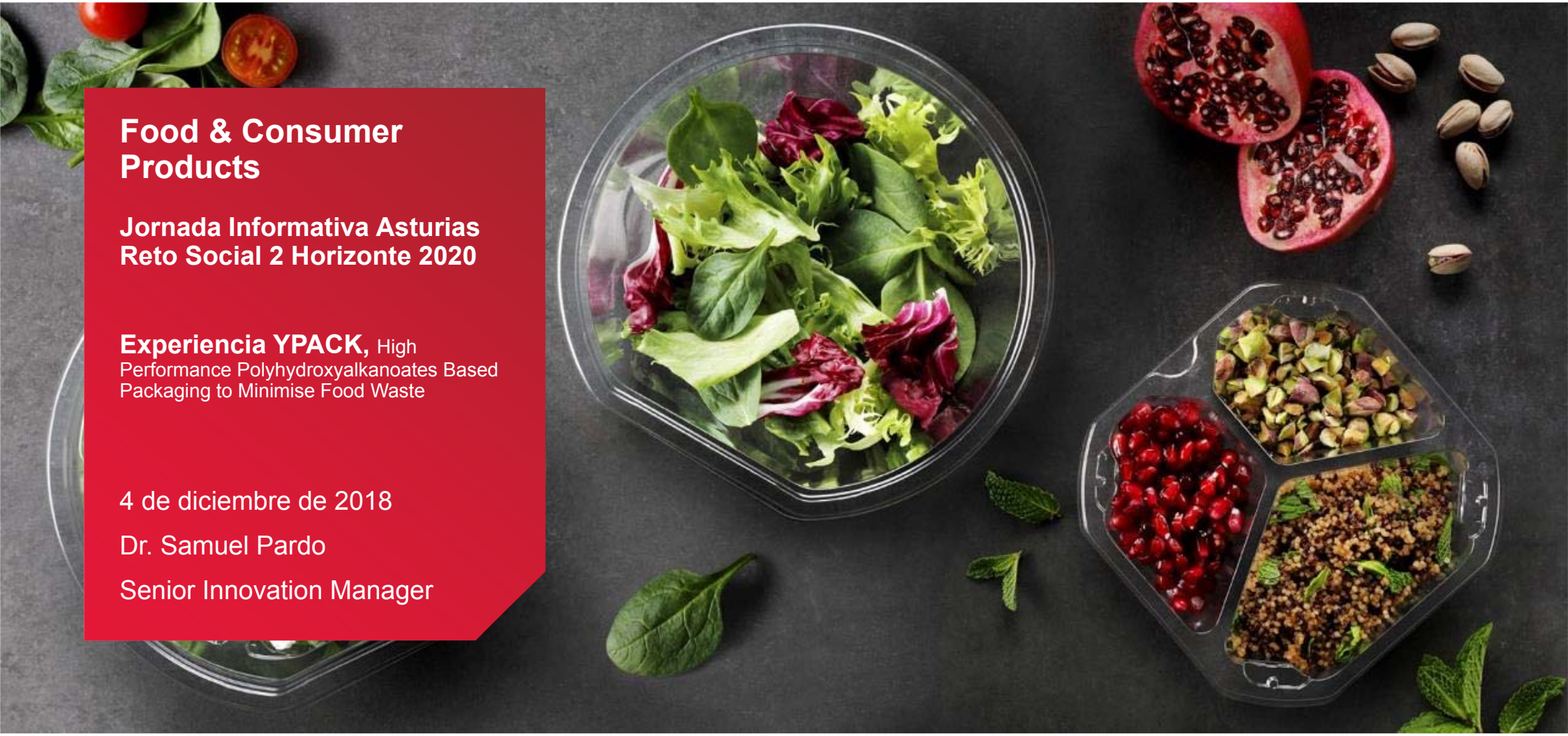
klöckner pentaplast

Plastic packaging solutions for food & consumer products

Food & Consumer Products



Food & Consumer Products

Jornada Informativa Asturias
Reto Social 2 Horizonte 2020

Experiencia YPACK, High Performance Polyhydroxyalkanoates Based Packaging to Minimise Food Waste

4 de diciembre de 2018

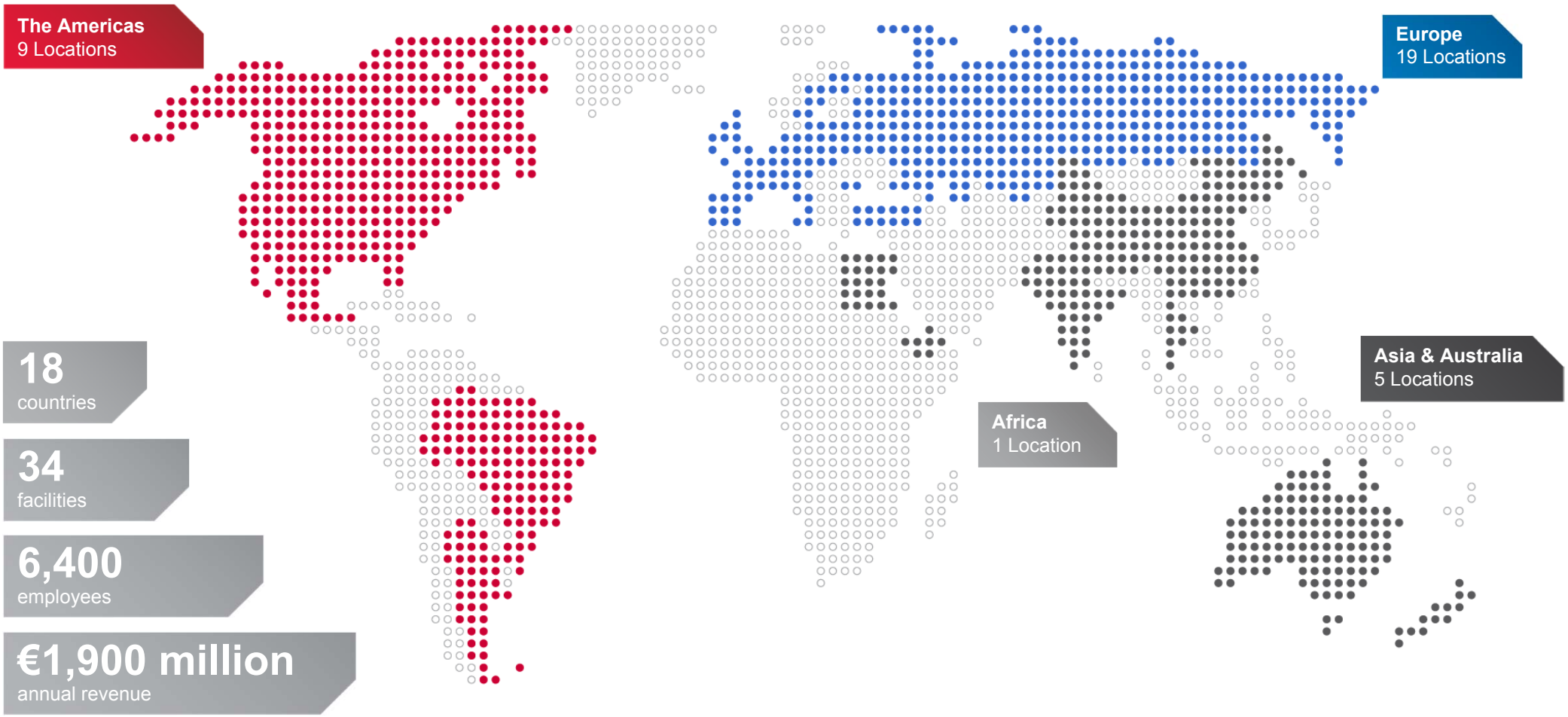
Dr. Samuel Pardo

Senior Innovation Manager

kp's New Global Footprint

Leading market knowledge and customer understanding

Food & Consumer Products



18
countries

34
facilities

6,400
employees

€1,900 million
annual revenue

klöckner pentaplast acquires LINPAC – July 2017

Creating a worldwide total packaging solutions business

Food & Consumer Products

klöckner pentaplast

- Strong North American presence
- Specialising in rigid film for form, fill and seal

LINPAC

- Strong European presence
- Specialising in rigid trays and flexible films

klöckner pentaplast today – a rewarding union of expertise and innovation

- 34 combined locations
- 6,400 employees
- €1.9 billion in annual revenue
- Sales to 100 countries
- 3 Divisions
  - Food & Consumer Products
  - Pharma & Medical Devices
  - Specialties

kp's New Global Expertise

Investing in people, technology and services worldwide

Food & Consumer Products

Food & Consumer Products

Specialties

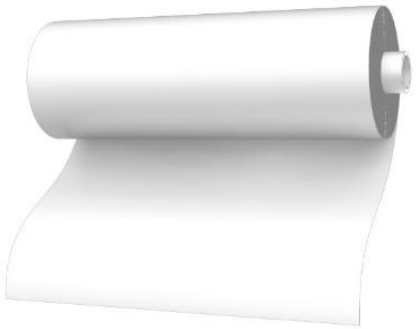
Pharma & Medical Devices

kp Food & Consumer Products Division

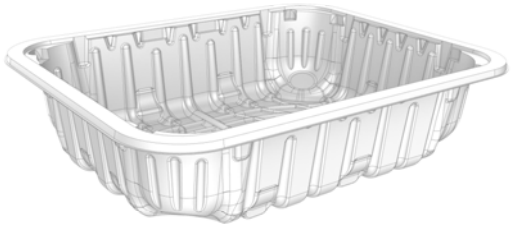
What do we do?

Food & Consumer Products

Rigid Films for Form, Fill & Seal



Flexible Films



Thermoformed Rigid Trays

Market trends driving innovation

Food & Consumer Products

Protect & Preserve

Reduced Food Waste

Extended shelf life

Reduced breakage

Portion control

Convenience

Demand for small, re-sealable and convenient packaging

Trend towards smaller pack sizes

Easy-open packaging on the rise

Increased demand for ready-to-consume suited packaging

Customization

Opportunity to achieve price premium for added perceived benefit

Differentiation & Attraction

Need to develop individual packaging formats with new sizes, colors, shapes and materials

Advertising space on package

Sustainability & Recyclability

Increased use of recycled and recyclable content

Increased use of bio-plastic and renewably sourced materials

Reducing material use

Natural look & feel of materials used

Added functionality

Need to develop new packaging formats and materials

Increasing demand for Smart Packaging, Anti-Counterfeiting, Brand Protection, Security Packaging

Opportunity to achieve price premium for added perceived benefit

Innovation sources

Innovation resources	Projects	Strategic topic
Internal	KP Group	
Regional – IDEPA I+D	ECOFORMING: *investigación en la aditivación macromolecular de poliésteres activos para la fabricación de envases termoformados ecosostenibles*	Recyclable and alternative gas barriers for packaging
Regional – IDEPA I+D	BICONEP *Estrategia integral de aumento de la vida útil en productos cárnicos con Bioconservación mediante la interacción envase-producto*	Active packaging and Food waste reduction
National – CDTI	ECOSS Envases sostenibles y seguros para el consumidor	Food safety
National – CDTI (CIEN)	CEUS: ECONOMÍA CIRCULAR PARA LA VALORIZACIÓN DE LOS RESIDUOS PLÁSTICOS URBANOS	Recyclability and Circular Economy
European – H2020	YPACK	Food waste reduction, circular economy

CALL

Topic(s):
SFS-35-2017 - Innovative solutions for sustainable food packaging

Call for proposal:
H2020-SFS-2017-1
Funding scheme:
IA - Innovation action

Challenges

- the **scaling-up and commercialisation** of eco-innovative solutions to packaging in a developing framework of social, economic and environmental conditions.

- new, **modified or improved products, processes or services**. For this purpose they may include prototyping, testing, demonstrating, pilot projects, large-scale product validation and market replication.

- comprise activities such as **validating the benefits for users/buyers**, validating technical and economic performance at system level, validating standards, and activities to prepare market uptake, ensure consumer acceptance and optimise access to and the dissemination of results.

- involvement of **packaging and food processing companies, retailers and civil society organisations** to bridge the gap between ideas that have been developed and their practical implementation.

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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 773872

CALL

Needs:

- **reducing the environmental footprint of packaging material, increasing the shelf-life of food and developing food spoilage indicators**, improving product design, optimising process efficiency, and reducing the need for chemical preservatives while maintaining the nutritional and sensorial properties of food.

- to **overcome the barriers to market** uptake of many promising technologies.

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CALL

Expected impacts:

- wider and faster deployment of innovative, user-driven, packaging solutions resulting from greater industry and consumer acceptance, and higher visibility of innovative solutions, overcoming the barriers to market uptake.

- **reduced waste** in both food and packaging materials, and its negative impacts on the environment (e.g. resource utilisation, greenhouse gas emissions, pollution).

- strengthening of the EU's position in manufacturing, improving competitiveness as well as opportunities for growth, diversification and job creation for the EU food and packaging sector in general, and SMEs in particular.

- **strengthening the European food value chain** through continued support to product quality, contributing to consumer trust and increased consumption.

- support for the **transition from a linear to a circular economy**.

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STEPS TO PREPARE

PREPARATORY ACTIVITIES

- Call identification
- Intitial contacts – draft technical proposal aceptance
- Coordinator role
- Role technological centres, Universities, etc. R&D partners
- Consortium agreement
- Participant portal H2020 paperwork
- Preparation meeting to define WP leaderships, timing, activities and deliverables
- WP definition calls

CONSORTIUM

- Coordinator
- WP leaders
- Countries
- Universities, Technological Centres, RTD
- Companies: SMEs, IND
- Best posible collaborations

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Overview of YPack Project

PHA based packaging solutions as biodegradable, high barrier and shelf-life extending alternatives for the demanding food packaging market in the form of biodegradable thermoformed trays and biodegradable flow pack pouches

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YPACK CONSORPTIUM STRUCTURE

IND

RTD

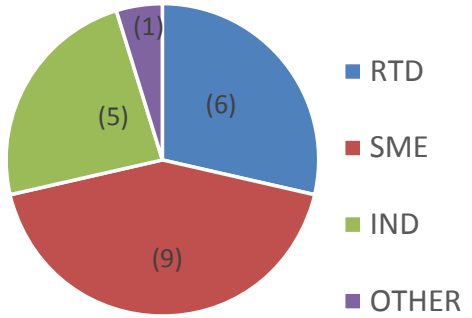
Coordinator

OTHER

SME

Spain	7
Portugal	5
Belgium, Netherlands,	2
UK, Hungary, Macedonia,Turkey, Israel, Italy	1

Organisation type in the Consorptium



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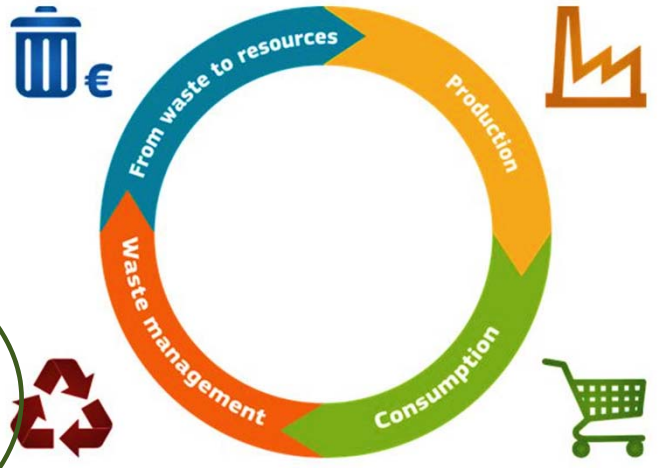
European strategy for Circular Economy Framework of Ypack Project

YPACK is aligned with the EU Circular Economy strategy and Responsible Research and Innovation (RRI) guidelines of the European Commission:

- ✓ Use of raw bio-based food industry by-products
- ✓ Life-cycle-assessment (LCA) studies
- ✓ Recyclability and biodegradability of packaging
- ✓ Active and passive barrier solutions to reduce food waste



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