

## CONSTRUCTION WASTE AND ITS RECYCLING

Aadu Võsu  
Ragn Sells Eesti Ltd.  
Estonia

Estonian economy has developed rapidly during last years. It applies also in building and construction industry. Table 1 gives a survey of investments made by Estonian building companies during the last five years.

Table 1: Investments in construction (1992-1996, million crowns) (1)

year	1994	1992	1995	1993	1996
investment	1109	3931	1906	5664	3097

As a result of economical growth the volume of different types of waste in Tallinn and in whole Estonia has changed dramatically as well. A recent extensive developments in building and reconstruction indicated the massive quantities of refuse generated by building and construction industry.

By estimations about 45% of all waste going to landfill arises from construction and that approximately 75% of this construction waste has the potential to be reused as fill or aggregate.

Waste collecting and transporting company "Ragn Sells Eesti Ltd" Tallinn department collecting an average 4000 m<sup>3</sup> or 6400 t (volume weight 1,6 kg/m<sup>3</sup>) of construction waste monthly.

From January to March 1996 has been experimentally separated approximately 2 300 m<sup>3</sup> (wich corresponds 3 680 t) of construction waste. All waste has been collected from different regions of Tallinn. The first selection was made by collecting vehicle driver. For manual and partly mechanical separation was transported only containers which consisted of different recyclable materials like wood, metal, concrete, cardboard, glass ect.

The results of separation are presented in table 2.

Table 2: The results of separation

Recycled material	Wood	Metal	Waste paper	Filler	Glass	Land filled
Tonnes	107	24	3	1886	2	1794
%	2	<1	<1	51	<1	47

The key to successful recycling is meeting the needs of the market. But Estonian market for recyclable materials is at the moment very poor. No apparent problems with steel, black and colored metal and whitepaper, but more difficult to find users for wastewood as well for filler.

Taxation seems to be as one means of encouraging a better use of recycling building materials most of which (generated in 1995 198 024 t) (2) goes to land-fill at present.

## REFERENCES

1. Estonian Building Market 1997 . Handbook, Tallinn ,edited by Ü.Siinmaa
2. Estonian Environment 1995. Yearbook, Ministry of the Environment of Estonia, 1996 Tallinn