

International Brokerage Event
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ITENE: Packaging, Transport, Logistics

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ITENE's description and research interest

ITENE was founded in 1.994 as a private association with **NON PROFITABLE PURPOSES** and integrated by companies and institutions related to Packaging and Logistics



ITENE'S previous experience



39 Projects financed in FP6-FP7

5 Coordinators

6 Technical management

28 WP leader

120

Professional

22 Financed projects in other calls: LIFE, Interreg, Ecoinnovation (coordinators in 3 Lifes and 1 Sudoe)

23%

Doctors

10 projects financed in H2020

2 Coordinators: PLASTICIRCLE, IMPACPAPEREC

1 Technical management BBI (Funkifiber)

7 Participation (EcoBulk, Agrimax,...)

14

Qualifications

20 SME's Instrument (support to the coordination, management and business)

3%

Annual investment in
Technical training

Demonstrating systemic urban development for circular and regenerative cities



- **Objectives:**

- Implement a full circular economy model incorporating regenerative and circular practices.
- Potential Materials in the city: Water, energy, air, soil, biomass, bio-waste, recyclable materials.
- Potential Technologies: sensors, big data, observational programs, geo-localization and traceability, satellite navigation

- **Expected results**

- Reduce consumption, creation/regeneration of resources directly in cities, environmental/economic improvement
- Involve citizens, public authorities and policy bodies in the circularity and regenerative processes of the city during and after the project.
- Development of new services and business models and create jobs

Consortium - required partners



No	Expertise	Type	Country	Role in the project
01				IOT – ICT-Big data Solutions
02				Co-Creation & Collaborative economy
03				Municipalities
04				Waste managers
05				Sorting and waste treatment plants
06				Experts on Water, energy, air, soil treatment & Valorization (to be defined)
07				
08				

INTERESTED IN OTHER TOPICS



1. Smart plastic materials with intrinsic recycling properties by design
2. Efficient recycling processes for plastic containing materials (IA)
3. Methods to remove hazardous substances and contaminants from secondary raw materials
4. Raw materials innovation for the circular economy: sustainable processing, reuse, recycling and recovery schemes

In these topics, we could do...



STEP 1: Design of polymer material and recycling technologies:

1. PILOT SCALE: Innovative deinking process (100kg/h) with an efficient water treatment system (LDPE, HDPE, PP and PS)
2. Polymer design to improve “Recyclability”: use enzymes/bacteria to decompose the polymer into monomers that can be used as starting material in other polymerization processes
3. Universal additive: Additive to make conventional polymers also compostable.
4. Chemical recycling of multilayers: pyrolysis or gasification

In these topics, we could do...



STEP 2: Improvement of sorting technologies → Improve waste quality (purity)

1. Improved optical sorting/Magnetic separation
2. Autosorting: markers to be added in the plastics to sort them easily by material or group of materials. This is useful for black plastics, multilayers or compostable materials in general
3. Innovative Removable Adhesives: to achieve the easy separation of multilayers in the sorting plant (only with water, temperature, or specific removing components)

STEP 3: Valorization of other fractions contained in plastics into added value products

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