

**ZERO WASTE
EUROPE LIVE!
2 OCTOBER 2018**

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**SĂLACEA
BIHOR COUNTY
CASE STUDY**

**10 YEARS TO REACH EU TARGETS:
HOW TO MAKE IT HAPPEN?**

COMUNA
SĂLACEA



SZALACS
KÖZSÉG

BIG STEPS FOR EU CIRCULAR ECONOMY

TARGETS within 5 months in EASTERN EUROPE

Case study of
Sălăcea Commune, BIHOR county



Sălăcea - Szalacs
zerowaste



Phd. Pásztai Zoltán



COMMUNE OF SALACEA

COMUNA
SĂLACEA



SZALACS
KÖZSÉG

BH



- Aprox. 3000 inhabitants (Sălăcea 2400, Otomani 600)
- 1000 households
- 65 Km away from Oradea

BEFORE APRIL 2018



BEFORE APRIL 2018



BEFORE APRIL 2018



THE FORMAL - DUAL COLLECTION SYSTEM

- ▶ Black bins 120L: household waste (wet fraction)
 - ▶ Collection 2 / month
- ▶ Yellow bags 100L: recyclable waste (dry fraction)
 - ▶ Collection 1/ month

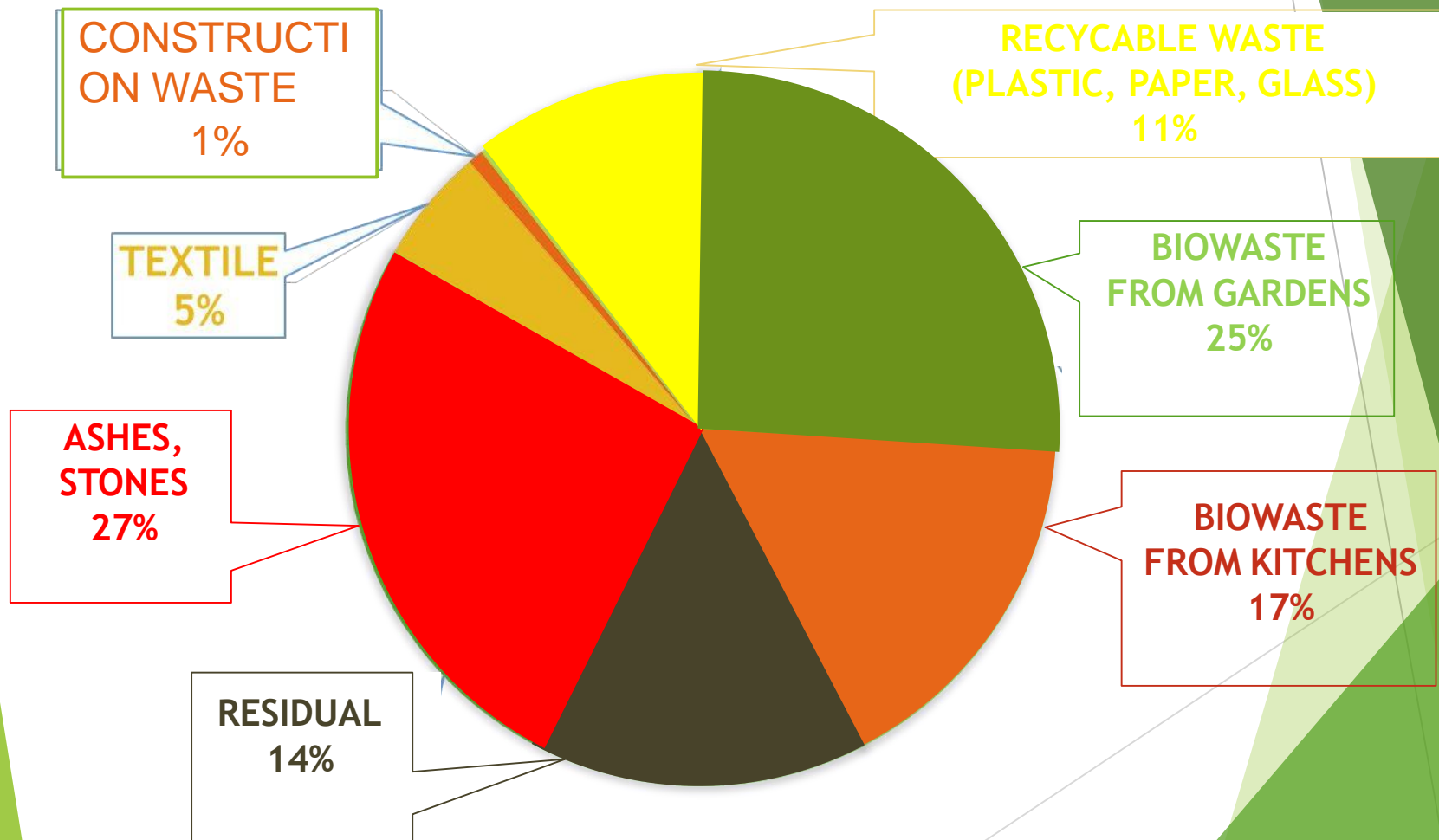


QUANTITIES COLLECTED IN THE DUAL SYSTEM

- ▶ 330 t/year of waste from which:
 - ▶ 320 t/year household residual waste (wet fraction)
 - ▶ 10 t/year of separately collected waste (dry fraction)
 - ▶ **Separate (gravimetric) collection rate(3%)**

COMPOSITION OF THE HOUSEHOLD WASTE DUAL SYSTEM(DRY/WET)

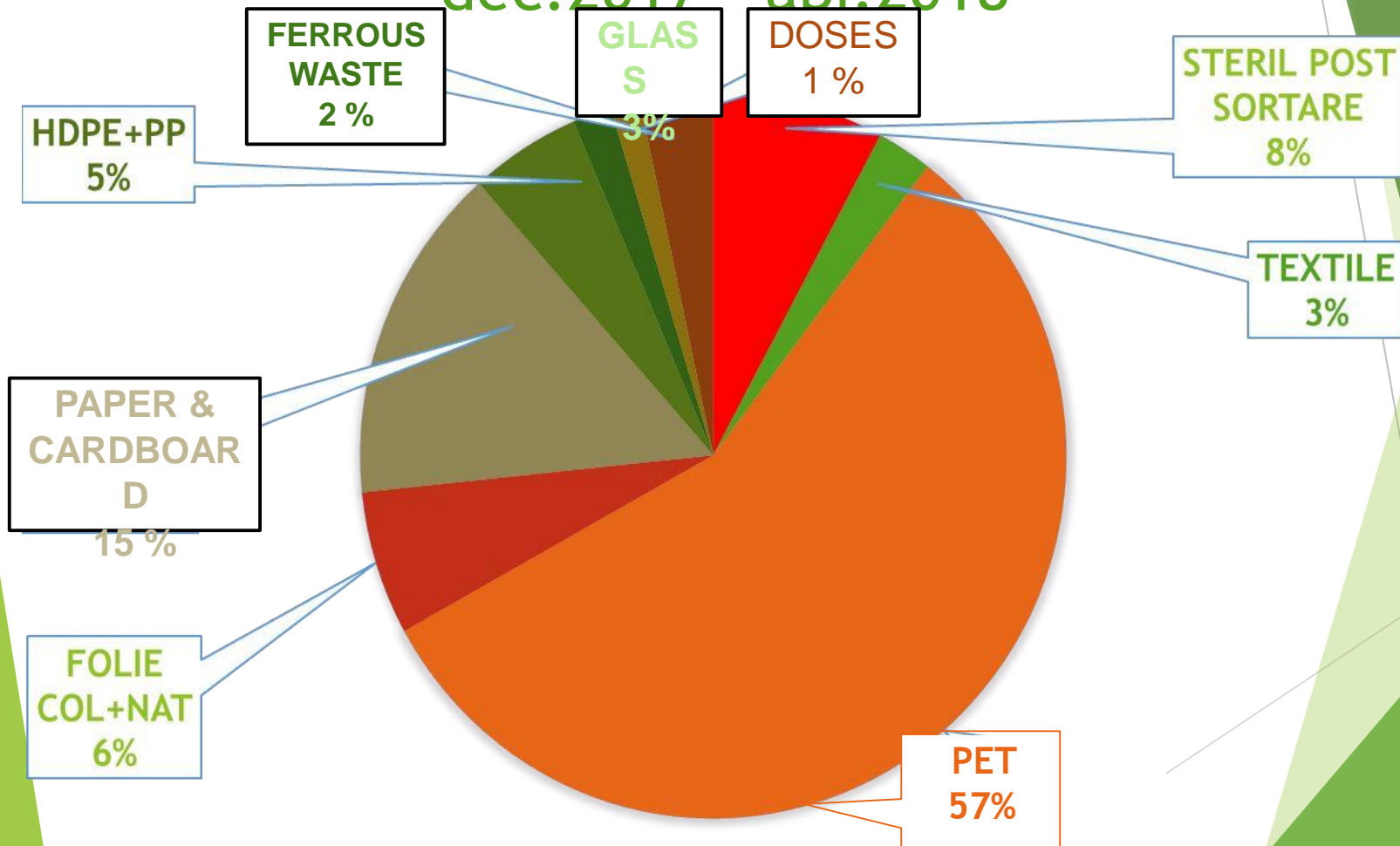
in the monitoring period
dec.2017- mart.2018



Analyzed quantity: 32,78 t

COMPOSITION OF THE RECYCABLE DUAL SYSTEM (DRY/WET)

in the monitoring period
dec.2017 - apr.2018



Analyzed quantity: 0,67 t

ZEROWASTE

► In January 2018, Commune of Salacea has joined ZERO WASTE cities, signing a partnership with ZERO WASTE ROMANIA, assuming all the commitments.



Sălacea - Szalacs
zerowaste

ZEROWASTE ATTITUDE



Sălăcea - Szalacs
zerowaste



RECIPIENTS USED FOR THE NEW S. COLLECTI

- ▶ Paper - blue bag 120 l



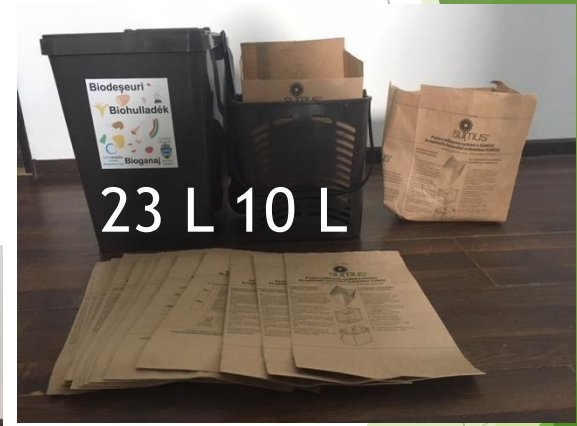
- ▶ Plastic and metal - yellow bag 120 l



- ▶ Glass - green bin 120 l



- ▶ Bio waste- 23 l + 10 l + 7 l



- ▶ Residual 40 l



Imprinted in 3 languages: Romanian, Hungarian, Gypsy

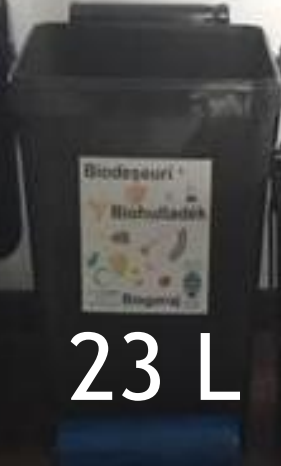
RECIPIENTS

40 L



23 L

10 L



120 L



WHY THE BIOWASTE?(40%)

■ ALLUMINIUM 1%

■ GLASS 8%

■ PLASTICS 16%

■ FOOD WASTE 33%



7% VEGETABLE ■

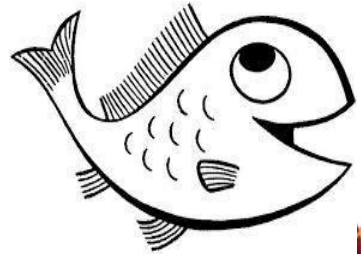
10% UNSORTED ■

25% PAPER ■



BIOWASTE

- Crisp and cooked dish
- Meat, fish, bones, egg shell
- Vegetable , fruits
- Bakery products
- Coffee grounds,
- Paper napkins



BIOWASTE COLLECTING BINS



COLLECTION



The collection is done separately for each fraction,
by the operator AVE BIHOR

The AVE logo is painted in large, stylized letters on the side of the white truck's body. The letters are white with a red outline and are set against a red background.

DEȘURI BIODEGRADABILE



BIO-HULLADÉK

**VARIO
PRESS**

MAN

TREATMENT OF THE BIOWASTE

Composting Station

ECO BIHOR



TREATMENT OF THE BIOWASTE



RESIDUAL WASTE

By distributing 40 L bins, the volume of the residual waste container was reduced from 120 liters to 40 liters

This determines the generators to fit in this low volume bin

Products such as : grass, branches, ashes, dust, stones no longer fit in the container!



FOR OTHER TYPES OF WASTE

The success of the reduction of the household waste quantities was achieved through home composting and separate collection of the bulky, electric... waste :

1.

Waste collection centers



2. Home composting



Waste collection center SĂLACEA, BIHOR



AWARENESS CAMPAIGN IN SCHOOLS



AWARENESS CAMPAING IN KINDERGARTNES



Each class in the school and kindergarten in Sălacea commune was equipped with bins for collecting each type of waste.



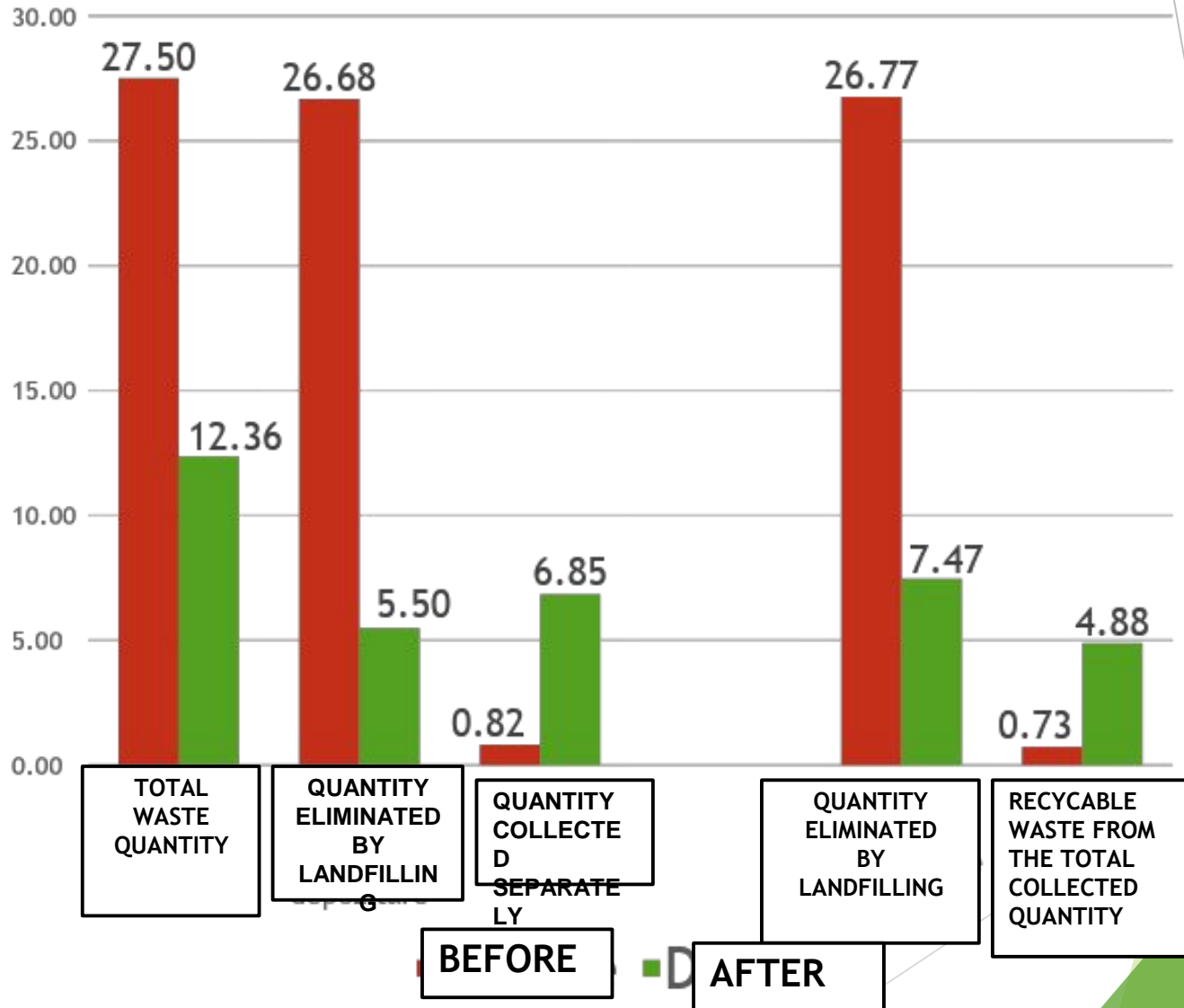


RESULTS COMPARISON

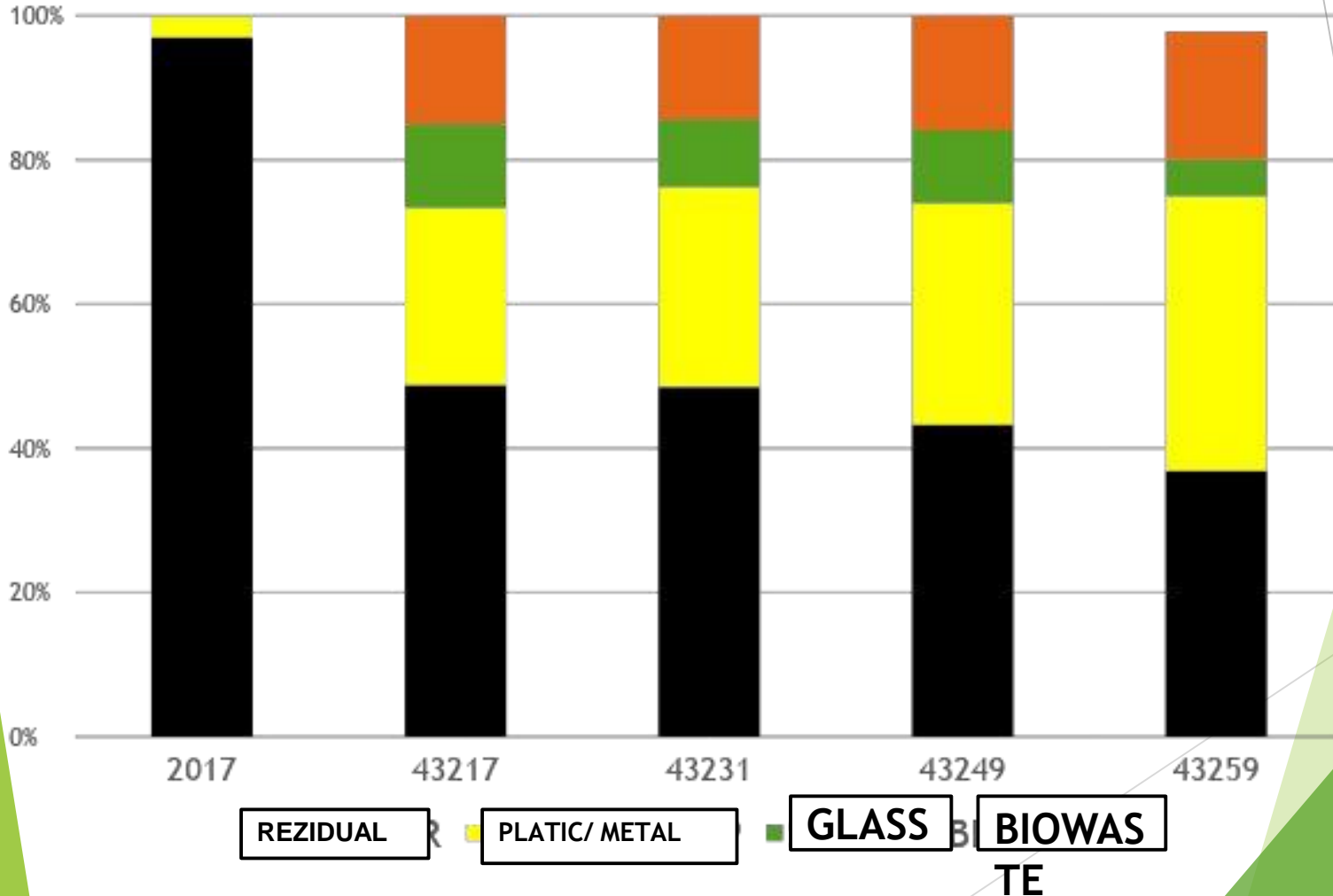
tonne / month	Before	%	After	%
Total WASTE quantity	27,50	100%	12,36	100%
Quantity eliminated by landfilling	26,68	97%	5,50	39%
Quantity collected separately	0,82	3%	6,86	61%
Quantity eliminated by landfilling	26,77	97%	7,47	60%
Recycable waste from the total collected quantity	0,73	3%	4,88	40%

RESULTS COMPARISON

(t/month)



MODIFICATION OF THE WASTE COMPOSITION AFTER CHANGING THE COLLECTION SYSTEM



RESULTS COMPARISON

THE formal dual collecting system

- ▶ Household waste. approx 27 500 kg monthly
- ▶ From which 8-10% recyclable (bad quality)
- ▶ Quantity collected separately under 5% - yellow bags

THE new 5 fraction collection system

- ▶ Total waste / month: 12 400 Kg
 - ▶ Residual 5 500 Kg (45 %)
 - ▶ Recyclable waste 3 785 Kg (31 %)
(paper, cardboard, plastic, metal etc.)
 - ▶ Glass 1 110 kg (9 %)
 - ▶ Biowaste 1 960 Kg (16 %)

The amount of the separately collected waste is 40 %

(quantities to be taken into account for reaching the EU targets)

Against 3% in 2017.

THE STEPS THAT WERE FOLLOWED

1. A DEVOTED MAYOR!
2. A COLLECTOR COMPANY operator equipped with facilities suitable for treating the separately collected fractions.
3. A WASTE MANAGEMENT plant - compost station, sorting hall, eu conform landfill needed.
4. Joining ZERO WASTE cities, signing a partnership with ZERO WASTE ROMANIA.
5. Waste collecting INFRASTRUCTURE design and development for 5 STREAMS
6. AWAERNESSE CAMPAIGNE in every school and kindergarten classroom, in every pub, church and culture house.
7. Home composting and separate collection of the bulky, dangerous, electrical waste, in the WASTE COLLECTING CENTERS
8. Withdrawal of the waste islands from the public domain introducing DOOR TO DOOR separate waste collection system
9. VERIFYING the system.
10. COERCIVE measures.
11. * Apply the PAY AS YOU THROW scheme

THANK YOU FOR YOUR ATTENTION

**I collect my
waste separately!**

**I believe in the
power of good
example!**



AND YOU??