

Institute of Waste Management and Circular Economy

COMPARISON OF WASTE MANAGEMENT SYSTEMS IN WESTERN AND TRANSITION ECONOMIES WITHIN THE PROJECT WATRA

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WORKSHOP F11: WM TRANSIENT COUNTRIES – FROM SOCIALISTIC TO
MARKET ECONOMIES
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**Institute of Waste Management
and Circular Economy**

Introduction

Considered countries

Comparison and evaluation of different waste management systems

Conclusion

Task

Describe waste management systems in post-socialistic EU countries, "old" EU states and the post-Soviet states

Compare by indicators of waste management

Focus on time before 1990 and after 1990

Compare concerning waste collection, landfilling, recycling, composting, incinerated waste

Aim

Show how and for which reasons the post-socialist EU states and "old" EU countries developed much better than the post-Soviet states

Post- socialistic EU-states:

GDR, Poland and Estonia

Accession to the EU 1999 (GDR), 2004 (Poland, Estonia)

The laws of waste management were adopted from the EU

“Old” EU-states:

Austria, Italy and Denmark

Accession to the EU 1995 (Austria), 1958 (Italy) and 1973 (Denmark)

Post-soviet states:

Belarus, Ukraine, Russia, Moldavia, Georgia and Kazakhstan

same principles, rules and regulations like other post- soviet countries

poor data availability

No standardized laws on waste management

High presence of the informal sector

Waste management situation and the development of the waste explained

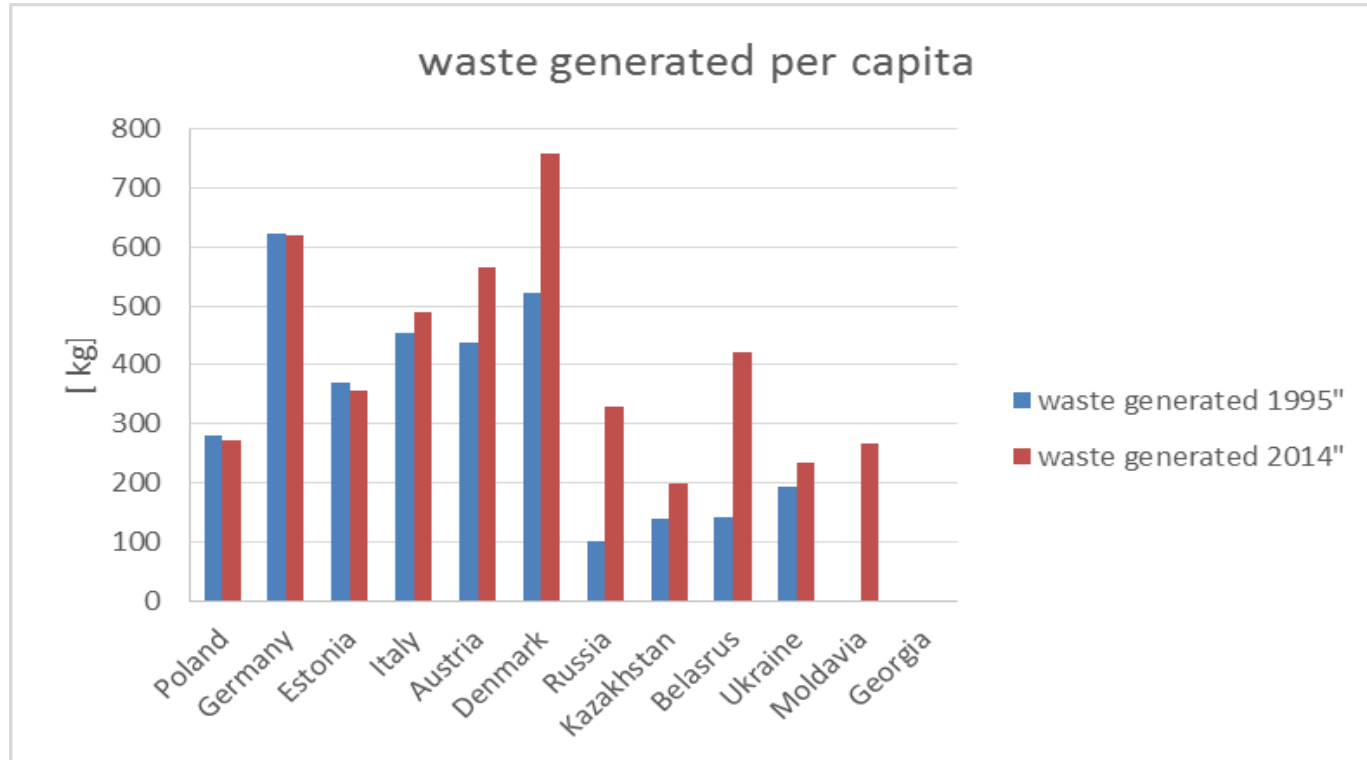
Industry has developed totally different

Municipal waste is considered to be the waste collected through waste removal systems in private households or public institutions (equal with the notion of „collection of waste“)

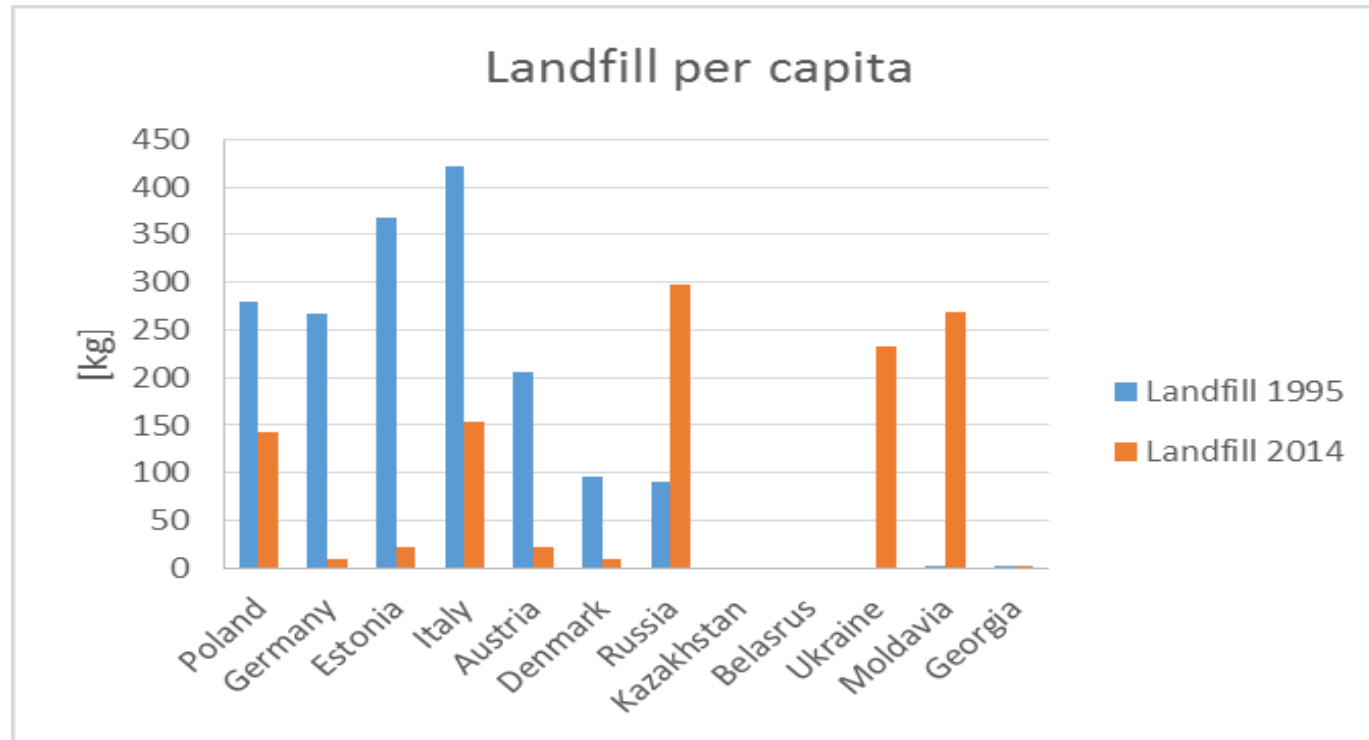
In case there is no data for waste removal systems available, the results are estimated

Informal sector is estimated to differ strongly

Considered “treatment” of waste: incineration, composting, recycling and landfilling



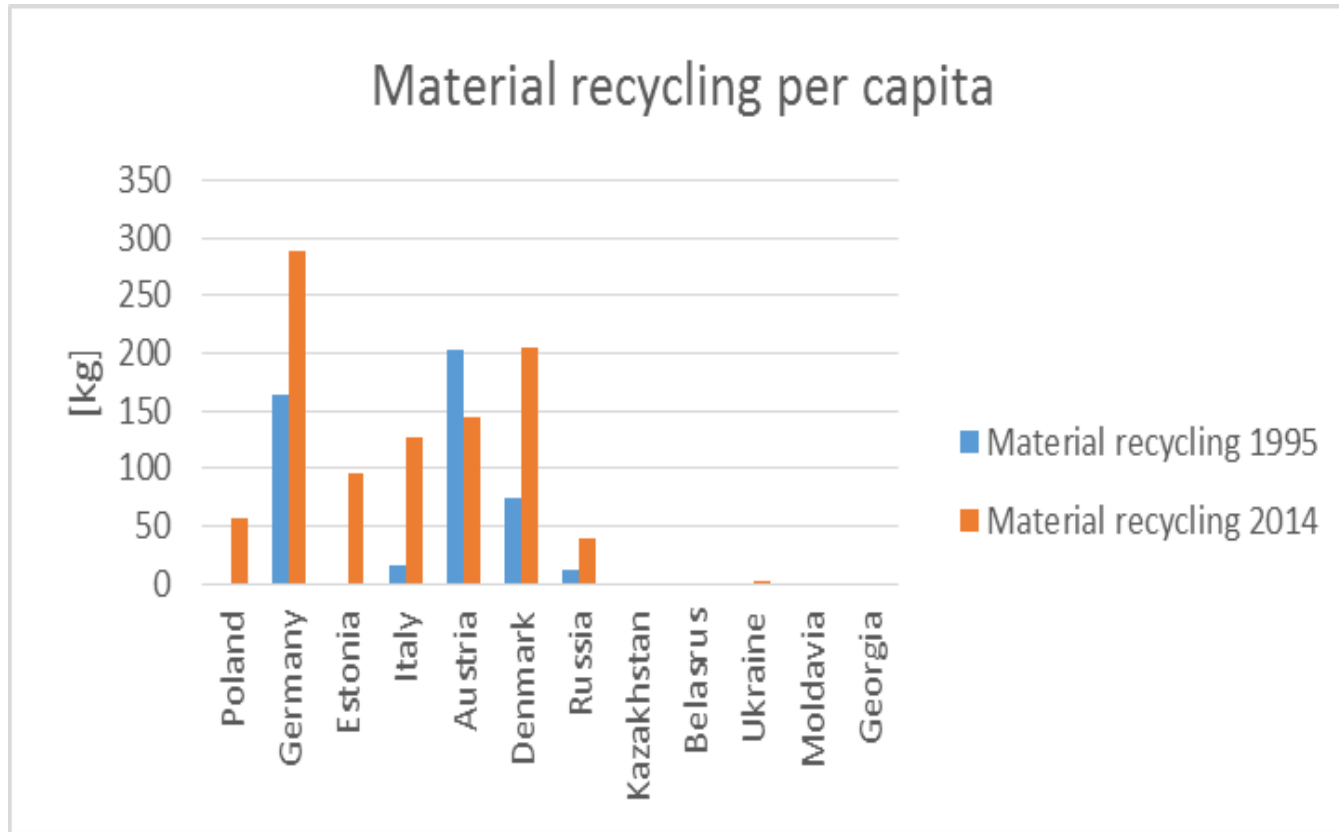
Improved living conditions of the respective populations
 Consumption behavior of people changed leads to
 rise in waste production



Changes before 1990 and after 1990

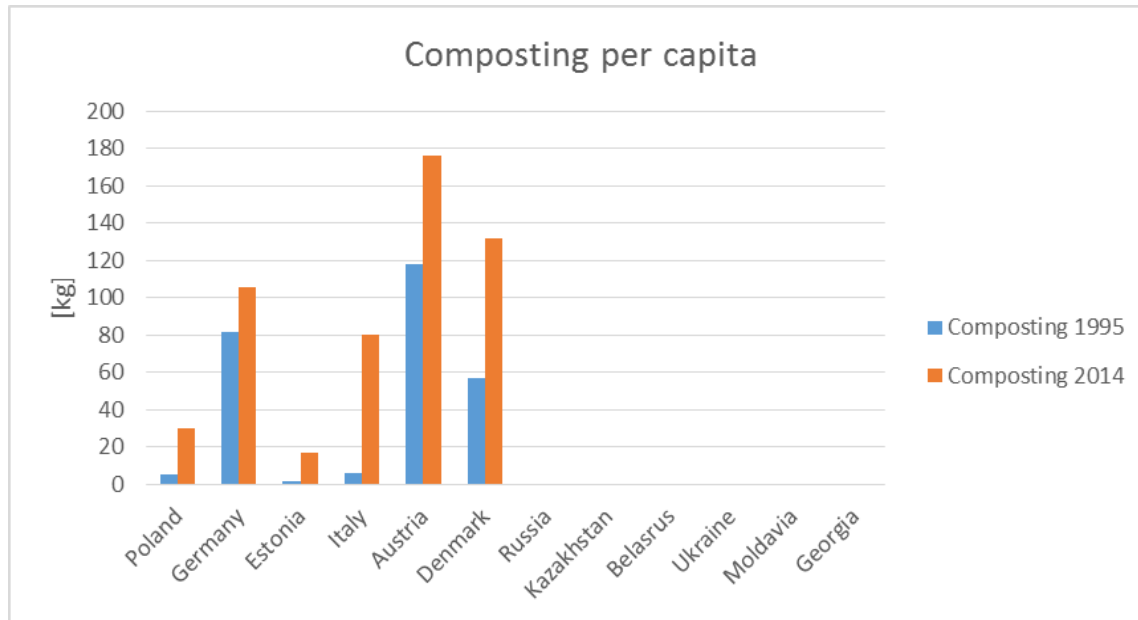
Influenced by social and financial factors and above all by the informal sector

change in post-socialist EU countries from 1995 to 2014 clearly shows that the EU's guidelines are effective



No data for Kazakhstan and Belarus

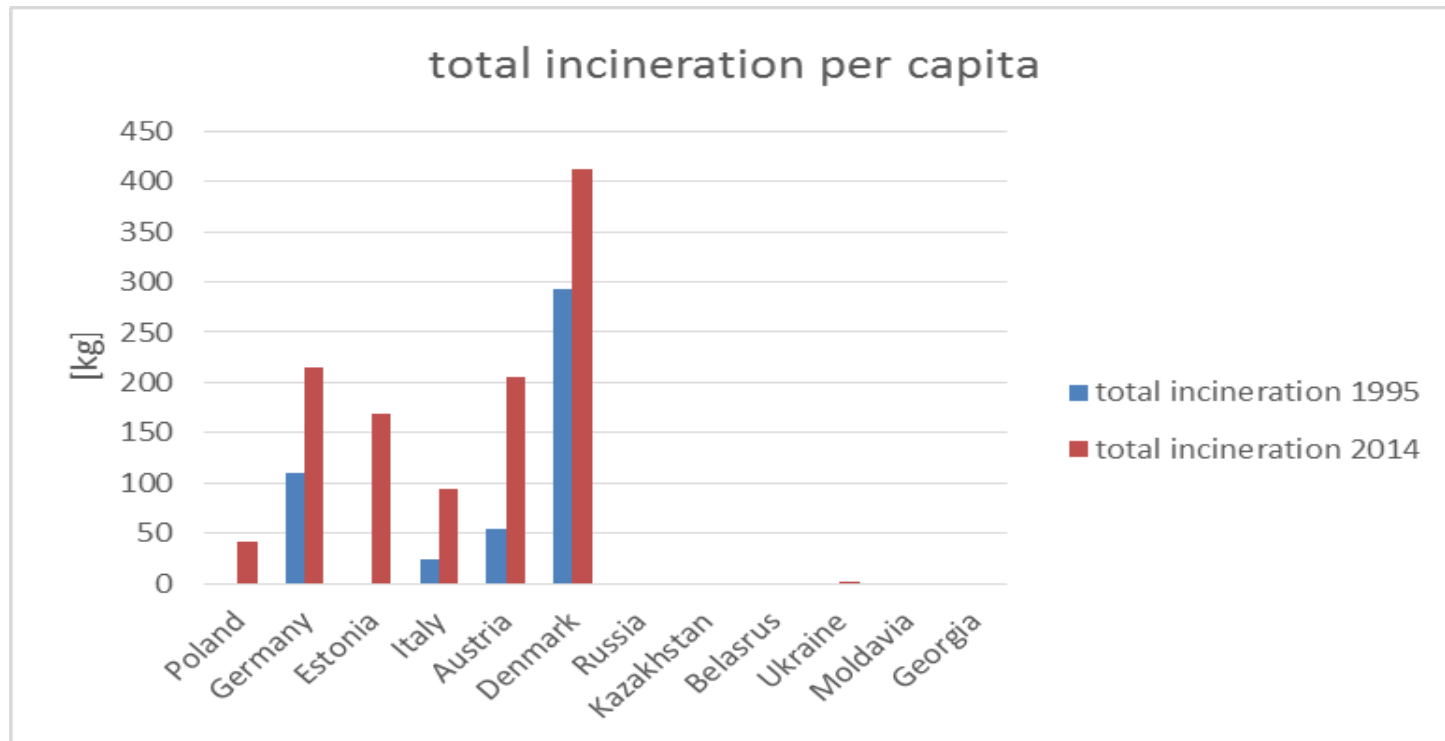
No material recycling in Ukraine, Moldavia and Georgia



Home composting not included

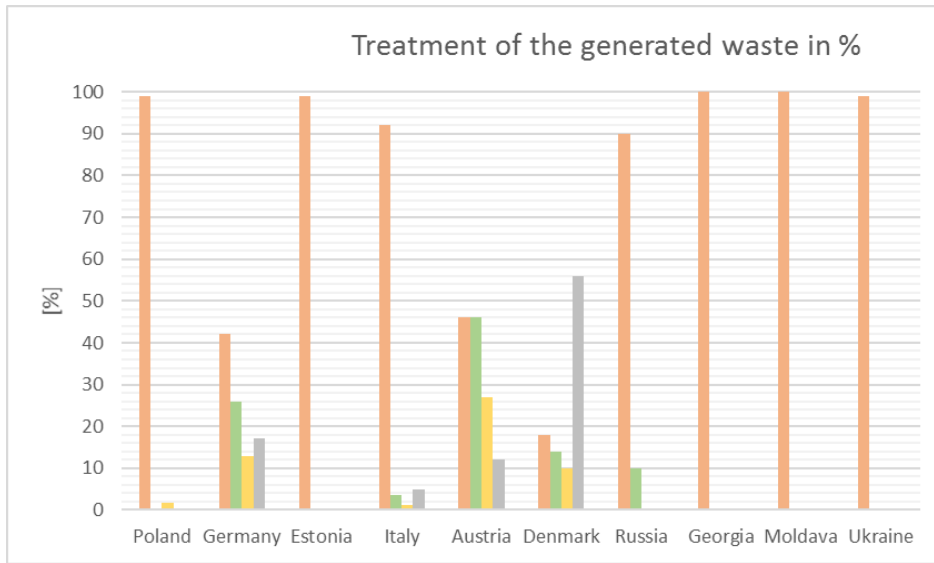
Before 1990 neither the state-of-the-art nor the capacities were sufficient in order to build composting plants or provide the required capacities

But promising system of feedingstuff collection was established in some socialistic countries (especially GDR)



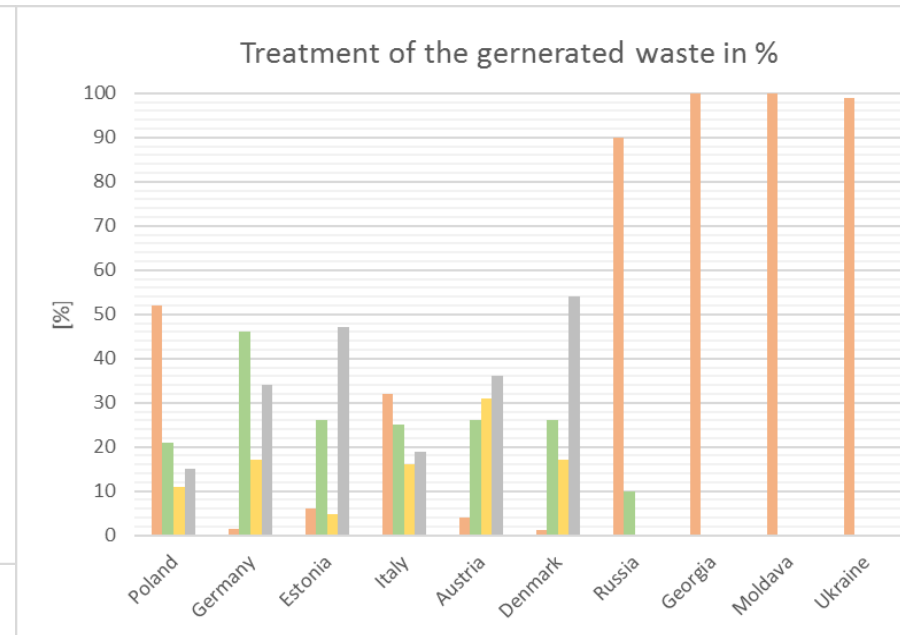
No data for Kazakhstan and Belarus
post-Soviet states – only Ukraine treated its waste with
incineration(0,06 kg per head)
In Moldavia and Georgia there is no incineration of waste until
the present day

Before 1990



- Landfilling before 1990
- Recycling before 1990
- Composting before 1990
- incineration before 1990

After 1990



- Landfilling after 1990
- Recycling after 1990
- Composting after 1990
- incineration after 1990

Reduction of landfilling in EU
 Increasing recycling in EU
 Post soviet countries start efforts

Looking at the past socialistic waste management system:

There was a quite efficient recycling system in the socialistic economy

Shortage leads to efficient usage of material streams

Lot of uncontrolled dump sites (recycling not for ecological reasons, but for economic)

WM Systems in socialistic countries broke down after collapse of „Iron Curtain“

For the Future:

Implement a **comprehensive WM Data system – DATA AVAILABILITY**

Integration of the informal sector activities in the organised WM System

Increasing waste sector → ecologic and economic chance

Waste system of the EU could be transferred to the post-Soviet states (best practice examples for post soviet EU states)

Countries with orientation to EU (GDR, former socialistic EU-States) had more possibilities to modernize their WM Systems based on the model of existing western market orientated WM-Systems



»Wissen schafft Brücken.«

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