Alelyckan Re-use Park, Sweden

1. Summary

<table>
<thead>
<tr>
<th>Country/Geographical Area</th>
<th>Sweden, city of Gothenburg</th>
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</thead>
<tbody>
<tr>
<td>Level implementation</td>
<td>Local</td>
</tr>
<tr>
<td>Scale</td>
<td>Roll out</td>
</tr>
<tr>
<td>Waste fraction / Specific Waste Type</td>
<td>Household waste, bulky or other</td>
</tr>
<tr>
<td>Target Audience</td>
<td>Inhabitants of the City and surroundings, approx 1 million</td>
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<tr>
<td>Objective</td>
<td>To give the inhabitants the possibility to donate reusable material before recycling and to buy donated (sometimes repaired) goods in thrift shops located within the recycling park.</td>
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<tr>
<td>Initiator/coordinator</td>
<td>Gothenburg municipality</td>
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<tr>
<td>Other key actors involved</td>
<td>3 local Thrift shops (one municipality owned)</td>
</tr>
<tr>
<td>Duration</td>
<td>Started in 2007 and continuing</td>
</tr>
<tr>
<td>Number in PW Mapping</td>
<td>30</td>
</tr>
<tr>
<td>Name of partner(s) having contributed to factsheet &amp; date</td>
<td>Karlskrona municipality</td>
</tr>
<tr>
<td>Contacts</td>
<td><a href="mailto:kretsloppskontoret@kretslopp.goteborg.se">kretsloppskontoret@kretslopp.goteborg.se</a></td>
</tr>
</tbody>
</table>
2. Context

Sweden has changed from a system based on land filling to a system based mainly on recycling and material/energy recovery. Since 2002 it is not allowed to landfill material that can be used for combustion and since 2005 it is also forbidden to put organic waste on landfills.

The municipalities are responsible for the collection of household waste. Except for those fractions that fall under the producer responsibility where a large part of the paper, metal, glass and plastics are included. Producer responsibility is in place for packages, car tyres, paper, cars, electric and electronic products (including light bulbs), batteries, medicines, radioactive products and orphan radiation sources. The system is financed by a fee put on packages, paid by the producers (and in turn by the customers). The municipality is also responsible for collecting bulky waste.

The current system of collection has led to a rather complicated system with about 10-15 different waste fractions.

The collection of household waste is financed by a mandatory fee paid by each household to the municipality. The fee covers all collection and no part is financed by taxes. Usually the fee differs depending on how much waste is thrown away by each household, leading to a good incentive to sort out the fractions from the producer responsibility - which is already paid for when the product is purchased! In this way the household gets a lower fee by sorting, and some municipalities also have an even lower fee if you compost the organic waste yourself, thus minimising the amount collected by the municipality.

The focus in Sweden has been much on recycling, and not so much on prevention, but lately the focus has shifted and many initiatives, as for instance this re-use park, has started. The new National Waste Management Plan (2012) also puts a major focus on prevention.

Gothenburg (Swedish: Göteborg) is the second-largest city in Sweden (after Stockholm) and the fifth-largest in the Nordic countries. Situated on the west coast of Sweden, the city proper has a population of 515,129, with 510,491 in the urban area and total of 928,629 inhabitants in the metropolitan area.

Gothenburg has five recycling stations in addition to the recycling park where people can leave their bulky waste. In those other stations no collection for re-use takes place.
3. Strategy

Objectives

To give the inhabitants the possibility to donate reusable material before recycling, and to buy donated (sometimes repaired) goods in thrift shops located within the recycling park.

Preconditions

In 1998 the Recycling Committee (Kretsloppsnämnden) was established in the City with responsibility (among other things) to make the waste treatment sustainable. One of the projects that the Committee started was the Alelyckan Re-use Park (Kretsloppsparken Alelyckan). The planning for the park started in 2003.

Procedure

First all visitors pass by the three specialised (building material, second hand and repaired goods) shops within the area, after that they enter the re-use station under roof, with three lanes for cars. There they are asked if they have something to donate to second-hand sales. Products that are in good condition could then be sold for re-use in the thrift shops located at the entrance. The rest is sorted into different waste fractions for materials recycling or energy recovery.

Instruments

The park is owned by the municipality, and the thrift shops pay rent for their use.
4. Resources

Financial Resources

The initial cost to build the Centre was about 4 million Euros, and it has about 10 employees. To that come the workers in the attached charities. It is difficult to estimate as the charity organisations rely heavily on voluntary work, and many of those employed are jobless persons in job training funded by the government. Also waste collection in Sweden is based on fees, and not tax money making it very difficult to estimate a total cost.

Human Resources

About 10 employed and many voluntary and jobless people in training.

Communication Tools

During the start-up phase quite a lot of advertising took place, but now the park is mainly promoted by the homepage for Gothenburg city. The dedicated homepage for the park has been closed down.

Allocation of resources over time

After the initial investment the use of resources are fairly stable.
5. Evaluation

Results

- **Participation**
The target audience is all people living within the Gothenburg area.

- **Avoided waste quantities (or toxicity)**
The Swedish Environmental Institute (IVL) has evaluated the centre in 2010 and these are the results:

Total inflow to the park was 6,430 tonnes. The re-used amount was 358 tonnes, meaning that more than 5% of material that otherwise would have been thrown away were re-used.

<table>
<thead>
<tr>
<th>Total inflow of products and waste</th>
<th>Recycling park [tonnes/year]</th>
<th>Conventional recycling center [tonnes/year]</th>
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</thead>
<tbody>
<tr>
<td>Of which:</td>
<td></td>
<td></td>
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<tr>
<td>Re-use of products</td>
<td>358</td>
<td>52</td>
</tr>
<tr>
<td>Material recovery</td>
<td>84</td>
<td>135</td>
</tr>
<tr>
<td>Incineration with energy recovery</td>
<td>48</td>
<td>235</td>
</tr>
<tr>
<td>Recovered for landfill construction</td>
<td>4</td>
<td>72</td>
</tr>
</tbody>
</table>

This means that 70% of the donated products were re-used.

- **Other results**
The net benefit for the environment comes from the re-used goods replacing new goods made from virgin materials, and only to a much smaller part the lesser need for waste treatment.

Impacts

- **Avoided Costs**
Some treatment costs could be avoided, but not very significant.

- **Avoided CO₂ equivalents**
The results show that 358 tonnes of waste are prevented annually and instead sold for re-use in the recycling park. The waste prevention activities are estimated to give an annual net reduction of some 1.3 ktonne of carbon-dioxide equivalents and 9700 MWh compared to a conventional recycling center.

- **Social Benefits**
The charity with the second hand shop is the City Mission, and the income from the shop goes to help people needing support because of drug abuse, illness or other problems. The park also is used as a training for unemployed people to get back into the labour market.
Continuation over time

Ongoing.

Difficulties encountered

One problem is that people unaware of the possibilities to give away useful goods before recycling has often packed their cars in a way making it difficult to recover the material. The park is still rather unknown, and about 18% of the inhabitants frequent it.

Monitoring System

As told earlier the site was very thoroughly evaluated in 2010 by the Swedish Environment Institute (IVL). Apart from that all collected goods are weighed.

The indicators recommended by the report from IVL is:

1. Share of prevented weighed amount compared to the total (in this case 358/6430 = 5.56%)
2. Share of prevented weighed amount to the whole region (in this case 358/216833 = 0.165%)
3. Avoided CO2 equivalents compared to regular recycling (1300 tonnes)
4. Energy saving compared to regular recycling (5100 MWh)
6. Lesson learnt & recommendations

Opportunities & Challenges

One improvement could be that visitors were asked to pack their cars more wise so that things they were planning to give away came on top, and not under the material to be left for recycling later in the process.

The number of visitors needs to go up. The park is still rather unknown by the inhabitants, despite much press and advertising.

30% of the goods handed in are disposed of as waste because they do not work properly, half directly in the sorting station and half in the shops. If more resources to repair goods existed, more probably could be salvaged.

Similar elsewhere

Marche Region: Reuse Center L’Alligatore, Italy

The activity take place in the separately collected fractions Center of Serra de’ Conti (AN), where each citizen can go and leave or collect reusable goods.

Before the activation of the Center, only a part of the objects was reused, and the rest was destined to disposal. Today, in the center, called “L’Alligatore”, managed by the Municipality, also thanks to the help of some volunteers (pensioners, etc. ..), the majority of the objects, after a reuse compatibility examination, are “REUSED”, accounts for more than 2% of total waste generated. The trend is in constant growth.

The main objective is reducing the waste production, avoiding that goods of all typology, still in good state (or however usable), are destined to disposal.