Best practice of WEEE management in Europe

Fiene Grieger, M.A.
isw Institute for Structural Policy and Economic Development

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www.weeenmodels.eu
isw profile

• founded in 1991
• independent non-profit research institute
• head office in Halle/Saale (Saxony-Anhalt, Germany)
• office locations in Magdeburg, Berlin
• approx. 60 staff members (academic and administrative)

• application-oriented and interdisciplinary research in the fields of regional economic development, structural policy, educational and technology research
• studies, in-house publications, public relations, editorial work
• workshops, stakeholder involvement, dissemination, presentations
• network and cluster management
• funding consultancy
• scientific monitoring

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isw - broad network and close collaboration with institutions and stakeholders

- federal and state level ministries
- European Commission, Committee of the Regions
- companies, chambers, associations and trade unions
- universities, research and science institutions
- regions, municipalities, employment agencies, educational institutions
- development banks owned by the federal and state governments, and the EU
**isw references (selection, EU projects only)**

- **WEEENModels** (Sep 2013-Dec 2016): LIFE+ Project to improve logistic solutions for Waste Electric and Electronic Equipment (WEEE) to increase collection rate and recycling. Cooperation between Italy and Germany.
- **Chemlog T&T** (July 2012-Dec 2014): Central Europe Project - Promotion of intermodal transport by tracking and tracing of dangerous goods. 15 partners from 8 countries.
- **ChemClust** (Jan 2010-Dec 2012): Interreg IVC Project - Improving innovation capacity of European Chemical Clusters. 10 Partners from 7 countries.
Best practice study

- analysis of European best practice solutions for WEEE logistics
- covered countries: Germany, Sweden, Scotland
- aim: description of various approaches for WEEE logistics in a European comparison with specific focus on
  - policy framework
  - collection, transport and return systems, financing
  - best practices
Best practice study

analysis of European Best Practice Solutions for Logistics of WEEE
covered Countries: Germany, Sweden, Scotland

- completed in May 2014
- languages: German, English
- 66 pages + 14 pages comprehensive statistical appendix + 2 pages bibliography
- printed on demand, and study is also available on http://www.weeenmodels.eu/
WEEE collection rates in Europe

quantity of waste equipment collected (2010)
source: Eurostat
WEEE collection rates in Europe


www.weeenmodels.eu
WEEE directive 2012/19/EU

The purpose of this Directive is to contribute to sustainable production and consumption by, as a first priority, the prevention of WEEE and, in addition, by the re-use, recycling and other forms of recovery of such wastes so as to reduce the disposal of waste and to contribute to the efficient use of resources and the retrieval of valuable secondary raw materials.

It also seeks to improve the environmental performance of all operators involved in the life cycle of EEE, e.g. producers, distributors and consumers and, in particular, those operators directly involved in the collection and treatment of WEEE. In particular, different national applications of the ‘producer responsibility’ principle may lead to substantial disparities in the financial burden on economic operators. Having different national policies on the management of WEEE hampers the effectiveness of recycling policies. For that reason, the essential criteria should be laid down at the level of the Union and minimum standards for the treatment of WEEE should be developed.
Requirements WEEE directive 2012/19/EU

Regulations for WEEE data collection in individual categories

- first period from August 2012 – August 2018: 10 categories
- as of August 2018: data collection in six categories (except e.g. light bulbs)

Changes of collected quantities

- as of 2016 on average 45 % of the volumes launched on the market in the preceding three years are to be collected
- if this is not achieved there needs to be a gradual increase to achieve the minimum collection rate until 2019
- as of 2019 on average 65 % of the volumes launched on the market in the preceding three years are to be collected or
- 85 % of accruing WEEE quantities in a member state
Collection schemes

Pick-up systems
- linked to bulky waste
- take-back by distributors / traders
- mobile hazardous waste unit

Drop-off systems
- recycling centre
- container solutions
- return to traders

Photos: isw, HWS, Gastrikeatervinnare
Collection schemes

It is feasible and advisable to combine pick-up and drop-off systems.

Choosing the most suitable collecting scheme (or combination of different collection schemes) depends on catchment area, population density, spatial conditions, public acceptance etc.
Best Practice Halle (Saale)

Combining different collection schemes

- 3 drop-off collection centres e.g. for WEEE
- mobile hazardous waste unit
- 34 containers for small WEEE collection

✓ drop-off collection centres:
  weekly opening hours: 80 h
  (average in Germany: 60 h)

✓ In 2015 380 t large household equipment (CG 1),
  275 t refrigerators (CG 2),
  643 t IT equipment (CG 3),
  277 t small devices (CG 5), and
  3,4 t gas discharge lamps (CG 4)
were collected in 3 drop-off collection centers in Halle.
Best Practice Halle (Saale)

Combining different collection schemes

- Installing the containers did **not** lead to shifts in quantities from drop-off collection centres to containers.
- The regained resources were withdrawn from residual waste.
Best Practice Halle (Saale)

Primary treatment facility
- Public Private Partnership
- Separation and decomposition of WEEE (CG 3 and 5)

Photos: HWS
Best Practice Sweden

Gävle (Swedish municipality)
- 4,477 qm and 160,000 inhabitants
- WEEE collection via 13 collection centres and specialized trucks covering fixed routes
- WEEE share of household waste is decreasing but still to high
- developing new ideas together with the company „coop“ (used goods trader)
Best Practice Sweden

Collection containers placed in shops

- started with 28 new collection points, today >50 self-service containers established (drop-off)
- collection is priced at a fixed charge of 20 € for coop (emptying every 4-6 weeks)
- high collection rates of small WEEE and bulbs

Large-scale information campaign and targeted marketing led to very high awareness, knowledge where the containers are to be found, and how to properly use it.
More than 30 representatives from seven European countries such as Italy, Belgium, Portugal, Norway, Spain, Poland, and Germany joined the workshop. The European experts presented different aspects of WEEE collection and identified their regional best-practice solutions with regard to collection flows, community initiatives, collection and treatment centres, communication and marketing programmes and awareness raising. The Ministry of Agriculture and Environment Saxony-Anhalt kindly supported the event.
Outlook

- on-site visit in Halle (autumn 2016)
- further consultation with public waste disposal operators in Saxony-Anhalt
- continuous networking and know-how transfer
- dissemination
Thanks for your attention!

Fiene Grieger, M.A.
isw Institute for Structural Policy and Economic Development
Office Seebener Straße 22, 06114 Halle
Germany

Phone: +49 345 299 82 718
Email: grieger@isw-institut.de
LinkedIn: https://de.linkedin.com/in/fiene-grieger-m-a-316887112