

Carton Recycling

A Strategic European Perspective

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Content

- 1. Eunomia**
- 2. Recycling Schemes**
- 3. Challenges**
- 4. Conclusions**

About Eunomia

National Government



Local Government



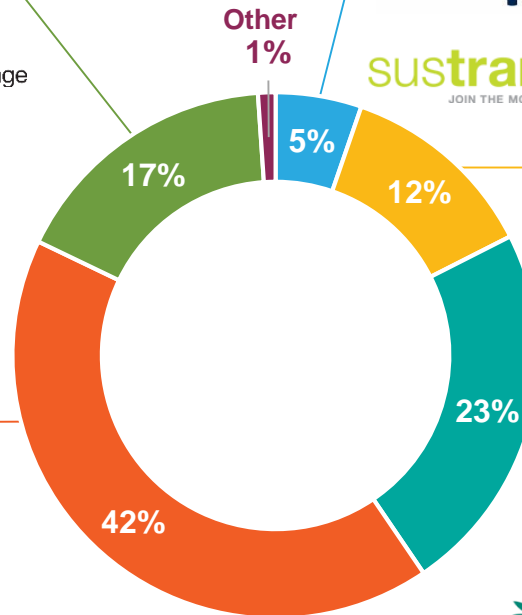
Non-Governmental Organisations



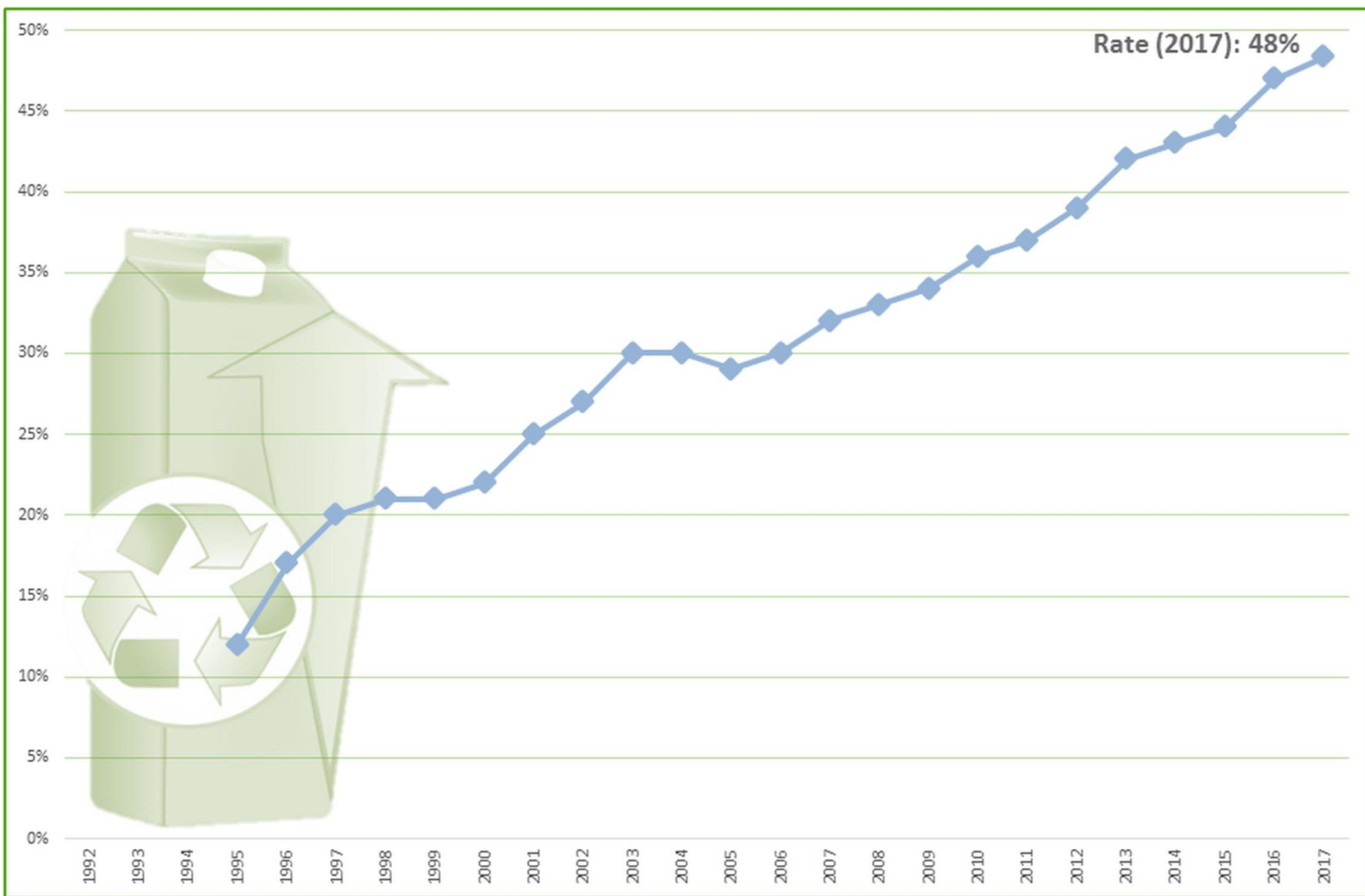
Private Sector



Supranational Government



BEVERAGE CARTON RECYCLING RATES (EU-28)



Kerbside Collection (with Plastics & Metals)



Kerbside Collection (mixed packaging)



© picture alliance/dpa/P. Pleul

Street Containers: Separate



Street Containers: Separate



Street Containers: With Plastics



Bulk Containers: Mixed Packaging



© picture-alliance/dpa/J. Eisele

Recycling Station Collection

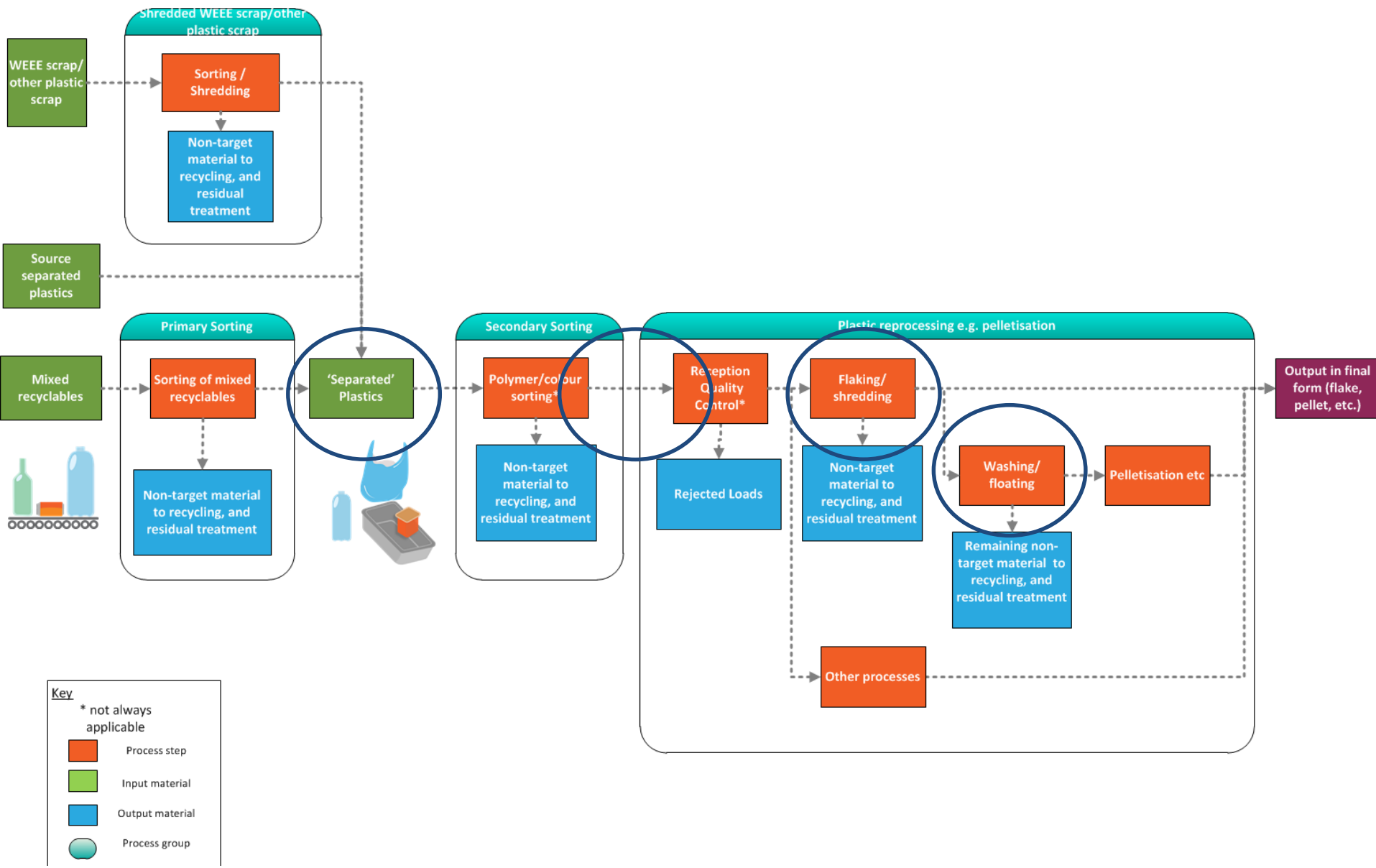


New Regulatory Drivers

- **Waste Framework Directive Recital 46**
 - ...The calculation of the recycling targets should be based on the weight of municipal waste which enters recycling. As a general rule, the actual measurement of the weight of municipal waste counted as recycled should be at the point where municipal waste enters the recycling operation.... Losses of materials which occur before the waste enters the recycling operation, for instance due to sorting or other preliminary operations, should not be included in the waste amounts reported as recycled
- **Waste Framework Directive Article 11a (1) (c)**
 - ...the weight of the municipal waste recycled shall be calculated as the weight of waste which, having undergone all necessary checking, sorting and other preliminary operations to remove waste materials that are not targeted by the subsequent reprocessing and to ensure high-quality recycling, enters the recycling operation whereby waste materials are actually reprocessed into products, materials or substances
- **SUPD**
 - Recycled content (Article 6)
 - Extended Producer Responsibility (Article 8)
 - Separate collection (Article 9)

What's the point of measurement?

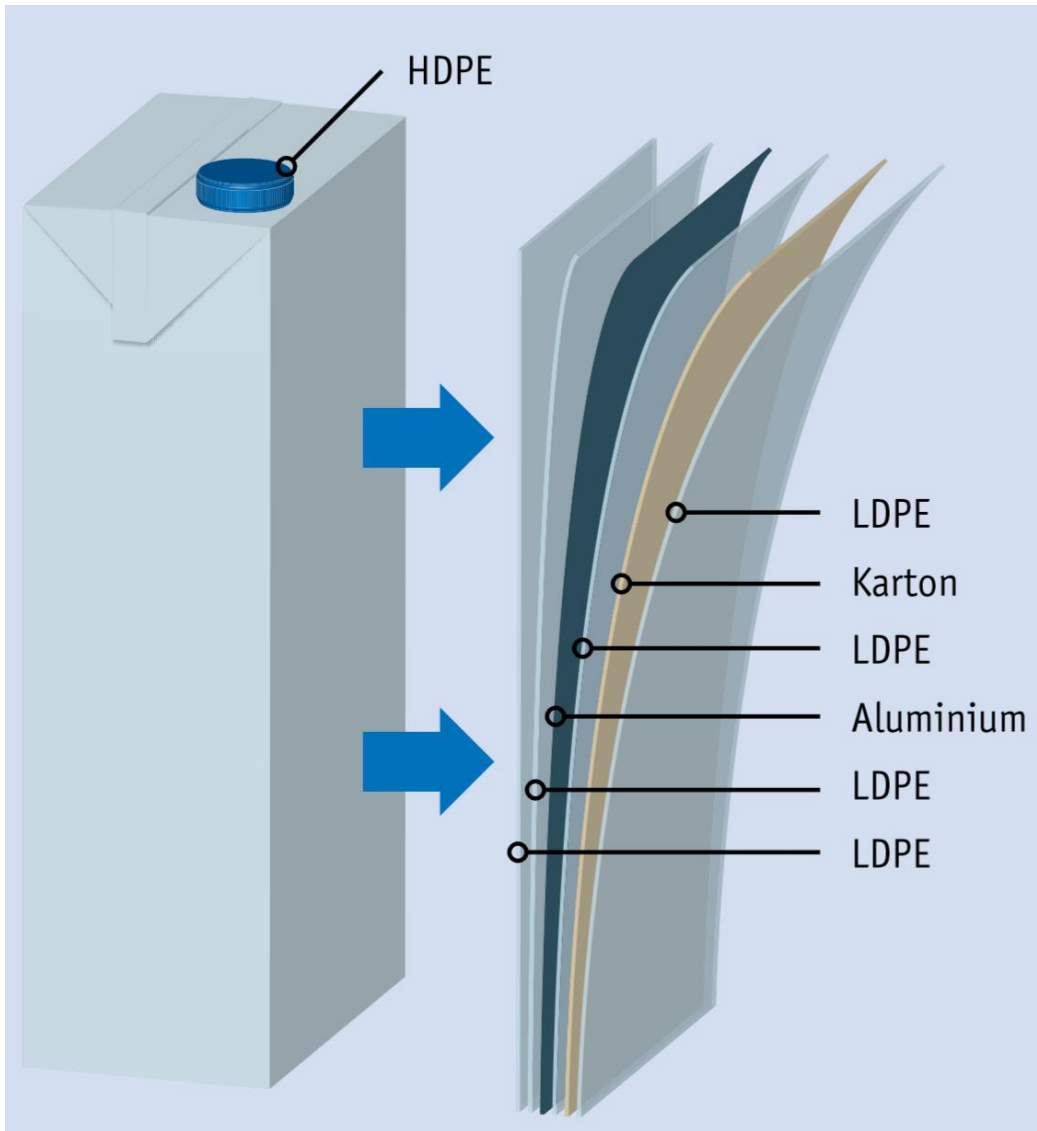
Plastics Flow Chart



Original 'Brick'



Basic Design



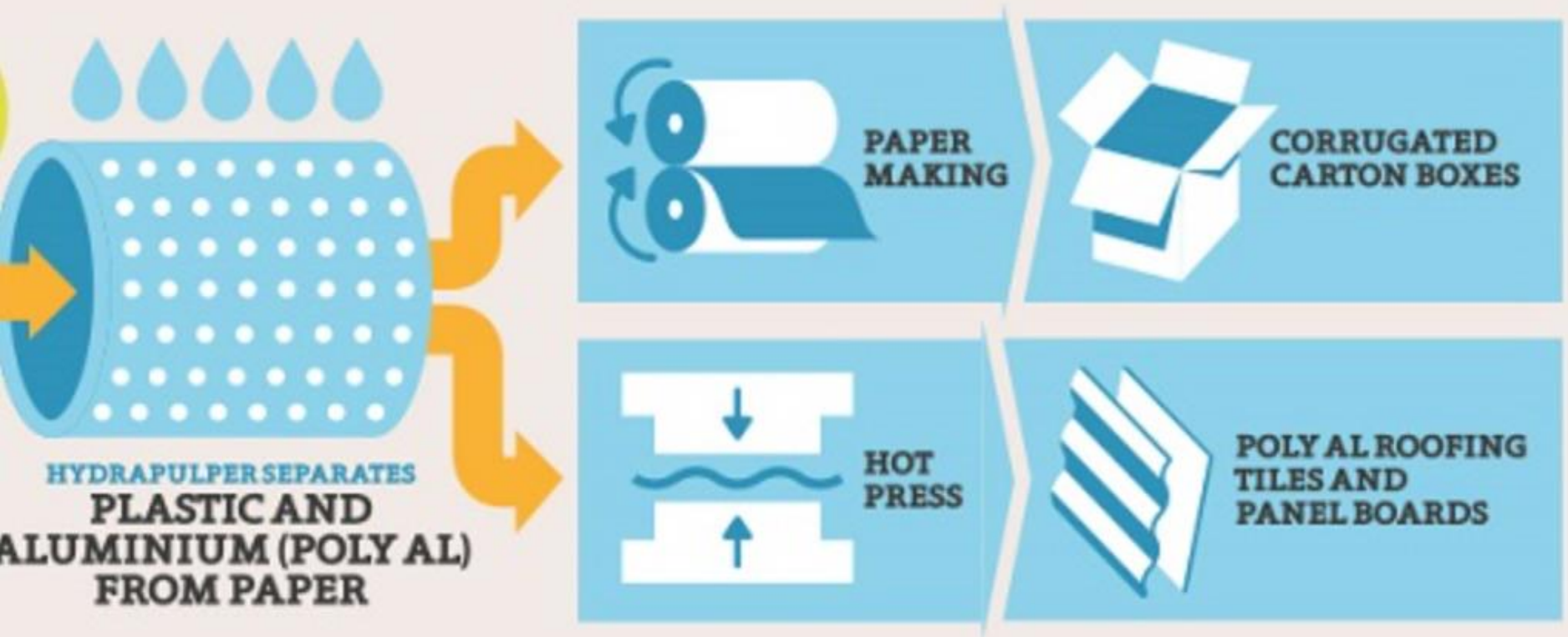
Diversity – and more Plastic



HDPE top, bottom and lid

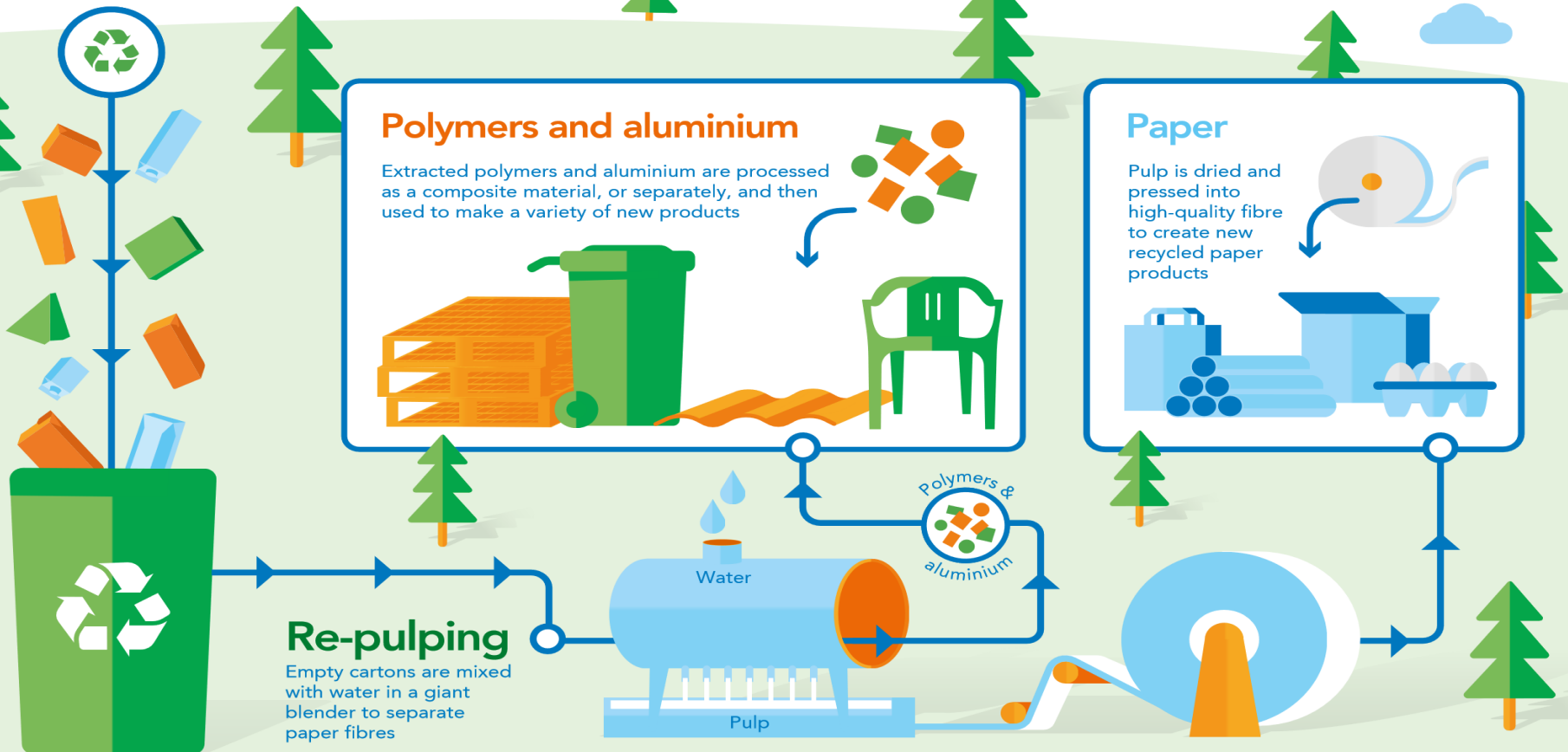


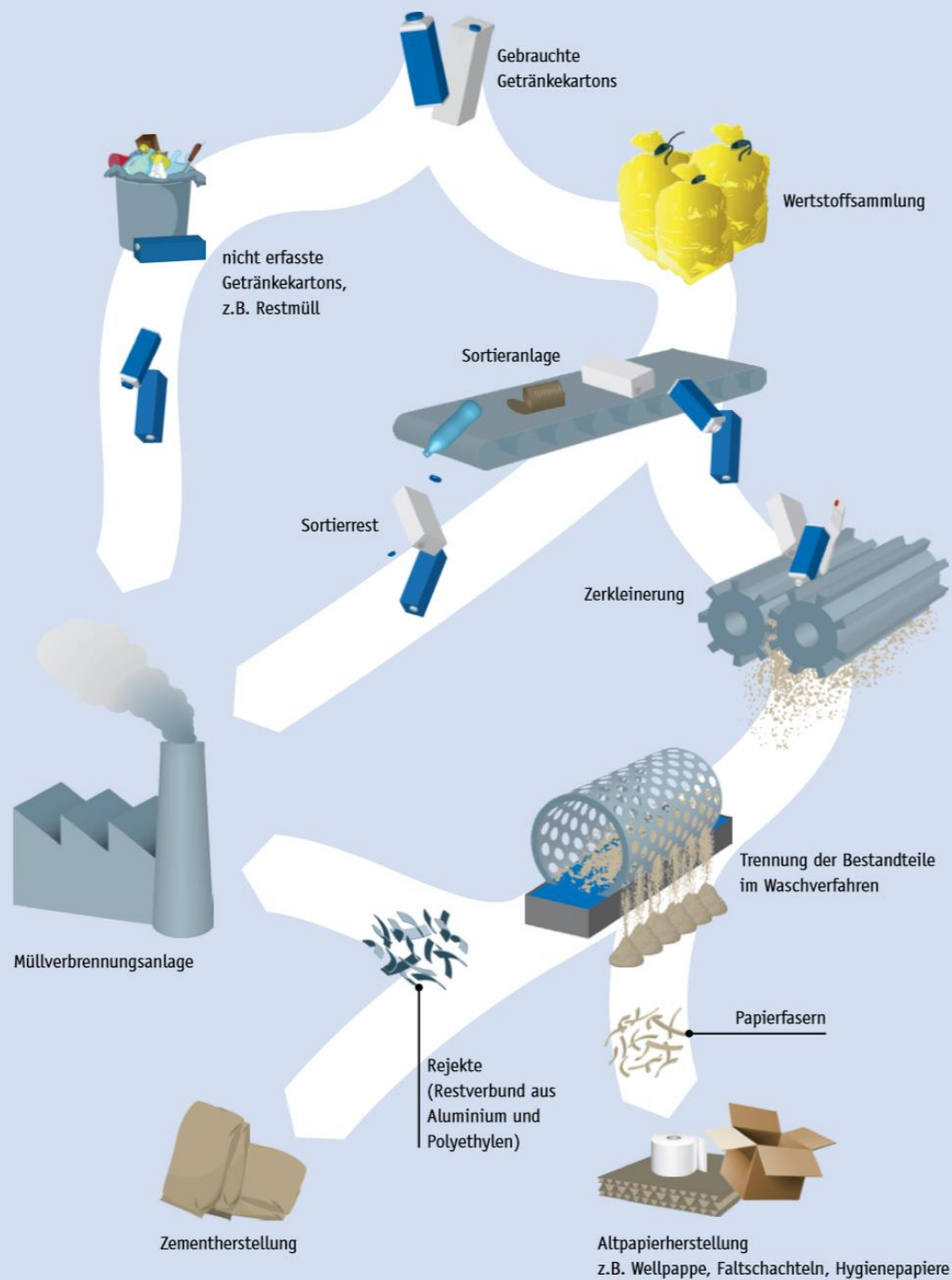
Carton Recycling Process



Carton Recycling Process

The recycling journey





After baling, recycling must take place quickly...



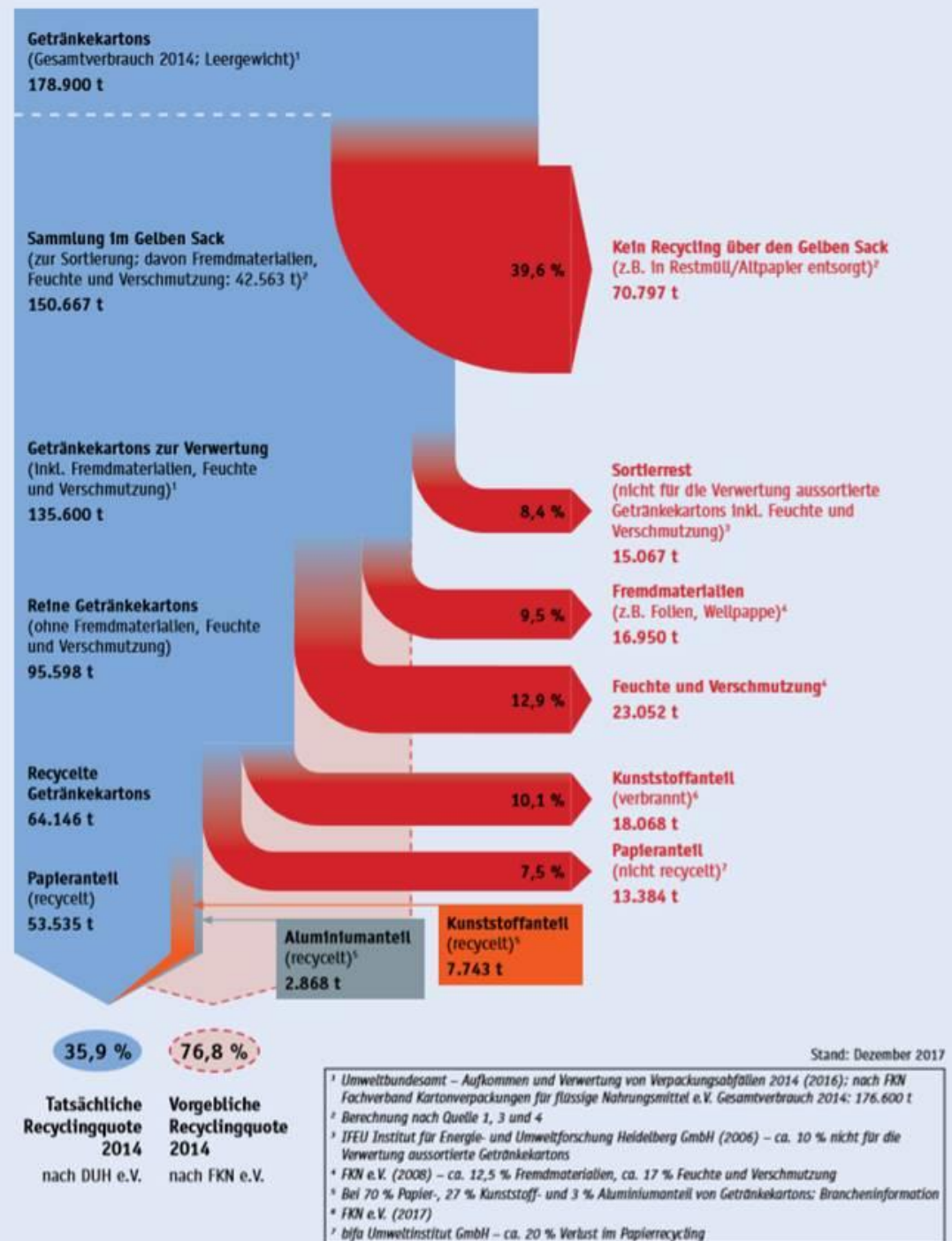
Aluminium and LDPE: PolyAL



Aluminium and LDPE: PolyAL



- **Real German recycling rate c. 30%?**



EPR Fee Modulation: French Bonus/Malus

On-pack sorting instructions



Weight reduction



Volume reduction



Mono-material packaging



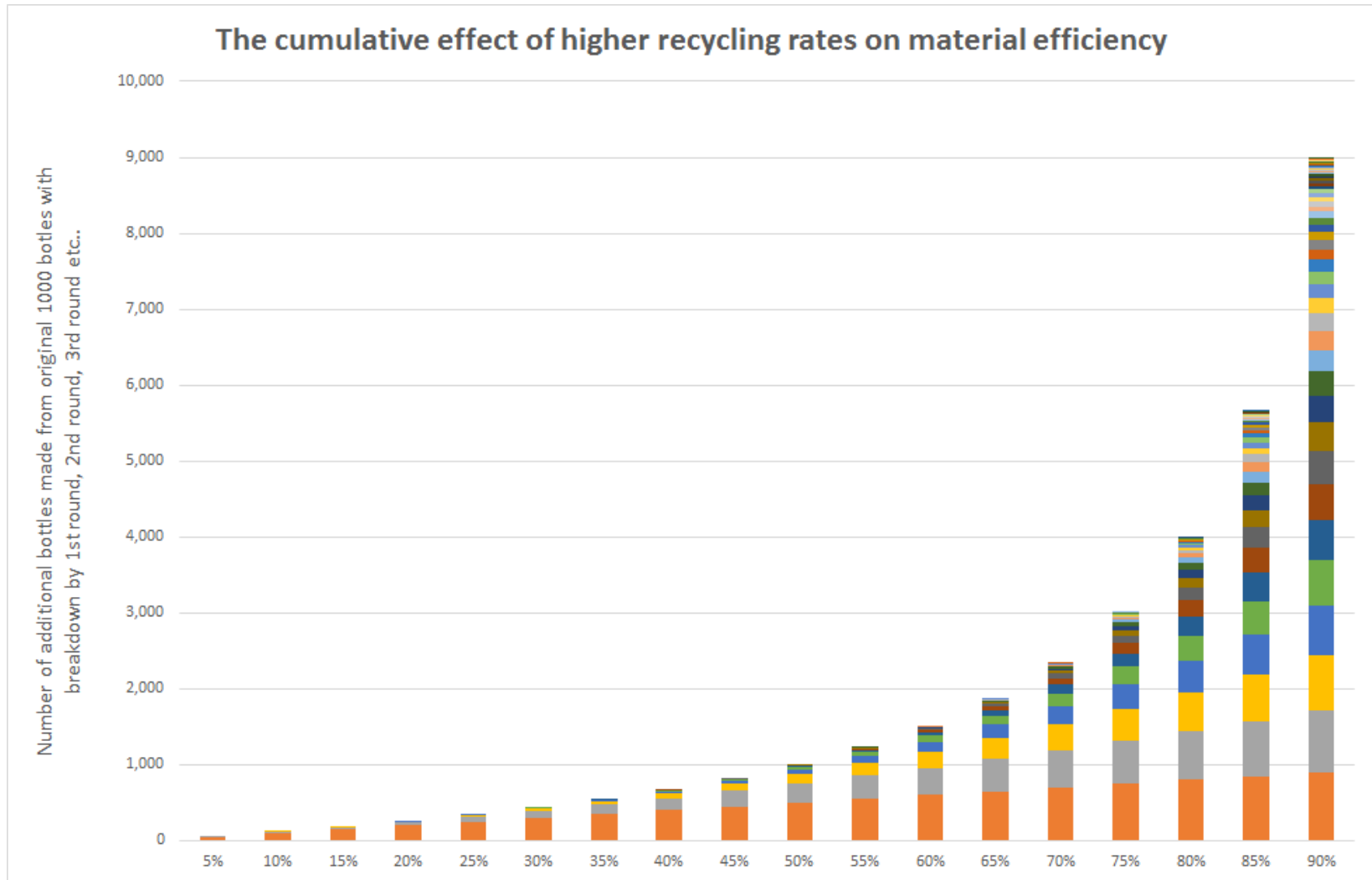
Recycling disruptors



Non-recoverable packaging



Cumulative impact of high recycling rates





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Säng här!

Säng här!

Conclusions

- **Carton recycling strategy not straightforward...**
- **Collection and sorting is relatively easy**
 - But collection rates can be low and loss rates are high
- **The market is likely to undergo significant change in the next few years**
 - EPR with fee modulation
 - New measurement method
- **May not be the next priority material to target.... But it will be quite soon!**



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