

Green Solutions with green Metals

Global recycling delivers massive CO₂ reduction

8 Dec 2009. "BIR's recent study on the environment benefits of recycling shows the important contribution our members make to energy, water and CO₂ savings," says Dominique Maguin, BIR's President. "The figure of 500 million tonnes of reduced CO₂ is a conservative estimate based on sound scientific analysis. Let me put it in context: this figure is equivalent to almost 2% of global fossil fuel emissions and represents more than the CO₂ emitted by aviation worldwide."

BIR was participating in the Bright Green Exhibition and conference in Copenhagen on the 12th and 13th of December 2009 and BIR Director General Francis Veys was a member of the official delegation of the International Chamber of Commerce.

"The purpose of Bright Green is to showcase specific approaches to address climate change challenges," explains Francis Veys. "BIR will be supported by GI, the Danish recycling federation to make the case for our industry. Our members across the globe are providing nearly 50% of the raw materials needed, and we can still increase this figure. The collection of waste can be improved and the recycling activities are indispensable for saving energy, gas emissions and natural resources. It is of paramount importance to leave a safe, clean and welcoming planet for future generations."

The members of BIR represent a global powerhouse industry, processing over 600 million tonnes of commodities, with an annual turnover exceed-

ing 200 billion US dollars, similar to the GDP of countries such as Portugal, Colombia and Malaysia. "Our 1.6 million employees are justifiably proud to be part of this industry," Francis Veys adds. "And, each of them can point to an individual contribution of over 300 tonnes of CO₂ reduction per year. That figure will continue to grow if recycled materials become the resources of choice in the future."

BIR President Maguin concludes: "The UN's 2005 Millennium Assessment Report showed that a majority of the ecosystems that provide raw materials are being degraded or used unsustainably, threatening life on Earth. We can minimise and reverse this damage by increasing environmentally-responsible recovery and reuse of valuable materials."

X-ray lead glass from electronic waste



photo: Stenametal

X-ray-protection glass made of glass from electronic waste

A huge amount of glass from Europe's electronic waste is not recycled, even though there are plenty of opportunities to do so. A new innovation from Stena makes it possible to convert old monitors to x-ray protection glass.

"With this new patented product, we can utilize more of the glass in electronic waste," says Detlef Oertel, responsible for R&D in the board of

GRIAG Glasrecycling, which is part of the Stena Metall Group. "The new lead glass product protects against radiation and can be used, for example, at hospitals."

Only 35 % of the glass in Europe's electronics waste is recycled. This means that around 300,000 tons of glass are not used for material recycling even though there are proven methods to process it. Since its start, GRIAG Glasrecycling, part of the Stena Metall Group, has recycled glass from over ten million TV sets and monitors at its facility outside Berlin. "We recycle glass from electronic waste from customers in ten European countries. The potential market for the material is strong, and in the years ahead we expect to double capacity," says Staffan Johansson, president of GRIAG Glasrecycling.

In recent years the company has developed innovative new products from the glass in electronic waste. "With our new x-ray protection glass, it will be possible to convert glass from tel-

evision and computer monitors to a new product with environmental advantages," he continues. "Independent tests show that the radiation protection is comparable to that of existing products on the market."

One of the benefits of the new recycled x-ray glass is that it is fully transparent which is unique among products on the market. It can also be manufactured in many sizes. "Initially we will be focusing on customers that need radiation protection from medical equipment, but eventually we expect that the product will be used in several different industries."

Staffan Johansson describes how one of his colleagues at Stena passed a security checkpoint at an airport with the x-ray lead glass in his bag. "When he passed through the control, the security guard's monitor went completely dark and he wanted to know what my colleague was carrying. This was further proof that the product works as well as it should," he concludes.