

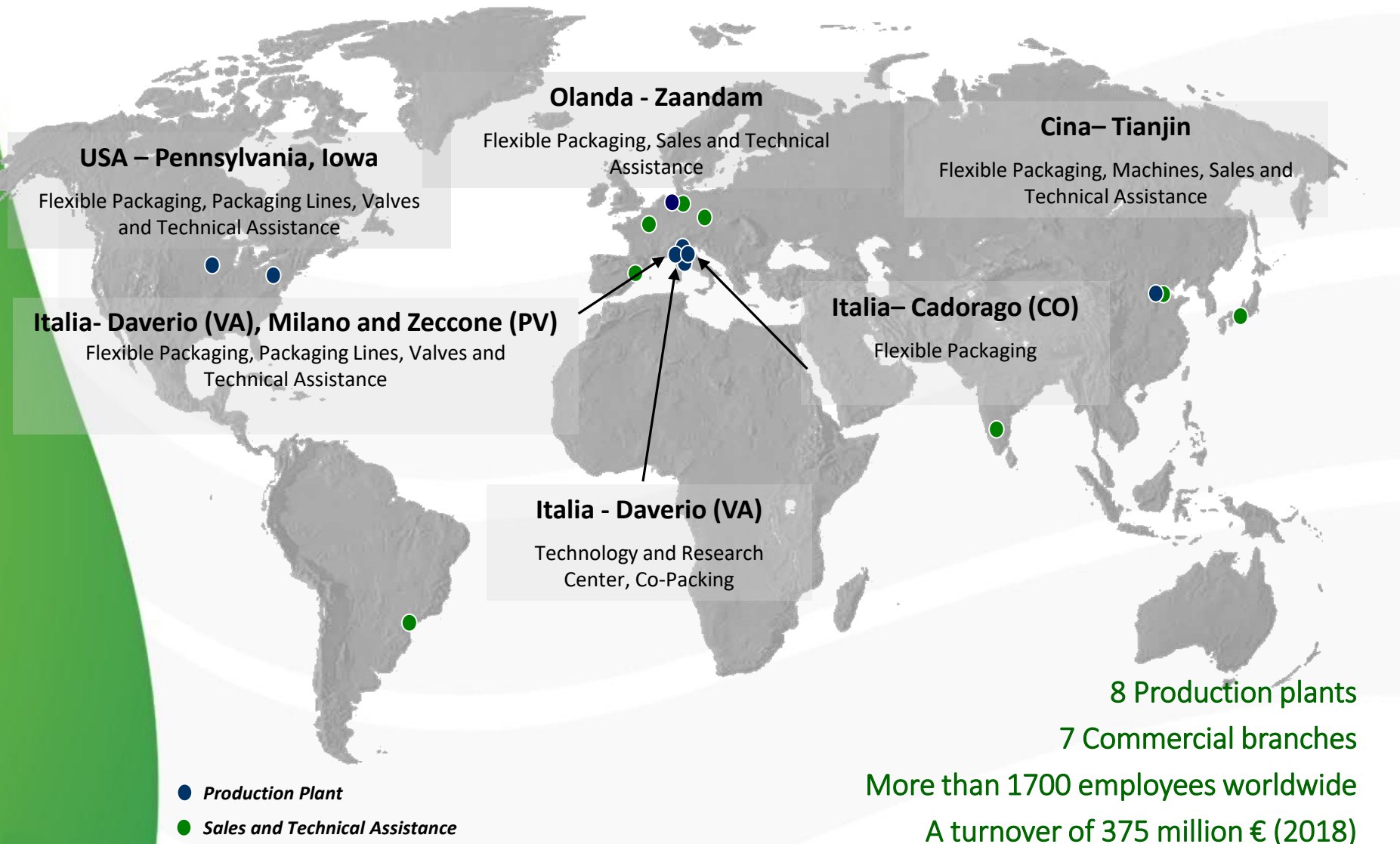
SUSTAINABLE FOOD PACKAGING MATERIALS

- Osvaldo Bosetti, GONGLIO SpA -



Trieste,
11-12 September 2019

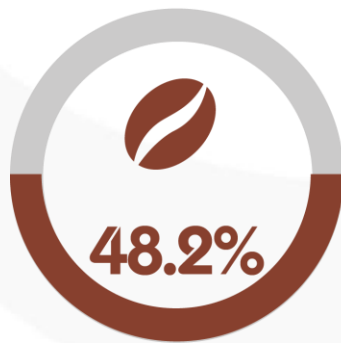
THE GOGLIO GROUP



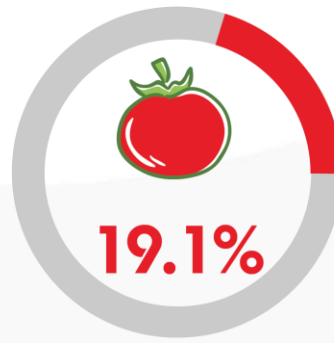
THE GOGLIO GROUP

2018 Turnover breakdown – 375 mln €

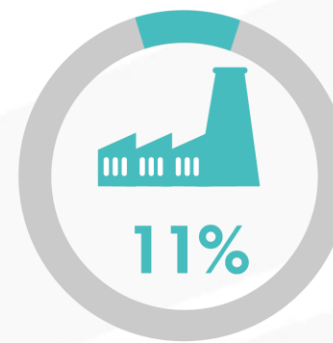
BY MARKET SEGMENT



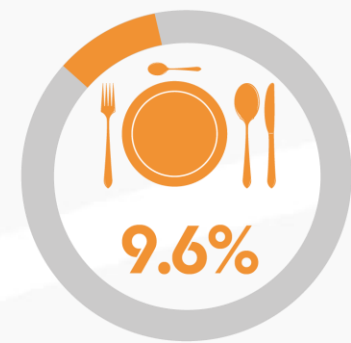
COFFEE



ASEPTIC



INDUSTRIAL
PRODUCTS



FOOD



READY MEALS: 1.5%



SOFT DRINKS: 0.2%

PET FOOD: 0.7%



OTHER MARKET
SEGMENTS: 0.7%

MACHINES: 8.9%



WHY TO CHOOSE A BARRIER PACKAGING?



- CO_2
- H_2O
- AD/ABSORPTION
- FLAVOR

- O_2
- CO_2
- H_2O
- ENVIRONMENTAL CONTAMINATION
- MIGRATION

A PACK HAVE TO:

- HOLD
- CARRY
- STORE UP
- PRESERVE



COMPOSTABLE LAMINATES: NORMS OF REFERENCE

In order to be defined "biodegradable" and "compostable", products have to be certified by a Board of Certification.

The **95% out of the total mass of certified materials has to be manufactured using compostable raw materials**; producers can choose a maximum of **5% non-compostable materials**, with a **1% maximum concentration each**.

The raw materials used are /can be certified, and have to be compliant with 4 essential law requirements: quantity of **heavy metals**, **biodegradability**, **disintegration** and **ecotoxicity**.



- *EN 13432 for EUROPE*
- *ASTM 6400 for USA*

COMPOSTABLE LAMINATE

Materials that combine the naturalness of cellophane, the weldability of the **extruded bio-polymer** at the Goglio plant in Daverio and the **Barrier Lacquer** technology.

- HIGH BARRIER TO OXYGEN AND HUMIDITY
- CERTIFICATION «OK COMPOST-INDUSTRIAL»
- PERFECT PRINTABILITY
- MACHINABILITY OF THE MATERIAL TESTED ON DIFFERENT PACKAGING LINES

To complete the range of compostable solutions, a **degassing valves** have also been developed and **PATENTEND**.

The **BIO VALVE** is produced starting from compostable certified raw materials.



COMPOSTABLE CAPSULES

Compostable capsules compatible with the Nespresso system made of:

CAPSULE BODY, made with injection molding at the Goglio Polymers Division;

LOWER LID, welded inside the capsule to guarantee the perfect airtightness composed by a multilayer material;

UPPER LID, made by multilayer material to provide high oxygen barrier and at the same time the perfect brewing.

Goglio capsules are **PATENTED** and **CERTIFIED** «OK COMPOST – INDUSTRIAL»



ALU-FREE and RECYCLABLE: THE DEVELOPMENT



STANDARD
PET|A|PE



ALU-FREE
PET|PETbar|PE
PET|CoexEVOH|PE



**POLYOLEFIN
MATERIAL**
OPPbar|PE
OPP|PPbar|PE



MONO-MATERIAL
OPPbar|PP
OPP|PPbar|PP



**NEW POLYPROPYLEN
DEGASSING VALVE**

ALU-FREE and RECYCLABLE

High barrier laminates without aluminum or metallization made with **barrier layers** obtained thanks to the use of the **innovative Goglio barrier lacquer** which gives the material the following characteristics:

- HIGH BARRIER TO OXYGEN AND HUMIDITY
- HIGH FLEX CRACKING RESISTANCE
- POSSIBILITY OF HIGHLY TRANSPARENT BARRIER MATERIALS
- 100% RECYCLABLE STRUCTURES



Thank you for your attention!

