



**HORIZON
2020**

Accelerating Water Circularity in Food and Beverage Industrial Areas around Europe

Fact Sheet

Project Information

AccelWater

Grant agreement ID: 958266

Status

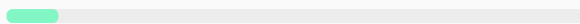
Ongoing project

Start date

1 November 2020

End date

31 October 2024



Funded under

H2020-EU.2.1.5.3.

Overall budget

€ 9 429 670

EU contribution

€ 8 115 787,38

Coordinated by
**AGRICULTURAL &
 ENVIRONMENTAL
 SOLUTIONS**

 Greece

Project description

Improving water efficiency in the food and beverage industry

The food and beverage industry is one of the most water- and energy-intensive industries in the world in addition to producing large volumes of waste. Therefore, freshwater supplies are in high demand. Despite significant progress in improving water use efficiency, the food and beverage sector needs to do more to minimise the use of freshwater during the processing of raw materials. However, current solutions for wastewater treatment in industries under a water–waste–energy nexus remain limited. The aim of the

EU-funded AccelWater project is to change this pattern and improve freshwater consumption in the food and beverage industry by focussing on developing novel water reclaiming and reusing as well as artificial intelligence-enabled monitoring and control technologies.

Objective

The food and drink industry is the EU's biggest manufacturing. However, this industry is one of the most water and energy intensive industries worldwide while the companies belong to that sector produce a lot of waste. Specifically, the food and beverage industry consumes 56% of the available water for industrial and urban use. Additionally, food processing embeds 28% of the total energy used for production, while the total direct energy consumed by the European food industry amounted to 28.4 Mt oil equivalent, while 30.6 Mt of food waste are produced in this industry. Although, huge steps have been made in increasing the water use efficiency through the use of modern technologies and methods, there is limited effort from the food and beverages industry to minimize freshwater use during the raw material processing. In addition, high water consumption in industrial areas lead to increased production costs due to the fact that the tariffs for public wastewater treatment can be very high in European cities as well as the industrial electricity prices can also be very high. Currently, solutions for wastewater treatment in industries include the use of clarification, membrane filtration, reverse osmosis, process water polishing, disinfection with water treatment chemicals and UV, and biological treatment technologies. However, the use of these technologies under a water-waste-energy nexus is very limited. AccelWater's project main objective is to optimize freshwater water consumption in the food and beverage industry under a water-waste-energy nexus by introducing beyond state-of-the-art water reclaiming, reusing and Artificial Intelligence enabled monitoring and control technologies will permit the use of reclaimed water in the manufacturing processes of food and beverages and on the same time will allow waste and energy reclamation, optimization and management, and consequently will result to environmental and socioeconomic sustainability.

Field of science

/engineering and technology/other engineering and technologies/food and beverages

/natural sciences/computer and information sciences/artificial intelligence

/engineering and technology/chemical engineering/separation technologies/desalination/reverse osmosis

/engineering and technology/environmental engineering/water treatment processes/wastewater treatment processes

Programme(s)

Topic(s)

Call for proposal

H2020-LCCI-2020-EASME-singlestage

Funding Scheme

IA - Innovation action

Coordinator



AGRICULTURAL & ENVIRONMENTAL SOLUTIONS

Address

Markou Mpotsari 47
11742 Athens
 Greece

Activity type

Private for-profit entities
(excluding Higher or
Secondary Education
Establishments)

EU contribution

€ 1 347 500

[Contact the organisation](#) 

Participants (14)



NATIONAL TECHNICAL UNIVERSITY OF ATHENS - NTUA

 Greece

EU contribution

€ 1 517 500

Address

Heron Polytechniou 9
Zographou Campus
15780 Athina

Activity type

Higher or Secondary
Education Establishments

[Website](#) 

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INSTITUTE OF COMMUNICATION AND COMPUTER SYSTEMS

Greece

EU contribution

€ 763 750

Address

**Patission Str. 42
10682 Athina**

[Website](#)

Activity type

Research Organisations

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ATHINAIKI ZYTHOPIA ANONYMOS ETAIRIA

Greece

EU contribution

€ 332 500

Address

**Kifisou 102, Aigaleo
122 41 Aigaleo**

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Activity type

**Private for-profit entities
(excluding Higher or
Secondary Education
Establishments)**



REZOS BRANDS ANONYMI EMPORIKI ETERIA IDON DIATROFIS

Greece

EU contribution

€ 386 312,50

Address

**Vipe Patron
25200 Patras**

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Activity type

**Private for-profit entities
(excluding Higher or
Secondary Education
Establishments)**



DIGNITY IDIOTIKI KEFALAIΟΥXIKI ETAIREIA

Greece

EU contribution

€ 242 375

Address

**Efplioas 33
18537 Pireas**

Activity type

**Private for-profit entities
(excluding Higher or
Secondary Education)**

Establishments)[Contact the organisation](#) **PRODAL SCARL** Italy

EU contribution

€ 770 790

Address

**Via Giovanni Paolo li 132
84084 Fisciano**

Activity type

Research Organisations[Contact the organisation](#) **CALISPA SPA** Italy

EU contribution

€ 224 653,63

Address

**Via Riccardo Ciancio 12
84083 Castel San Giorgio**

Activity type

**Private for-profit entities
(excluding Higher or
Secondary Education
Establishments)**[Contact the organisation](#) **Associazione Nazionale Industriali Conserve Alimentari Vegetali** Italy

EU contribution

€ 112 430

Address

**Viale Della Costituzione Is.
F/3
80143 Napoli**

Activity type

Other[Contact the organisation](#) **FUNDACIO UNIVERSITARIA BALMES** Spain

EU contribution

€ 757 250

Address

Activity type

Carrer Perot Rocaguinarda**17****08500 Vic Barcelona**[Website](#)**Higher or Secondary****Education Establishments**[Contact the organisation](#)**ASSOCIACIO CATALANA D INNOVACIO DELSECTOR CARNI PORCI INNOVACC**

Spain

EU contribution

€ 76 841,25

Address

Calle Tomas De Lorenzana**15****17800 Olot**[Contact the organisation](#)

Activity type

Other**MATADERO FRIGORIFICO DEL CARDONER SA**

Spain

EU contribution

€ 287 385

Address

Paratge Can Canals Nou S/n**Sant Joan De Vilatorrada**[Contact the organisation](#)

Activity type

**Private for-profit entities
(excluding Higher or
Secondary Education
Establishments)****AXIA INNOVATION UG**

Germany

EU contribution

€ 245 000

Address

Turkenstrasse 29**80799 Munchen**[Contact the organisation](#)

Activity type

**Private for-profit entities
(excluding Higher or
Secondary Education
Establishments)****HASKOLI ISLANDS**



 Iceland

EU contribution

€ 302 125

Address

**Saemundargotu 2
101 Reykjavik**

Website [↗](#)

Activity type

**Higher or Secondary
Education Establishments**

Contact the organisation [↗](#)



MATIS OHF

 Iceland

EU contribution

€ 749 375

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Activity type

Research Organisations

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