

Carbon emission reporting at HeidelbergCement



HeidelbergCement has committed to decrease its CO₂ emissions, both direct and indirect. An annually updated survey of our key emissions figures enables us and our stakeholders to see how far we are on our way to achieving our reduction targets.

How do we report carbon emissions?

The Greenhouse Gas (GHG) Protocol Corporate Standard classifies a company's GHG emissions* into three 'scopes'. We report our emission data in line with our obligation towards the Global Cement and Concrete Association (GCCA).

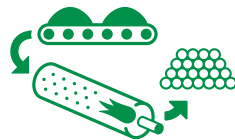
Carbon dioxide (CO₂) makes up the vast majority of greenhouse gas emissions in our business, although smaller amounts of methane (CH₄) and nitrous oxide (N₂O) are also emitted. This factsheet focuses on CO₂ emissions.

Scope 1



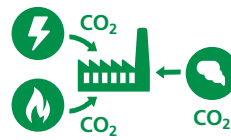
Scope 3 Scope 2

A significant proportion of the Scope 1 emissions that are generated in the cement production process are unavoidable and contribute significantly to the CO₂ balance of the end product concrete. We are therefore intensively investigating new technologies that enable CO₂ savings on a large scale.



Scope 1

Direct emissions from owned or controlled sources, such as combustion of kiln fuels related to clinker production; calcination of carbonates; combustion of non-kiln fuels (e.g. hot gas generator, dryers), combustion of fuels for on-site power-generation and of the carbon contained in waste water; fleet fuel consumption.



Scope 2


Indirect emissions from the generation of electricity, heat or steam purchased from external power production.




Scope 3

All other indirect emissions from activities of the organisation, occurring from sources that they do not own or control. HeidelbergCement reports the following parameters: purchased materials and fuels (purchased clinker, raw materials, cement constituents, cement and additives), logistics from upstream and downstream transportation (trucks, rail, vessels) and distribution.

Direct emissions can be communicated as gross emissions or net emissions.

 **Gross emissions** are all direct GHG emissions minus the emissions from pure biomass and the biogenic carbon content of mixed fuels (= fossil direct GHG emissions) and minus the emissions from on-site power production.

 **Net emissions** equal gross emissions minus emissions from alternative fossil fuels and non-biogenic content of mixed fuels as well as minus emissions for external heat transfer.

