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O fim dos monopólios na gestão de embalagens: o caso alemão - ensinamentos e dificuldades

João Miguel Vaz – ECOGESTUS Lda.

End of a Monopoly: Packaging Regulation in Germany

eco gestus

UNINOVA

CA3 Computational Intelligence Research Group

FACULDADE DE CIÊNCIAS E TECNOLOGIA UNIVERSIDADE NOVA DE LISBOA

Overview
Waste Management In Germany

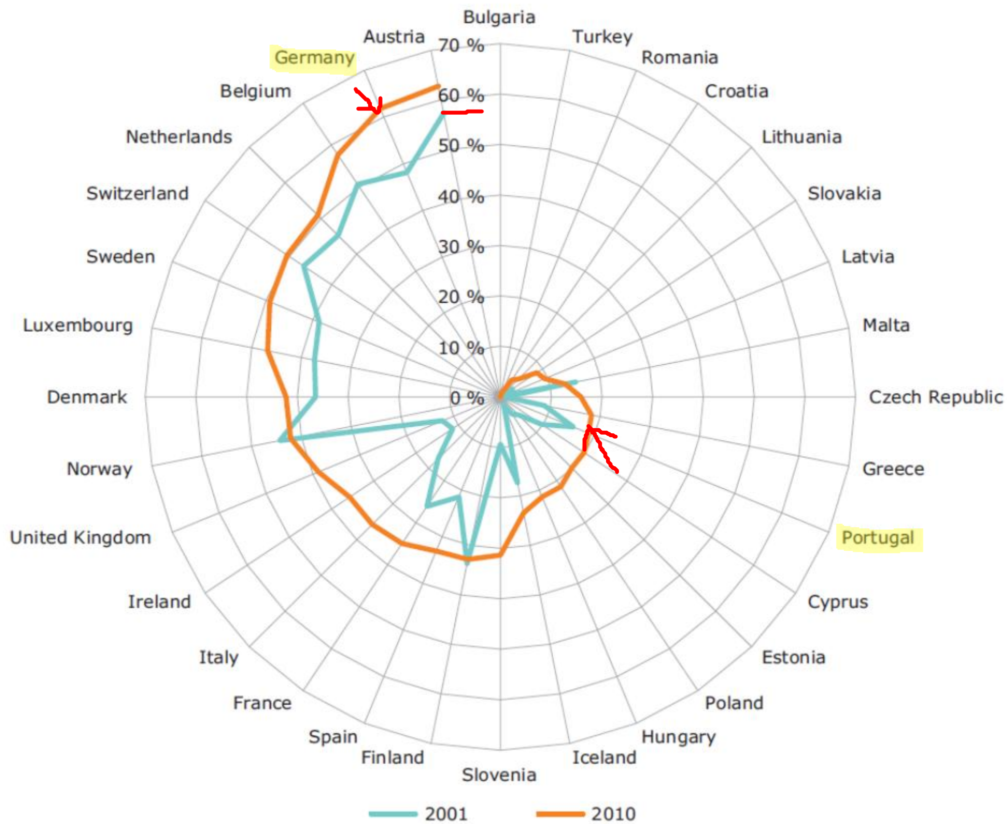
- In 2012, approx. 14% of the raw materials used by German industry came from recovered waste.
- Waste management contributes, with a share of approximately 20% to the German Kyoto targets for the reduction CO_2eq Emissions.
- Waste industry is a powerful economic sector in Germany: almost 200.000 people employed in 3.000 companies produce an annual turnover 40.000 million euro.
- Around 15.000 waste treatment facilities contribute to resource efficiency recycling and recovery procedures.
- High overall recycling rates: approx. 60% for municipal waste, 60% for commercial waste, and 90% for construction and demolition waste

Source: Waste Management Germany, BUM, 2012


More recyclables than residues in 2010
1990
Residues
87%
34 million tonnes
Bio-waste
Glass
Paper
13%
5 million tonnes
2004
Residues
42%
18 million tonnes
Biowaste
Packaging Materials
Glass
Paper
58%
25 million tonnes
2010
Residues
37%
15.9 million tonnes
Biowaste
Packaging Materials
Glass
Paper
63%
27.6 million tonnes
Source: Federal Statistical Office (Statistisches Bundesamt) 2012, own calculations

MSW Recycling Rates

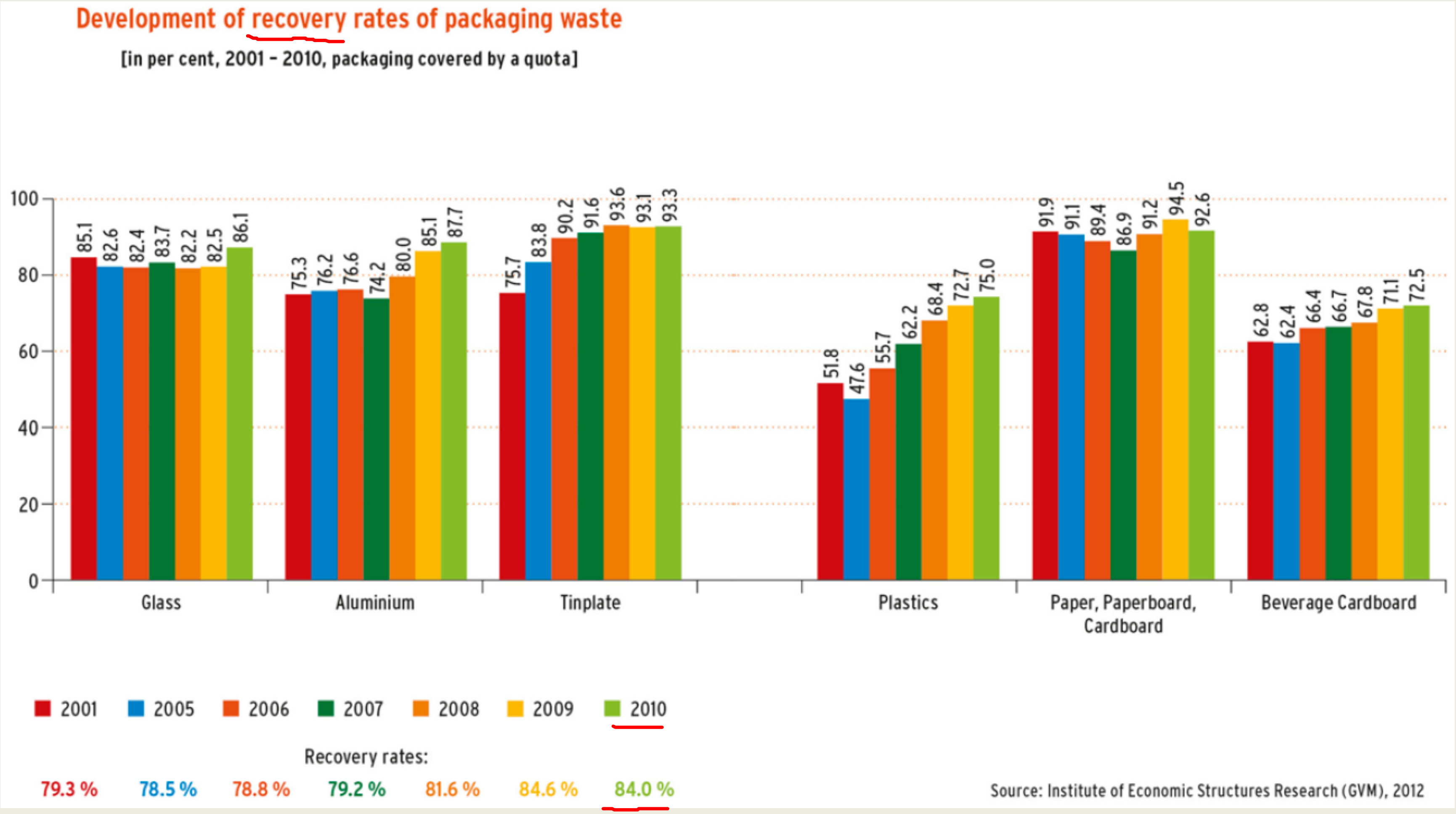
Figure 2.5 Municipal waste recycling rates in 32 European countries, 2001 and 2010



Note: The further from the centre in the radar chart, the better the waste management. The recycling rate is calculated as the percentage of municipal waste generated that is recycled. Total recycling includes material recycling as well as composting and digestion of bio-waste. According to Eurostat the comparability of the data over time is high. However, some breaks in the time series are documented, which can influence the comparability between countries and within a country. Generally, the quality of the data has improved during the period 2001–2010. For Iceland, 2008 data are used for 2010. For Slovenia, 2002 data are used for 2001 and 2009 data for 2010. Croatia is not included for 2001.

Source: Eurostat, 2012a, 2012c; ETC/SCP, 2013a, 2013b, 2013d, 2013e, 2013f.

Recovery Rates for Packaging Waste



Reusable Packaging
1999 - 2009

INSTITUTO SUPERIOR TÉCNICO
Universidade Técnica de Lisboa

European Investment Bank

Table 12 – Share of reusable packaging in drinks consumption per type of drink (%)

Type of drink	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Mineral water	84,94	80,96	74,03	68,33	72,98	67,6	60,94	52,64	46,96	45,15	43,57
Fruit juices and other non-carbonated drinks	34,75	33,62	33,16	29,24	23,96	20,62	17,11	14,02	12,99	11,46	11,17
Carbonated soft drinks	74,90	66,96	60,21	53,97	65,42	62,15	54,40	47,73	41,88	37,64	36,53
Beer	74,83	72,81	70,84	67,99	89,23	87,79	88,53	87,05	85,19	87,14	88,49
Wine	? 26,75	25,03	25,41	25,29	24,62	20,04	19,03	17,50	9,10	7,85	7,24
Weighted average for all five types of drinks	68,68	64,98	61,13	56,20	63,60	60,33	55,99	50,64	46,44	44,74	44,33

Source: adapted from GVM (2011)

Reusable Packaging in Germany 2009-2011

Quota of reusable and ecologically advantageous one-way packaging			
Year	2009	2010	2011
Beer	88.5%	88.2%	87.5%
Mineral water	43.8%	43.3%	41.9%
Soft drinks	37.4%	34.6%	32.4%
Mixed alcoholic drinks	15.7%	14.3%	12.4%
All beverages	**51.8%**	**50.1%**	**48.3%**
reusable	49.2%	48.0%	46.7%
ecologically advantageous one-way packaging (1)	2.6%	2.1%	1.6%

(1) Acc. definition VerpackV § 3 Abs. (4) Source: GVM 02/2013

- The Packaging Ordinance (VerpackV) target: 80% reusable (*Mehrweg*) and ecologically advantageous one-way packaging for drinks.
- Only the Beer sector is using more than 80% reusable packaging (glass)
- Target is **clearly missed**

Low Weight Packaging Disposal Costs Evolution: 1996 - 2007

	1996 (€/ton)	2007 (€/ton)
Collection	360[1)]	256[2)]
Sorting		150
Treatment and Recycling	610 – 820	100
Subtotal	970-1.180	506
DSD's fees	1.720	1.300[3)]
Unknown system costs, overhead	540 – 750	≤ 794

1) Value based on the LWP collection (including plastics).

2) Average value for LWP collection (including plastics): in 2007, in Bavaria, for example, about 56% of the population was served with a kerbside collection and the remainder by a bring system. For kerbside collection the costs are approximately 300 €/t for the bring system around 200 €/t.

3) According to DSD, the fees for plastic packaging were around 1.300 €/t in 2007. The average charge is certainly far less than this amount, because some licensees might have been granted with quantity or other discounts (such as discount for service packs).

DSD: Historical Overview

- *Verpackungsverordenung* (German Packaging Ordinance) approved in 1991 due to population demands, refusing Landfills and Incinerators
- After 2000 new challenges associated with Waste Packaging management:
  - Resource Efficiency
  - Climate Change
  - Market Liberalization / End of Monopoly (2005)
- The *VerpckV* is changed in 2008 and then in 2012 with the *Closed Cycle Management Act (Kreislaufwirtschaftsgesetz, KrWG)*

European Environment
Eur. Env. **10**, 152–163 (2000)

GERMAN PACKAGING WASTE MANAGEMENT: A SUCCESSFUL VOLUNTARY AGREEMENT WITH LESS SUCCESSFUL ENVIRONMENTAL EFFECTS

Eric Neumayer*

London School of Economics and Political Science, UK

Questions arise concerning the “Gruene Punkt” and DSD success ever since !

Alternative Model*

- Private Operators proposed several changes to the VerpackV (*5th Novelle*)
  - Collection should include simultaneously non-Packaging Materials (plastics, metals)
  - CO_2 Emissions should be used and work as Scorecard, pushing more friendly "climate change" Packaging into the mainstream
  - The VerpackV is not leading to more ecological friendly (recyclability) materials used as Packaging
  - Green Dot System should include all fractions (Bio and Residual waste too)
  - A Centralized Control (***Zentralstelle***) is necessary

* Source: REMONDIS, Werstoffe und Verpackungsabfaelle – ein alternatives Duales System, 2011

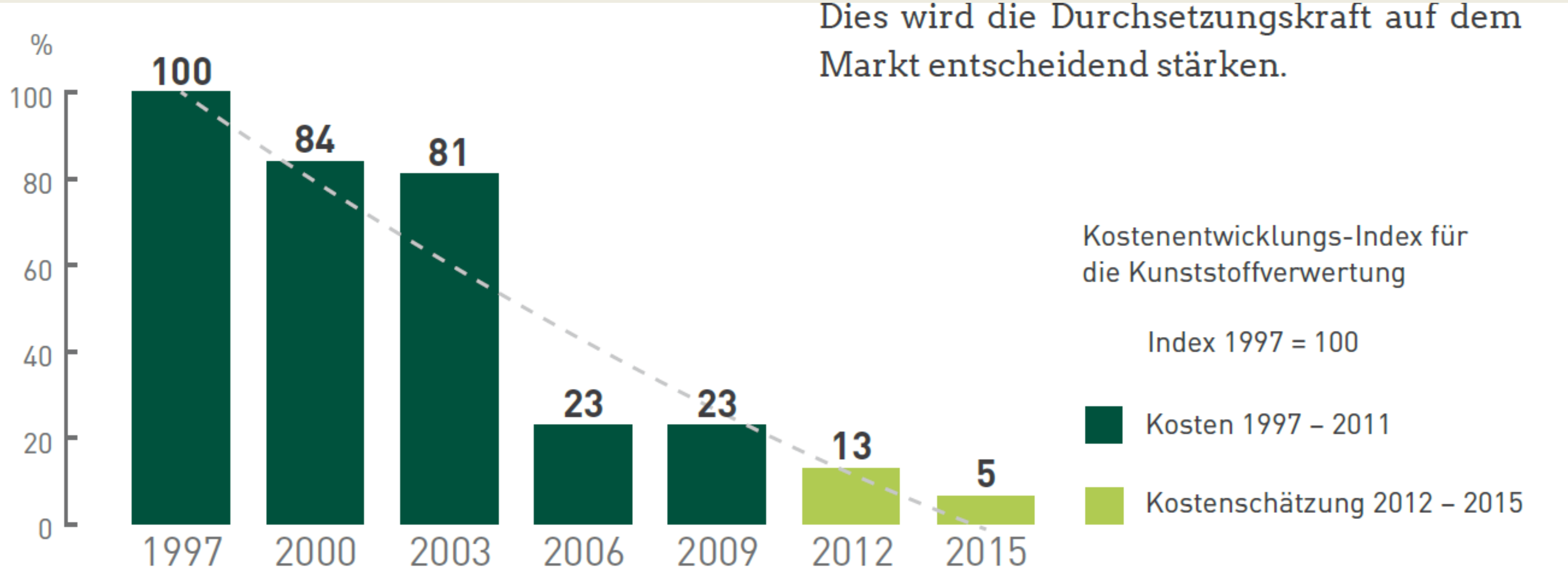
The “new” Gruene Punkt
Duales System Deutschland (DSD)

- Packaging Producers and Retailers are obliged to pay fees according to types and quantity of packaging. Internet sales are also included
- There are 11 licensed companies: e.g. Der Gruene Punkt; Landbell, Eko-Punkt; Redual; Veolia; RkD; Bellandvision; Interseroh; Zentek...
- The VerpackV obliges Packaging (B2B) producers to take back their empty package (B2B)
- Packaging made of 100% biodegradable materials are exempted from fees (§16 Abs.2 VerpackV)

Packaging Management after "Monopoly End"

- Free choice for the Packaging producers/retailers
- Retailers can organize their own system, collecting themselves the used (waste) Packaging. However, this should be an exception and not the norm.
- Collection using yellow bins and plastic bags, as before 2005
- Treatment and Recycling : 2,25 million tonnes of Low Weight Packaging (2012) of the 4,0 million collected
- Treatment Facilities: 100 units (90% is sorted in 50 Facilities)

Improved Cost Efficiency
- Plastic Packaging -



Kosteneffizienz & Innovationsstärke: Kunststoffrecycling Made in Germany – Investitionen zahlen sich aus
Quelle: DSD GmbH

Positive: after the DSD Monopoly

- New concepts to collect more Recyclable Waste have emerged since 2009: “Wertstofftonne” – dry waste in one single bin
- System optimization with more plastics being recycled, (43%, BUM), with an overall recovery of 73% (2010)
- Less costs for the Packaging Industry and Retailers: during Monopoly DSD: 2.000 million euro, now are estimated around 940 million euro yearly
- Paper/Cardboard and Glass Packaging are performing well, meeting targets and having positive Market Value.

DSD “black book” : critics

Municipalities

- The DSD supports (15% revenues) municipalities costs with LWP collection depending on contracts between the two parties. These costs include:
  - Cleaning and maintaining collection area
  - Support to campaign for source segregation
- However, the Municipalities Association (VKU) is very critical of the DSD.
  - How to sanction substandard collection by "DSD" ?
  - Why does the system costs **120 million Euro to taxpayers**, even before collecting one bag?
  - Short-term contracts (3 year) not providing enough incentives
  - Lower prices, estimated at 200 €/ton for LWP (2011) when before, 900 €/ton for LWP was common
  - Work is paid under the national average (30% lower than municipal workers)

In short, VKU states that:

"The system lacks transparency and is expensive !"

NGO Position (DUH)

Den meisten Verbrauchern ist nicht bewusst, dass sie mit dem Kauf von Produkten das System der Verpackungsentsorgung mitfinanzieren.

27.01.2014, 12:00 Uhr

Deutsche Umwelthilfe fordert ein schnelles Ende der ordnungswidrigen Verpackungsentsorgung

DUH kritisiert betrügerisch genutzte Entsorgungsmöglichkeiten durch so genannte Eigenrücknahmen und unterstützt Initiative des Bundeslandes Nordrhein-Westfalen zur Überarbeitung der Verpackungsverordnung

- **Reusable Packaging is not encouraged** and Plastic Packaging is increasing (+25% in a decade)
- Fees on Packaging Materials are too low and not leading to less plastic and more favourable materials
- **Free riders** are taking advantage
- The“Branchsolutions” i.e. Retailers/Institutions own packaging recovery (should be an exception and is the norm) **are not controlled**
- People are confused and don’t trust the system as before
- **2 million tones of packaging are missing/ not traceable**

Critics of the VerpackV 5th Amendment (2008)

1. ***Complexity*** – difficult administrative norms, hard to understand and implement
2. ***Ecologically unsound*** – packaging materials with better LifeCycleAssessment (LCA) are not encouraged, and *de facto not* used as such; only 1/3 of LWP is materially recycled
3. ***Financially*** – funding is insufficient and the system may collapse
4. ***Transparency*** – no one knows what fees are the Packaging Industry paying or what is LWP final destination; citizens and politicians can not control the system anymore

Conclusions

1. **Transparency**. Since the end of the monopoly of DSD, there is more secrecy due to "competition" and business oriented activities. The disclosure of financial information is a problem. **Controlling is very difficult** due to lack of Government instruments to trace packaging waste. Municipalities are unsure of LWP final destination, so are consumers.
2. **Germany is performing well** concerning waste packaging recovery (73%) and recycling (43%) compared to most EU countries. However, it **failed its reusable targets** and did not introduce more ecological friendly packaging materials. At the contrary plastic packaging is increasing (25%, 2003 to 2010) subverting the initial purpose of VerpackV. And 2/3 of the LWP (plastics) is being incinerated.
3. **Unlicensed (free riders) packaging has increased** in the last years, estimated at 30% of all packaging collected not paying fees. thus distorting competition.
4. Packaging waste management system is now trying **an innovative approach** with the introduction of a new recycling bin ("Werstofftonne")
5. Sorting capacity has improved as well as technological innovation, creating in Germany a **Recycling Cluster** able to export its know-how. Simultaneously, sorting facilities are accused of getting too large and driving smaller companies out of business. This is also valid to lower salary standards driven by the end of DSD Monopoly
6. **The 6.Novelle** (revision) of the VerpackV (2008) is underway and should be presented in March 2014.

Obrigado pela Vossa atenção

Resíduos, Estudos e Soluções Lda

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ECOGESTUS Lda

Rua D. Afonso IV, 23 , 2º - Buarcos
3080-328 Figueira da Foz, Portugal

Tel.: + 351 233 109 034
e-mail: contacto@ecogestus.com

www.ecogestus.com