



ALPLA Sustainable Packaging

*IKW-Mittelstandstagung – Christoph Hoffmann
03.09.2019*

Agenda

- 1. About ALPLA*
- 2. Production and Innovation*
- 3. Sustainability*
- 4. Recycling and Best Practices*
- 5. Life Cycle Assessment (LCA)*



ALPLA

ALPLA



Facts & Figures



20,800

Employees



178

Production facilities
(including 72 in-house)



46

Countries



€ 3.66

Billion euros –
total sales 2018



1955

Founded

Global Presence





Production and Innovation at ALPLA



Market segments

Our high-quality packaging



Beverage



Food



Milk & Dairy



Beauty Care



Home Care



Oils and lubricants



Pharmaceuticals

Leader in Technology

Production technologies



**Extrusion blow
moulding
(EBM)**



**Injection stretch
blow moulding
(ISBM)**



**Injection
moulding
(IM)**



**Injection blow
moulding
(IBM)**

Expertise from experience

Our expertise in customer consultation is based on over 60 years of experience in plastics processing.



Product Design

Our creative designers develop the ideal design concept for the respective market.



Modelling & Simulation

We check ideas at an early stage to achieve our goals as efficiently as possible.



Tool Construction

Our own ultra-modern mould shops ensure that we are independent of suppliers and that our development processes have the flexibility they need.



Process Technology

Process is continually improved until quality and production efficiency meet the customer's requirements.



Speed to Market

Everything from a single source – customers receive samples based on their specifications within just a few weeks of the initial briefing

Most recent ALPLA Innovations



the SIMPLE ONE

- This packaging solution combines sustainability and functionality.
- It is a technologically advanced and attractive looking alternative to pouches.



EBM PET

- This innovation combines the possibilities of EBM technology with the advantages of the material PET.
- Highly recyclable for an efficient circular economy



Home Compostable Coffee Capsule

- Made from Sunflower Husks (byproduct does not compete for land use)
- Biodegrades faster than an egg shell in under one year



ALPLA Sustainability

Sustainability

Mission & Vision

Sustainability is incorporated in ALPLA's core strategy and represented as an essential part of our corporate culture.

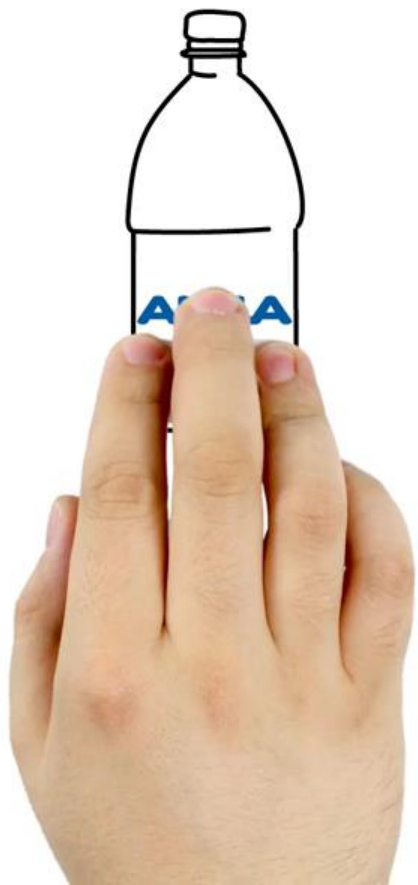
ALPLA's holistic vision is to use human and natural resources in an efficient and sustainable way.



ALPLA Sustainability Steering Council

ALPLA Sustainability integrates social, environmental, ethical and human rights concerns into the business operation and core strategy

The ultimate goal is a resource efficient production without losses of water and material, with the help of renewable energy and using sustainable and recycled materials in a friendly work environment.



Sustainability

“ALPLA Sustainability integrates social, environmental, ethical and human rights concerns into the business operation and core strategy.”

Economy & Technics



- Increase share of Inhouse production
- Consider sustainable criteria in purchase, logistics and investments
- Responding to customer requests

Production & Environment



- Recycling and sustainable Materials
- Enhance product design and light weighting
- Resource efficient production and use of renewable energy



People & Society

- Human rights and labor protection
- Education and Training
- Responding to society concerns

People & Society



- ALPLA ensures that employees are given the opportunity to develop, grow on a personal level & take control of their own lives
- Our values correspond to internationally recognized ethical standards
- We believe in long-term thinking & to act in the interest of future generations
- ALPLA apprenticeship and other educational programs
- Increased number of solidarity sourcing projects like
 - Employment of aged workforce
 - Employment of people with special needs and/or support projects



“IT’S OUR RESPONSIBILITY TO PROVIDE EXCEPTIONAL TRAINING TO YOUNG PEOPLE ACROSS THE GLOBE. THIS ALLOWS US TO ESTABLISH THE SAME BASIC CONDITIONS WITHIN THE ALPLA GROUP AND ENSURE THE SAME HIGH QUALITY AT ALL LOCATIONS.”

Günther Lehner, CEO



People & Society

- ALPLA Employee Development - Individually tailored and continuously developed training concepts (Academy, Trainee Program, Job Rotation, Mentoring, Coaching etc.)
- Living phase orientated human resource approach (flexible working time models, child care system etc.)
- ALPLA Dual Apprenticeship System – in Mexico, China, Germany, Austria
- Health Care Supporting System (medical checks, support of sport events etc.)





- Energy efficiency, conservation of resources & reduction of emissions
 - Modernization as the most efficient strategy for responsible energy management
 - Regular plant energy assessments worldwide, followed by individual action plans
 - Systematically recording power consumption emissions at our plants since 2007
 - Annual calculation of ALPLA's carbon footprint
- Neutralizing emissions at our plants in Vorarlberg by 2018 and in Austria by 2020



“SYSTEMATIC ENERGY MANAGEMENT IS THE ONLY WAY TO SUSTAINABLY REDUCE ENERGY CONSUMPTION, ENERGY COSTS & EMISSIONS.“



Production & Environment

- „Zero Pellet Loss“ – actively reduce the amount of pellet losses
- Energy efficiency & CO₂ reduction measurement
- Closed water Systems
- Usage of Solar power at different facilities & wind energy in Mexico
- Usage of renewable energy in the recycling plants and production in Vorarlberg
- Planned usage of renewable energy in whole Austria by 2020
- PVC free and no Plasticizers



Economy & Tecnic

- Innovation is the key to success and to sustainability
 - In-house production model since 1985
 - Development of the perfect form of packaging for different industries
 - Light weighting
 - Development of new sustainable raw materials (e.g. PEF)
 - Energy saving while producing efficient packaging solutions
- **Recycling**



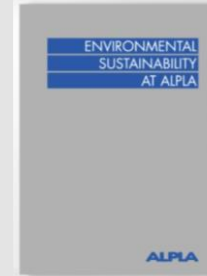
“THE FOCUS IS ON THE SEARCH FIELDS OF CONVENIENCE AND NEW MATERIALS SUCH AS BIO-BASED PLASTICS AND COST INNOVATIONS.”

Christoph Hoffmann, Director of Corporate Strategy,
Business Development & Sustainability

Sustainable activities

Memberships & Transparency

- CDP (Carbon Disclosure Project)
 - AIM Progress – Program for responsible sourcing
 - Ecovadis – Supplier Sustainability Ranking
 - SEDEX – Supplier Ethical Data Exchange
 - Local Climate Neutrality Alliance (Klimaneutralitätsbündnis) 2025
-
- ALPLA 3rd Sustainability Report published (07/2019)
<https://sustainability-report18.alpla.com/>
 - ALPLA Environmental Sustainability brochure
 - ISO (9001, 14001, 50001 etc.) & OHSAS 18001 Certification



**OUR PLANET IS NOT RECYCLABLE.
BUT THE RIGHT PACKAGING IS.**



The Ellen MacArthur Foundation

ALPLA signed the New Plastics Economy Global Commitment

ALPLA is taking action to eliminate problematic plastic packaging by:

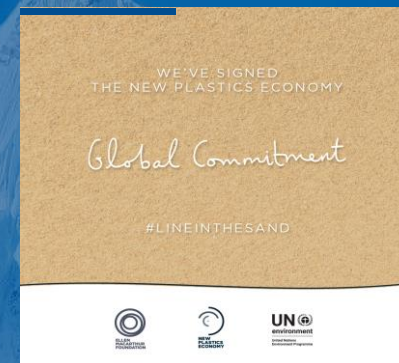
- Publishing yearly three packaging solutions by reducing the weight of the packaging.
- Keeping our packaging solutions 100% PVC free.

ALPLA produces a 100% recyclable plastic packaging by 2025 by:

- Continuously considering and implementing design for recycling and related guidelines.

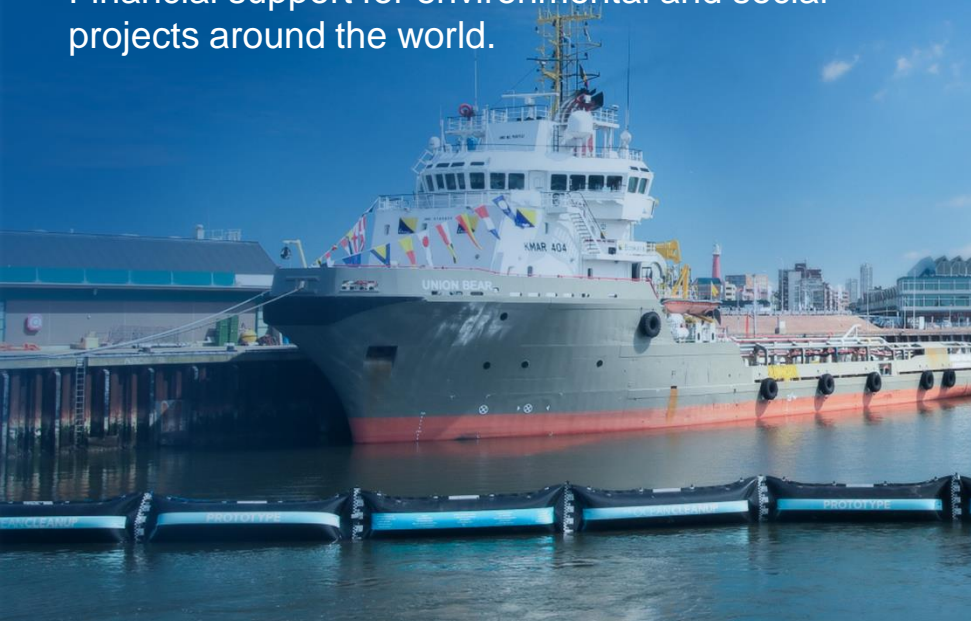
ALPLA uses 25% post-consumer recycling content on average (by weight) across all plastic packaging by:

- Providing a budget of plus 50 million euro to enhance and support our recycling activities at ALPLA now and in future.



Sponsoring

Financial support for environmental and social projects around the world.



Waste Free Oceans

Waste free oceans collects, upcycles and creates new „Ocean Plastic Products“ - ALPLA is Gold Member.

The Great Bubble Barrier

Bubble barrier technology in rivers and canals to collect plastics while allowing for the passage of fish and river traffic.

Water disinfection (WADI) project of HELIOZ in India

WADI is a cost-effective UV measurement device. PET bottles filled with water, exposure to sun together with WADI, press button, wait for the happy smiley face – water is ready for consumption.

Bringing WADI (Water Disinfection) device to 4000 people across Khandwa in India.

Upcycling project Uganda

ALPLA supports The Social Innovation Academy (SINA) in Uganda. Houses are built out of used plastic bottles.

The Plastic Bank

„Social Plastic“: for the collection of plastic bottles people receive access to services and goods (education, food/water, medicine, etc.)



Recycling & Best Practice at ALPLA

Corporate Recycling Services

Milestones

Recycling at ALPLA

- 1990** First post-consumer recycling PET-bottle (PCR bottle)
- 2005** ALPLA becomes a joint-venture partner in IMER Mexico
Foundation of PET Recycling Team GmbH in Wöllersdorf, Austria
- 2010** ALPLA acquires a 75% majority shareholding in the PET Recycling Team
- 2012** Construction of the ALPLA PET Recycling Team plant in Radomsko (southern Poland)
- 2018** Collaboration of ALPLA and the Texplast Germany (a member of the Fromm-Group)
- 2018** **ALPLA recycles around 100,000t PCR bottles into new recycling PET r(PET) material**

PRT Wöllersdorf

Austria

100% ALPLA Subsidiary

Recycling PET capacity of 20,000 tonnes granules made of post-consumer PET bottles

Output

- Food grade rPET granules clear, light blue and blue

Process

- 1 Sorting & Washing Line
- 2 Extrusion Lines (Starlinger)

PRT Radomsko

Poland

100% ALPLA Subsidiary

Recycling PET capacity of 15,000 tonnes granules made of post-consumer PET bottles

(Additional 15,000 tonnes non food approved flakes made of post-consumer PET bottles)

Output

- Food grade rPET granules clear, light blue, blue and green

Process

- 2 Sorting & Washing Lines
- 1 Extrusion Line (Starlinger)

IMER Toluca

Mexico

Joint Venture of ALPLA, Coca-Cola Company and Coca-Cola Femsa in 2005

Recycling PET capacity of 16,000 tonnes food approved flakes made of post-consumer PET bottles

Output

- Food grade clear rPET flakes

Process

- URRC technology

Texplast

Germany

Collaboration of ALPLA and Texplast in relation to PET recycling in 2018

Recycling PET capacity of 20,000 tonnes granules made of post-consumer PET bottles

Output

- Food grade rPET granules clear

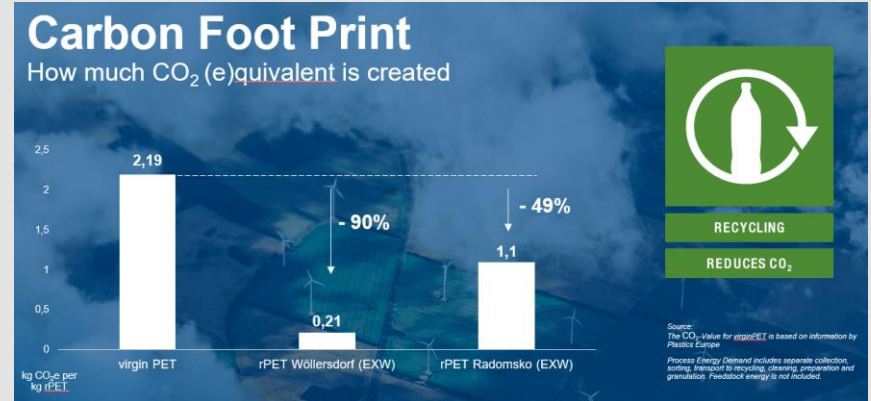
Process

- 2 Sorting & Washing Lines
- 3 Extrusion Lines (Starlinger & Erema)

Recycling

Why is Recycling important for ALPLA

- there is a growing demand for it from industry and legislation
- we support our customers with their sustainability strategy
- it is necessary based on the purchasing behavior of our consumers
- Recycling is part of a sustainable packaging
- Recycling gives value to our packaging after the usage phase
- Use of recycling material saves CO₂ emissions



Best Practice – Recycling

Injection Stretch Blow Moulding



Beverage

- Pepsi
- Pepsi 1,5L
- 50% rPET



Body Care

- L'Oréal
- Garnier 250ml
- 30% rPET



Home Care

- Werner & Mertz
- Frosch 750ml
- 100% rPET



Home Care

- Unilever
- Coccolino intense
- 25% rPET



Beverage

- Coca Cola Company
- Coca Cola 0,5L
- 50% rPET

Best Practice – Recycling

Extrusion Blow Moulding



Home Care

- Ecover
- Ecover laundry
- 25% rHDPE
- 75% plant based plastics



Diary

- ARLA
- Milk Market UK
- 40% rHDPE



Home Care

- Henkel
- Perwoll 1500ml
- 20% rHDPE



Home Care

- Werner & Mertz
- Green Care Professional 1000ml
- Emsal Stein & Fliesen 1000ml
- 100% rHDPE new: from Yellow Sack (Gelber-Sack)



Body Care

- Procter & Gamble
- Head & Shoulders
- 25% Beach rHDPE

Best Practice – Recycling

Injection Moulding



- Bolton Group
- UHU Stic Renature
- 100% rPP for cap and nut
- 58% plant based plastic for container
- Werner & Mertz
- Flip Top Closure
- 100% rPP

UMWELT BEWUSST EFFIZIENT

Umweltbewusstsein und Effizienz –
eine starke Kombination bei ALPLA.

www.alpla.com

Life Cycle Assessment Packaging

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sustainability.alpla.com

Life Cycle Assessment Packaging

Presentation on youtube: <https://www.youtube.com/watch?v=cn3nY6gtuX8>



Life cycle assessment of various ALPLA packaging units and alternative materials

By C7-Consult
Roland Fehringer

Starting point

- In a nutshell, the public perception of beverage packaging is:
 - Plastic bottles and aluminium cans have a negative environmental image
 - In most cases, glass bottles have a positive environmental image
- The political parameters include, for example:
 - The EU's circular economy package
 - EU Directive on Single-Use Plastics
 - Product design
 - Extended producer responsibility
 - Targets for separate collection

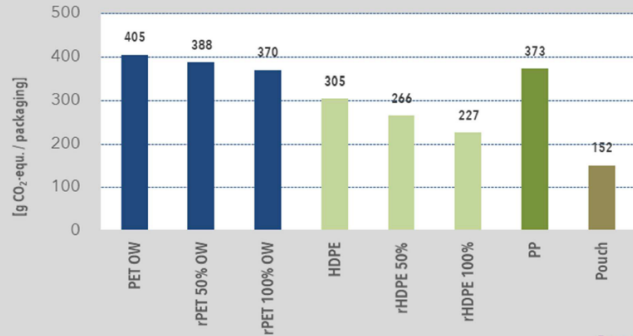
Does public perception and the current political parameters tally up with the facts and figures?

Aim of the analysis

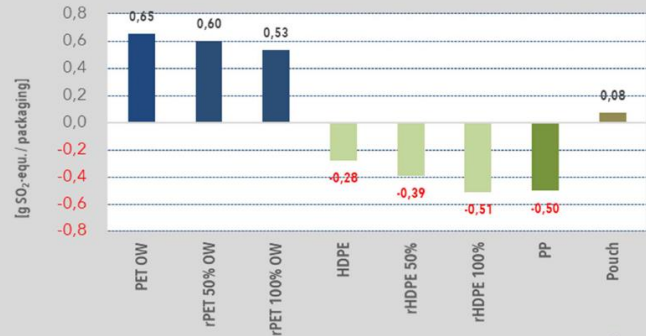
- The aim of the analysis is to calculate a **life cycle assessment** in line with ISO 14044 for PET **packaging units** and alternative packaging materials for certain beverages, foods and Liquid Detergents which are consumed via the food retail sector in ten countries.
- The purpose of the life cycle assessment is to promote an **objective discussion** of the environmental evaluation of the beverage packaging examined on the basis of the latest set of data.
- The results of the life cycle assessment are confirmed by an independent **reviewer**.

Germany – Detergent 1.5 Liter

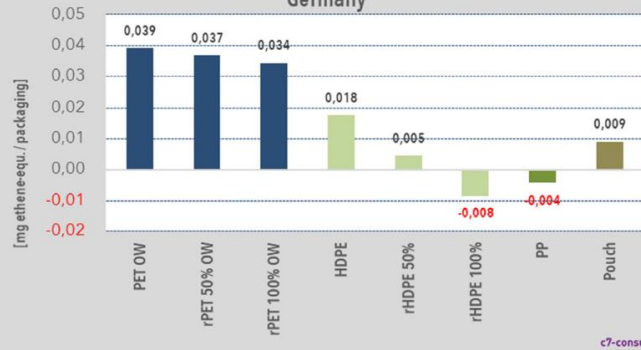
climate change - detergent 1,5l - Germany



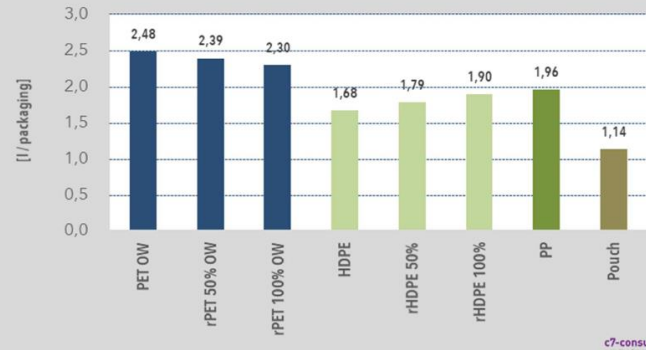
acidification potential - detergent 1,5l - Germany



photochemical oxidation (summersmog) - detergent 1,5l - Germany



water - detergent 1,5l - Germany



Results: food

