Partnership for collection of WEEE 2014-2016, Denmark
General information about Denmark

- Population 5.7 mio people
- A flat landscape.
- 1/3 population live in cities > 100,000 inhabitants.
- 1/10 live in towns with less than 1,000 inhabitants.
- Area: 43,000 km².


- Municipalities have separately collected WEEE since late 1990´s ties.
- Put on market EEE 25 kg/capita
- Collection of WEEE by producer responsibility 12 kg/capita. Declining since 2009.
### TABLE 3
OVERVIEW OF MAPPED WEEE SHADOW STREAMS INCL. UNCERTAINTY INTERVAL

<table>
<thead>
<tr>
<th>Explanation of quantity</th>
<th>Estimate (tonnes)</th>
<th>Uncertainty interval (tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quantities sold:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EEE put on market companies and households*</td>
<td>151,000</td>
<td>170,000-235,000</td>
</tr>
<tr>
<td>Estimate of quantities put on market in addition to official reports</td>
<td>51,500</td>
<td></td>
</tr>
<tr>
<td><strong>Quantities collected:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Municipal collection through recycling centres and bulky waste services with to the producer responsibility scheme*</td>
<td>75,000</td>
<td></td>
</tr>
<tr>
<td>Collection of WEEE from businesses</td>
<td>17,500</td>
<td>10,000-25,000</td>
</tr>
<tr>
<td>Retail trade (end-of-life whitegoods taken back at the sale of new product)</td>
<td>15,450</td>
<td>7,900-23,000</td>
</tr>
<tr>
<td>Theft from recycling centres and bulky waste collection + sale of WEEE to unauthorized scrap dealers</td>
<td>12,500</td>
<td>5,000-20,000</td>
</tr>
<tr>
<td>Accumulation in society (larger population and higher rate of single households)**</td>
<td>8,600</td>
<td>–</td>
</tr>
<tr>
<td>Exports of used EEE</td>
<td>5,000</td>
<td>3,000-7,000</td>
</tr>
<tr>
<td>WEEE incorrectly discarded with domestic waste</td>
<td>5,000</td>
<td>1,500-16,000</td>
</tr>
<tr>
<td>Theft of small WEEE from household collection</td>
<td>3,400</td>
<td>3,400</td>
</tr>
<tr>
<td>Regional collection sites of collective schemes*</td>
<td>2,800</td>
<td>–</td>
</tr>
<tr>
<td>Incorrect sorting of WEEE in scrap metal containers at the recycling centres</td>
<td>2,000</td>
<td>1,500-2,500</td>
</tr>
<tr>
<td>Producers/importers own collection*</td>
<td>1,800</td>
<td>–</td>
</tr>
<tr>
<td>WEEE in combustible waste suitable for incineration from companies</td>
<td>1,500</td>
<td>1,500-16,000</td>
</tr>
<tr>
<td>Retail trade (take-back of EEE in shops and surplus stocks)</td>
<td>1,000</td>
<td>600-1,400</td>
</tr>
<tr>
<td>Incorrect sorting of WEEE in cable containers at the recycling centres</td>
<td>500</td>
<td>400-600</td>
</tr>
</tbody>
</table>

Notes: *Official data **In the use phase and therefore not available for collection

The 4 most important 'shadow streams' This means that more than 95 % is not thrown waste bins in households.
# STATUS OF COMPLIANCE WITH COLLECTION TARGETS

## COLLECTION TARGET
(% OF QUANTITY SOLD)

<table>
<thead>
<tr>
<th></th>
<th>EU TARGETS 2019</th>
<th>WORST CASE*</th>
<th>DPA SYSTEM 2014</th>
<th>BEST CASE**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>65%</td>
<td>39%</td>
<td>50%</td>
<td>72%</td>
</tr>
<tr>
<td>Household equipment</td>
<td>-</td>
<td>57%</td>
<td>59%</td>
<td>90%</td>
</tr>
</tbody>
</table>

* If the non-recorded quantities sold are included in the statistics (202,500 tonnes), but none of the non-recorded quantities collected are included in the statistics (78,600 tonnes).

** If the non-recorded quantities sold are included in the statistics (202,500 tonnes), and the non-recorded quantities collected are included in the statistics (78,600 tonnes).

The table shows that we seem to have enough usable data on collection from households. The new element is that the collection target covers both commercial and household WEEE.

The producer responsibility means that collection of WEEE from households has improved. In the future, Member States will be ordered to establish similar good monitoring of WEEE from companies.
MAIN CONCLUSIONS

STRUCTURAL EXPLANATIONS FOR THE ‘SHADOW STREAMS’

All mapping projects have, to varying degrees, identified barriers to increase the monitoring of collected WEEE. This can help explain the ‘shadow streams’ and why they arise.

The barriers are linked to:

• Data monitoring systems
• Control and supervision
• Organisation of producer responsibility

The barriers have formed a basis for the partnership to develop recommendations.
The partnership recommends:

**IT MUST BE EASY TO REPORT DATA**

- Establishment of one data entry for stakeholders who are to report collection of WEEE:
  - Based on the two existing data systems and developed in close dialogue with the users
  - Based on a simple and uniform set of waste codes and enable quality assurance of data.
- Develop the data system with positive experiences from other countries
- Simultaneously with developing one data entry, to carry out an information campaign aimed at treatment operators, collectors and retailers on correct reporting in the two current data systems. The campaign should be developed in dialogue with users and based on easy and easily accessible information.
GRAPHIC OVERVIEW OF RESULTS

EEE put on market

- Estimate of quantities put on market in addition to official reports
- 151,000 tonnes - EEE put on market from companies and households
- Collection target: 65% of quantities sold

Collected WEEE

- Estimate of collection, in addition to official reports or flows quantified in this survey
- 75,000 tonnes - Municipal collection through recycling centres and bulky waste services with delivery to producer responsibility scheme
- 1,800 tonnes - Producers/Importers' own collection
- 15,450 tonnes - Retail trade (end-of-life white goods taken back at the sale of "new product")
- 8,600 tonnes - Accumulation in society (larger population and higher rate of single households)"
- 5,000 tonnes - Exports of used electronics
- 2,000 tonnes - Improper sorting of WEEE in scrap metal containers at the recycling centre
- 1,000 tonnes - Retail trade (take-back of electronics in shops and surplus stock)
- 500 tonnes - Incorrect sorting of WEEE in cable containers at the recycling centre
- 1,500 tonnes - WEEE In combustible waste suitable for incineration from companies
- 3,400 tonnes - Theft of small WEEE from household collection
- 5,000 tonnes - WEEE (incorrectly discarded with domestic waste
- 12,500 tonnes - Theft from recycling centres and bulky waste collection + sale of WEEE to unauthorized scrap dealers.
- 17,500 tonnes - Collection of WEEE from businesses
- 2,800 tonnes - Regional collection sites of collective schemes
Thanks for your attention

Please contact me for the full reports and questions.

Reports can be found here: http://mst.dk/virksomhed-myndighed/affald/affaldshaandtering-strategi-aktiviteter/projektoversigt/elektronikaflald-og-shredderaflald/partnerskab-for-indsamling-af-elektronikaffald/kortlaegningsresultater/

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