



**Thermoforming a path to circularity**

**Thermoformers perspective**

**Petcore, Bologna, June 15 & 16**

# We are a FAMILY GROUP that has been established for over 50 years



Creation in the family garage

1972



Initial public offering

1989

Growth through business start-ups and acquisitions

1990 - today

1990 - **ALPHAFORM** and **DYNAPLAST**, France  
1993 - **NESPAK IMBALLAGGI**, Italy  
2001 - **SOCAMEL TECHNOLOGIES** and **RESCASET CONCEPT**, France  
2002 - **GUILLIN ITALIA** and **GUILLIN ESPANA**, Sales subsidiaries  
2004 - **ANIS OPAKOWANIA**, Poland  
2006 - **VERIPACK EMBALAJES**, Spain  
2008 - **GUILLIN Portugal**, Sales subsidiaries  
2010 - **SHARP INTERPACK** Group, United Kingdom  
2011 - **GUILLIN NEDERLAND**, Netherlands, sales subsidiary  
2014 - **GUILLIN DEUTSCHLAND**, Germany  
2016 - **KIV VERPACKUNGEN**, Germany, formerly KREIS  
2018 - **GUILLIN POLSKA**, Merger of **ANIS OPAKOWANIA** and **KREIS**, Poland  
2018 - **ETIMEX** Primary Packaging GmbH, United Kingdom  
2018 - **THIOLAT Group**, France, Spain and Romania  
2019 - **FLIGHT PLASTICS**, United Kingdom *now SHARPAK ROMSEY*  
2020 - **GUILLIN ROMANIA** and **THERMOFLEX SA**, Switzerland  
2021 - **GAULT & FRÉMONT Group**, France and Belgium  
2022 - **CIESSE PAPER**, Italy and **CELTIC SALES**, Ireland

1973



PATIPACK

1978



MULTIPACK

**Major innovations, several of which have won awards**

CLASSIPACK, THERMIPACK, ARCHIPACK, MARMIPACK, DISTRIPACK, WOKIPACK, TAKIPACK, LUXIPACK, FRESHIPACK, COOKIPACK, FORTIS, SHARPTEK



DISTRIPACK  
(2013)



LUXIPACK (2015)



LUXIFOOD (2018)



DUALIPACK (2020)



900

M€ OF TURNOVER

21 500

REFERENCES

3 000

EMPLOYEES

COMMERCIAL  
PRESENCE IN

OVER **70**  
COUNTRY

32  
SOCIÉTÉS

21  
SITES DE  
PRODUCTION

11  
FILIALES DE  
DISTRIBUTION

1972 - GUILLIN Emballages | 1989 - Groupe GUILLIN Holding | 1990 - ALPHAFORM | 1990 - DYNAPLAST | 1993 - NESPAK Imballaggi | 2001 - SOCAMEL Technologies, RESCASET Concept | 2002 - GUILLIN Italia | 2003 - GUILLIN España | 2004 - GUILLIN Polska | 2006 - VERIPACK Embalajes | 2007 - SOCAMEL UK | 2008 - GUILLIN Portugal | 2010 - SHARPAK Aylesham, SHARPAK Bridgwater, SHARPAK Yate | 2011 - GUILLIN Nederland | 2014 - GUILLIN Deutschland | 2014 - SOCAMEL España | 2016 - KIV Verpackungen | 2017 - SOCAMEL Deutschland | 2018 - GUILLIN Polska | 2018 - THIOLAT, GUILLIN Romania | 2019 - SHARPAK Romsey | 2020 - THERMOFLEX | 2021 - GAULT & FRÉMONT, EDD, INTERSAC, MONTGOLFIER | 2022 - CIESSE PAPER, CELTIC SALES



# We are EXPERTS in food packaging solutions



We design, manufacture and distribute innovative packaging solutions



Large and medium-sized  
retailers



Commercial catering



Traditional Trade



Fruit and Vegetables



Agri-food industry



Foodservices

#weprotectyourfood



## We are able to offer ALL SOLUTIONS

We are the only company able to **offer a complete multi-material package** (plastic, cardboard, pulp).  
whose impact is measured (LCA)  
enabling our customers to switch seamlessly from one solution to another at any time...





# We are COMMITTED to SOCIETAL EVOLUTION



**PREVENTION**  
against marine  
pollution

**STRUCTURING**  
Development of  
recycling channels

**Educating the public**  
about good  
citizenship



Since 2020, GUILLIN has been a Founding Partner of Prevented Ocean Plastic™.

Our recyclable packaging is made from high-quality recycled materials collected from the coasts of Indonesia and transformed using a socially responsible process certified by recognised independent bodies.

**Thanks to this partnership, nearly 1 billion plastic bottles will not end up in rivers and oceans.**

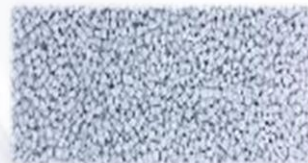


## PROJECT by FABRICE AMEDEO

- Navigation without fossil fuels
- Measuring and analysing microparticles in the ocean thanks to on-board sensors
- Co-design and presentation to schools of an educational booklet to raise awareness, in partnership with the French Ministry of Education and the Fondation de la mer.

# rPET sources

- Depending on the country we use;
  - PCR bottle flake
  - PCR tray flake
  - PCR mixed bottle and tray flake
  - rPET pellet 100% PCR
  - rPET pellet PCR/virgin

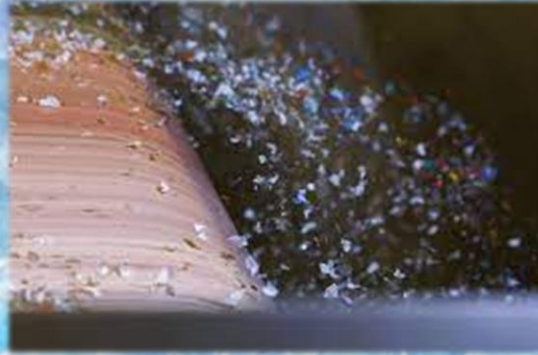




# Processing – contamination removal



**Flake  
sorting**



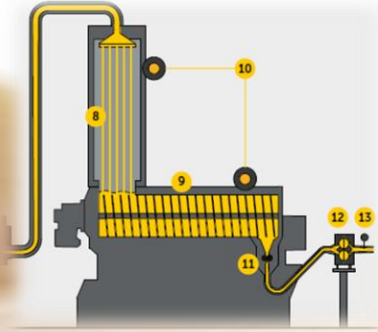
**Metal  
removal**





# Processing - IV boosting

Liquid state  
polycondensation



Chain extenders

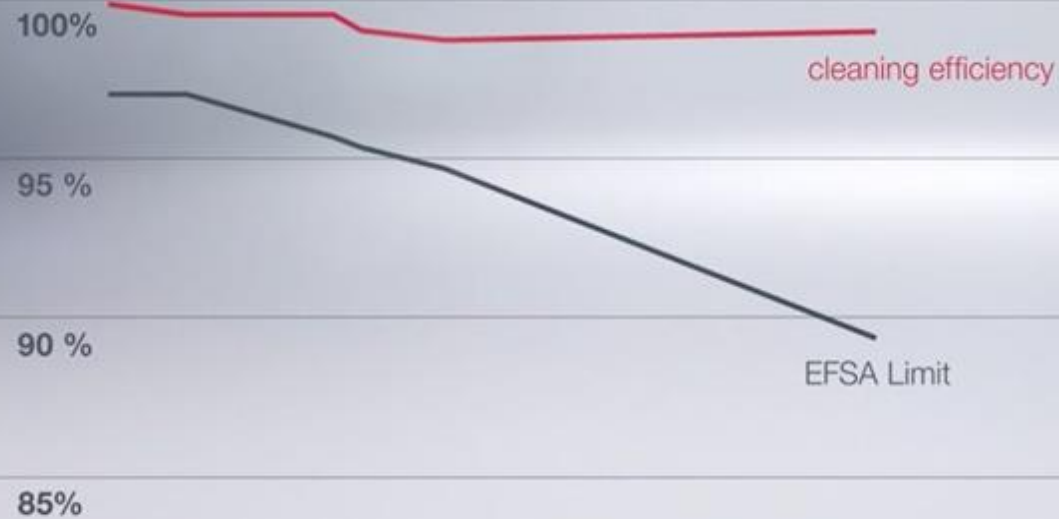


Solid state  
polymerization



# Processing – decontamination return to food grade

The PCR is returned to food grade using EFSA approved decontamination processes

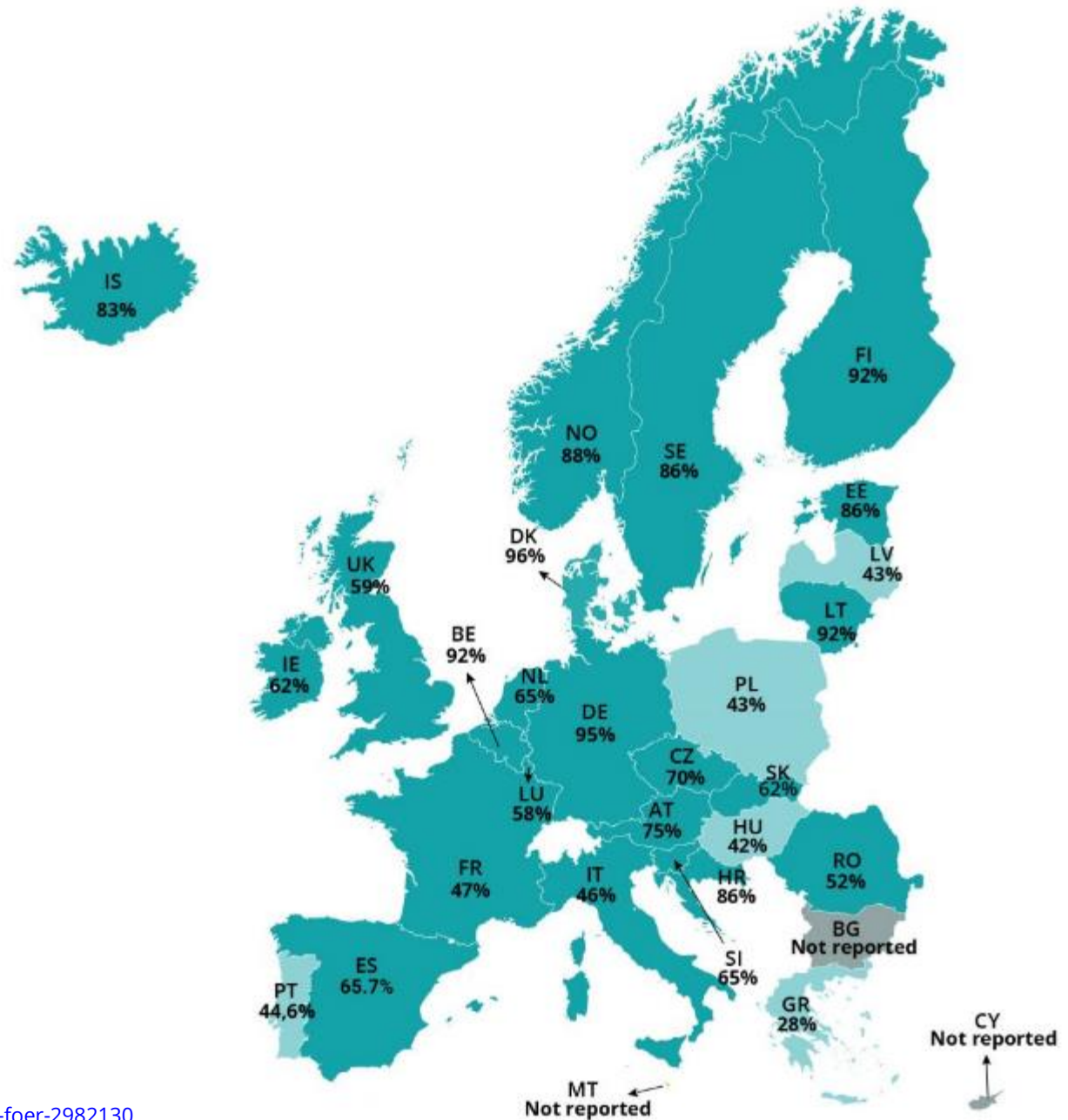




# PET collection rates



- % recovered by market
- Average 50% placed on the market is recovered
- Yield loss in recycling up to 50%!
- Recycling rates have increased by 21% in last 2 years, more needed....



Sources;

Slovakia – Source: [Institute for Environment Policy report](#), November 2018.

Denmark – Source: 2020 data from Dansk Retursystem

A/S <https://www.danskretursystem.dk/press/#/pressreleases/danskerne-panter-som-aldrig-foer-2982130>.

Spain – Source: 2020 Ecoembes.

National 2019/2020 data and Eunomia/NMWE/Petcore Europe/PRE 2020 based on 2017 data.

# Challenges



- We must capture and re-use as much PET as possible, but there are conflicts in the supply chain;
  - PCR tray flake can reduce PCR bottle flake value
  - The output of a recycling line is inversely proportional to the quality of the flake
  - What % PCR is truly sustainable? There will always be losses in any system, so 100% everywhere is unrealistic
  - Focus on less plastic can result in thinner packaging, but this can increase fines generation and lower yields in recycling
  - Identification of food grade vs non food grade







#weprotectyourfood

Thank you