

# Collection, Sorting and Recycling of Aluminium Packaging makes a lot of sense!





Aluminium packaging fits every desired recycling and processing route. The amount of aluminium packaging effectively recycled greatly depends upon individual national requirements and the efficiency of the collection schemes, therefore rates vary from 30 to 80% or more across Europe. However, in nearly all cases the value of the collected scrap covers most if not all of the related recycling costs. Collection centres obtain a better quality of the sorted aluminium fraction and thus higher revenues through the application of latest sorting techniques.

Recycling of used aluminium saves up to 95% energy. This corresponds with a saving of over 9kg of greenhouse gases per kg of aluminium produced.

Recycled aluminium cans are used again for the production of new cans or for the production of other valuable aluminium products such as engine blocks, building facades or bicycles. The latter also applies to other aluminium rigid and semi-rigid packaging such as aerosol cans, food cans, menu trays, cups, tubes, capsules and closures. In Europe about 50% of all semi-fabricated aluminium used for the production of new beverage cans and other aluminium packaging products comes from recycled aluminium.

Most European countries have nationwide metal and / or aluminium packaging recycling schemes in place. This is also true for an increasing number of Central & Eastern European countries. These schemes can be grouped into three main routes:

1. Separate collection of used beverage cans, either in designated deposit systems (Nordic countries, Germany), voluntary take back systems (Central & Eastern European countries, Turkey) or incentive based projects (UK, Ireland, France, Greece,

others) such as charity events. Moreover aluminium cans and trays are included in separate collection schemes in the UK and Switzerland; the latter covers tubes and capsules as well.

2. Multi-material packaging collection systems, where aluminium containing packaging is part of the "light packaging flow" containing plastics, tinplate, beverage cartons and sometimes paper packaging, newspapers and magazines. Here, aluminium is separated during the final step of sorting at the plant (e.g. Italy, Spain, Germany, Portugal, France, Belgium, Austria).

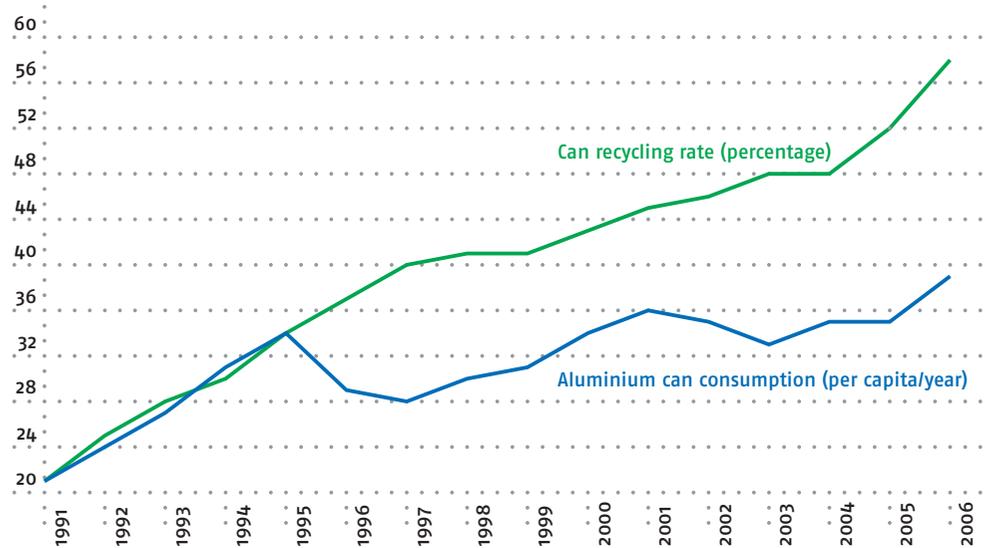
3. Extraction from the bottom ashes of municipal solid waste incinerators as aluminium nodules (Netherlands, Germany, France, Belgium and Denmark, in particular).



In many European countries municipal solid waste (MSW) is entirely or partly incinerated, any thin gauge aluminium foil contained in the MSW might be oxidised and delivers energy while thicker gauges can be easily extracted from the bottom ash for recycling purposes.

In line with national requirements (e.g. Germany), aluminium can be extracted from laminates by pyrolysis and thermal plasma techniques.

In order to further improve the quality of the highly valuable aluminium fraction within mixed packaging collection systems, the aluminium industry, together with the equipment manufacturers, has focused its efforts on developing various aluminium sorting techniques. Eddy current machines and detection-ejection systems are implemented to extract aluminium from mixed materials flows as well as from incinerator bottom ashes where it is highly diluted.



Aluminium Beverage Can Usage and Recycling Rates in Western Europe 1991–2006

For used beverage cans alone the collection rates are as high as 80 to 93% in some European countries (Benelux, Scandinavian countries and Switzerland). The mean collection rate of aluminium beverage cans in Western Europe, which has been monitored since 1991, has almost tripled from 21% in 1991 to 57.7% in 2006.

With a considerable amount of extra recycling in addition to official recovery activities, it can be safely assumed that 7 out of 10 cans are collected and recycled.

# European network of aluminium packaging recovery and recycling initiatives



The EAA Packaging Group and its member companies have established together with their partners a number of aluminium packaging promotion and recycling initiatives throughout Europe. In some countries we work closely together with existing schemes (green dot, deposits, etc.) and provide additional help and assistance to further increase the aluminium packaging recycling results. In other countries we have teamed up with partner industries such as the canmakers, the drinks & food producers and other interest groups like green and consumer groups and local authorities. Together we develop specific activities aimed at raising the awareness among the public at large that collection and recycling of aluminium packaging makes a lot of sense.

## European Contact:

European Aluminium Association (EAA)  
Packaging Group  
Mr. Maarten G. Labberton  
labberton@eaa.be  
www.aluminium.org

## National contacts

### Austria

Alurec / ARA  
www.alurec.at  
www.ara.at  
Pro-Alu-Pack

### Belgium

Stalupack  
johan.goethals@jango.be  
Fost-Plus  
www.fostplus.be

### Denmark

Aluminium Danmark  
www.alu.dk  
Dansk Retursystem AS  
www.danskretursystem.dk

### Estonia

Eesti Pandipakend LLC  
www.eestipandipakend.ee

### Finland

PALPA  
www.palpa.fi  
MEPAK  
www.mepak.fi

### France

France Aluminium Recyclage  
(FAR)  
www.france-alu-  
recyclage.com  
La Boite Boisson GIE  
www.bcmelaboiteboisson.com

### Germany

DAVR  
www.davr.de

### Greece

Aluminium Association of  
Greece  
www.aluminium.org.gr  
CANAL / ELVAL  
www.canal.gr  
www.elval.gr

### Hungary

EAI Hungary Kht.  
www.aluminiumitaldoboz.hu

### Ireland

ALUPRO Ireland  
www.aluproireland.ie  
REPAK  
www.repak.ie

### Italy

CiAL  
www.cial.it

### Netherlands

RAVN  
www.aluminiumcentrum.nl  
SKB  
www.kringloopblik.nl

### Norway

Norsk Resirk AS  
www.resirk.no  
Norsk MetallGjenvinning AS  
www.glassgjenvinning.no

### Poland

Fundacja RECAL  
www.recal.org.pl  
RECAN S.A.  
www.recan.com  
KOBAS.A.  
www.koba.com.pl  
www.ecoserwis.pl

### Portugal

FIMET (Fileira Metal) /  
Pontoverde  
www.fileirametal.pt  
www.pontoverde.pt

### Romania

AMEP PACK S.A. Romanian  
Recycling Center for  
Aluminium Beverage Cans  
www.reciclaredoze.ro

### Serbia

Recan Fund for Recovery and  
Recycling of Beverage Cans  
www.recan.org.yu

### Spain

ARPAL  
www.aluminio.org  
Asociación de Latas de  
Bebidas  
www.latasdebebidas.com

### Sweden

AB Svenska Returpack  
www.returpack.se  
FTI AB  
www.ftiab.se  
Swedish Aluminium  
Association  
www.aluminiumriket.com  
www.packalu.se

### Switzerland

IGORA  
www.igora.ch

### United Kingdom

ALUPRO  
www.alupro.org.uk

## Other links:

**EAA** (European Aluminium  
Foil Association)  
www.alufoil.org

**AEROBAL** (International  
Organisation of Aluminium  
Aerosol Container  
Manufacturers)  
www.aerobal.org

**OEA** (Organisation of  
European Aluminium Refiners  
and Remelters)  
www.oea-alurecycling.org

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