



LIFE INTEGRATED PROCESS for ENZYMATIC SPLITTING of TRIGLYCERIDES

TYPE OF ACTION : DEMO PLANT

VALUE CHAIN : VC3 – AGRO-BASED

START/END DATES : 09/2016 – 08/2021

BBI JU CONTRIBUTION : € 4,295,153.67

PARTNERS



INTERACTIONS BETWEEN PARTNERS



LEGEND:

PARTNERS

Developed products

- POLYMERIZATION
- ENGINEERING
- SUSTAINABILITY

DISCLAIMER



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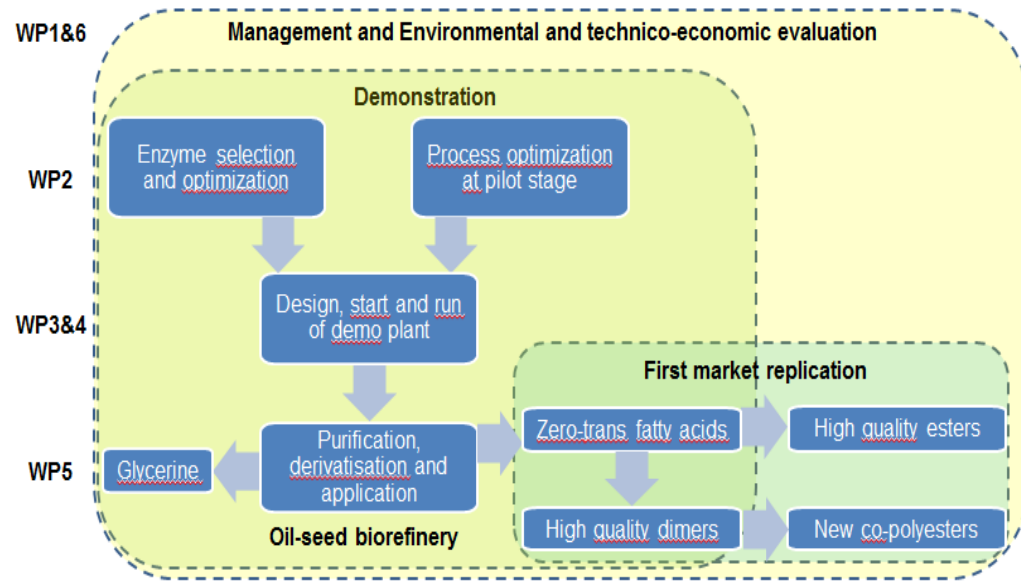
PROJECT OBJECTIVES

To perform the scale-up to pre-industrial level of a new environmentally friendly alternative to traditional splitting routes of triglycerides producing free fatty acids and glycerol

To enzymatically produce selected commercially important fatty acids at an overall lower variable cost than current processes and to showcase their use as intermediates

To contribute to reaching the EC goals on waste reduction by elaborating and evaluating new value chains for making use of agricultural co-products

INTERACTIONS BETWEEN WORKS PACKAGES



PROJECT IMPACTS

Competitive biotech pathway compared to conventional processes

- * ↓ 45% water consumption
- * ↓ 70% enzyme consumption
- * >50% waste water cost
- * ↓ of variable costs

Green process for high quality products

- * 80% ↓ of energy consumption
- * Full recycling of hydrolysis waters
- * ↓ of by-products generation & suppression of salts formation for reactive oils

European economic benefits

- * Pioneering industry with new clean & green products to face growing Asian competition
- * Job creations for industrialisation and sales
- * Technology licensing

NEW PRODUCTS

High quality FA & Zero trans FA for food application

New grade of Co-polyesters

New grade of dimer acids (C36 and C44)