

Analysis of Opportunities for Recycling Carbon-containing Waste of Aluminium Production

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In the given article, we have assessed the opportunities for recycling and utilising of carbon-containing waste of aluminium production (containing 20–85 % of carbon). We have demonstrated such options as extraction of valuable components (including carbon as a fuel); application as sorbents and reductants and additives in the production of cement. Several advantages of the analysed solutions have been emphasised. It is the enhancement of the main production process efficiency and its environmental performance, reduction of waste management and disposal costs, exclusion of irrevocable losses of carbon and fluorine-containing products. We have underlined the prospects for considering patented technologies for review of reference documents on Best Available Techniques.

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