

The Swedish system for packaging waste – recycling results and consumer aspects

Presentation by Johan Jareman, the Swedish Consumer Agency, at seminar on packaging waste from households in Reykjavik 14. November 2005

The organisation and system(s) in Sweden

In Sweden the municipalities are responsible for the collection of waste from households. For a number of waste categories Sweden has in recent years introduced “producer responsibility” in the legal system. This means that for packaging waste, waste paper, electric/electronic waste and a number of other categories, the producers are responsible for collection and recycling of such waste. For packaging waste the producers have organised a system with container stations (ÅVS, short for “återvinningsstation”) to provide collection from households. Waste paper for recycling is normally located together with packaging materials.

It is possible but voluntary for landlords to arrange collection in neighbourhoods, and they can buy such service from entrepreneurs. Especially many municipal housing companies have arranged such service in their areas, and around 80-90 % of 725 000 apartments in a survey have access to separation of all packaging materials and paper recycling within 200 m¹. A few municipalities arrange pavement collection for all private houses. They use a system with containers separated in several compartments for different waste categories. An evaluation from Lund², where 857 households in detached houses has had this system since 2000, shows that 97 % were satisfied with this service and wanted to keep it. The result has been increased amounts of sorted packaging waste, and decreased amounts of household waste. Lund now offers this system to all homeowners. A few municipalities use a system with separation in plastic bags of different colours, and collection in one container. However, packaging waste is not included in those systems, but such examples exist in Norway.

The Swedish Consumer Agency has no formal role regarding waste management in Sweden, but a general task to work for a development that gives consumers good conditions to act environmentally. We are involved in policy making, but do not have much resources to put on this kind of work.

Recycling results

Unfortunately it is difficult to find data that show to what degree Swedish consumers separate their waste. Official statistics does not specify households from other sources of separated waste (eg. restaurants, shops, etc.). Surveys where consumers have been asked how they separate their waste often have other aspects in focus, so it is difficult to find out how much they estimate that they separate.

In a survey 2003 by the Swedish Consumer Agency, consumers were asked if and how much they separate waste.

¹ Survey by SABO (the Swedish Association of Municipal Housing Companies) among their members, 2003.

² “Lyft på locket”, report from the Municipality of Lund, 2002

	State that they separateⁱ	Official statisticsⁱⁱ
Glass (packaging)	95 %	96 %
Paper (packaging)	91 %	71 %
Metal (packaging)	92 %	65 %
Plastic (packaging)	90 %	69 %
Paper (newspapers etc.)	96 %	80 %
WEEE (electric/electronic)	87 %	-

ⁱ Not necessarily 100 % of the specific waste category is separated.

ⁱⁱ Collected and recycled (including energy recovery), but not only from households.

Swedish consumers – their situation and opinions

Time spent for recycling activities

There has been some debate in Sweden on the issue of the time needed for the consumers to handle packaging waste for recycling.

Studies³ indicate that the time spent for cleaning and sorting the waste in the households is around 20-30 minutes per week, and for transportation around 20 minutes.

The professional debate has focused on how to estimate an economic value for this time. Such estimates have been used in arguments on whether or not this kind of recycling gives a positive value for the society.

Costs for the consumers

The packaging fees that finance the collection and recycling (around 50 million €yearly) are commonly estimated to be transferred to the consumers in the form of increased costs for the packaged products. There has been some professional debate on the issue if this sum is multiplied in the distribution chain or not.

The Swedish EPA estimate the cost for consumers to around 15 €per household a year for the ÅVS collection system. For a collection near the household the cost is estimated to increase with 50-100 €per household⁴. However, in the municipality of Helsingborg, curb side collection of packaging waste is not more expensive than ordinary collection.

Studies⁵ show that around 50 % mainly use the car to transport packaging waste to the collection site. A significant number of visits (according to one study⁶ around 20 %, according to another⁷ > 50 %) are made only to leave the waste (not combined with other purposes). It is important to monitor such transport behaviour, since the environmental benefit of recycling can be outweighed by the extra environmental load from car transports.

³ Survey in four Swedish municipalities. SHARP research programme, 2004.

The Swedish Consumer Agency, 1997.

⁴ Public enquiry "Resurs i retur", 2002 (pp 125-126)

⁵ The Swedish Consumer Agency, 2003. Förpackningsinsamlingen, 2000.

⁶ Förpackningsinsamlingen, 2000.

⁷ Berglund. C in Formas, 2004

Importance of and motives for waste recycling

Different studies⁸ have looked at the questions of what motivates the consumers to engage in handling packaging waste, and how important do they think it is. Some of the answers:

- Consumers feel that they should act as they think others should
- Consumers want to see themselves as responsible citizens
- Seeing others (for example neighbours) sort their waste is important

Sorting waste is considered as an important measure for the households. It was given rating 4,0 on a scale from 1-5 (5 as most important), and 73 % stated that it is an important measure. As a comparison was “buying environmentally labelled products” given rating 3,4 and 45 % stated that it was an important measure⁹.

Regarding consumer motivation, one important issue is if there is a common view in society that it is environmentally beneficial to sort and recycle packaging waste. There has been a lot of public debate in Sweden on this issue. Media coverage of experts saying that household separation of waste is environmentally meaningless can probably undermine the credibility of such systems. Such statements has however been met with several experts saying that recycling is beneficial.

Accessibility of collection systems for packaging waste

Two different surveys give results on how accessible consumers find the collection systems.

The Swedish Consumer Agency, 2003

72 % of the households can separate all packaging materials at the same site. Those who have different sites mainly live in block of flats, where collection of for example newspapers and glass packaging is offered in the neighbourhood, but for other packaging materials the inhabitants must visit an ÅVS.

Distance to collection site
< 250 m around 40 %
< 500 m 50-60 %

9-17 % (depending on kind of material) find it troublesome or very troublesome to return their packaging waste to recycling. 43-52 % find it very easy.

FPI (the producers' organisation for information matters, etc.), 2000

Distance to ÅVS
< 100 m 18 %
< 300 m 38 %
< 600 m 62 %

There is a trend to develop more small-scale collection in neighbourhoods. There is an official agreement from 2004 among actors that this is a desirable development. Results from municipalities that have that kind of service also show that the households want it.

⁸ Survey in four Swedish municipalities. SHARP research programme, 2004. Lindén, 2004 (pp 156-159)

⁹ Lindén, 2004 (p 50)

Order at container parks (ÅVS)

This topic has been debated for many years in Sweden. Container parks have often been poorly cleaned, and responsibilities have been unclear. Containers have not been emptied often enough, so consumers have arrived with their waste and been forced to either take the waste home again, search for another ÅVS, or probably most common: have left their waste beside the container.

This problem was recognised in a public enquiry 2001¹⁰, when the actors responsible for the ÅVS system committed themselves to a programme for improvements.

Some results from consumer surveys made by FPI:

How often is the ÅVS littered? *Transparency with data from 1999, 2002 and 2003*

How often are containers full? *Transparency with data from 1999 and 2002*

Information

One aspect that the Swedish Consumer Agency has highlighted is that it is confusing for consumers that the collection system is only meant for packaging waste. For many consumers it seems more logical that the collection includes all household waste of the specific material. The result is that many other kinds of for example plastic and metal waste is left in the collection. It is an information problem to explain that the system is only meant for packaging waste.

The Swedish Consumer Agency has argued that packaging on consumer products should be marked with a text saying how to sort it in the waste separation.

The legal system places the key role for information on the municipalities, but the producers are also supposed to work with information.

The Swedish Association of Waste Management has published a compilation of good practice in the field of waste information from municipalities.

Main challenges now and in the future

The Swedish National Waste Plan (2005) states:

Decreased landfilling and increased recycling has to a great extent been achieved through efforts by the households in the form of waste separation. Public faith in the system is crucial to maintain the progress that has been achieved. It should be simple to separate household waste correctly (in the way the systems are designed for). The division of responsibility between producers and municipalities ought not to be changed, but the cooperation ought to be developed. It will be important to monitor the cooperation between producers and municipalities, and the level of service to households.

The Swedish Consumer Agency has the overall view that from the consumers' perspective it is important that the collection sites are easy accessible and well maintained, that information makes it easy to sort and leave the packaging waste correctly, and that the waste management

¹⁰ Public enquiry "Resurs i retur", 2002 (pp 125-126)

is not unnecessarily expensive. The agency is currently developing a policy for consumer waste management, and this will probably be finalised in the beginning of 2006.

Conclusions

What have we learned in Sweden?

- It is possible to achieve fairly high collection results with producer responsibility and container systems. Systems with curbside collection for residential districts and neighbourhood collection in areas with blocks of flats give even higher results, but to higher cost.
- Producers and municipalities tend to have difficulties to agree on how the systems should be designed, and can have problems to cooperate.
- It is important to define responsibilities to avoid poorly maintained collection sites.
- The system(s) need to be easy to understand and to use for the consumers.
- A common view on pros and cons of the introduced system is important to give quick and united response to criticism.
- Collection results and surveys of consumer opinions show that Swedish consumers generally are engaged in the waste recycling and think that it is important.
- With a more accessible and well maintained collection system and better information the Swedish Consumer Agency believes that the commitment of the consumers can get even stronger, collection results even better, and in the end result in better environmental quality.