

ALGORITHM FOR LOGISTICS OPTIMISATION

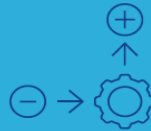
“By using real-time information, this solution allows us to capitalise on the potential of biowaste”

Theodoros Gkiourkas, Project Manager at Clube, testing the solution in Kozani.

200kg
of biowaste per year
is thrown by each European¹,
and **only 25% are recycled.**²



2023



The compulsory separate collection of biowaste in Europe gives an opportunity for the valorisation of this resource.



HOW TO OPTIMISE THE COLLECTION OF BIOWASTE, TO ENSURE BIOREFINERIES HAVE ACCESS TO A UNIFORM & HIGH-QUALITY FEEDSTOCK?

➤ WHEN?

The prototype is currently being tested in the Greek city of Kozani. If testing goes well, the technology is expected to reach TRL7 by 2022 and be commercially available soon after.

➤ WHAT?

To optimise the collection of biowaste, ITENE developed a user-friendly Cloud Platform based on real-time information, which allow waste managers to prioritise containers for collection.

➤ HOW?

A metaheuristic algorithm, based on the collection and processing of real time statistical data, calculates the optimal route the trucks should take to optimise the collection of biowaste in municipalities.

The data are information on the current collection scheme (e.g. number and capacity of trucks and containers, collection times, current routes, distances), as well as real-time information on the level of degradation of the biowaste and how full the container is, sent by sensors placed in the bins.

More about the sensors [here](#).

Contact

Miguel Ángel Górriz Peris, Project Specialist
miguelangel.gorriz@itene.com

www.itene.com

Want to learn more about biowaste collection?

Listen to our **webinar** on Selective collection of Urban Biowaste.

Read full **interview** of ITENE [here](#)

Discover our **SCALIBUR project**

SCALIBUR

RESEARCH CENTER
ITENE

This project received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 817788



¹ COM/2010/0235 final

² https://www.interregeurope.eu/fileadmin/user_upload/plp_uploads/policy_briefs/2017-03-24_PB_Biowaste_amended.pdf