



## Co-incineration of wastes in the cement industry

One of the more important contemporary problems related to environment protection is the growing number and variety of wastes generated. Despite a number of activities taken, the volume of wastes deposited at landfills continues to grow. There is a real threat that there will be simply no place for new wastes. Within the EU policy, a part of wastes is already covered by a total ban on depositing, and the list will continue to grow. However, in this case it is necessary to work out methods for their alternative management.

The need has been perceived both by the authorities and the society for some time already, yet no effective solution to the problem has been found. Still, the majority of wastes generated in Poland ends at landfills. Low deposit costs and very weak control of the type and volume of wastes cause a situation where wastes manufacturers and companies dealing with waste processing do not see a need for searching alternative methods for waste management. Moreover, our landfills can also accept wastes imported from other countries, for whom this is also the cheapest method of removing wastes from their territories. This happens despite the EU policy clearly stating that waste management should take place as close as possible to the place of its generation.

As is known, cement plants can co-incinerate large volumes of wastes in the clinker burning process. The problem lies not as much in the legal aspect, as in technological solutions, particularly in proper initial wastes preparation for incineration. Conditions in cement kilns allow for effective, safe and waste-free utilisation of almost all types of wastes. It must be remembered, however, that the fundamental task of the kilns is to produce the highest quality of clinker and stable operation of the installation. The problem of wastes preparation has been resolved in the EU countries by establishment of plants only dealing with wastes processing and implementation of effective systems of selective wastes collection.

This largely refers also to municipal wastes. In Poland, since 2003, there has been applied National Waste Management Plan, which by law aims mainly at limitation of the volumen of deposited wastes and at rational utilisation of wastes. After the initial period of the Plan's opera-

tion it has turned out that it does not sufficiently achieves its assumptions.

Energy obtained from wastes can and should be used in technological installations ensuring optimal conditions for utilisation. Technology of the cement industry allows for effective and absolutely safe utilisation of a large volume of wastes, also including municipal wastes. For this purpose, appropriate preparation of this material is necessary. Despite this, however, the solution is much cheaper than establishment of new incineration plants from scratch. Properly organised cooperation of entities dealing with municipal waste management (municipalities) with installations capable of co-incinerating the wastes can ensure proper conditions for establishment of systems for wastes collection, preparation, and effective utilisation, without a necessity to incur vast costs. Such solutions are successfully applied in Europe and in Poland, and - gradually implemented on an increasingly broader scale - will allow for significant limitation of wastes deposited, and thus for solving a crucial problem of all local authorities. The Polish Cement and Lime Association will actively act and support all initiatives aiming at limitation of deposition and increase of the volume of energy recovered from combusted wastes in technological installations.

