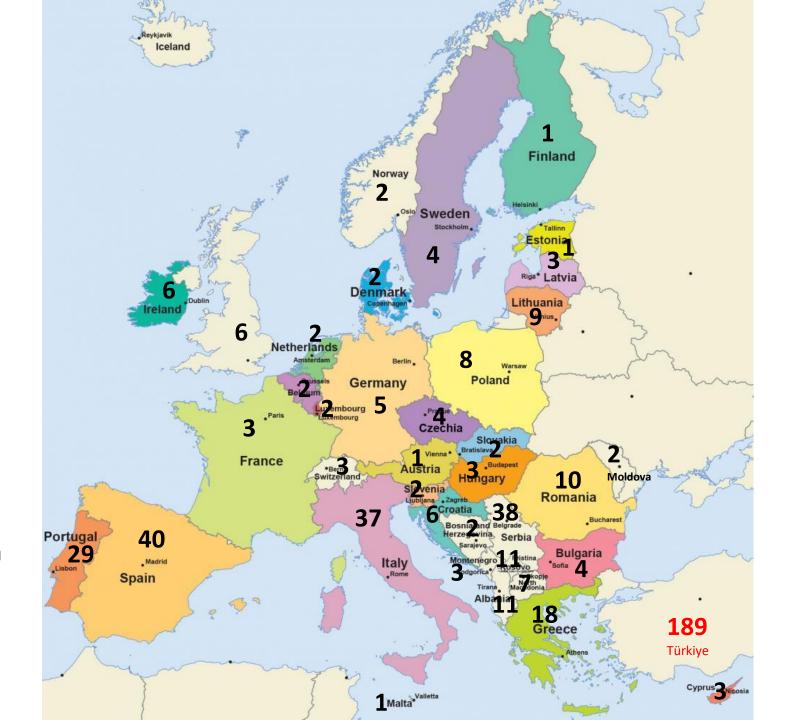
South Africa

Sri Lanka

Tunisia

Türkiye

USA





WG4 tasks & deliverables

Valorisation of agrofood waste

Tasks

- T4.1 Mapping food systems;
- T4.2 Integrate systems with a search for innovation;
- T4.3 Develop a more comprehensive understanding of valorisation strategies for their improvement, and to define new ones;
- T4.4 Define the value-added final product;
- T4.5 Study potential practical applications of these innovative products that are obtained from the waste of the F&V value chain;
- T4.6 Run comparable analyses of techno-economic durability and environmental impacts of potential valorisation pathways of FW.

Deliverables

- D4.1. Preparation of a short guideline where the new valorisation strategies available/possible to develop per Country will be summarised M36 (Oct2026)
- D4.2. Creation of a list of bioactive compounds extracted or obtained from F&Vs by-products (to attach at the guideline) M28 (Feb2026)
- D4.3. Review papers on the valorisation of agrifood waste method M36 (Oct2026)
- D4.4. Develop at least 4 potential applications of the valorisation and use of the waste of the F&V value chain M48 (Oct2027)

			TIMELINE															
			Year 1				Year 2				Year 3				Year 4			
			Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
WG4	T4.1	A4.1									*							
	T4.2	A4.2					*						*					
	T4.3	D4.1												*				
	T4.4	D4.2										*						
	T4.5	D4.3												*				
	T4.6	D4.4																*



October 2024 - Call for expressions on interest

Aim

Screening of active members & preparation of first round deliverables

D4.1. Guidelines for the new valorisation strategy

D4.2. List of bioactive compounds extracted or produced from F&V waste

D4.3. Review paper on valorisation of agrofood waste

Strategy

Creation of four subgroups

Vegetables

Fruits

Cereals

Animal production*

*meat and meat products, milk and dairy products, seafood

CA22134 - WG 4

B I U 🖘 🏋

Call for expressions on interest in participation in preparation of first round deliverables:

- D4.1. Guidelines for the new valorisation strategy (M36);
- D4.2. List of bioactive compounds extracted or produced from F&V waste (M28);
- D4.3. Review paper on valorisation of agrofood waste (M36).

The working group has more than 400 members with different expertise. In order to increase efficiency, the creation of four subgroups (vegetables, fruits, cereals and animal production) is proposed, as discussed at the first meeting of WG4 in Ancona. The aim of this Google form is to collect the express of interest in participating in the preparation of the activities related to the deliverable:

- D4.1. preparation of a short guideline where the new valorisation strategies available/possible to develop per country will be summarised;
- D4.2. creation of a list of bioactive compounds extracted or obtained from F&Vs by-products (to attach at the guideline);
- D4.3. review paper on the valorisation of agrifood waste method (representative for every participant country).

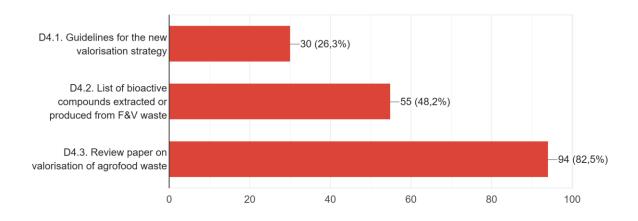
If you are interested in participating in at least one of these activities, please complete the Google form by 18 October 2024 at the latest. Select only one subgroup in which you would like to participate. After receiving the expressions of interest and confirmed the active participants, a meeting for each subgroup will be organized and all the further steps discussed (election of a subgroup coordinator, action plan for the preparation of the review, etc.).

Thanks for your collaboration!

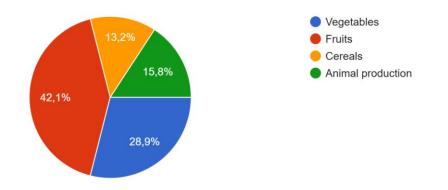


December 2024 - Call outcome

Which deliverable/s are you interested to take part in?



Which subgroup are you interested in?



SG Vegetables=	34
SG Fruits=	49
SG Cereals=	15
SG Animal production=	17
Total Active Members=	115



December 2024 – WG4 general meeting

Aim

Discussion over the google form results and call for volunteers in the coordination of the subgroups

SG Vegetables → Sarah Milliken (University of Greenwich)

SG Fruits → Ozgur Tarhan (Usak University)

SG Cereals → Victoria Krauter (FH Campus Wien)

SG Animal production → Kaltrina Berisha (University Of Prishtina "Hasan Prishtina")

Role of coordinators

- organize and lead subgroup internal meetings
- coordinate tasks in between the SG members to address the deliverables
- update WG4 leader



From January 2025 – WG4 SGs meetings

Aim

Goal of the first subgroup meeting was to define the coordinator(s), draw the action plan for the preparation of the guidelines, list of bioactives and start to plan the review papers.

Strategy

- minute of every SG meeting
- shared google drive where all the info are stored (per SG)
- monthly WG4 cross-subgroup meeting

SG Vegetables

- 1. Coordinator: Sarah Milliken (University of Greenwich) S.Milliken@greenwich.ac.uk
- 2. D4.1 lead: Khadija Ramzan Khadija.Ramzan@lammc.lt
- 3. D4.2 lead: Syeda Hijab Zehra hijab.zehra@lammc.lt
- 4. D4.3 lead: Francisco Javier Alvarez-Martinez <u>f.alvarez@umh.es</u>

SG Fruits

- 1. Coordinator: Ozgur Tarhan (Usak University) ozguratarhan@gmail.com
- D4.1 lead: László Abrankó <u>abranko.laszlo.peter@uni-mate.hu</u>
- 3. D4.2 lead: Doinita Muntean maria.doinita@gmail.com
- 4. D4.3 topic 1 Senem Kamiloglu skamiloglu@uludag.edu.tr
- 5. D4.3 topic 2 Ozgur Tarhan ozguratarhan@gmail.com
- 6. D4.3 topic 3 Zehra Ayhan <u>zehraayhan@sakarya.edu.tr</u> (Sevil Cikrikci <u>sevil.cikrikci@gidatarim.edu.tr</u>)
- 7. D4.3 topic 4 Simona Saponara simona.saponara@unisi.it

SG Cereals

- 1. Coordinator: Victoria Krauter (FH Campus Wien) victoria.krauter@fh-campuswien.ac.at
- 2. Co-coordinator: Enrique Barrajón-Catalán (Universidad Miguel Hernández) e.barrajon@umh.es

SG Animal production

- 1. Coordinator: Kaltrina Berisha (University Of Prishtina "Hasan Prishtina") kaltrina.berisha@uni-pr.edu
- 2. Co-coordinator: Emre Hastaoğlu (Sivas Cumhuriyet University) ehastaoglu@cumhuriyet.edu.tr



February 2025 – Subgroups coordinators update

D 4.1. Preparation of a short guideline where the new valorisation strategies available/possible to develop per Country will be summarised

Steps

A work plan and timeline for developing a guideline have been generated.

Focus on the main food categories grown in Europe (or those that generate most waste/by-products at each stage along the supply chain).

Identify and suggests how to improve available valorisation strategies in industrial level by increasing the TRL of the bioactive compound extraction methods.

Strategy

Prepare an initial TOC. Validate and accept by SG leaders that is suitable for a unique document (covering all 4 SGs) Setting up a data collection platform (Microsoft form) to enable all the WG4 members to a stuctured contibution to the document.

The data collected in this way will serve as a starting point for the final guideline template.



February 2025 – Subgroups coordinators update

D 4.2. Creation of a list of bioactive compounds extracted or obtained from F&Vs by-products (to attach at the guideline)

Steps

A template draft for the list of fruit by-product-derived bioactives has been generated and a list of bioactive compounds extracted or obtained from fruit by-products has been created.

Ongoing literature review for the collection of available information.

Strategy

A collaboration between all the SGs has been proposed and commonly accepted. Fruit SG will share an excel file draft to other SGs for framing a common template (by bioactives or by food waste category?), to be adjusted according to the food categories needs.



February 2025 – Subgroups coordinators update

D 4.3. Review papers on the valorisation of agrifood waste method

Steps

SG Vegetables \rightarrow A systematic review tool which uses AI to generate research topic clusters will provide a novel approach. The results will then be used to develop a narrative review of the main research topics. The methodology (key word string) is being finalised.

SG Fruit \rightarrow Four review papers have been proposed regarding volarization of fruit by-products: corresponding authors/co-authors have been listed, TOCs has been generated, and the timeline has been established.

SG Cereals \rightarrow A review focused on the valorisation of cereal by-products is ongoing.

SG Animal production \rightarrow titles and corresponding authors/co-authors for two review papers are under discussion within the members.

All SGs expects to submit by the end of 2025.

Strategy

Considering the expertises within the WG on systematic review tool which uses AI to generate research topic clusters, an AI workshop/training session has been proposed (ideal taget: all the Action members).



Thank You for the attention!

My contacts

email1 jessica.girardi91@gmail.com

email2 jessica.girardi@llkc.lv

phone +371 29336522

