One man’s waste is another man’s gold

In the scramble for alternative energy sources, coal-fired power stations have had a bad press. Dirty, smelly and inefficient, they do nothing more than smother the environment in dust. But this dust has a value, as Eko Export S. A. knows only too well.

Eko Export specializes in the production of alumino-silicate microspheres that are a by-product of the process of burning coal dust in power stations. The raw material for the microspheres is the dust produced in the burning process. “This dust is five times lighter than sand and is blown about by the wind causing a serious environmental problem,” says company Cofounder and Director of Business Development Zbigniew Bokun. “By collecting this dust for processing into microspheres, we provide an effective solution.”

Microspheres have a number of highly beneficial properties, including high temperature resistance, a neutral impact on the environment, good thermal and acoustic insulation, and low specific weight. These properties mean that microspheres have wide-ranging applications in a variety of industries including the automotive sector, energy and technology, the building industry, the plastics and ceramics industries as well as other manufacturing industries. What is seen as one man’s waste turns out to be another man’s gold.

“We generated turnover of ten million EUR in 2014, and the business continues to grow,” says Mr. Bokun, who founded the company together with his son-in-law Jacek Dziedzic. In addition to 30 employees at its production plant in Bielsko-Biała, Poland, Eko Export also has a further 40 employees at its drying facility in Kazakhstan where the raw materials for its microspheres are sourced. All of the company’s profits in the last few years have been invested in modernizing the production facilities and developing an in-house quality management system called ECO. It uses barcodes to ensure full traceability. For quality control purposes, a sample is taken from every ton of microspheres produced and tested to ensure consistent quality. A key development in its history was the acquisition of the patent rights to the production processes in Kazakhstan in 2011. “Our production lines can be quickly and cheaply erected in other countries and are capable of producing 7 t of microspheres an hour,” says Mr. Bokun. “They therefore have potential in countries like Saudi Arabia or America, where we are currently looking for partners for projects.”