

WWW White goods in Vienna

Waste Reduction by means of reusable transport packaging (rtp)
of large household appliances (white goods).

Motivation and Objectives

Waste from disposable transport packaging contributes substantially to the packaging waste volume generated in the city of Vienna. The transport packaging of large household appliances is the source of a considerable share of this packing waste and the starting point of this study.

The objective of this study is to determine the feasibility of reusable transport packaging systems (rtp) in the white goods sector and its effect on the waste prevention program of the city. Two key issues are analyzed and documented

- The amount of waste that can be reduced by the use of rtp in the white goods
- The effective and efficient design of rtp-systems to exploit the full range of their waste prevention potential

Results of the study

- **The waste prevention potential arising from the replacement of disposable transport packaging by rtp is approx. 1.100 t p.a.** In addition, modifications in the design of the appliances could more than double those savings.
- **Rtp can prevent transport damages:** Assuming that today, 2 % of appliances are damaged during transport, rtp will result in a waste prevention of approx. 6.900 appliances annually.
- **Rtp can reduce waste in the re-distribution of used appliances:** With a rtp system, used appliances can be redistributed in the rtp packaging. This has a great impact on a possible reuse of the appliances or their parts. In addition, emissions of hazardous substances (particularly from refrigerators) can be prevented.
- **Transferability:** measurable costs and advantages from using a well managed rtp-system will facilitate the adoption of similar rtp systems by other industries.
- Many services of a rtp-systems are already performed by various economic actors in Vienna. Additional services will have to be offered by a system operator.

Conclusions

The study has shown that rtp-systems can prevent waste in all phases of transport. The study further points out that the maximum waste prevention will occur when all actors along the supply chain cooperate to find the most sustainable solutions for their transport activities. Therefore a pilot-project is recommended to test the feasibility of a rtp-system for white goods in the City of Vienna.

Several issues shall be considered in the development of pilot-projects

- packaging (labelling, meeting the requirements of WEEE etc.)
- re-distribution of waste appliances (take back)
- structure of adequate take-back points
- complete and traceable information flows
- extent of prevention of transport damages
- cost reduction potential and the like

and identify incentives for the realization of a rtp-system for the whole white goods industry.