

English:

Concrete is the most widely used building material in the world. In the time it takes me to utter this sentence, the global construction industry consumes an amount equivalent to 19,000 bathtubs full of concrete. In fact, after water, concrete is the most used material in the world.

Concrete consists of a mixture of cement and sand.

Overall, the construction and building sector is now responsible for 38 percent of global greenhouse gas emissions, according to a study by UNEP.

Heidelberg Cement is the world's second-largest cement manufacturer with over 3,000 locations in more than 50 countries. Compared to other German companies such as BMW, Daimler, VW and Lufthansa, Heidelberg Cement is the company with the highest CO₂ emissions on its balance sheet - and thus a massive fuelling of climate change. According to a 2019 study by the startup "right.based on science," the average global temperature would warm by 10°C if all companies operated like Heidelberg Cement.

The production of cement requires gigantic quantities of limestone. Cement is heavy, and transport is expensive. That is why cement - according to Heidelberg Cement - is mostly used within a radius of 200 km around the production sites. Of the 143 cement plants HDC operates, some are also located in Germany, France, Italy and the United Kingdom. But the largest cement capacities are in the Asia-Pacific region, where there are fewer environmental regulations and less determined enforcement of human rights and occupational health and safety. There, huge karst mountains are being mined and ecosystems destroyed forever. Karst mountains are a natural CO₂ reservoir. When they are destroyed, not only does this CO₂ reservoir disappear, but also the basis of life for many living creatures. In addition, the porous rock stores water, which it releases again in dry periods. In some regions, this is a prerequisite for functioning agriculture. Cement mining therefore also threatens the livelihood of regional farmers.

Even in Europe, mining areas are not without controversy. But resistance is bearing fruit! In the Vexin Nature Park in France, a subsidiary of Heidelberg Cement, Calcia Ciments, wanted to destroy 100 hectares of fertile farmland in order to quarry limestone for the Paris region and the 2024 Olympic Games. Years of persistent protest by the local population and numerous lawsuits due to conflicting environmental regulations have now been successful: at the beginning of December, the company announced that it was abandoning its plans.

When it comes to extracting resources and increasing profits, construction industry giants often get their hands dirty.

In the Palestinian West Bank, which is occupied by Israel, a subsidiary of Heidelberg Cement, Hanson Israel, is active. The quarries supply Israeli settlements, which are illegal under international law, and Israeli core territory. It is suspected that the material is also being used to build the Israeli barrier, which the ICJ declared illegal under international law in a 2004 advisory opinion. Under international law, it is prohibited to exploit resources from occupied territories (Art. 55 HLKO).

The fact that Trump was not re-elected President of the USA will have met with more disappointment at HDC. After all, the former executive publicly calculated the profit opportunities for the corporation if the wall on the border with Mexico were actually built. And in last year's election campaign, the company donated \$77,500 to Republicans. They must have miscalculated!

Heidelberg Cement is active in Indonesia through subsidiaries such as Indocement. They want to exploit the limestone deposits of the Kendeng Mountains on Java and build a cement factory - but the indigenous communities there have been actively resisting for years. In September of last year, they filed a human rights complaint against the corporation with the OECD (Organisation for economic cooperation and development) contact point in Germany. Because of their ecological function, the karst mountains in Indonesia, which are crisscrossed by water-storing caves, are actually protected. The government in Jakarta nevertheless released 5,000 hectares for industrial use. But if the construction materials company goes ahead with its plans, it will destroy the drinking water resources and the water resources of thousands of farmers needed for agriculture. Not to mention the serious consequences for the ecosystem and the rare animals and plants living there.

Heidelberg Cement also operates problematically in Western Sahara, where it runs a grinding plant through its subsidiary Ciments du Maroc. The area has been occupied by Morocco for decades in violation of international law. Investments and activities by international corporations there encourage and reinforce the illegal military occupation, as Morocco is primarily concerned with plundering the territory's natural resources. The organization Western Sahara Resource Watch holds the company jointly responsible for the situation in the occupied area, which repeatedly escalates into armed violence.

In Togo, too, HeidelbergCement pollutes the environment through limestone quarrying and clinker production, dispossesses entire population groups without compensation, and causes migration and displacement. Wildlife is displaced, ecosystems destroyed, and air, soil, and water polluted. According to reports, workers there are employed under very precarious conditions: Overtime and minimum wage are not paid and those who protest are fired.

Does this fit in with the responsible, ecological image that the company likes to present?

Sand mining

Gigantic quantities of sand are also needed for the production of concrete. Desert sand is too rounded and not suitable for this purpose; coarser-edged sand, shaped by water, is needed. Although sand is always being created anew through weathering, we are currently consuming more than twice as much sand as all the rivers in the world supply. Entire riverbeds, bays and beaches are being dredged. 90% of this goes to the construction industry. In the process, ecosystems are destroyed, currents are altered, groundwater levels are lowered, erosion is encouraged, and water is polluted. Some islands have already run out of sand, and dozens of small islands are completely submerged. Beaches are also a natural protection against waves. If they disappear, coastal regions are exposed to the destructive energy of storms without protection. But that's not all: sand mining is not sufficiently monitored and regulated in many countries. As a result, the multibillion-dollar business attracts criminal gangs who illegally dredge rivers or suck up seabeds, often with brutal force of arms.

Sealing of surfaces/soil destruction/biodiversity

Cement is not only problematic at the site where the raw materials are mined. Its use in the global construction industry is also harmful. We are in the midst of a construction boom. All over the world, urbanization is advancing. We are building and building, buildings, factories, roads, airfields. Soil sealing and thus soil consumption are constantly increasing. Yet fertile soils are indispensable for the survival of mankind. In addition, sealed soils increase the risk of flooding, storms and erosion.

But we are not only destroying our own livelihoods: by concreting over our environment, we are also pushing flora and fauna ever further back. Alongside industrial agriculture, the fragmentation and sealing of swaths of land is one of the main causes of the massive extinction of species that we have been observing for around 40 years. Between 1970 and 2014, the number of vertebrates alone declined by a full 60 percent.

Water consumption

Often overlooked is the fact that concrete production consumes tremendous amounts of water. Concrete accounts for almost 10% of global industrial water consumption. This water is often lacking as drinking water or for irrigation, because 75% of this water is consumed in regions suffering from water shortages.

Fine dust pollution in large construction areas

In addition, limestone quarries, cement factories, transports and construction sites release particulate matter that is harmful to health and can lead to respiratory diseases such as so-called pneumoconiosis. In Delhi, the capital of India, 10% of the particulate matter that chokes the city comes from the concrete industry. At construction sites there, air pollution rates exceed safety limits by a factor of three.

Despite knowing all this, the cement companies try to keep the growth mania going by lobbying. No wonder, they profit from the high demand for their products.

But we must stop the sealing of surfaces and must not accept that even more green spaces are built up. In the construction industry, too, unlimited growth is not possible on a limited planet. Stop the madness!

Innovations?

The cement industry often responds to all these facts by saying that the future lies in new cement production that produces fewer emissions. In these touted cements, fly ash or granulated blast furnace slag is added to reduce emissions. These waste products from the coal industry are not a long-term solution given the need to phase out coal.

Other approaches to making cement production climate-neutral are based on carbon capture and storage (CCS), an approach to storing CO₂. Heidelberg Cement is also relying on this technology. In Norway, the Group is installing the world's first industrial carbon capture and storage system in a cement plant to reduce CO₂ emissions by up to 50%. But these technologies are highly controversial. New technologies are not desirable from a climate justice perspective. They benefit only a few wealthy, industrialized countries, potentially increasing dependencies. Moreover, there is the far-reaching question of safe, long-term storage of stored CO₂....

The problem is more fundamental. We need to drastically reduce cement demand worldwide and in Germany.

Paradigm shift in the construction industry and housing culture

We need a radical paradigm shift in our housing and construction habits. There is a lot of talk about housing shortages in Germany and the need to create affordable housing. Affordable housing is important. But at the same time, we should realize that in the 1950s, there were only 15 square meters available per person. Currently, it's 46 square meters. As in all areas of life, we people in the affluent industrialized nations are thus taking up more space, more resources, more energy than we are actually entitled to. We need to use and distribute living space better. It is a myth of the construction industry that more and more has to be built. There is a lot of unused living space, and many buildings stand empty. In addition, from an energy point of view, any renovation is more ecological than a new building. We can counter the trend toward more and more living space per person through community projects and alternative forms of living. Why do many people only live in shared apartments during our studies and then often move into their own duplexes? Share living space, move together!

And if new buildings are absolutely necessary, they must be built from more environmentally friendly raw materials. Old materials such as wood, straw and clay, for example, offer great potential. Solid wood can be used to construct modern buildings that are more stable against earthquakes and even stand longer in fires than steel structures, which melt at high temperatures and

collapse uncontrollably. Wood is three times lighter than reinforced concrete and can be used to redensify existing cities. On many buildings, one could easily add up to 4 stories of wood.

Wood grows back and is available almost everywhere, which promotes regional economies and local jobs. And studies show that people feel more comfortable in wooden houses than in concrete structures.

We demand: Stop the building madness! Infinite growth is not possible in any industry. Flower meadows instead of concrete deserts!