# 

Beauty and sustainability in one as a response to challenges for the packaging market



# Eye-catching packaging design consumer decision-making



key in

Does packaging of a product impact your buying behaviour?

Did design of product wrapper inspire you in purchasing?



\*International Journal of Novel Research in Marketing Management and Economics

What happens to packaging after you take the product out?





Packaging waste generated by packaging material, EU, 2020 (%)



Note: Eurostat estimates. Source: Eurostat (online data code: env\_waspac)

#### DCT2DOT



# Sustainable packaging is a requirement



# Packaging and Packaging Waste Directive 94/62/EC

- Reduce over-packing and waste generation by re-using & recycling of packaging
- Reduce the complexity, volume, weight of packaging
- Reduce the use of plastics

# Plastic Tax EU Council Decision (Euratom) 2020/2053 of 14 December 2020

Member states' annual levy of 800 euro per tonne of non-recycled plastic waste, leading to duties for manufacturers and importers of consumer goods

	Current targets (%)	By 2025 (%)	By 2030 (%)
All packaging	55	65	70
Plastic	25	50	55
Paper and cardboard	60	75	85
Wood	15	25	30
Ferrous metals	50 (incl. AL)	70	80
Aluminum	_	50	60
Glass	60	70	75

# Recycling targets / essential requirements





## Perception of sustainability?





# DDT2GREEN

# Helping brands package beautifully in a

sustainable way?



#### Responsible sourcing

We cooperate with FSC<sup>®</sup>/PEFC<sup>™</sup> certified suppliers supporting responsible sourcing practices



#### ECO materials

Recycled board, low-migration inks, solvents, sustainable varnish, cellulose acetate window film, transferrable film instead of PET laminate



#### Smart design

Smarter, mono-material constructions and light weighting of packaging means less waste and less landfill generation



#### Plastic to paper

Replacing plastic packaging with paper and other recyclable alternatives, e.g. litho laminated board replacing vacuum forms and plastic trays



#### ECO technologies

- LED printing
- Cold foil

#### - ECOLURE (NEW!)



#### Product safety

Compliance with BRCGS global standards for food safety means packaging free of mineral oils and dangerous substances



#### Carbon footprint

We reduce the CO2 emissions on a yearly basis. By 2030 we aim to reduce our emissions by 44% and by 2050 be completely green!



#### Recyclability

Most of our production waste is recycled. Also packaging manufactured with the

technology can undergo mechanicating E organic recycling (compostable).

# Smart design: raw material reduction

Goal:

To redesign existing constructions to reduce material waste





# Smart design: Practicality and beauty combined



PISANKT

POPCORN



# Smart design: lightweighting



#### What we did:

- one unprinted construction across range -> less ink used
- change of board -> lower grammage
- Optimization of construction & sheet layout -> lower board consumption



#### **Benefits for the client:**

- Iower board & production costs
- lower logistics and warehousing costs



#### **Benefits for the environment:**

- Less production waste (board)
- Lower energy consumption during print
- No increase of CO2 emissions during transport

## Plastic to paper

#### Goal

- reduce the number of packaging units
- eliminate plastic
- minimum impact on original design



#### Achived by:

- Selection of board with adequate properties to fit the dimensions & weight of the product
- New construction design to secure the product in line with the material change





## Plastic to paper



#### Goal:

To make the packaging fully recyclabe and mono-material

#### Achieved by:

- elimination of PET vac form
- all paperboard material
- integrated insert tray,

single-piece box









# **ECO**LURE •

Recyclable & compostable alternative to traditional MET- PET lamination.



## Traditional PET lamination





#### DDT2D•T

# Benefits of **ECOLURE**



# Recyclability testing and certification, EN 13430



Outcome of a 2 year 11M euro research technology project, co-financed from the European Regional Development Fund in the framework of the Smart Growth Operational Programme 2014-2020.

#### **Project scale**

> 4,000 samples tested for parameters including gloss, water permeability, compostability level

#### Three project stages



Laboratory sample tests



- Pilot production line set up
- Product sample tests & certification end 08.2022

#### Research

Research team from Warsaw University of Technology and Europe's third largest research network Łukasiewicz Research Network accredited by ILAC













# **ECOLURE** certification



#### Compostability

#### PN-EN 14806 EN 13432

Certifying Body:



#### Sustainability Stamp on packaging:



#### Sustainability Stamp on packaging:







