Management coordination and recovery strategies for sludge and organic waste in the SUDOE region

ECOMONDO
THE GREEN TECHNOLOGY EXPO

Session:
Waste as resources: Innovative technologies for recycling and recovery

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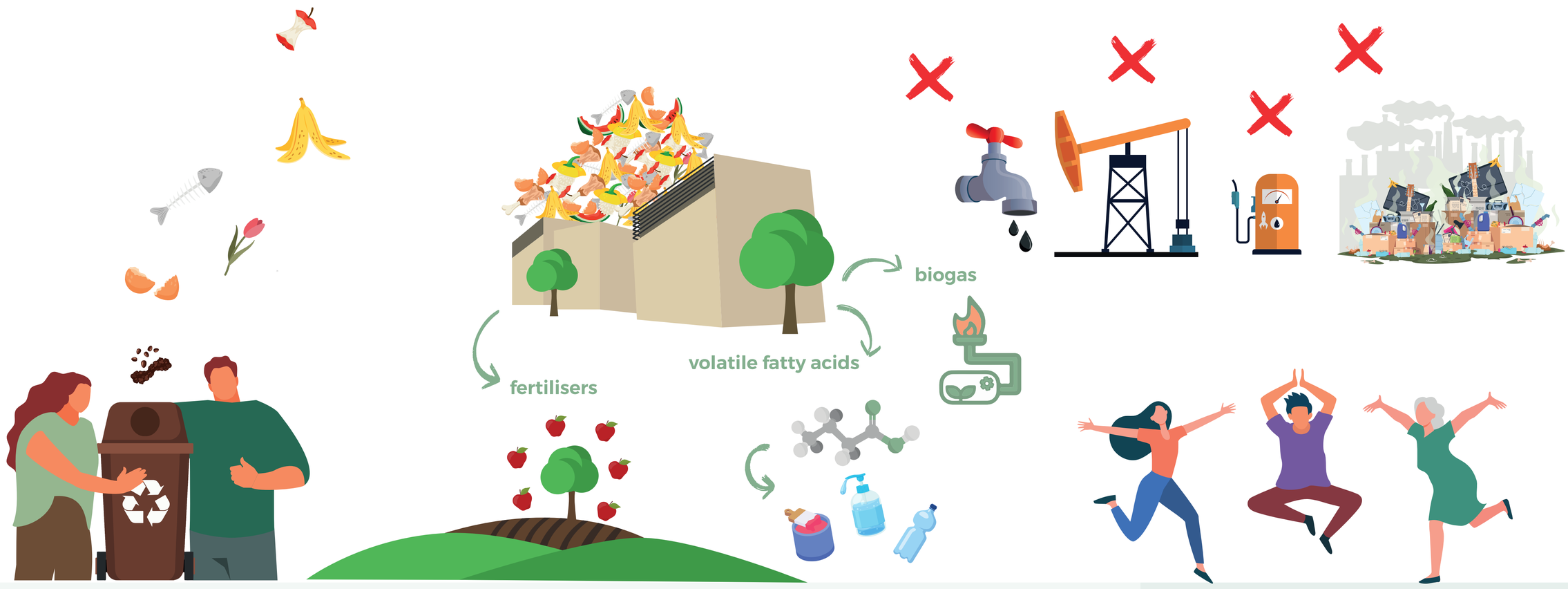
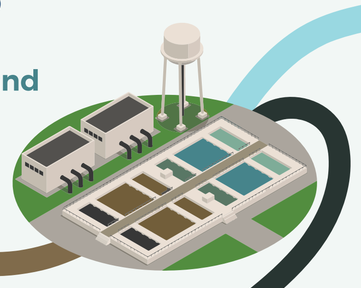


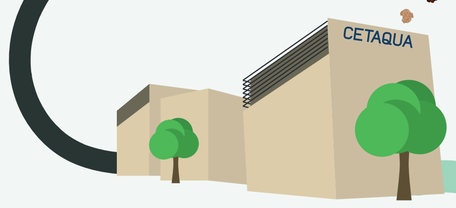
ÁGUAS DO TEJO ATLÂNTICO
Grupo Águas de Portugal

wastewater treatment and sludge pre-treatment

Porto. Porto Ambiente

planning and management of urban waste collection





CETAQUA
CENTRO TECNOLÓGICO DEL AGUA

transformation of waste and sludge into high added-value products and project coordination

INSA TOULOUSE
tbi Toulouse Biotechnology Institute
BioGroup Group of Environmental Biotechnology
CRETUS USC

process optimization through mathematical models and determination of environmental impacts

nereus sustainable recycling systems

concentration of products for industrial use in biorrefinery systems

INSA TOULOUSE
tbi Toulouse Biotechnology Institute

energy recovery

feuga fundación empresa universidad gallega

communication and transfer of knowledge and processes

Patrimonio Natural de Castilla y León
Junta de Castilla y León

use of fertilisers as amendments to agricultural soils

ECOVAL proposes a new approach for managing sewage sludge and urban biowaste by its conversion to volatile fatty acids such as acetic, propionic, butyric or valeric acid), since these compounds (known as building blocks or the carboxylate platform) are secondary raw materials that can be converted to plastics, lubricants, cosmetics or paintings, among others.

Currently, **volatile fatty acids** are obtained almost entirely from oil, which implies a high environmental impact and an example of a business based on linear economy. However, processes developed in recent decades have shown that these VFA can be **produced through biological process** from several types of **organic waste** (dairy or fish canning effluents, sewage sludge, urban biowaste, etc.).

At the same time, in **Sudoe Region** (Spain, Portugal and Southwest of France), **more than 5 million tons of sewage sludge are produced every year,** and up to 20% is incinerated and 10% still disposed in landfills. Regarding **biowaste, more than 11 million tons** are produced every year (being approximately the **80% food waste**), and still more than 65% of this waste is incinerated or disposed in landfills.

Therefore, there is a **circular opportunity** to develop and scale-up these technologies to reach the market, since the renewable origin in the production of volatile fatty acids still represents a minimal fraction and the treatment of organic waste is still far from being circular. **Solutions such as the one proposed by Ecoval, fully aligned with the EU's objectives of being the first climate-neutral continent in 2050.**

www.ecoval-sudoe.eu

Project co-financed by the Interreg Sudoe Programme through the European Regional Development Fund (ERDF)
ERDF budget: 1,109,250 €