



Concrete and Greenhouse Gas Emissions

Cement use is set to rise as global urbanization and the demand for new buildings and infrastructure increases post-COVID.

Unfortunately, with an increase in cement use more greenhouse gasses (GHG) and CO₂ emissions will be emitted.

Facts About Concrete & CO₂ Emissions

- Concrete is the second most common material in the world, after water.
- Its main ingredient, cement, alone produces about 8% of the world's GHG.
- Global concrete production is 20 billion tons (10 billion cubic yards), making it the number one material produced by humans.
- If the concrete industry were a country, it would rank as the third-largest contributor of GHG behind China and the United States.

Why Does Concrete Emit CO₂?

This is a result of the chemical reaction that occurs when the ingredients of concrete bind together, as well as the burning of fossil fuels to help carry out this reaction, and the fuel needed to mine and transport concrete's raw materials.

Reducing CO₂ Emissions

In order to meet the Paris Agreement's goals that President Biden's administration has recommitted to, the cement industry will need to continue to find new ways, through technological advancements, to reduce concrete's carbon footprint. This is especially important if we are to meet Biden's target of cutting emissions by "50% or more from 2005 levels by 2030". During Biden's global leader climate summit this week the President is expected to unveil an updated carbon emission reduction target.