LIFE BioLubridge

BIOLUBRICANTS FROM URBAN SEWAGE SLUDGE

www.life-biolubridge.eu

C. Pastore, L. di Bitonto*, E. Scelsi, V. D'Ambrosio, V. Locaputo, A. Angelini, A. Leuzzi

[1] Water Research Institute (IRSA), National Research Council (CNR), Bari, 70132, Italy
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Presenting author email: luigi.dibitonto@ba.irsa.cnr.it

THE PROJECT

In LIFE BioLubridge a new process will be demonstrated on a pilot scale, by treating thickened urban sewage sludge with the aim of:

- recovering lipid contained therein for generating biolubricants
- reducing final residual sludge disposal and improve its final quality and properties, encouraging the safe use of sludge in agriculture

Lipids will be purified and converted into biolubricants, which will be tested for specific applications in the field of metalworking fluids.

ENVIRONMENTAL PROBLEMS

WASTE MANAGEMENT ISSUES
Sewage sludge in Europe is increasing fast but it cannot be used in agricolture because of the increasing amount of "emerging polluntants" it contains.

ENVIRONMENTAL POLLUTION
lubricating oil is emitted into the environment, impacting on soils, groundwater, vegetation, and animals.

RAW MATERIALS SCARSICITY
Overuse of virgin natural resources for biolubricants production

MAIN OBJECTIVES

- Development of an innovative technology to recover lipids from sewage sludge
- Final Sewage slugde treated for agricoltural usage, maximising the use of a waste product
- Development of biolubricants from sewage sludge lipids
- Shortening of the overall treatment of sludge, from 15 days to 6-12 hours

IMPACTS

3,5 tons of biolubricants produced

2,5 tons of palm oil saved

2,5 Kg CO_2 emissions saved per Kg of palm oil saved

5000 m³/year of water saved

PARTNERS

VITONE ECO – ABSOLUTE SEPARATION

IRSA CNR – Istituto di Ricerca sulle Acque – Consiglio Nazionale delle Ricerche

acquedotto pugliese – l'acqua, bene comune

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PROJECT DETAILS

PROJECT TITLE: Biolubricants from urban sewage sludge
ACRONYM: LIFE BioLubridge
SECTOR: Waste
START DATE: 01/09/2021
END DATE: 31/08/2024
EU CONTRIBUTION: 1,352,049 Euro

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CONTACTS

PROJECT COORDINATOR
VITONE ECO s.r.l
Gaetano VITONE
E-mail: info@vitoneco.com
Web: www.vitoneco.com