



The Impact of COVID-19 on the Cement Industry



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Cement is an essential building block of development. Manufactured from limestone and other materials, it is often mixed into concrete to provide housing, roads, and pipes that supply water to communities. The world consumes over 4 billion tons of cement annually. The cement sector has a large economic impact due to its long and diverse supply chain and it contributes 5.4 percent of global gross domestic product (GDP) and 7.7 percent of world employment.¹

As the COVID-19 outbreak has slowed construction in many countries, the industry has seen lower demand for its products, leading to overcapacity. Cement companies are largely expected to survive the crisis, but they must strengthen their sustainability and competitiveness. Companies must also reduce their carbon emissions for their long-term viability; with the cement sector generating 7 to 8 percent of global greenhouse gas emissions, pressure is growing for the industry to achieve carbon neutrality.

SECTOR BACKGROUND

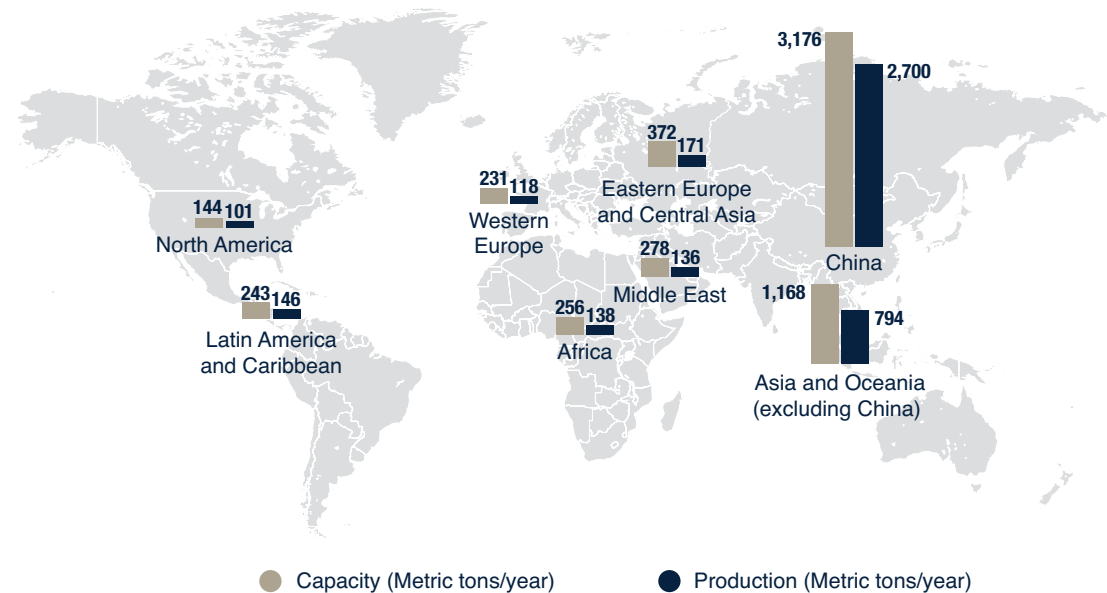
Critical product: Cement/concrete is the second-most-utilized product in the world after potable water. Besides its multiplier effect on jobs and GDP, it is critical to achieving the United Nations' Sustainable Development Goals. The material is key to building housing, roads, airports, and other infrastructure needed to support economic development. It is also used to construct dams, utilities, hospitals, and schools, all of which contribute to the health, education, and wellbeing of society.

¹ Cembureau 2020; Fitch Solutions Group 2020; ILOSTAT 2020.

Industry snapshot: Globally, more than 1,000 cement producers operate over 2,300 integrated cement plants and over 600 grinding stations.² Five countries account for nearly three-quarters of the world's cement production: China leads with a 57-percent share, followed by India, Vietnam, the United States, and Indonesia.³ The majority of plants are privately owned and operated, and while the top 10 players account for about 45 percent of global capacity,⁴ the industry overall is quite fragmented.

As global demand has stagnated over the last decade, historical capacity expansion has given way to regional overcapacity with a global average utilization of about 70 percent.⁵ Another challenge stems from the intensive capital investment required, and many cement companies struggle to generate returns beyond their investment.

Figure 1: Global Cement Capacity and Production, 2019



Source: CW Research 2020.

Long-term challenge: The cement industry today accounts for 7 to 8 percent⁶ of global carbon emissions, after improving energy efficiency and reducing greenhouse gas (GHG) emissions over the last few decades. The bulk of emissions is generated during the production of clinker, when lime, clay, and other raw materials are heated in huge kilns. Rising environmental concerns among investors, governments, and society will require plants to further reduce their carbon footprint. Some industry leaders are committing to carbon neutrality in cement by 2050.

2 Global Cement 2020.

3 CW Research 2020.

4 Edwards 2020.

5 CW Research 2020.

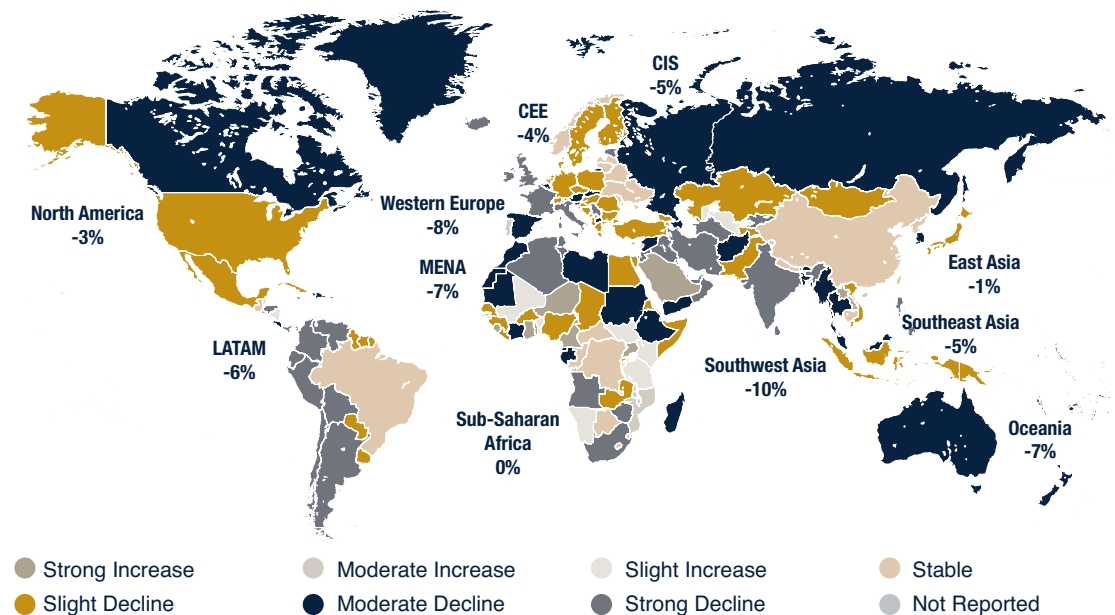
6 Folliet 2020.

COVID-19'S IMPACT ON THE SECTOR

The pandemic's full effect on the sector is currently difficult to predict because the long-term impact of the outbreak on the global economy remains unclear. However, in the short-term, direct effects on the cement industry are becoming clearer.

Effect on demand: In 2020, global cement demand is expected to shrink 3 percent year-on-year when including China, and 6.4 percent year-on-year when excluding China.⁷ Overall, the pandemic's impact will be unevenly distributed, with some countries more resilient than others.

Figure 2: Projected Cement Demand, 2020 vs. 2019



Source: On Field Investment Research 2020.

Note: CIS = Commonwealth of Independent States; CEE = Central and Eastern Europe; MENA = Middle East and North Africa; LATAM = Latin America

Utilization rate: Before the pandemic, the industry was not operating at full capacity; with the global economic slowdown, plants are expected to see further drops in utilization rates. The global average utilization rate, which refers to producers' actual output over potential output based on fully utilized production capacity, could fall as low as 60 percent for 2020 according to projections, from about 70 percent annually over the past five years.⁸ While companies are likely to finish committed expansions that were delayed due to lockdowns, whether they start new projects beyond 2021 will depend on the pace of economic recovery.

Stock prices and foreign exchange risks: Over the last 12 months, share prices of major cement producers have fluctuated by an average 47 percent between their 52-week high and

⁷ On Field Investment Research 2020.

⁸ Roger 2020.

52-week low.⁹ Fluctuations in foreign exchange rates have further eroded profit margins of cement companies in some emerging markets, and increased these companies' energy costs and cost of servicing debts in hard currencies.

RESPONSE TO THE CRISIS

The cement industry is considered an essential sector in most countries. Thus, companies have continued to operate through the pandemic, focusing on complying with health and safety requirements while protecting their own financial health. Meanwhile, governments are expected to take proactive actions to support the industry.

Short-term actions: Companies are taking steps to protect cash flow and strengthen their financial position amid decreased demand, including: i) achieving cost savings by minimizing nonessential expenses and reducing labor costs; ii) cutting capital expenditures by postponing ongoing projects where possible and restricting maintenance to critical projects; iii) preserving working capital by adjusting inventory levels to market conditions and through other strategies; and iv) boosting liquidity by withdrawing credit lines and suspending dividends payments and share repurchase programs, among others.

Health and safety compliance: Companies are ensuring that plants comply with new health and safety regulations and standards set by governments in response to the pandemic. Generally, work can be performed with a high degree of safety because of plants' tightly controlled work environment, low personnel density, and the fact that much of the work takes place outdoors.

Merger and acquisition activity: In the short term, M&A activity is expected to be constrained as deals will be more difficult to complete. However, in the medium term, large, well-capitalized companies could seek to acquire smaller companies that are struggling due to the pandemic.

Government support: In some countries, the cement sector could benefit from government policies, such as those seeking to stimulate demand by promoting the housing market (e.g., facilitating easy access to home financing or supporting affordable housing projects or other public works). Whether governments introduce such interventions will depend on the broader challenges facing each country and the importance of the cement sector to the economy.

GOING FORWARD

Once countries begin to reopen post-pandemic, consumption of cement and concrete is expected to gradually recover, fueled by economic growth, urbanization, and population growth, especially in emerging markets. The industry's biggest challenges—and opportunities—are longer-term: To survive and flourish, companies must prioritize sustainability and raise their environmental standards. Governments, investors, and the general public increasingly are

⁹ Share price declines were calculated using publicly available data for five top cement companies.

pushing companies to reduce their carbon footprint. Cement companies that prioritize sustainability even during this difficult period are likely to emerge as the winners in the next cycle. Many companies are already taking significant measures towards decarbonization.

- **Decarbonization goal:** Globally, the cement industry has been moving towards decarbonization. In the wake of the Paris Agreement, which aims to restrict any global temperature increase below two degrees Celsius from pre-industrial levels, the European Cement Association has set a target to reduce specific greenhouse gas emissions by about 30 percent¹⁰ by 2030 from 1990 levels. The ultimate goal is to achieve zero carbon emissions across the cement and concrete value chain by 2050.

Experts believe this 30-percent reduction can be achieved if the industry can make significant progress in: i) reducing the global average specific-energy consumption to 2.9 gigajoules/ton for clinker production and 80 kilowatt-hours/ton for cement, and targeting an average clinker-in-cement ratio of 65 percent by 2050; ii) rolling out full-scale waste-heat recovery, with a goal of achieving 100-percent alternative fuel use (half of which would be biomass) and over 50-percent renewable energy supply; and iii) scaling up innovative, low-carbon cement products and carbon capture, storage, and utilization technologies.

- **Public-private effort:** Decarbonizing cement requires significant financing to pay for technologies to reduce fossil fuel use and greenhouse gas emissions. This will require leveraging long-term public and multilateral financing with adequate private capital return. Government support is also critical. Joint efforts are expected to focus on: i) sharing R&D and pilot-project costs with a high degree of public funding; ii) introducing “greening” construction codes and standards not only for cement but also for the broader construction industry (such as green building), which can help stimulate growth and investment in the market; iii) introducing carbon pricing mechanisms as appropriate; iv) promoting resource- and energy-efficiency measures and related technology transfers; and v) rewarding innovation, agility, and impact.

IFC'S ROLE

According to the United Nations, 3 billion people will need new housing and basic urban infrastructure by 2030. The International Finance Corporation (IFC) supports cement projects to help address this fundamental need in emerging economic, including in conflict and frontier markets. Furthermore, IFC supports base-materials production, including cement, to build domestic linkages to other sectors and increase economic complexity in emerging markets. IFC has invested more than US\$3 billion¹¹ in cement projects over the last 15 years across more than 25 countries.

¹⁰ This percentage includes electricity. The data is from "Cementing the European Green Deal" (Cembureau 2020).

¹¹ The figure includes both own-account investments and funds mobilized by IFC.

IFC has launched a Sector Crisis Response Facility to provide urgent support for existing clients experiencing, or vulnerable to, the economic impacts of COVID-19. In the medium to long run, IFC seeks to support its clients in the manufacturing sector to increase product, process, and value chain complexity in emerging markets. Within the cement subsector, IFC is applying performance thresholds in the assessment of cement investments, and is supporting the industry to transition to zero carbon emissions through adoption of top-notch technologies that can help plants achieve high energy and resource efficiency. These include the installation of waste-heat recovery units, the production of blended cement with a lower clinker ratio, the use of alternative fuels and alternative materials (recycled, hence using circular-economy practices), and the implementation of carbon capture, storage, and utilization whenever possible.

Paradoxically, COVID-19 could accelerate the sustainability trend in the cement industry as the outbreak increases public awareness of health and environmental issues. The pandemic and ensuing global slowdown have presented new challenges for the industry but also new opportunities. Even as cement companies adjust to weakened demand, they can reset strategies to better position themselves once the market revives. They can also identify ways to raise their energy efficiency and reduce their greenhouse gas emissions, whether by adopting new technologies or by rethinking their products, portfolios, and partnerships. IFC partners with forward-thinking players to help them leapfrog technologies, deliver a lower carbon footprint, and emerge as the industry frontrunners of the future.

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