Erdwich sells fridge recycling plant to Chinese company

(D, PRC) – The German company Erdwich Zerkleinerungssysteme GmbH has landed an order from China for a plant to recycle refrigeration appliances. The facility is due to be commissioned in Tangshan, east of Beijing, in March. Erdwich said that China's largest recycler had placed the order. This semi-public company opened another Erdwich plant to recycle fridges and freezers back in June 2011. This unit is located in the northern province of Heilongjiang close to the city of Harbin and has an hourly capacity of 30 to 40 domestic fridges and freezers.

Managing director Hans Erdwich expects to see a dramatic rise in demand for these plants in the years ahead as the Chinese government's current Five-Year Plan provides funding for reprocessing. Erdwich counts itself among the world's top three manufacturers of recycling plants for refrigeration appliances. Its installed facilities had recycled more than 30 million units of refrigerators and freezers around the globe to date, the company reported. □

Targets for automotive and industrial storage batteries met

(EU) – According to the latest sustainability report published by the Association of European Automotive and Industrial Battery Manufacturers (Eurobat), recycling of used automotive and industrial storage batteries meets the 65 per cent target rate stipulated by the EU Battery Directive. The recycling efficiencies for lead batteries (without taking plastics used as reducing agents into account) vary between 68 and 83 per cent. The batteries' lead content, which makes up about 60 per cent of the total battery weight, is reclaimed to produce secondary lead, reaching a recycling rate of 97 per cent.

The acid content in waste lead batteries of about 30 per cent of total weight is processed for reuse or else converted into calcium sulphate (gypsum) or sodium carbonate (soda) which can be used to in the production of building products or detergents. Some companies simply neutralise the acids before disposal, the report adds.

The plastics fraction, which makes up about 7 per cent of battery weight, is also treated using different processes. Plastics are either separated from the lead for recycling, for instance in the production of new plastic parts for the automotive industry, or else are smelted together with the lead. In this case, the gas created by the pyrolysis of the plastics in the shaft furnace is used as an energy source, according to the report.

Eurobat does not provide any figures for the recycling of industrial nickel-based storage bat-

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Glass industry and mun glass collection rate an

Mixed collections too costly / Study cites

(EU) – According to recent study, more waste glass must be collected separately in Europe. "We need higher collection rates and higher quality of collected glass", say the Association of Cities and Regions for Recycling and Sustainable Resource Management (ACR+) and the European Container Glass Federation (FEVE) in a written statement on the release of the study.

The study jointly authored by the two organisations indicates that there is much room for improvement. It concludes that separate collections of glass bottles and jars will improve both the quantity and quality of post-consumer glass available, cutting down on the resources otherwise used to make new packaging. "Last year, more than 25 billion bottles and jars were collected in Europe. While almost 100 per cent of the glass collected is used, the vast majority of it, well over 80 per cent, is actually recycled in a bottle-to-bottle production system," observes Adeline Farrelly, FEVE Secretary General.

Based on a comprehensive assessment of European municipal collection systems, the study identifies eight particularly effective schemes. According to the assessment, separate collection systems yield processed material of better quality, meeting the specifications necessary for the bottle-to-bottle production, at a cost which is competitive with the use of virgin raw materials. Other systems like mixed collections can be either too costly or

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teries except to note that most nickel-cadmium batteries are collected and recycled in compliance with the EU Battery Directive. While the reclaimed nickel is mainly used to produce stainless steel, battery manufacturers reuse the cadmium. Although there are only a handful of recycling companies in the EU for industrial nickel-cadmium batteries, the companies reportedly have sufficient capacities to handle both the present as well as projected waste volumes.

Unlike established battery chemistries such as lead batteries or nickel-cadmium storage batteries, recycling of lithium-ion batteries used in automotive or industrial applications is still in its infancy, the Eurobat report notes. As these batteries have an estimated lifetime of about ten years, industrial-scale recycling of this stream is expected to start after a transition period. The association expects an increase in lithium recovered from waste batteries only after 2030. Eurobat estimates that the recycling rate of the batteries' lithium content will reach 50 per cent. □