# Emilia Romagna and the Circular Economy

# I.L.P.A. Group – The Group structure


Passion for packaging

ILIP S.r.l.

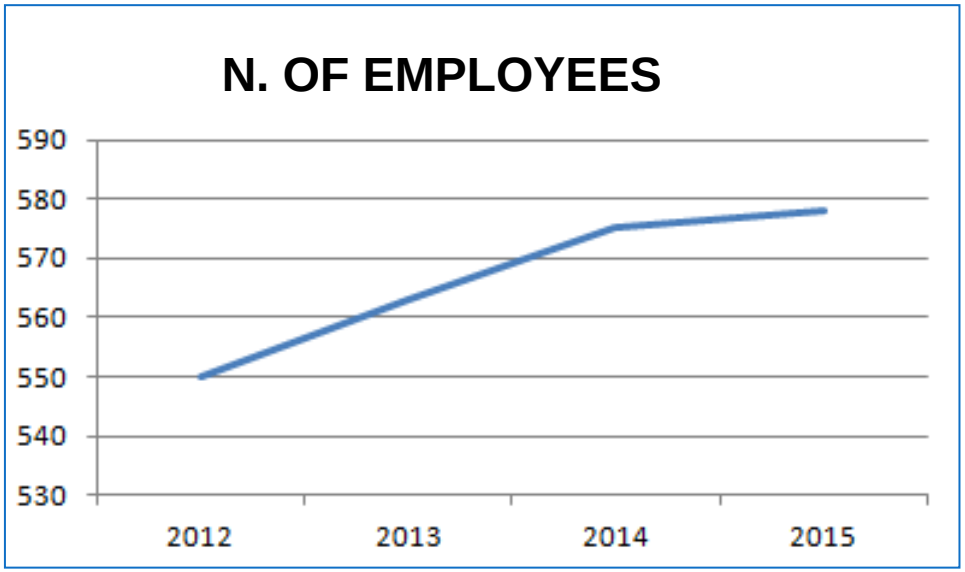
MP3 S.r.l.

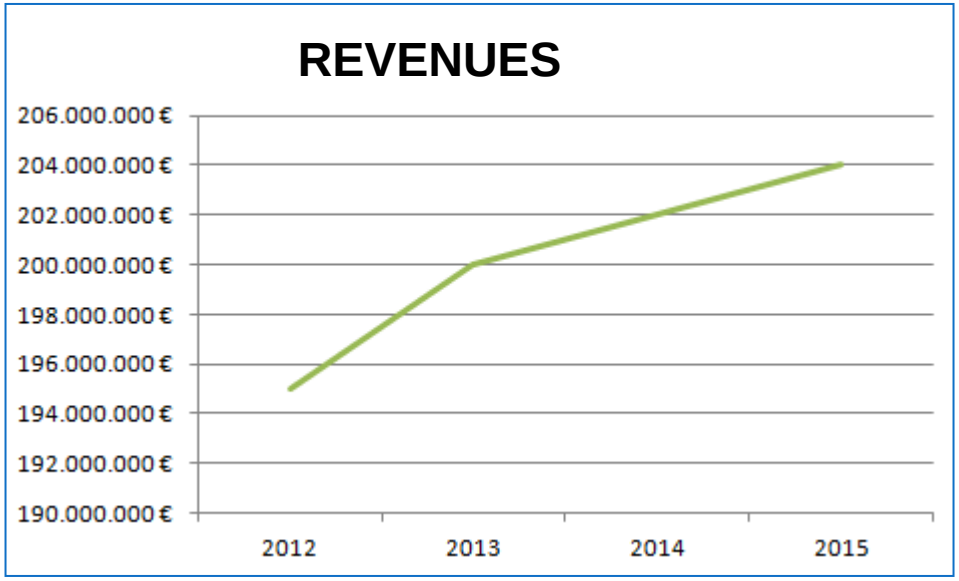
AMP Recycling S.r.l.

# I.L.P.A. Group

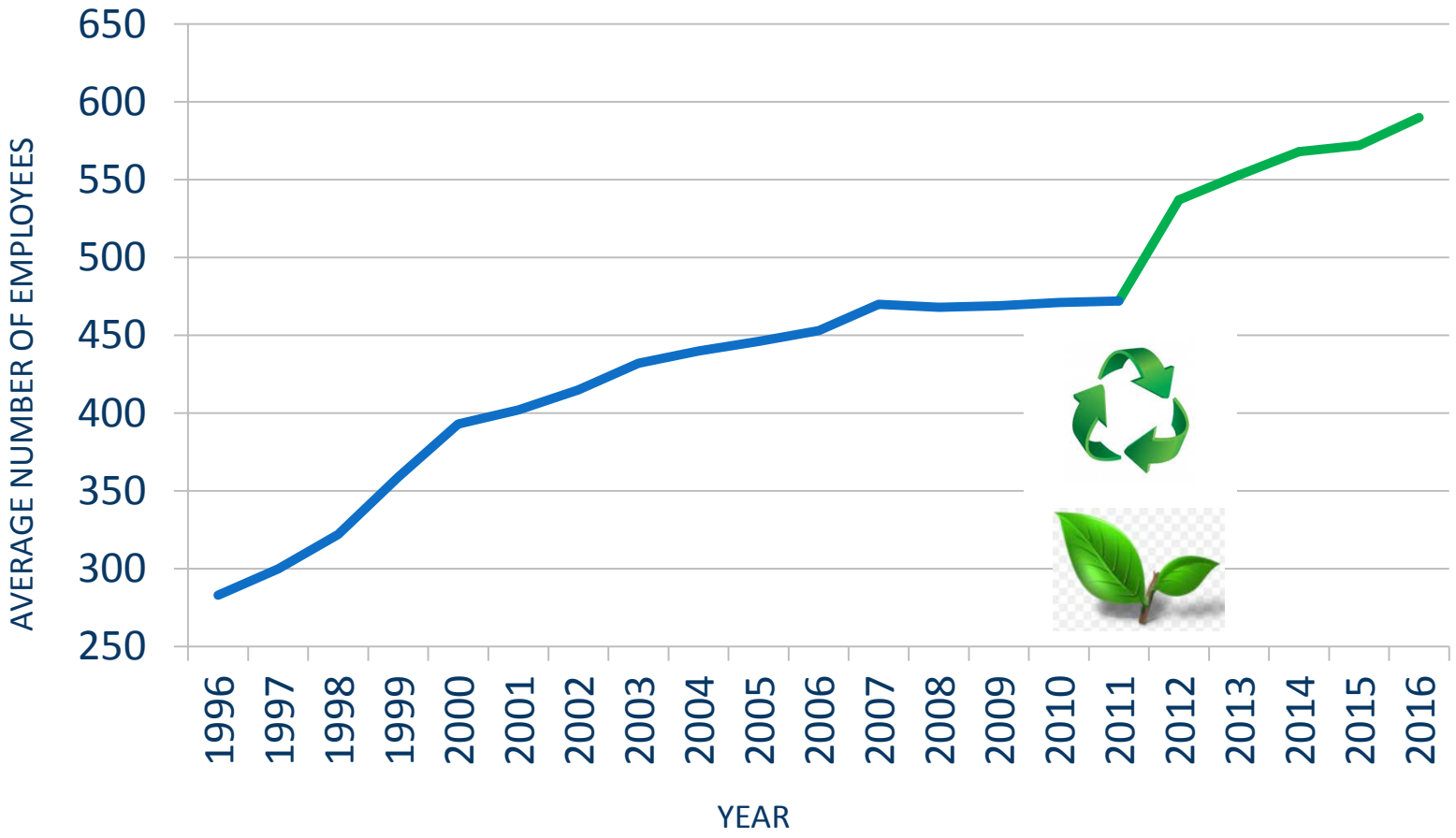
| | |
|---|---|
| **Foundation** | **1962** |
| **Factories** | **3 (2xBologna, 1xFerrara)** |
| **Companies** | **3 (ILIP S.r.l., MP3 S.r.l., AMP Recycling S.r.l.)** |
| **Market** | Retail chiains, food processing industry, foodservice companies, caterers, horticultural packaging, automotive industry, plastic converters |
| **Export** | > 55 Countries (5 CONTINENTS) |
| **B2B Customers** | > 4.000 |

# I.L.P.A. Group


N. OF EMPLOYEES
590
580
570
560
550
540
530
2012
2013
2014
2015


REVENUES
206.000.000 €
204.000.000 €
202.000.000 €
200.000.000 €
198.000.000 €
196.000.000 €
194.000.000 €
192.000.000 €
190.000.000 €
2012
2013
2014
2015

# I.L.P.A. Group – Employment data 1991 – 2016



# I.L.P.A. Group – ILIP S.r.l.

Passion for packaging

## BUSINESS UNITS:

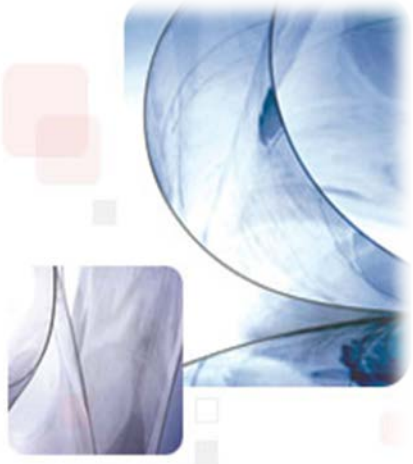
- Fresh Produce Packaging
- Foodservice Packaging
- Fresh Food Packaging


# I.L.P.A. Group – MP3 S.r.l.

running for excellence

**BUSINESS UNITS:**

- Semi – finished products
- Thermoformable and FF&S reels
- Cut Sheets

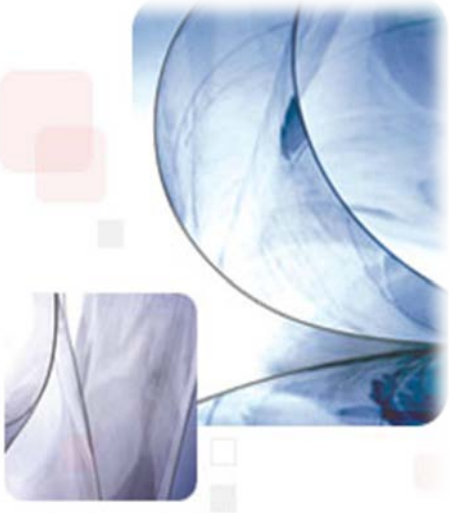


ilpa group

# I.L.P.A. Group – AMP Recycling Srl

**BUSINESS UNITS:**

- **PCW PET Recycling**
- **R-PET films extrusion**
- **Horticultural packaging**

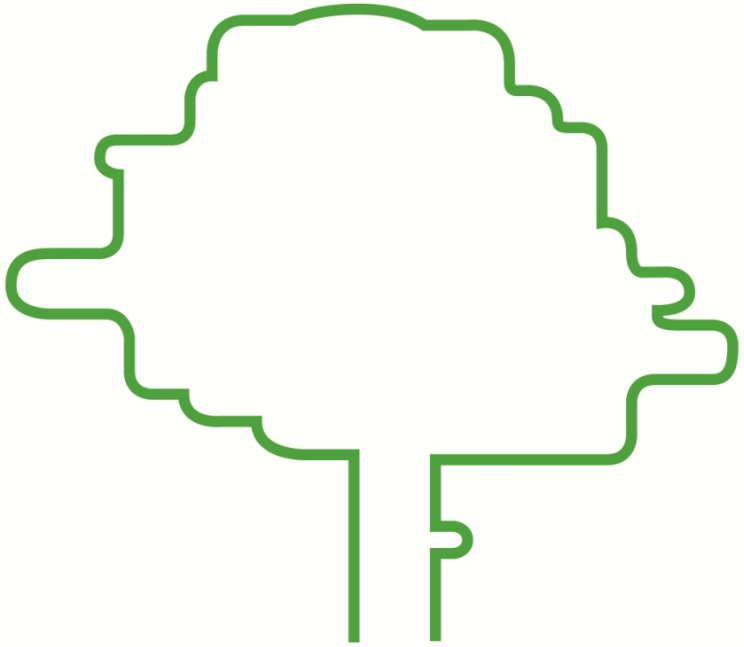


# HOW DO I.L.P.A. Group

# STAND OUT FROM THE CROWD

# Since1962 a family run successful business

## Our Roots



## Our Values


**We will spread our *Passion for Packaging* at all levels in our organization**

# Sustainable development: I.L.P.A.'s Environmental Responsability

**3 R→** I.L.P.A.'s three main commitments are:

**1.Reduce** packaging weight (DOWNGAUGING) without compromising the safety and shelf life of the packaged products. I.L.P.A. promotes more sustainable and innovative packaging systems, like heat sealing.

**2. Recycling** has become economically and environmentally sustainable. ILIP is part of I.L.P.A. S.R.L. vertical integration of the r-PET supply chain: a **CLOSED LOOP SYSTEM** from post consumer water bottles for food packaging.

**3. Renewable resources:** bioplastics, plastics from plant are renewable and compostable. **I.L.P.A. is the only European manufacturer with complete ranges of disposable tableware, foodservice packaging and fresh produce packaging made in PLA.**

# Sustainable development:
# The role of Packaging toward a holistic approach

**« ... the study estimates annual food waste generation in the EU27 at approximately 89Mt ... »,, or 179kg per capita**

(Source: European Commission-PREPARATORY STUDY ON FOOD WASTE ACROSS EU 27 Final Report October 2010)

**« ...packaging can only be assessed in relation to the product it contains and the function it serves.**

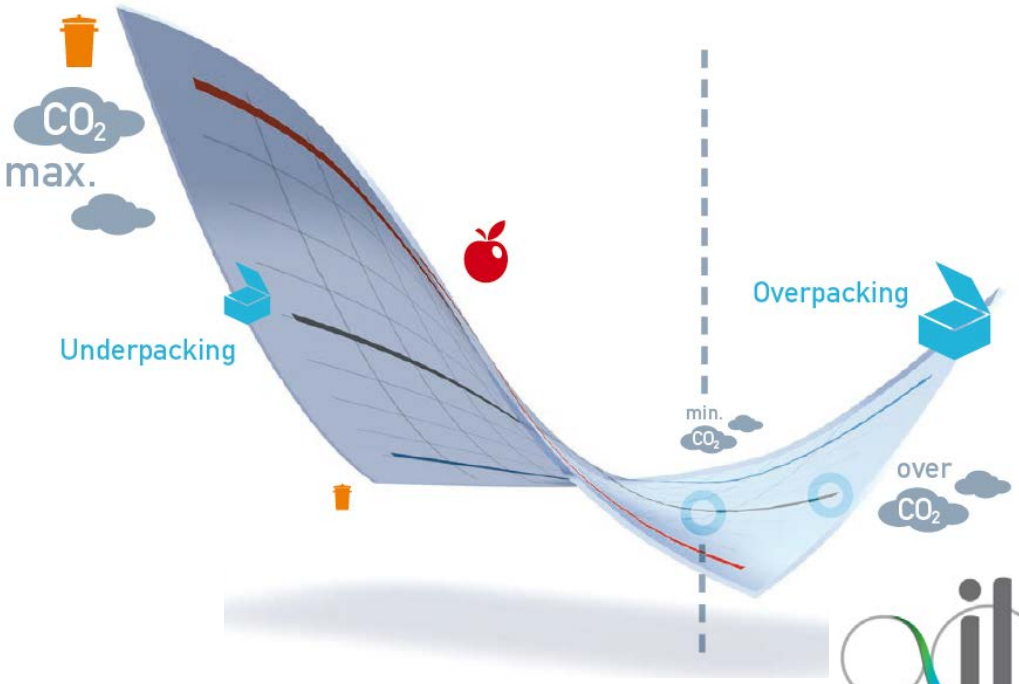
**Such an assessment will show that in the context of sustainability, packaging should be considered as part of the solution and not part of the problem.»**

(Source: EUROPEN - Green Paper on Packaging and Sustainability.
An open dialogue between stakeholders - October 2011)

# Sustainable development:
# The role of Packaging toward a holistic approach

## SUSTAIBABILITY= FIT-4-PURPOSE PACKAGING

Efficient and effective packaging results in maximun food protection, minimum food wastage and therefore minimum environmental inpact



# Sustainable development:
# The role of Packaging toward a holistic approach

**NOW THAT'S WHAT WE CALL UNDERPACKAGING**

# Sustainable development:
# The role of Packaging toward a holistic approach

**NOW THAT'S WHAT WE CALL OVERPACKAGING**

# Food losses &waste reduction

**I.L.P.A. R&D commitment**

What can I.L.P.A. R&D do on food packaging **to help to reduce food losses and waste reduction**?

Activities ongoing: studies on fresh produce shelf- life extension with active packaging*

- Packaging that absorbs/ degrades ethylene (scavenging system) thanks to substances included in the polymeric matrix or pad: not migrating (catalytic action)
- Packaging with antimicrobials:
    i. Mineral substances included in the polymer matrix not migrating (bioceramics)
    ii. Sustances included in the polymer that are released in a controlled way from the packaging to the surface of food (functionalized clay)

*= Active Packaging- definition: packaging in which some constituents have been deliberately included in the polymer matrix in order to release substances that enhance the performance of the performance of the packaging system and improve the shelf-life of food

# Sustainable development: I.L.P.A. and the Circular Economy

## CLOSING THE LOOP WITH r-PET FOOD PACKAGING

ILIP is the final stage of I.L.P.A. Group recycled-PET vertical integration converting r-PET in trays for food securing its **origin** and **traceability**

- ✓ **Whashing, sorting, grinding post consumer water bottles**
- ✓ **Extruding r-PET flakes**
- ✓ **Thermoforming r-PET sheets**

# A vertical integration: from bottles to punnets

Bottles supply (according to COREPLA standard)

Regulatory Compliance

Washing, sorting, grinding post consumer water bottles


Thermoforming r- PET punnets

Thermoforming r- PET sheets

Extruding r-PET flakes

# Sustainable development: I.L.P.A. and the Circular Economy

## 100% food grade r-PET

E.F.S.A. APPROVED FOOD GRADE r-PET FLAKES:
WE ARE ENTITLED THEN TO MANUFACTURE 100% r-PET PUNNETS

Starlinger Decontamination Unit

**NOW**

MULTI-LAYER SHEETS WITH FUNCTIONAL BARRIER: A – B – A

- 10% VIRGIN PET LAYER
- 80% r-PET LAYER
- 10% VIRGIN PET LAYER

Compliancy with:

Reg. (EC) N°1935/2004

Reg. (EU) N°10/2011

**NEXT STEPS**

MONOLAYER SHEETS SUPERCLEANED 100% r-PET!

- 100% r-PET LAYER

Compliancy with:

Reg. (EC) N°282/2008

ilpa group

# Waste reduction - Raw materials consumptions

## CLOSED LOOP
### PET recycling

I.L.P.A. Group current recycling capability:

- **Input PCW bales (water and soda PET bottles)= 15.000t**
- **Input PCW bales (water and soda PET bottles) (year 2017) = about 40.000**

By recycling 15.000t of waste into secondary raw material, we contribute to avoid the production of the same amount of virgin PET which, in terms of Global Warming Potential (carbon footprint), is equal to **25.800.000 Kg $CO_2$ eq.***

equals to **4.300 TRIPS AROUND THE EQUATOR BY CAR**

*= GWP: 1 Kg PET bottle grade= 2,51 Kg $CO_2$ eq. (PlasticsEurope Eco-Profile and EPD PET bottle grade May 2011)

Passion for packaging

# Sustainable development: I.L.P.A. and the Circular Economy

## UNIVERSITY COLLEGE DUBLIN* CARBON FOOTPRINT ASSESSMENT

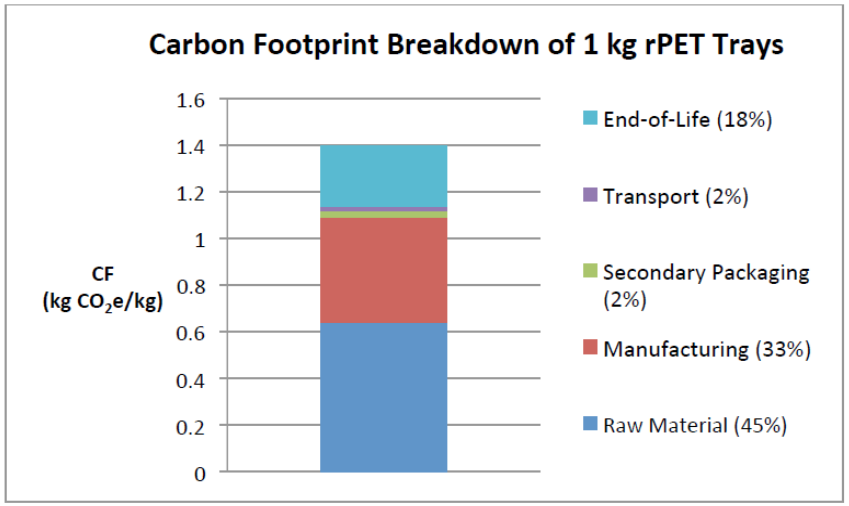



Figure 2: Specific Carbon Footprint Breakdown of rPET Trays(on a 1 kg basis)

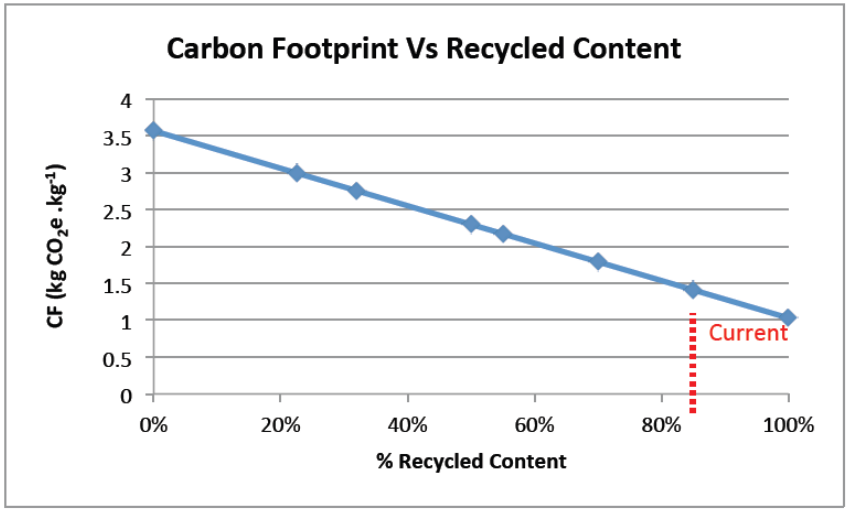



Figure 3: Carbon Footprint Vs Tray Recycled Content

*Carbon Footprint Analysis of a Polymer Manufacturing Process: Dormer, A.S.; Finn, Donal – University College Dublin

# Sustainable development:
# I.L.P.A and the Circular Economy

**CLOSING THE LOOP WITH r-PET FOOD PACKAGING**

PLEASE WATCH THE FULL VIDEO:

VIDEO\ILIP_PET_RECYCLING_EN.mp4

YouTube

# Recycling: current situation and future prospects

- ✓ Growing evolution of the waste sorting technology
- ✓ Increased recycling volumes
- ✓ The world of packaging's need of achieving easier recyclable products and mono-materiality concept

Enhancement of recycling process and plastic materials

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# THANKS !

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## FOR FURTHER INFORMATIONS:


http://www.ilpagroup.com/

YouTube