



# 1. Hamburg's separate waste collection

Household waste is collected separately in 4 bins



	2007	2017	2019*	Goal 2020	Goal 2025
<b>Residual waste</b>	556,000	453,390	434,000	405,000	385,000
<b>Paper</b>	77,100	98,200	96,270	110,000	116,000
<b>HWT / lightweight Packaging</b>	27,700	37,300	40,300	43,000	50,000
<b>Biowaste</b>	26,800	69,300	68,300	75,000	86,000

Quantities in t/a,

\* Extrapolation

# 2. HWT – Lightweight Packaging and Similarars



STADTREINIGUNG.HAMBURG

- Responsible for disposal according to Closed Cycle Management Act
  - Waste from households: Local authorities (public sector)
  - Waste from industry, trade, mining and demolition and construction: In competition (private sector)
- Local authorities are not responsible for disposal of packaging from households (Private sector)
- In Hamburg, since 2012 lightweight packaging and non-packaging of similar materials are collected in the yellow bin (HWT – Hamburg bin for recyclables)
  - Should increase the high-quality material recovery
  - Citizens save money – cost-free bin => bad quality

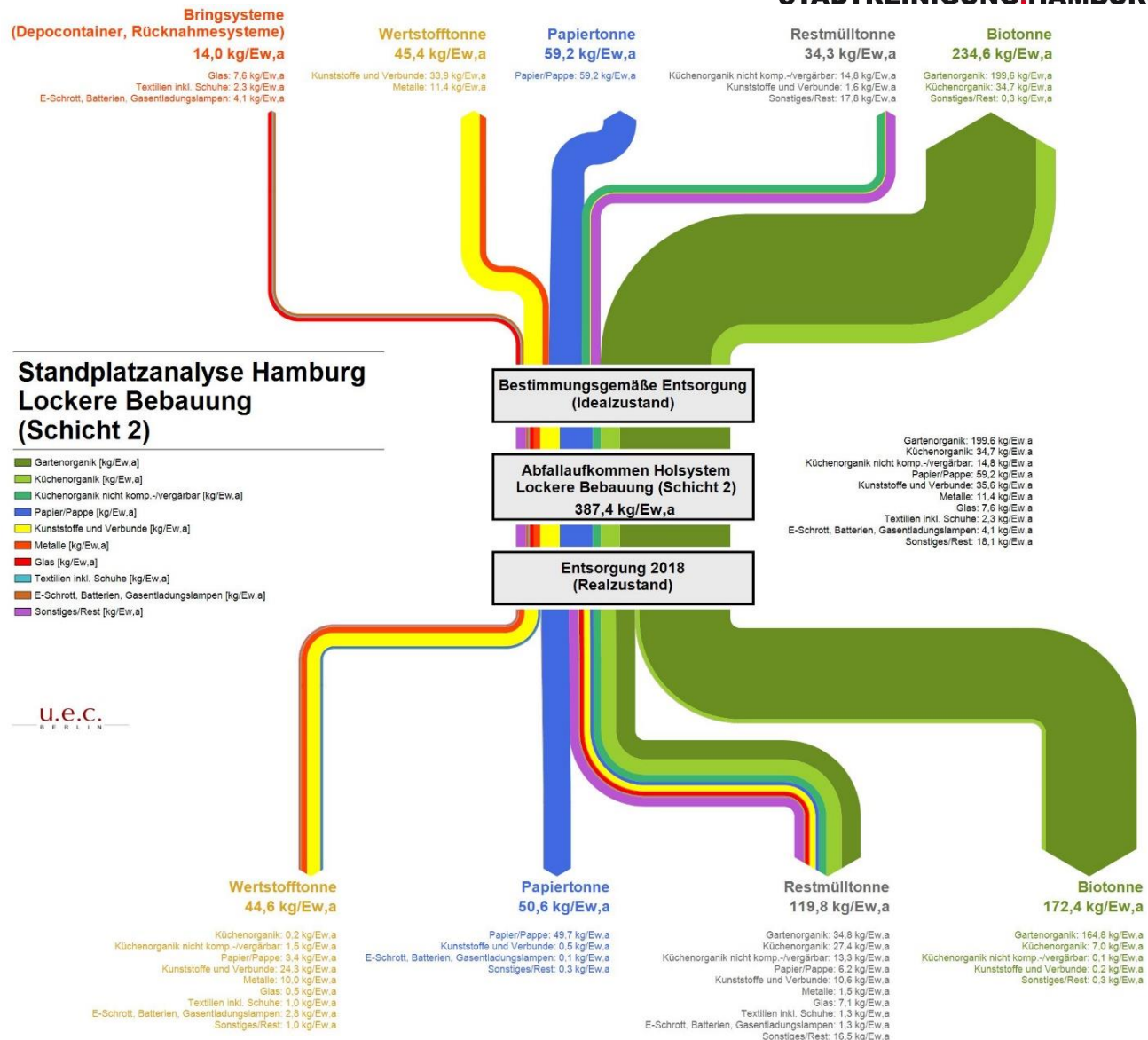


# 3. HWT – collection



STADTREINIGUNG.HAMBURG

Waste qualities and quantities in single-family housing areas



# 4. Plastics – separate fractions



STADTREINIGUNG.HAMBURG

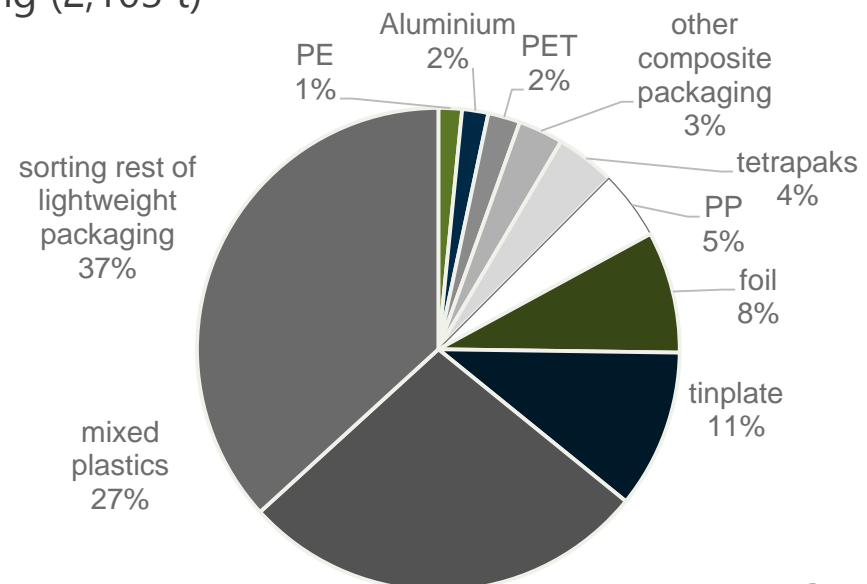
- Sorting of non-packaging from the same material into fractions defined by Dual Systems:

- Nr. 310 – foil (466 t)
- Nr. 325 – PET (Bottles) (123 t)
- Nr. 331 – PS (Polystyrol) (36 t)
- Nr. 410 – tinplate (607 t)
- Nr. 510 – tetrapaks (228 t)
- Nr. 830 – sorting rest of lightweight packaging (2,103 t)
- Nr. 324 – PP (Polypropylen) (263 t)
- Nr. 329 – PE (Polyethylen) (90 t)
- Nr. 350 – mixed plastics (1566 t)
- Nr. 420 – metals (Aluminium) (100 t)
- Nr. 520 – other composite packaging (172 t)

- SRH markets sorted reusable materials independently

- Hard plastics (collected at recycling stations – 581 t)

- CDs (6,6 t)

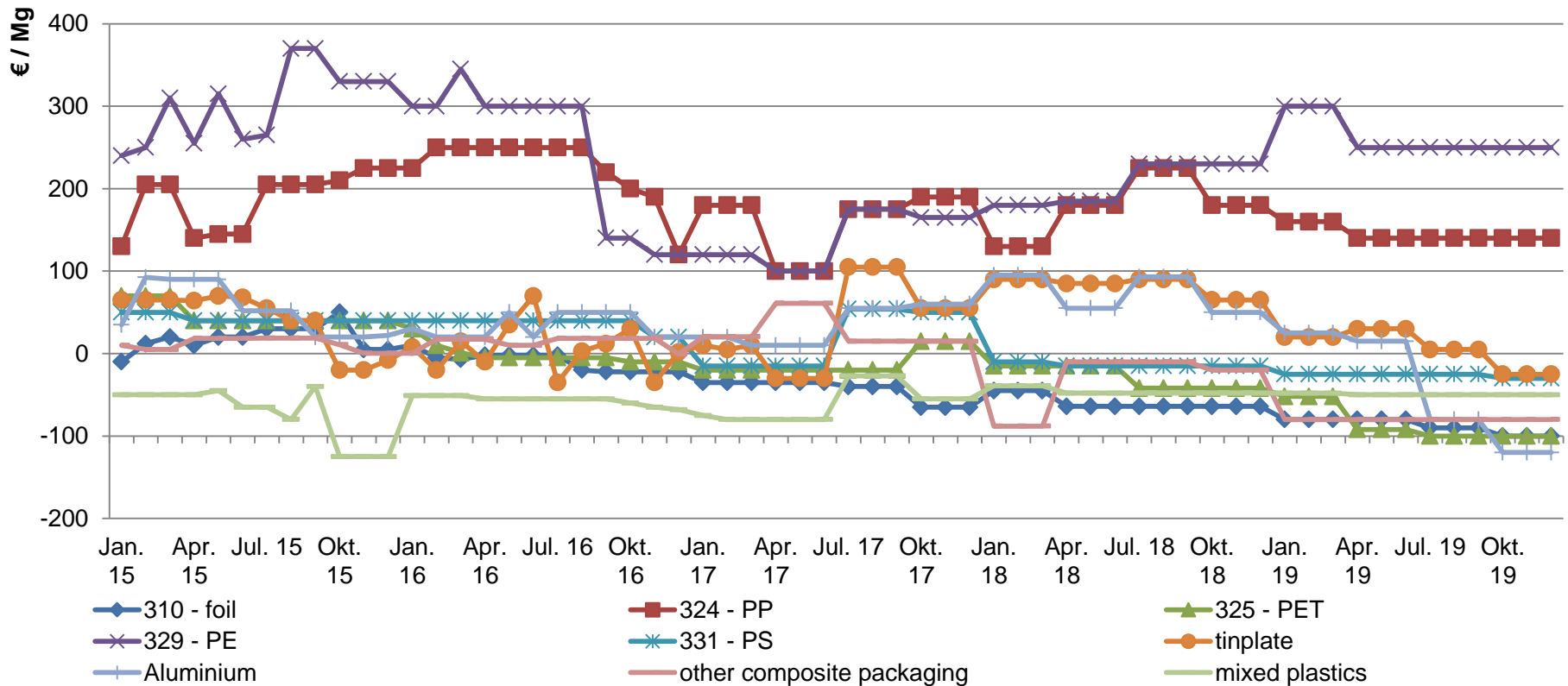


In 2018

# 5. Prices and value



STADTREINIGUNG.HAMBURG



- Prices for almost all fractions have declined over the last few years, making recycling less cost-efficient
- Recycling needs a market for recycled materials!

# 6. Outlook – Lessons Learned



STADTREINIGUNG.HAMBURG

- Quality over quantity!
- Local authorities must promote the use of recycled materials
- The right material for the purpose => paper is not always better than plastic
- Strategy for avoidance of waste (reduce, reuse, repair)
- Waste management evolves into sustainable closed circle economy