Electric and thermal energy make up about 40% of production cost at Group level. Using alternative fuels helps to reduce both costs and the carbon emissions.

Alternative fuels, however, are heterogeneous by nature, in terms of caloric values, ash content and moisture. This heterogeneity creates interruptions that affect the stability of our process and operations parameters. It also prevents our industry from increasing its consumption.

Using Near-infrared Spectroscopy, as a real-time analyser, enhances process and quality control, which results positively in both kiln productivity and clinker uniformity.

Instrument installation can be done for Alternative fuel analysis at the reception in the plant, as is the case at our site in Hima, in Uganda, where it is used for biomass purposes. It can also be installed in the fuel dosing system in the kiln, for example in Dotternhausen, Germany, where it’s used to process “paper sludge” and in Volos, Greece, for residual derived fuel (RDF), where its used in both pre-calciner or main burner injection. In both cases, it is also connected to high level control systems.

**FACTS AND FIGURES:**
- Increased usage of alternative fuels and significant savings in thermal energy cost
- Increased carbon efficiency

**GLOBAL IMPLEMENTATION STATUS:**
- In use globally in Europe and MEA

Interested in more information on this initiative? Then follow Holcim Mager for more insights!