

# The label on the bottle in your hand says it was made from recycled plastic, but, is this real?

Depending on the **rules** and the **method** behind the claim, the bottle might contain little to no recycled content at all.



Companies working in the plastic sector

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## But what are we looking for?

### THE MASS BALANCE APPROACH

'Mass balance' is an accounting principle that **matches inputs** (such as plastic waste) **with outputs** from a recycling or production process, to **determine the recycled content**.

## Let's talk about rules

### CURRENT DEBATE:

What kind of rules do we want to use in the Mass Balance Model?



2 WAYS OF MEASURING / 1 REALITY

### ALLOCATION RULES

VS

### ATTRIBUTION RULES

MORE TRACEABILITY AND TRANSPARENCY

- Proportional**  
Quantities of recycled input are allocated to each output product in the same portion as what they represent in the total input.
- Polymer-only**  
Quantities of recycled input are allocated freely to part of the production resulting in polymers.
- Fuel-exempt**  
Quantities of recycled input used for fuel are excluded, and the remaining amount is freely allocated among output products.

- Batch-level**  
The input ratio recycle/virgin plastics is attributed to the complete batch.
- Companies level**  
The input ratio recycle/virgin plastics leads to credits, which can be freely attributed to multiple plastic products within a specific organisation.
- Multi-site level**  
The input ratio recycle/virgin plastics leads to credits, which are transferable between organisations.

YELLOW CARD - ONLY 1 ALLOWED

DIRECT RED CARD

LESS TRACEABILITY AND TRANSPARENCY

PREFERRED BY THE CHEMICAL INDUSTRY

## Let's talk about methods

### MECHANICAL RECYCLING

### CHEMICAL RECOVERY\*

There are different types of recycling technologies

- Meet rules providing the **highest traceability and transparency** level.
- A clear track of the recycled content in each product brings **fair competence to the sector** and **true information to the consumer**.
- Smallest environmental impact**.
- Should remain the **primary option** in the recycling sector.

- Chemical industry is pushing for **less strict rules to assess recyclability rates**.
- As rules are more flexible, distinguishing between **greenwashing** and real recyclability becomes more difficult.
- Solution for waste that cannot be mechanically recycled.
- Should **not compete** for waste that can be recycled mechanically.

\*The position of ZWE distinguishing between chemical recycling and chemical recovery is available [here](#).

## We are claiming for a new circular economy

We are living in a crucial moment as the next regulations will set the basis for our future society.



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In the path towards a **circular economy**, the **steps** that must be taken are clear.

- Use **'proportional allocation'** to evenly allocate the recycled content to output products instead of allocating it arbitrarily.
- Use **'batch level'** to determine recycled content, so that it is clear how much recycled material is in the final product.
- Consider **capping chemical recovery** up to a **maximum of 12,5 to 25%** to avoid it overtaking mechanical recycling if polymer-only or fuel-exempt rules are used.
- Implement regulation to ensure that **mechanical remains the primary recycling option** for maximum CO2 reduction and circularity score.

Transparency is key, no matter your field - **make sure you're playing fair.**