EGA makes significant step forward in re-using carbon by-product as an alternative fuel

United Arab Emirates: Emirates Global Aluminium, the largest industrial company in the United Arab Emirates outside oil and gas, today announced that it is to supply almost all of its production of carbon dust, a by-product of aluminium smelting, for use as an alternative fuel by the UAE cement industry.

The move extends EGA's cooperation with UAE cement companies to re-use by-products of aluminium smelting, in a step forward for the development of a circular economy.

EGA supplies its spent pot lining, another by-product, to UAE cement firms and has trialled the re-use of carbon dust with the industry.

Carbon dust is generated during the process of producing anodes, large carbon blocks that are consumed during aluminium smelting. High carbon content makes carbon dust suitable for use as an alternative fuel.

Over the next two years, EGA will increase its supply of carbon dust to the UAE cement industry to some 78,000 tonnes.

The use of EGA's carbon dust will reduce UAE cement companies' requirements for other fuels, including in some cases coal imported from as far as South Africa. Reducing mining and long-distance transport of coal is expected to save approximately 36,000 tonnes of CO2 emissions over the next two years, the equivalent of removing 7,800 cars from the roads.

EGA will supply the cement industry with both freshly-produced carbon dust and material produced in earlier years that the company stockpiled whilst working to find a viable large-scale industrial use. Freshly-produced carbon dust will be supplied directly to the cement industry. For stockpiled carbon dust, EGA has signed a contract with Heavy Machinery Viqa for processing and re-use. Heavy Machinery Viqa specialises in recovering and recycling by-products from heavy industries in the UAE.

Salman Dawood Abdulla, Executive Vice President, Environment, Health, Safety, Sustainability and Business Transformation at EGA, said: "Creating a circular economy with one industry's waste used as another industry's feedstock makes environmental and economic sense, and we are glad to be working with the cement industry to pioneer this approach in the UAE. We will now re-use almost all the carbon dust we generate at EGA, improving the environmental performance of both aluminium smelting and cement manufacturing."

Last year EGA recycled over102 thousand tonnes of waste, up from over 96 thousand tonnes in 2017.