

# **WERNER & MERTZ: RECYCLED PET IN BRANDED PACKAGING**

**TIMOTHY GLAZ  
HEAD OF CORPORATE AFFAIRS**

**Les Plastics&Composites:  
Déchets ou Ressources?  
10&11 mai Paris**





## OUR HISTORY



- 1867** The wax goods factory „Gebrüder Werner“ (Werner Brothers) was founded in Mainz
- 1878** Georg Mertz joined the business and became the second to add his name
- 1887** Georg Mertz's brother-in-law Philipp Adam Schneider took over management of the firm

Based on expertise in wax processing, he Developed an entirely new shoe polish with real nourishing properties.





## OUR HISTORY



- 1945** Broadening of the business segments
- 1952** Introduction of tuba + emsal floor care
- 1954** The branch factory in Hallein, Austria, commenced production.  
With the Tarax and Tofix brands, a new product range in bathroom and toilet care was introduced.

- 1971** tana Chemie GmbH was founded, with cleaning products for professional large-scale users
- 1986** Introduction of the Frosch brand with environmentally friendly, naturally biodegradable household cleaners



WERNER & MERTZ GMBH



## THE CARE OF ALL GOOD THINGS



MAIN CATEGORIES TODAY



## WERNER & MERTZ TODAY



- A family-owned corporation (GmbH)
- Reinhard Schneider is CEO and manages the company in its fourth generation.
- The company headquarters and main production facilities are located in Mainz.
- Branch factory in Hallein, Austria, with production of special products.





## FIGURES – DATA – FACTS FOR THE 2014 FINANCIAL YEAR



### Financial year 2014

Total revenue	335 Mio. €
Consumer	270 Mio. €
Professional	65 Mio. €

### Workforce -in Germany

943 employees  
623 employees



WERNER & MERTZ GMBH



## INTEGRALLY SUSTAINABLE = CRADLE TO CRADLE

WERNER & MERTZ



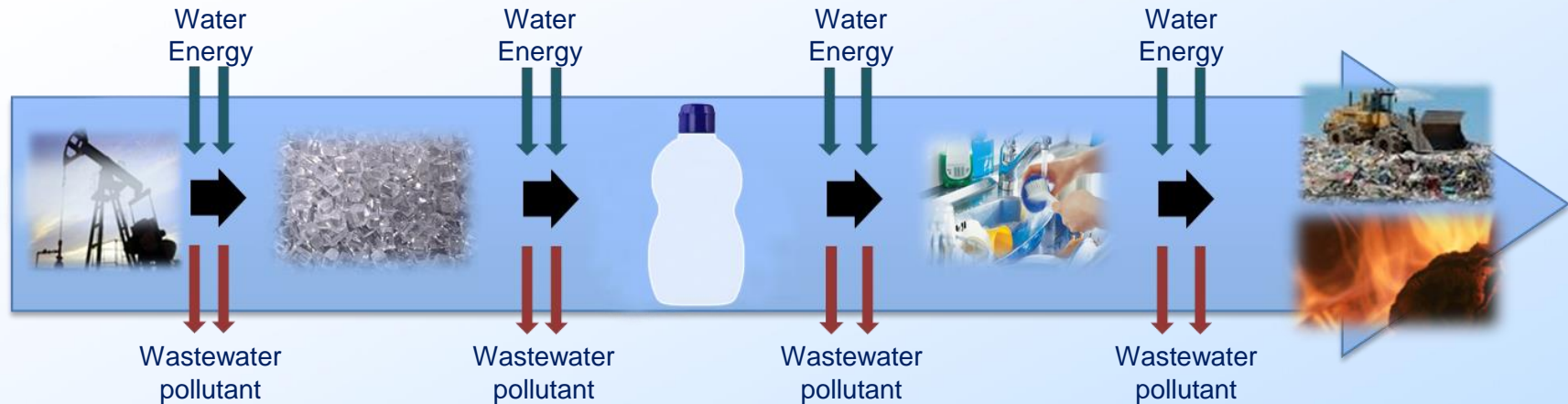
INTEGRALLY-  
SUSTAINABLE.COM





## „CRADLE TO GRAVE“

Design of material stream for predominantly amount of products

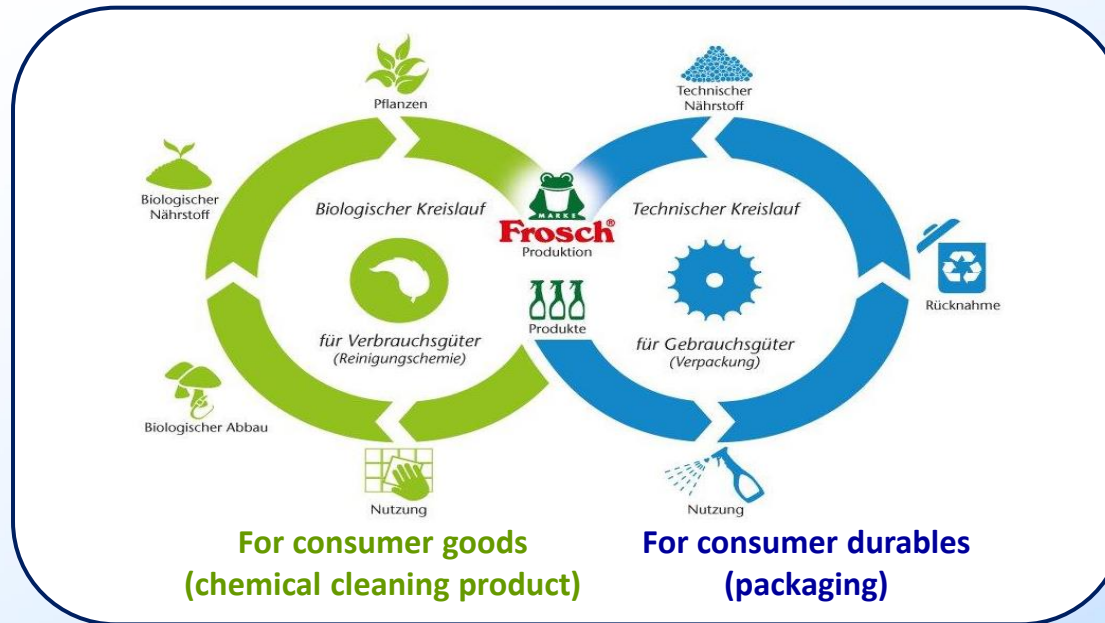


- **Eco-efficiency:** Less is more?
- No consideration for permanent **conservation of resources**
- „One-Way-Design“: **Take - Make - Waste**





## CRADLE TO CRADLE®



- **Eco-effectiveness:** Doing the right things!
- Waste becomes nutrient.
- „Cycle-Design“: **Take – Make – Regenerate!**



WERNER & MERTZ GMBH



**INITIATIVE**  
**Frosch.de**





## EXAMPLE “RECYCLATE INITIATIVE”







## EXAMPLE “RECYCLATE INITIATIVE”



### Stop destroying valuable resources pointlessly

In Germany app.50 % of all at households collected plastic packaging is incinerated with energy recovery. Recycling is mostly downcycling.



The german Öko-Institut found out that an effective circular economy could compensate 20% of all CO<sub>2</sub>-emissions coming from road traffic (2011) by 2030 in Germany.



## EXAMPLE “RECYCLATE INITIATIVE”

### Breakdown of Packaging-Collection in Germany by plastic type

Yellow Bin app. 1,1 mio To (mixed)

Deposit take back app. 440 tsd To PET



app. 70 % Polyolefine (PP,PE)  
app. 10 % PET (app. 120 tsd To)  
app. 20 % div. (eg. Composites)

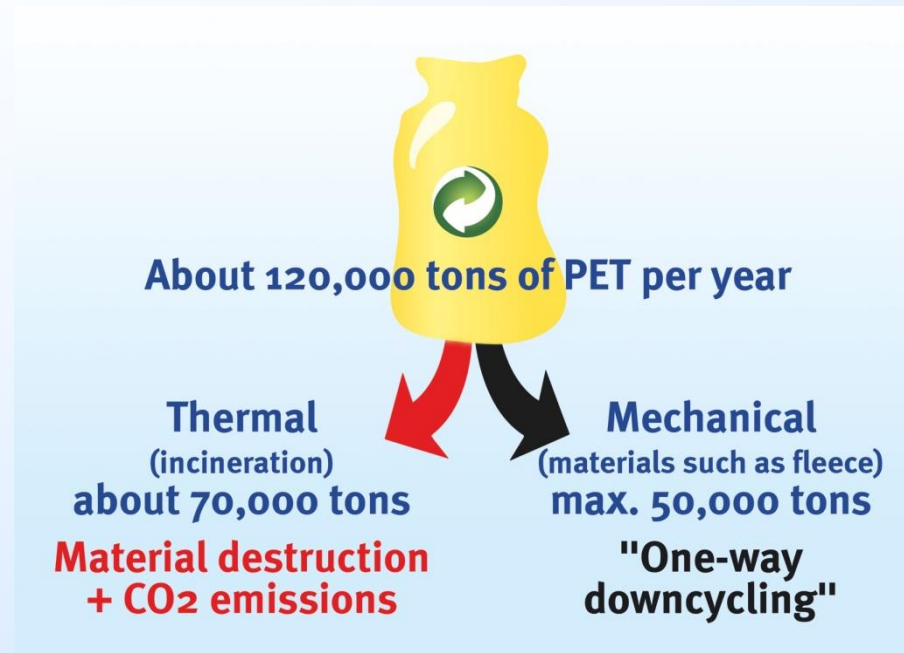
**In total app. 1,5 mio To**





## EXAMPLE "RECYCLATE INITIATIVE"

Coventional PET-Recycling (e.g. Germany) - no closed loop







WERNER & MERTZ GMBH



## EXAMPLE “RECYCLATE INITIATIVE”

Collaborating Partners :





## EXAMPLE “RECYCLATE INITIATIVE”

### Cooperation Partners' Contributions



Der Grüne Punkt

pre-sorted bales of PET-fraction sourced from household collection



unique sorting and flake refinement of PET flakes



manufacturer of PET bottles from the “new” material



initiator, driver, filler, trustworthy originator and implementer (market launch) of innovation



interface to consumers; encourages communication to and with end-consumers and, through its own activities, sensitizes and supports high-quality and effective upcycling of plastic packaging as seen in the example of the “Recyclate Initiative”



as NGO, provides constructive criticism, particularly with regard to the ecological feasibility of the process



## EXAMPLE “RECYCLATE INITIATIVE”

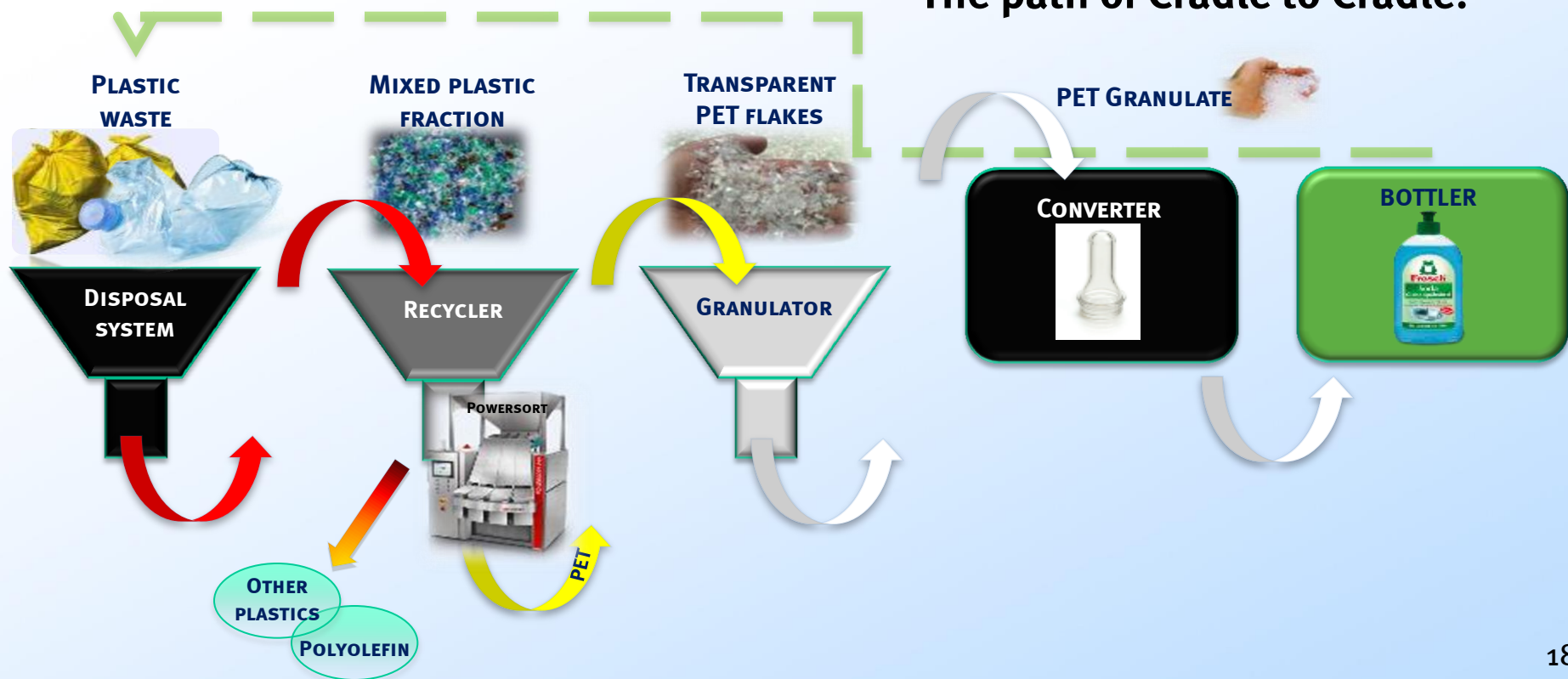
### Goals of the Initiative

- **Maximize** the proportion of **recyclate** in **PET** packaging (bottles)
- **Increase** proportion of PET secondary raw materials from “**Yellow Bag**” system, create an **effective** cycle (food-grade)
- Use of new **sorting technologies**, such as Unisensor by laser-spectroscopy
- Supply **materials/granules** to **WPR area** for production of PET bottles
- **Open innovation** to encourage other companies to get involved ASAP
- Make the process a **standard /best practice**





## EXAMPLE “RECYCLATE INITIATIVE”





## KEY TO SUCCESS

### Quality 1:

Transparent bottles  
of sorting fraction  
“mixed bottles”  
(Specification DKR 325)

### Availability!

### Quality 2:

Transparent bottles of  
sorting frac-tion  
“Mixed PET 70/30”  
(Specification DKR  
328-2; bottles and  
trays)

## Economy!

## Recycler



## Quality!



Input Quality

Recycling/Sorting

Flakes/Granulates



## EXAMPLE “RECYCLATE INITIATIVE”



### rPET usage at Werner & Mertz overview

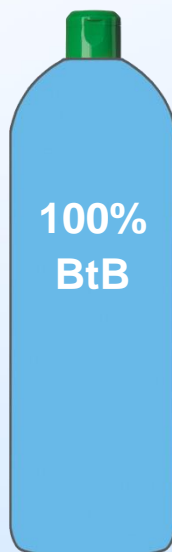
Conventional  
(without rPET)



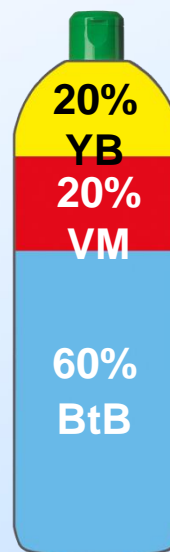
1. Generations  
2008...2013



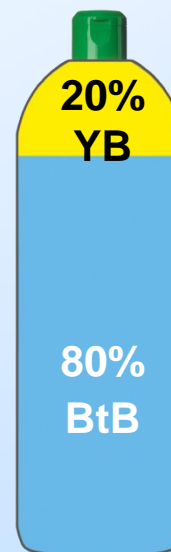
2. Generation  
2014/2015



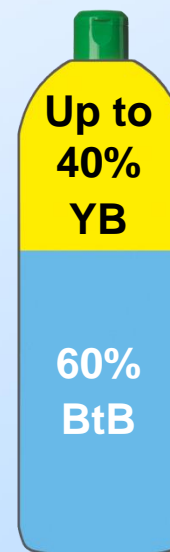
Start with YB  
2014



3. Generation  
2015



4. Generation  
???



(caption: BtB = Bottle-to-Bottle- rPET / deposit system ; YB = rPET from Yellow Bag; VM = virgin material)





## EXAMPLE “RECYCLATE INITIATIVE”



### Plastic is polluting the world's oceans.

Used plastic should be used again, not thrown away or incinerated. Frosch uses 100% recycled plastic.

\*For the first time Frosch has succeeded in processing plastic from the Yellow Bag into top-quality reusable plastic.

Pioneering work from Germany.

### More info:

INITIATIVE Frosch.de

in cooperation with

Der Grüne Punkt



## Consumer Involvement

Plastic recycling reduces „Marine Litter“



WERNER & MERTZ GMBH



# **SUSTAINABILITY AS A FACTOR OF SUCCESS**



# WHAT DOES SUSTAINABILITY MEAN?







WERNER & MERTZ GMBH



**IF EVERYONE TALKS  
ABOUT SUSTAINABILITY...**



WERNER & MERTZ GMBH

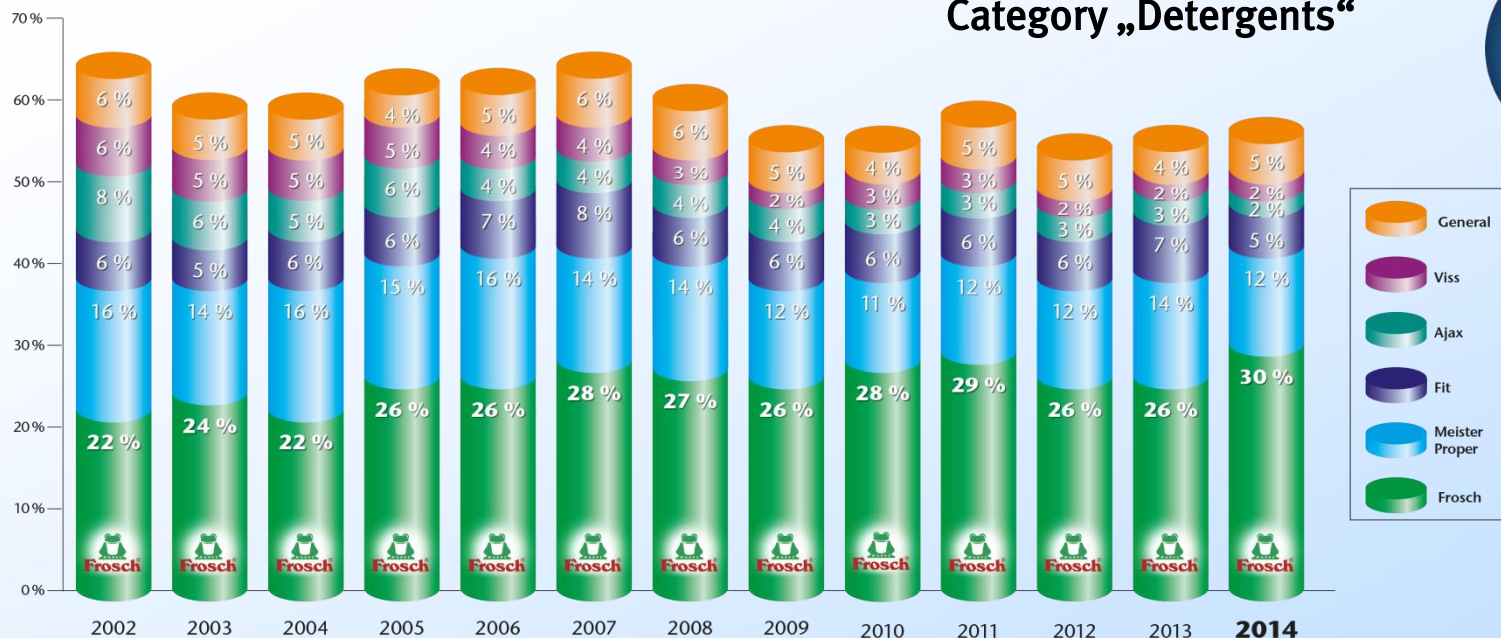


**...WHOM DOES THE  
CONSUMER BELIEVE?**



# TRUST IS GROWING SELECTIVELY – FROSCH WINS FOR THE 13TH TIME IN A ROW THE „MOST TRUSTED BRAND AWARD“

Category „Detergents“







WERNER & MERTZ GMBH



## INTEGRALLY SUSTAINABLE



Surfactants



Water



**OUR DRIVERS ARE:**



Packaging



Energy



\*Cradle to Cradle® is a registered trademark of McDonough Braungart Design Chemistry LLC



WERNER & MERTZ GMBH



FROSCH



Natural cleanliness, made for well-being  
based on “Integrally Sustainability”



**WERNER & MERTZ GMBH**



**THANK YOU VERY MUCH!**

**Timothy Glaz**

Head of Corporate Affairs

Phone: +49 6131 964 2032

Mobil: +49 172 6151003

Email: [TGlaz@werner-mertz.com](mailto:TGlaz@werner-mertz.com)

Werner & Mertz GmbH

Rheinalle 96, 55120 Mainz