

A circular economy system

for multi-source biomass conversion to added value products



LIFE18 CCM/GR/001180
With the contribution
of the LIFE Programme
of the European Union

Project Duration: 01/10/2019 – 31/05/2023 Total project budget: 2,636,693 €

EU financial contribution (55%): 1,450,181 €

Coordinating Beneficiary:



NATIONAL TECHNICAL UNIVERSITY OF ATHENS (NTUA)

Beneficiaries:



MUNICIPALITY OF LAVREOTIKI



FEDERATION OF HELLENIC FOOD INDUSTRIES



HELLENIC PETROLEUM S.A.



ENVIRECO CONSULTING S.A



SATISTICA LTD.



NEVIS - NOVEL ENVIRONMENTAL SOLUTIONS S.A.



UNIVERSITA DEGLI STUDI DI VERONA



PROJECT ACTIONS

Preparatory Action:

Technical preparation of the feedstock collection system and of plant installation

Implementation Actions:

- Design and installation of the biorefinery system and of the control & monitoring system
- Test operation and optimization of the biorefinery system
- Performance evaluation of fuel mixes with the produced ethanol in motor engines
- Economic feasibility study
- Development of the CIRCforBIO online platform
- Demonstration of the innovative biorefinery system through circular economy living labs
- Replicability and transferability

Horizontal Actions:

- Monitoring and evaluation of project impact
- Communication and dissemination of project results
- Project management

LIFE CIRCforBIO project

The LIFE CIRCforBIO project aims to reduce greenhouse gas emissions (gases responsible for climate change), mainly by replacing fossil fuels with advanced biofuels, that is, fuels derived from biomass (any organic source).

Specifically, in the present project biomass is derived from separated food waste (households), business waste (cafes, restaurants and bakeries) and agricultural residues of the Municipality of Lavreotiki as well as from food industries (brewery, potato industry and fruit juice industry).

By designing, developing and demonstrating a standard biorefinery system at the Lavrion Technological Park the biomass will be utilized for its bioconversion into a range of value-added products such as biodiesel, bioethanol, biogas and fertilizer.

The project started on 1st October 2019 and will last 44 months. It is cofunded by the European Union (EU) LIFE programme, which is the EU's most important financial instrument for the environment. The consortium implementing LIFE CIRCforBIO consists of the following entities: National Technical University of Athens (NTUA / Coordinator), ENVIRECO SA, Hellenic Petroleum (HELPE), Municipality of Lavreotiki, NEVIS SA, SATISTICA Ltd and the Federation of Hellenic Food Industries (SEVT).

www.circforbio.eu





