Alternative Fuels: Indispensable Resources for Sustainable Production

Many waste materials and by-products from other industries serve as valuable raw materials for HeidelbergCement: We use these resources as alternatives to natural raw materials and fossil fuels in the production of cement, and to support the Circular Economy. At the same time, these efforts help reduce our CO₂ emissions.

Did you know?

- Fossil fuels have a negative impact on the environment – and they are finite. We are therefore investing in the use of alternative and secondary fuels to replace fossil fuels such as oil, gas or coal in cement clinker production.
- Co-processing as a fuel in clinker kilns is a worthwhile option, since the mineral ash produced when using alternative fuels replaces raw materials and is fully incorporated in our products as a mineral component.
- Cement production contributes to societal waste management by utilising pre-processed and quality-controlled waste, such as non-recyclable household waste or biomass (e.g. dried sewage sludge or waste wood), as well as waste products from other industries.
- The use of alternative raw materials and fuels is always part of an official approval procedure. The high temperatures in the clinker burning process and long retention times offer the best conditions for complete burnout with the lowest emissions at the same time.
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- This is one of the key levers to achieve our overarching goal – to reduce our CO₂ emissions to under 500 kg per tonne of cementitious material by 2030 compared to 1990.
- We follow the theme "local solutions for local waste": For most efficient and compliant sourcing of alternative fuels the coordination is organised on national levels as much as possible.

What are alternative fuels?

Alternative fuels are predominantly waste materials that cannot be recycled in full. HeidelbergCement co-processes waste-derived fuels and raw materials in a safe, transparent and sustainable way.

What we do

- Until 2030, we aim to increase the share of alternative fuels to 43% of the fuel mix (2020: 25.7%), and to double the biomass rate from roughly 9% to 19%.
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- We enforce the sharing of best practices across countries in order to accelerate the global utilisation of alternative fuels efficiently. This is supported by a global working group chaired by a member of HeidelbergCement’s Managing Board.