



GENDER INCLUSIVITY, A CATALYST FOR DECARBONIZATION IN THE CEMENT INDUSTRY

PART 1

Women in cement, the current state of play



Introduction

Cement production is at the literal core of much infrastructure, housing, and non-residential buildings such as schools, airports, and hospitals.

"With key allied sectors across the value chain, the Cement industry generates **5.4% of global GDP** and employs **7.7% of the workforce** worldwide."

Cembureau 2020; Fitch Solutions Group 2020; ILOSTAT 2020.

While a true driver of socio-economic development, it is estimated that cement accounts for 7% of global greenhouse gas (GHG) emissions on its own (International Finance Corporation (IFC), 'Strengthening Sustainability in the Cement industry'. November 2021), thanks to the heat needed for kilns, and the chemical reaction from its creation.

As the cost of climate shocks continues to shrink the supply of already scarce resources, it is no surprise that the Cement sector must decarbonize if we are to make a meaningful dent in global emissions.

We appear to be on the cusp of a revolution. Proven 'greening' technologies are emerging,

stakeholders are demanding more sustainable infrastructure solutions, and public spending on those assets is also increasing.

Several large cement firms have demonstrated the potential of abatement technologies such as alternative fuels, carbon capture, use and storage (CCUS), and carbon-cured concrete. For their part, smaller start-ups are also offering their own engineering advancements.

But what would accelerate the transformation of the Cement industry?

We argue that greater gender inclusivity is a catalyst for positive change and could be a key to unlocking a new era for Cement.

This is the first in a series of papers that explore the rationale for greater gender diversity in the Cement sector within the context of pressures on companies to evolve toward cleaner, greener, and safer outcomes.

In this piece, we focus our research on understanding the current makeup of the world's cement workforce and the roles women play in this historically maledominated industry.

CEMENT AT A GLANCE +1,000 ~3,000 \$326.8 bn global production cement producers Cement plants market size



1.1 Estimating Women's Participation in the Cement Workforce

Diversity and inclusion have been growing areas of focus for most industries around the world

Tighter corporate governance regulations, increased investors scrutiny, challenges in securing competency, productivity, and safety in the workforce have contributed to this paradigm shift.

Cement is no exception. Over the past few years, the industry has been on a journey to increase the number of women within its ranks.

A necessary starting point for our work was thus to establish a baseline understanding of the current state of women's participation in the cement business.

Somewhat surprisingly when looking for an estimate, this number was hard to find.

The most quoted 'women in cement' figure we came across is

13%

Cemnet.com; Carbonecure.com

While this is a helpful headline number, it does not reveal any detail about the roles women play within the sector, nor how company size, location and reporting may skew the statistic.

In our effort to unpack the 13%, we investigated several gender-related metrics disclosed by publicly traded cement firms.

In an industry that counts **over 1,000 players**, including privately held companies, accessing **publicly traded company data** was the most straightforward route for this first phase of our research.

We considered companies designated by Bloomberg as belonging to the Cement & Aggregates industry, with at least 20% of their revenue from Cement and/or Concrete.

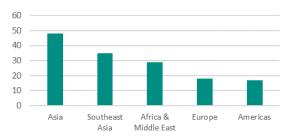
We then restricted our sample to publicly traded companies with market capitalizations of greater than 100M USD, mainly due to very limited gender data for companies below that size.

Two important methodological decisions were made with respect to our data sample:

- Parent/subsidiary entities were treated as independent observations, allowing us to better examine gender representation in different geographies. The risk of double counting was controlled by using average values throughout the research.
- 2) Missing data were counted as 'zero'. While this choice meant that we were likely undercounting women in the Cement industry, we believe that this was a more intellectually honest approach than the overcounting which would have resulted from an assumption of 'average'.

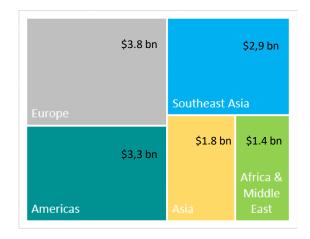
We identified **147 companies** that met the criteria. As outlined in Figure 1 and Figure 2, those companies are spread across developed and emerging markets countries, and across a wide range of capitalizations.

Figure 1: Company Count by Region



Source: Radiant, Bloomberg. Market capitalizations observed on 31 August 2023

Figure 2: Average Market Cap (USD bn) by Region

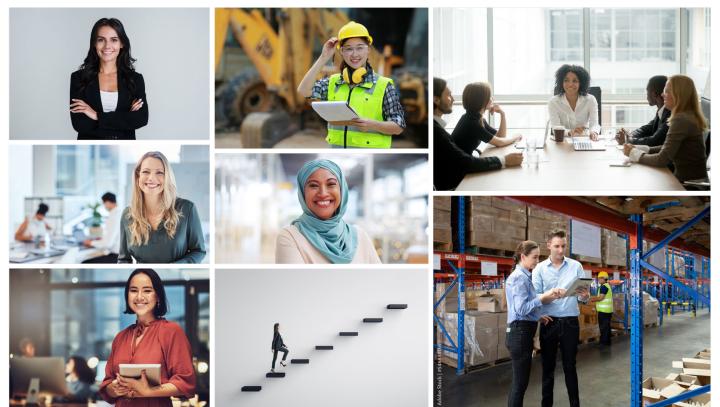


Source: Radiant, Bloomberg.

Market capitalizations observed on 31 August 2023

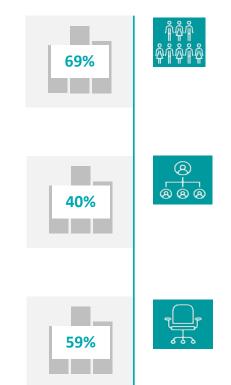
In a final step, we augmented Bloomberg data with analogous MSCI statistics for these 147 companies, and focused on three dimensions of gender representation:





1.2 The Demographics of the Cement industry: What do the Data Reveal?

Our first findings center on the reporting of gender data:



Reporting of Women on Boards

The most frequently reported gender data is the percent of Women on companies' Board of Directors. Sixty nine percent of publicly traded companies with larger capitalizations share this information, compared to 38% for smaller companies.

Reporting of Women in Management

When it comes to Women in Management, we see lower reported data with 40% of organizations with over 1bn USD market capitalizations disclosing gender statistics, and only 10% disclosed by smaller firms.

Reporting of Women in the Workforce

Publicly traded companies with larger capitalizations (over USD 1bn) are more likely to report women in the workforce statistics (59% of companies in our data set) than smaller ones (25% of companies).

We also observed that the quality of reporting varies from one region to the other. For instance, Southeast Asia is leading the way on reporting of Women in the Workforce and Women on Boards, followed by the Americas, Europe, Asia, Africa and the Middle East (see Figure 4).

Figure 4: Avg. Percent Companies Reporting
Gender Data by Region



Source: Radiant, Bloomberg, MSCI as at 31 August 2023

"Our second finding reveals that the benchmark for women representation, (estimated using data from publicly traded firms), is approximately

12.7%*"

different set of data than the often-quoted 13% referenced earlier, it is not materially different and seems a reasonable summary figure for the Cement sector. Digging one level deeper, we find that the lion's share is associated with Board-level positions, followed by Women in the Workforce and then Women in Management.

While this number is likely based on a

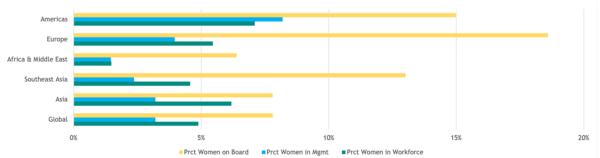
7.8% Women on Boards

3.2% Women in Management

4.9% Women in the Workforce

At the regional level, our analysis revealed that European companies have more Women on their Boards than their counterparts, but do not have meaningful advantages when it comes to Women in the Workforce or in Management roles. American companies seem to do better on gender diversity in general. Southeast Asian companies show good Board representation, but limited progress along the other two dimensions of women representation (see Figure 5).

Figure 5: Avg. Gender Representation for Publicly Traded cement Companies
Workforce, Management, and Board



Source: Radiant, Bloomberg, MSCI as at 31 August 2023

^{*} The figure of 12.7% is the summation of the Women on Boards and Women in the Workforce statistics (each use an 'average' methodology across firms that report), as these are largely non-overlapping categories. Note that we do not try to adjust for the limited instances of a senior executive that is also a Board member – for this reason, we risk slight *over*counting.



1.3 The relationship between geographic location, reporting, and gender representation

Above and beyond a belief shared by many companies that diversity is accretive to competitive advantage, we point to location as a key influence on women participation.

"Our third finding demonstrates a link between representation, reporting, and location, with reporting and location acting as determinants of representation."

Under the banner of 'what is measured is managed', we believe that companies measuring and reporting gender statistics are more likely to have policies in place to encourage more women at all levels of the organization.

In this context, **reporting** (whether it is voluntary or mandated) **acts in the same** way as *intentionality*. It may play the role of a significant and enduring driver of increased gender participation.

As representation improves, companies are incentivized to report as they believe it to be in their best interest in communications to interested stakeholders.

The regional variations we observed in the gender diversity statistics are another indication of the interconnectedness between geographic location and women inclusion. Factors such as local regulations, policies, and culturally-driven societal norms are additional motivators.

As we highlighted previously, European companies tend to exhibit higher levels of Women on Boards than their regional counterparts – 18.6% versus the 7.8% Global average. The European regulatory landscape, which has emphasized Board targets and/or 'comply or explain', seems to have indeed had a positive impact on the number of Women in Board seats.

Importantly, though, as these Boardfocused policies have not necessarily trickled down across other dimensions of gender diversity, we do not see a similar advantage for European companies when it comes to Women in the Workforce or Women in Management within the Cement industry.

"Our findings also suggest that local societal norms regarding prevailing attitudes towards 'women's work' may have both direct positive and negative effects on women's participation in certain parts of the world."

We conjecture that the low statistics for Women in the Workforce in African and Middle Eastern companies (1.5% versus the Global average of 4.9%) may be driven by cultural resistance to women doing the day-to-day work required in 'heavy industries'.

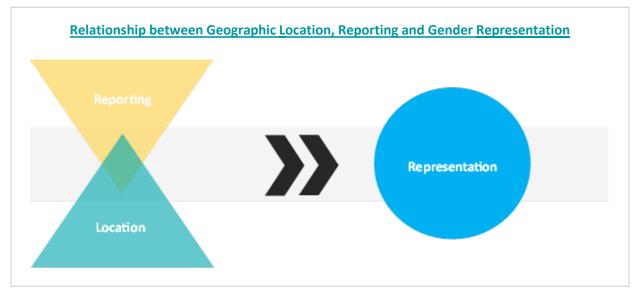
We observed a greater proportional representation in 'field jobs' (as proxied by Women in the Workforce versus managerial jobs) for women across all locations except the Americas.

This is an indication of the work still to be done to facilitate women's access to higher level positions within companies.

A more positive driver of participation by location rests on the World Cement Association's assessment that two thirds of cement managers have an engineering background. It may be more common for women in certain geographies to have an engineering/science/STEM background which would lead to greater leadership opportunities in some regions.

The Americas, for instance, exhibit 8.2% Women in Management compared to the global average of 3.2%.

All told, it is difficult to tease apart the forces at work bringing about greater gender representation at some firms, but we can attribute some of the differences to location-specific drivers.





1.3 Summary: What's Next?

We come away from this baseline gender diversity analysis of the Cement industry with the following conclusions:

- An appropriate overall benchmark for women's representation in the Cement industry is approximately 12.7%, using publicly traded companies with capitalizations of greater than \$100M USD as indicative.
- Developing a more robust understanding of female inclusion that goes beyond Board participation allows for a more nuanced understanding of the gender forces at work in the sector.
- Gender participation at the Board level is both the most reported statistic and has the highest actual women membership (regardless of region or company size).
- Southeast Asia, Europe, and the Americas cement and concrete companies are ahead of their regional counterparts when it comes to female workforce representation generally.
- The data clearly show a **strong link between reporting, representation, and geographic location**. **Reporting appears to be** *a motor* **for increased inclusion**.

Having established the state of play of the Cement industry with respect to women's representation, the next paper in this series will examine the changes afoot in the cement business: the push toward automation and the necessary evolution of cement and concrete from an environmental standpoint.

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As investors with decades of experience analyzing listed companies, we are well positioned to share insight on the economic importance of ESG and Diversity and Inclusion matters in companies' or sectors' performance and society at large.

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