## Impact of street collectors in Greece

## Istanbul 22/5/2015



## Street collectors of packaging waste in Greece

- Unofficial recycling (UR) was always a part of the "market" but only for non packaging metals
- Street collection of packaging materials appeared in massive scale along with the start of the financial crisis (2010)
- Potential source of income (mainly: immigrants, roma)
- High density populated areas (mainly Athens and Thessaloniki) are facing the biggest problems



## **Targeted materials**

- Cardboard-newsprint paper (mainly)
- Easy to be removed from the bins
- Traditional activity (well structured market)
- Easy to handle-high density bulk
- Aluminum cans
- High priced material
- Other Metals-Plastics (small scale)
- ➤ Light weighted materials → inefficient transportation
- Metal scavenging largely comes from stealing of non-packaging equipment as cover of sewer, cables, road signs, rails, etc.



## **Cardboard trade route**



# Legal or illegal medium & small scale stockyards: Approx. 100

# Street collectors taking materials from blue bin:

Estimated from some hundreds to a few thousand



## Common picture in the streets of Athens #1





# Common picture in the streets of Athens #2





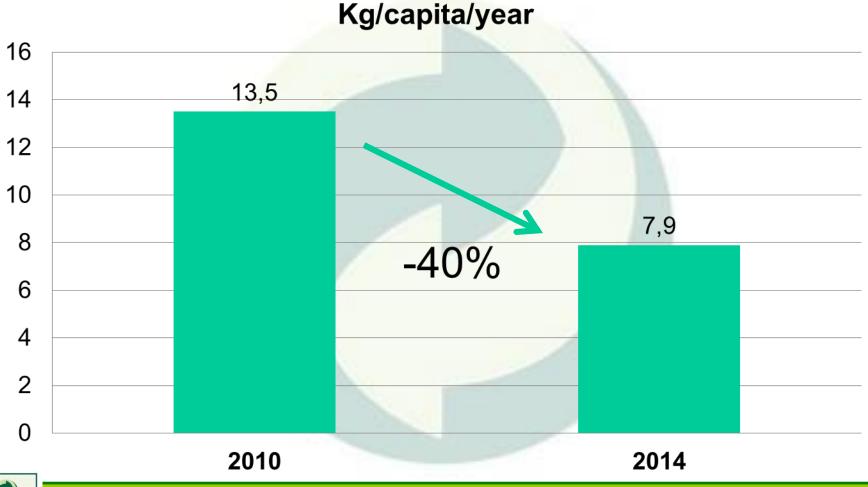
# Impacts

Besides the environmental impacts and black market activities the main effects to PRO's activities are the following:

- Negative effects to the official recorded MSW recycling rates
- Decreases quality of the collected material
- Increases operating costs of MRFs (less incoming valuable materials=loss of income)

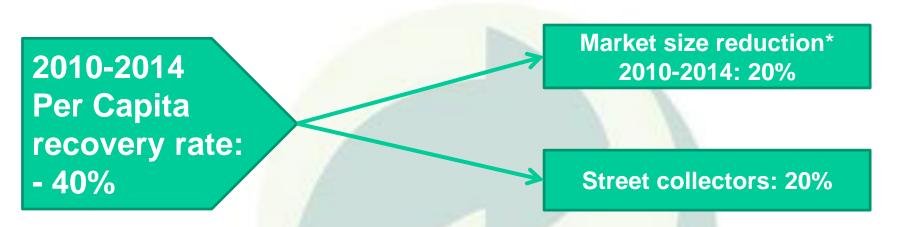


# Impact on MSW recycling rates I (cardboard)





## Impact on MSW recycling rates II (cardboard)



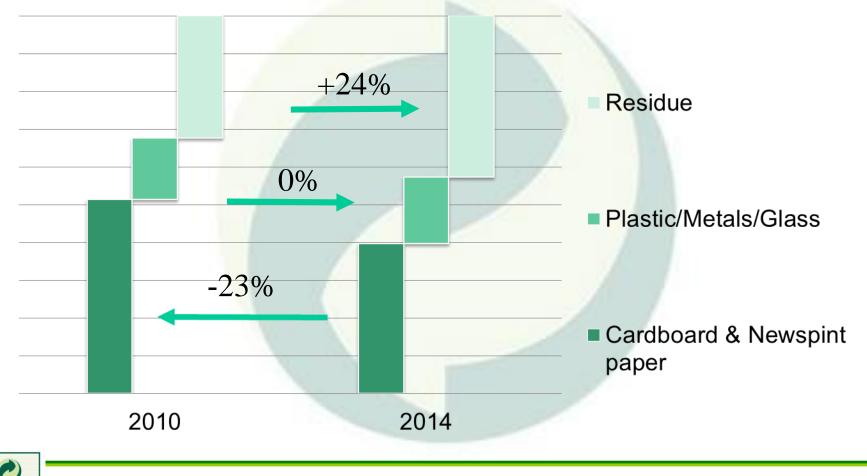
- Only half of the 40% reduction is caused by the recession
- The other half is attributed to UR, which is estimated to approx. 25kt/per year



\*Based on declared quantities at HERRCo 2010-2014=20% GDP growth rate 2010-2013 (Eurostat): -17%

## Impact on the Quality of the collection stream

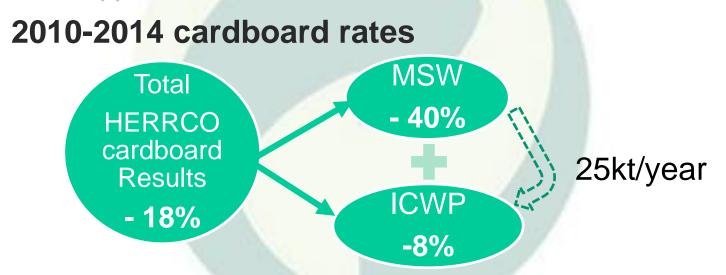
### MSW collection synthesis differentiation



Fictional increase of residue %. Stable per capita residue rate

## The annual losses from MSW end up to ICWP

 Based on the assumption that households and commercial / industrial sector are more or less equally affected by the crisis, we would expect ICWP and MSW results to decrease at the same rate.
Does this happen?



The annual losses from MSW end up to ICWP and consequently are being recorded by HERRCo



## **Impacts on MRFs**

Negative financial impact on the MRFs, since their project plans have been made according to the expected quantities per resident

Financial impacts caused by the annual loss of 25kt as incoming quantities for the MRFs

- $\Rightarrow$  Material sales: €2,4 mil.
- ⇒ HERRCo funding: €0,25 mil.

€3,5 mil./year

⇒ Additional operating cost: €0,8 mil. -



## Implementation of separate cardboard stream

- On-going discussion with the authorities for pilot separate cardboard stream for MSW
- This would lead to <u>much higher rates of scavenging since</u> the material would be already sorted and therefore easier to be removed
- The result of the above would be an even larger reduction of MSW recycling rate



# **Conclusions / Remarks**

#### Negative impacts:

- Decrease on MSW recycling rates
- Quality of the incoming quantities deteriorates
- MRFs are facing cost & operating problems

### **Results disruption**

- Quantities from street collectors are being recorded from HERRCo via ICWP
- If the targets are going to be separated for MSW and ICWP, it would be highly unlikely for the MSW target to be reached
- Competition issues: In case of new PRO which would record ICWP, part of recorded materials would come from the blue bin (MSW)

#### **General remarks**

 Actions from the authorities should be taken, since the actual problem is beyond PRO's limits.

