

New life cycle assessment for aluminium beverage cans

A new study shows there has been a significant reduction in carbon emissions due to aluminium beverage cans over the past ten years.

Düsseldorf, 27 May 2019 - Metal Packaging Europe, the association of European manufacturers of rigid metal packaging and their supply chain partners, has prepared a new life cycle assessment for aluminium beverage cans. Based on data from 2016, the study covers the life cycle of aluminium beverage cans produced in Europe in the standard sizes 25, 33 and 50 cl – from raw material extraction through production to the end-of-life phase. Compared with the data from 2006, the study shows there was a significant reduction in CO₂-equivalent emissions. The CO₂ footprint was reduced on average by 31 per cent, confirming the industry's commitment to reducing CO₂ emissions and successfully decoupling resource use from market growth.

The main factors that have made this progress possible are:

the continual improvements in aluminium production and can-making processes;

- a reduction in the can's weight and
- an increase in the recycling rate of aluminium beverage cans.

Based on the following key figures, the reduction in the impact on climate change for a 33-cl can over the ten-year period 2006 to 2016 was 33 per cent:

- a reduction of 12 per cent in amount of aluminium needed for each can;
- a 35 per cent decrease in the electricity and heat consumption thanks to improved efficiency in the can-making process and a reduction in the can weight of four per cent;
- an almost 50 per cent increase in the recycling rate for aluminium beverage cans throughout Europe, from 50 per cent in 2006 to 73 per cent in 2014.

The data for 2016 show that climate-relevant savings over the entire life cycle of the beverage can amount to 18 per cent. The recyclability of aluminium is still the key factor for further improvements: With a five per cent increase in the recycling rate, the impact on climate change will be reduced in each case by an average of six per cent.

Aluminium beverage cans are made from a single material, which makes them particularly easy to collect, sort and recycle. In 2015, the recycling rate for aluminium beverage cans rose to 74 per cent due to efficient collection and sorting systems and the active participation of European consumers. Aluminium is a permanent material that can be recycled time and time again without any deterioration in its material prop-

erties, and its raw material value is the highest of all packaging materials, making aluminium beverage cans a perfect product for the recycling industry.

“It is part of Metal Packaging Europe's mission to provide fact-based and unambiguous information about our industry,” says Leonie Knox-Peebles, CEO of Metal Packaging Europe. “We welcome the significant progress our member companies have made and are confident that even greater reductions can be achieved thanks to improved recycling rates across Europe.” The following members of Metal Packaging Europe provided data for 2016: Ardagh Group, CROWN Packaging Europe and Ball Beverage Packaging Europe. European Aluminium provided the latest data sets for aluminium sheet production. The participating companies cover up to 87 per cent of the relevant European markets.

The study, which was carried out by RDC Environment and certified by Solinnen, conforms to the ISO 14040 and 14044 standards.

Your Contact:

Georg Grumm

Information and Communication
Gesamtverband der Aluminiumindustrie e.V.
Phone: + 49 211 47 96 160
E-mail: georg.grumm@aluinfo.de