Towards 3R in Hungary: a review of related initiatives already in place

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Head of Department

BAY ZOLTÁN NONPROFIT LTD. FOR APPLIED RESEARCH

Institute for Logistics and Production Engineering

This project is implemented through the CENTRAL EUROPE Programme co-financed by the ERDF.
Bay Zoltán Nonprofit Ltd. for Applied Research

Bay Zoltán
(1900-1992)

Hungarian physicist, member of the Hungarian Academy of Sciences. He is famous about his Earth-Moon experiments (1946), the photoelectron multiplier and the lightspeed definition of „meter” unit.
Formalisation of informal sector activities in collection and transboundary shipment of wastes in and to CEE
Project Info

- Duration: January 1, 2009 – December 31, 2012
- Financed through the CENTRAL EUROPE Programme & ERDF
- 7 Partners from 5 countries

Austria

Germany

Hungary

Poland

Slovakia

This project is implemented through the CENTRAL EUROPE Programme co-financed by the ERDF
State of the basic problem:
- Thousands of people go everyday to collect waste and used goods to Austria and Germany from Eastern part of Europe
- This is an illegal activity, they do not keep the environmental laws
- It causes lot of problem in Western and East part of Europe
Sopron-Klingenbach határon átkelő lomisok száma

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Lomok mennyisége évszakonként

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<td>Össz</td>
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Határforgalom megoszlása (%-ban)
(2009. augusztus 1. felmérés alapján)

- Nickelsdorf A4: 14%
- Bucsu: 10%
- Kőszeg: 9%
- Heiligenkreuz - Heiligenbrunn - Mogersdorf: 3%
- Rábafüzes: 14%
- Köszeg: 9%
- Sopron: 38%
- Kittsee: 3%
- Nickelsdorf B10: 9%
- Nickelsdorf A4: 14%

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<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
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<tr>
<td>Collections per year</td>
<td>75</td>
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<tr>
<td>Transport distance in km/trip</td>
<td>300</td>
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<td>Loading capacity in %</td>
<td>69.5</td>
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<tr>
<td>Payload of the van in kg</td>
<td>1,315</td>
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<td>Cargo bay in m³</td>
<td>9.85</td>
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<td>Collected amount per year in kg</td>
<td>68,544.38</td>
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<tr>
<td>Collected amount per year in m³</td>
<td>513.43</td>
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</table>

Composition of materials [vol-%]:
- Steel: 16%
- Plastic garden chair: 16%
- Wood (shelf): 17%
- Couch: 16%
- Bicycle: 8%
- Textiles: 6%
- Tyre: 7%
- CRT monitor: 3%
- Computer: 2%
- Refrigerator: 8%
- LCD TV: 1%
- Electric lawnmower: 8%

This project is implemented through the CENTRAL EUROPE Programme co-financed by the ERDF.
The main aim of the Transwaste:
- To try a win-win solution for this problem
- To try to formalise these people to the legal activity
ISHS (International Second-Hand Service) can be a solution - an advocacy association for used item collectors - it is established by Mr. János Kozák, who is member SC

**Aims of ISHS:**
- Interest advocacy
- Trainings
- Issuing member cards
- Keep the contact with members
- German speaker contact point
From April 2012 ISHS has started the training for the collectors:
- 24 hours course (environment, waste management, trade, transport, German)
- 3 different courses, altogether 72 people passed the exams
- ISHS give a registration for these people
How to collect?

From the houses:
• The inhabitant orders the shipment in 3 ways (flyers, telephone or e-mail)

• At the lomis arrival, the inhabitant delivers the good (operable and checked) used items to lomis. He *doesn’t leave* the goods by itself on the street.
What collect?
Formalisation of informal sector activities in collection and transboundary shipment of wastes in and to CEE

TransWaste

Transfer list

„Formular A“  +  „Etiketten B“  +  „Formular C“

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CERREC: A project for re-use

- **Aims**
  - Installing re-use centres and networks in Central Europe
  - Integrating re-use into waste management on wide scale
  - Lower environmental impacts by longer lifetime for products
  - Employment
  - Added value with local workforce

- **Duration**

- **Core outputs**
  - Study on situation of re-use in CE
  - Action plans on national/regional level
  - Handbook for re-use and repair
  - Pilots in Central Europe
  - Development of a proposed quality management system
  - Approval of re-use centres & networks
  - Transnational platform for re-use
  - Non-profit EEIG

- **Participant Countries**
  - Austria
  - Slovakia
  - Czech Republic
  - Poland
  - Germany (regions)
  - Italy (regions)
  - Hungary

This project is implemented through the CENTRAL EUROPE Programme co-financed by the ERDF.
Situation of re-use in Hungary

- No systematic approach
- Several small companies in the re-use sector
- Scavengers, waste pickers ("Lomi")
- No re-use oriented collection for bulky waste
- Import of non-domestic bulky-waste
- Low level of environmental awareness

Existing good examples

- Small-scale private retailers (sometimes including simple repair activity e.g. computer repair = change of faulty parts).
- Industry - scale prepare for re-use, organised re-use (mainly established for clothes, well-organised)
- Second-hand clothes shops
- Flea markets, exchange fairs
- On-line second-hand trades, charity shops

Source of illustration: Internet
Hungarian trial, waste stream from households

- Obsolete and outworn products
Situation of re-use in Austria – an exemplary situation

- Re-use is a „big issue”
- Several years of tradition, more *environmentally conscious*ness
- Developed re-use initiatives
- More operating companies in the re-use sector
- **Re-use oriented collection** for bulky waste – usually by social enterprises
- Preparing for re-use and repair is solved in **existing re-use centres**
- Re-use is connected to **social re-integration** (education, employment possibilities)
- Networks are still missing!

Source: CERREC, BAN
Austrian trial, waste stream from households

- Good quality products in relatively good condition
Social-Economic aspects & re-use

- High unemployment rate in eastern countries
- High need for employment possibilities for lower educated people,
- Re-used products can be popular due to numerous people with low income,
- Refurbishment can be cheaper due to the low labour cost in eastern countries
- Continuously increasing relevance of re-use

Survey regarding the consumers’ willingness to buy second-hand products in Hungary
(Source: http://www.cecedhu.hu/page/229)

Unemployment rates (2012).

Source: EUROSTAT
Hungarian Pilot Action – e-reuse Ltd.

Host of the Hungarian pilot: Fe-Group Invest PLC.

- Fe-Group Invest PLC located in Budapest
- Established in 1994 as a private company
- Dealing with the collection and treatment of:
  - Selectively collected municipal waste of Budapest
  - Packaging waste,
  - Accumulators,
  - Metals,
  - WEEE.
- Established the E-REUSE ltd. for re-use pilot action in 2013.

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website: www.ereuse.hu
Hungarian Pilot Action – e-reuse Ltd.

Starting position

- **More relevant significance of re-use related issues in legislation**
  Implementation of WFD and WEEE recast in Hungarian legislation
- **Growing need on cheap, reliable products**
  Socio-economical situation of the households in Hungary – buying second-hand items has tradition
- **Ambitious entrepreneur among the stakeholders**
  Preliminary givens:
  - Collected WEEE with significant re-use potential
  - Looking for new markets, business options
  - Former co-operation with Bay-Logi (HUN CERREC partner), intensive interactions
- **Indirect triggers:**
  - Consistent and coincident goals with CERREC aims
  - Opportunity for knowledge transfer and co-operation with hosts of best practices
  - Environmental gains by re-use
  - Awareness raising of the public

Activities covered by the PA

1. Incoming waste
2. Separation from re-use aspects
3. Repairing
4. Cleaning
5. Giving ID number and Product Sheet
6. Shock Protection Control
7. Sale of re-usable product
Hungarian Pilot Action – e-reuse Ltd.

Sources of (re-use nominated) waste (WEEE)

- **Public**: less re-use potential
- **Offices**: real potential with limitations:
  - In-firm cannibalism
  - Careless handling
  - Insufficient storage conditions
- **Commercial dealers**: take-back points with problems, i.e. insufficient storage conditions

**Perspective initial factors (2012.)**

- Generally decreasing spending power of the households
- Decreasing of retail trade by 2%
- Second-hand market increased by 11%

**Threats**

- No external financial support
- Concurrent selling methods, i.e. private, individual garage sells and Internet flea markets (VAT and fee is not paid, but missing guarantee) – It can be turned into advantage!
Hungarian Pilot Action – e-reuse Ltd.

Facts on Pilot Action

- **4 employees**: 2 for management, 2 for maintenance
- Average 220 refurbished items monthly

Results of (almost) one-year operation

- This is still a pilot period....
- Smaller amount (5%) of reusable waste (both from demand or repairability view) than expected (10%)
- First consumers are the workers of the parent company (Fe-Group Invest PLC)
- Slightly increasing trade
Thank you for your attention!

www.cerrec.eu

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