

LIFE EXTRUCLEAN



With the contribution
of the Life
financial instrument
of the European
Union [LIFE13
ENV/ES/000067]

<http://www.life-extruclean.eu>

3rd
newsletter

LIFE EXTRU CLEAN

3rd PROJECT NEWSLETTER

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What is LIFE EXTRUCLEAN
project about?



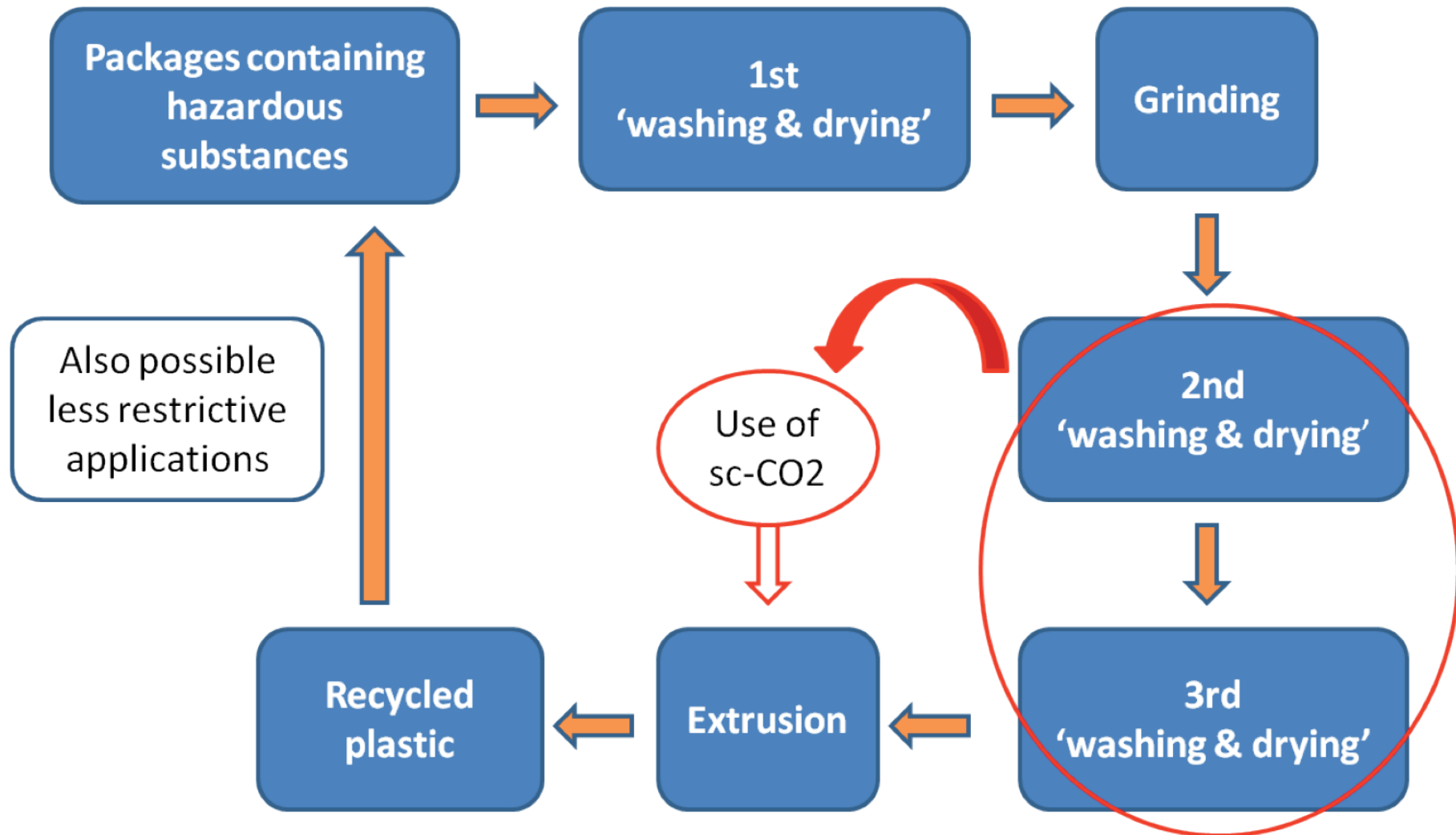
LIFE EXTRUCLEAN project aims to demonstrate the viability of the implementation of the supercritical fluids extraction (SFE) technology in the extrusion process involved in plastics recycling, leading to a recycled material free of hazardous contaminants and a recycling process with improved efficiency, in comparison with the current technology for hazardous plastic waste.

LIFE EXTRUCLEAN focuses on plastic packages that have contained dangerous substances, and therefore they become hazardous waste after use. The generally accepted method to eliminate the toxicity

of a hazardous container is its emptied and the 'triple rinsing and draining'. In the recycling line the packages gets a pre-rinse, are grinded in smaller pieces and cleaned by a series of washes (with different washing agents and surfactants) and subsequent rinsing and drying. After drying the material, it is processed through an extrusion line, getting a recycled material in pellet form. So, this process is characterized by a large water, cleaning agents and energy consumption, as well as large production of wastewater.

LIFE EXTRUCLEAN process will allow lower environmental impact of the

process, reaching at least the same efficacy in the hazardous character elimination of the recycled material.

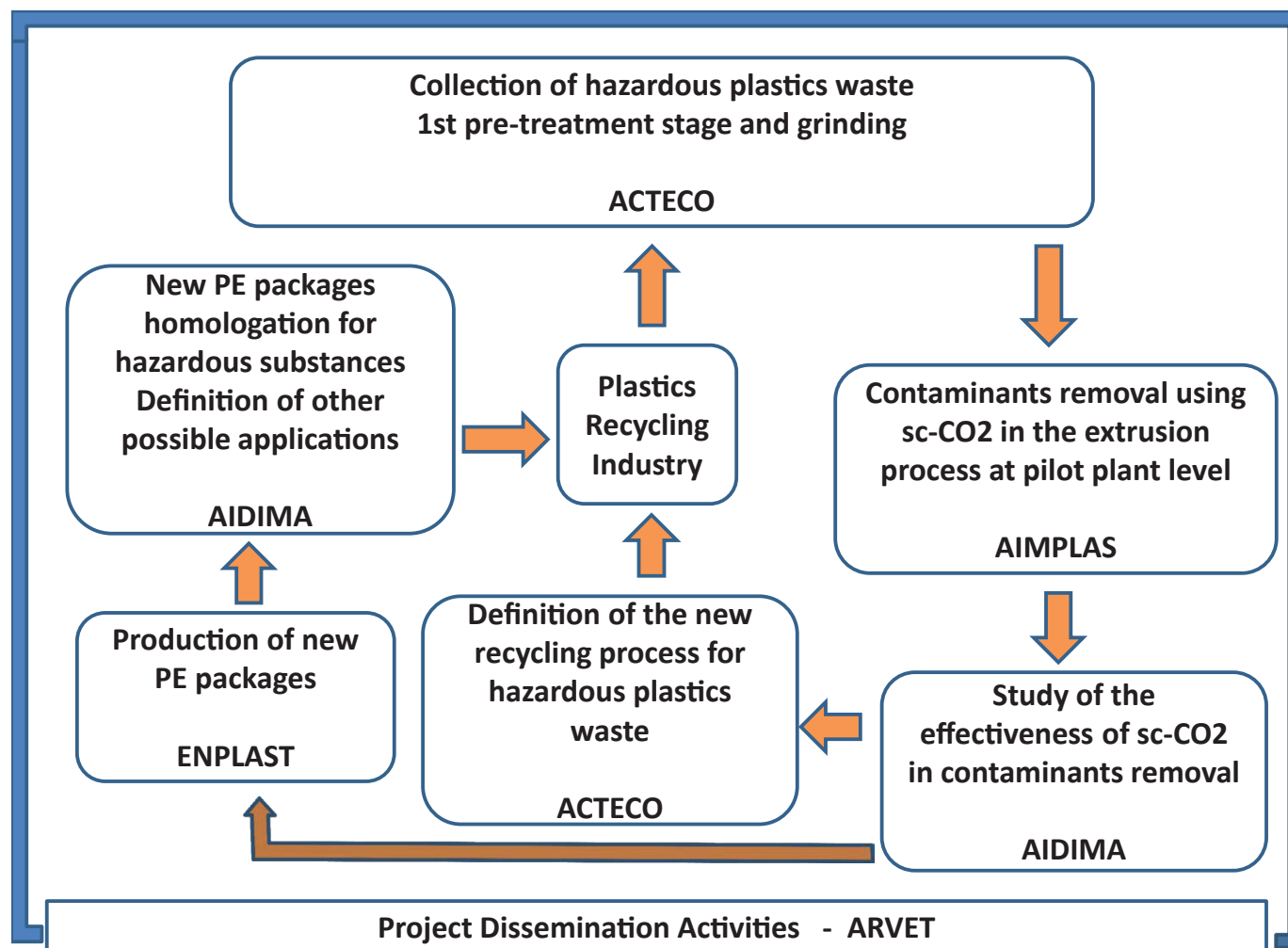


Life cycle of LIFE EXTRUCLEAN

The project consortium is formed by the following specialized companies and centres:

- **AIMPLAS:** Asociación de Investigación de Materiales Plásticos y Conexas in Valencia, Spain.
- **ACTECO:** Acteco Productos y Servicios S.L in Alicante, Spain.
- **AIDIMA:** Asociación de Investigación y Desarrollo en la Industria del Mueble y Afines in Valencia, Spain.
- **ARVET:** Agrupación de Exportadores de Transformados in Valencia, Spain.
- **ENPLAST:** Enplast S.A in Madrid, Spain

An overview of the LIFE EXTRUCLEAN partners and their role in the project is shown below:



Overview of the partners and their role in the project

About the LIFE
+ programme



The LIFE programme is the EU's funding instrument for the environment and climate action. The general objective of LIFE is to contribute to the implementation, updating and development of EU environmental and climate policy and legislation by co-financing projects with European added value.

LIFE began in 1992 and to date there have been four complete phases of the programme (LIFE I: 1992-1995, LIFE II: 1996-1999, LIFE III: 2000-2006 and LIFE+: 2007-2013). During this period, LIFE has co-financed some 4,171 projects,

contributing approximately €3.4 billion Euros to the protection of the environment and climate.

The European Commission (DG Environment and DG Climate Action) manages the LIFE programme. The Commission has delegated the implementation of many components of the LIFE programme to the Executive Agency for Small and Medium-sized Enterprises (EASME).

External selection, monitoring and communication teams provide assistance to the Commission and EASME.

The European Investment Bank will manage the two new financial instruments (NCFF and PF4EE).

The LIFE EXTRUCLEAN project has been funded by the European Union LIFE+: 2007-2013 in the area of Environment Policy and Governance.

LIFE EXTRUCLEAN in the
world wide web



Updated information about LIFE EXTRUCLEAN is available through the link <http://www.life-extruclean.eu/>, our **Twitter @lifeExtruclean** and our **Facebook fan page of LIFE EXTRUCLEAN**.



LIFE EXTRUCLEAN
dissemination in the media



The project partners have been doing different dissemination activities in the last months.

LIFE EXTRUCLEAN has been presented in different events, being the more prominent the following:

**1st International Recycling Forum
Wiesbaden Agricultural Plastics –
Potential for Recycling , (6th November
2015 Wiesbaden-Germany).**

In the Forum was dealt the current situation of emergency for recycling of agricultural plastics, general terms and conditions for an environmentally-friendly recycling of agricultural plastics. The recovery and recycling systems for plastics in agriculture and in gardening / manufacturers' product responsibility.

ACTECO participated at a conference into Innovative Recycling Technologies Session presenting life-extruclean project.



<http://www.rigk.de/en/forum/home.html><http://www.rigk.de/en/forum/home.html>

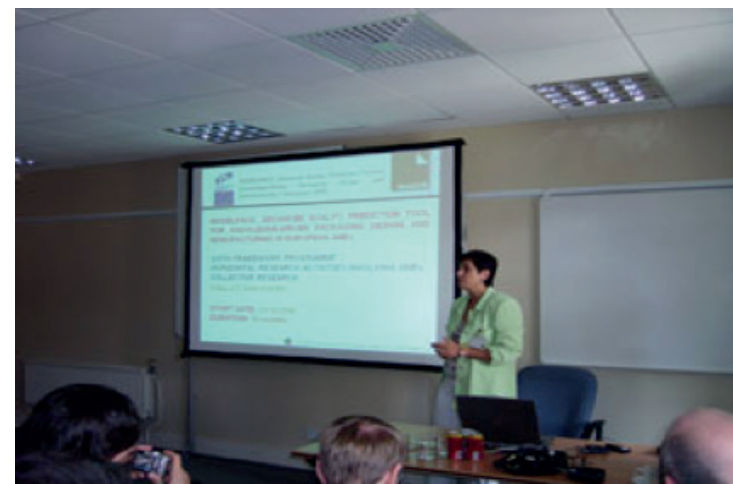
LIFE INFO DAY Networking Event (July 2015), organised by the by the Ministry of Agriculture, Food and Environment, Generalitat Valenciana, Camara Valencia, EEN, Seimed and Redit, held at Lluís Vives Business School (Valencia-Spain) was held on 14th July 2015 in Valencia, where AIDIMA participated in a seminar presenting the project.



27 TH IAPRI Symposium was held in Valencia from 8th-11th June 2015 where AIDIMA participated presenting Life-extruclean project.

IAPRI is the International Association of Packaging Research Institutes and annually organizes this event assembling students and researcher from worldwide that share their experiences and works in the packaging field

<http://iapri.itene.org>



Fairs

HYGIENALIA + PULIRE 2015, Madrid 27th to 29th October 2015

ARVET and the integrated association Asfel participated at the fair having an information booth and organizing B2B bilateral meetings.

Hygienalia + Pulire trade fair is the Spanish most important trade fair for the cleaning and Hygiene industry, where exhibited 119 companies and was visited by more than 5.000 national/international visitors according to the organizer statistics.



EMPACK in Porto, Portugal (October 2015)

The leading fair for the packaging sector in Spain was held this year in Porto, with more than 100 exhibitors, 3,000 attendees and 20 national and international speakers. The project was presented by AIMPLAS in a speech on the topic 'Recycling'.



IMEX- International Trade & Business fair in Valencia, Spain (June 2015)

A two-day event with many conferences and seminars dealing with different topics related to export, as well as B2B meetings with delegates in foreign countries.

LIFE EXTRUCLEAN was promoted at Arvet's stand with a roller-up of the project and leaflets to be handed out among interested visitors.

An event with topical presentations and an informative trade exhibition attended by international industry representatives

on the topic Agricultural Plastics – Potential for Recycling.

LIFE EXTRUCLEAN was presented on the specific session 'Innovative Recycling Technologies'.

LIFE EXTRUCLEAN



LIFE EXTRUCLEAN - Objectives
and Results up to now



The project has demonstrated the effectiveness of the new technology for decontamination at pilot plant scale. During the first half of the project, EXTRUCLEAN technology was set at pilot plant level and the decontamination process was optimized using polyethylene jerricans contaminated in a controlled way with simulant liquids representative of the different contaminants in hazardous plastic waste.

Results showed percentages of global reduction of the simulants up to 80%, according to the case study (packages for industrial products or packages for phytosanitary products).

The project partners met in October 2015 to put in common the results obtained and to plan ahead new actions for the next months.

LIFE EXTRUCLEAN Partners during the 16th Month meeting in ENPLAST, Spain
(28th October 2015)



Future actions



In the second half of the project, work is focused on the comparison of the effectiveness of the new technology to the traditional decontamination processes. It is also foreseen to implement the new technology at industrial scale. This will allow to define the new recycling model for hazardous plastic waste, based on a clean technology with lower environmental impact than the current processes. On the other hand, the recycled plastic material obtained by EXTRUCLEAN technology will be used in the production of new packages for hazardous substances transport, being validated for this application through the corresponding tests.

LIFE EXTRUCLEAN

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<http://www.aimplas.es>

Beneficiaries - Associated



<http://www.aidima.es>



<http://www.arvet.es>



<http://www.acteco.net>



<http://www.enplast.es>

<http://www.life-extruclean.eu>