

# Vietnam's emerging trends

Amid challenging market conditions and higher production costs, energy efficiency and decarbonisation have emerged as key development trends in the Vietnamese cement sector. These measures are helping producers optimise operations as well as reduce energy costs and carbon emissions, all while strengthening competitiveness.

■ by *Hai Khieu, FiinGroup, Vietnam*

Decarbonisation and energy efficiency are two of the key issues that face the Vietnamese cement industry as the country aims to lower its carbon emissions and improve its environmental record going forward



© Phong Nguyen Dinh

Vietnamese cement consumption recorded a slight decline in 2022 to 62.2Mt versus 62.7Mt a year earlier, driven by low public investment disbursement for infrastructure projects and a struggling real estate market. In particular, since the third quarter of 2022, real estate developers with high leverage have faced a liquidity crunch due to tightened monetary policy and stricter regulations on corporate bond issuance resulting from violations of current regulations of corporate bonds. In addition, lengthy and complicated construction licensing procedures,

especially in the largest cities such as Hanoi and Ho Chi Minh City, have resulted in delays to many property projects and thus stagnant residential construction activity.

### Key cement and clinker export market trends

Total clinker and cement export volumes witnessed a sharp decrease of 27.1 per cent YoY in 2022 to 29.8Mt from 40.9Mt a year earlier, mainly due to weakened demand from China. In particular, clinker export volumes from Vietnam to China hit a four-

year low. This was due to China's strict zero-COVID policy (which included import restrictions and lockdown measures), as well as the struggling domestic construction market following property company Evergrande's default in 2021, plus unfavourable weather conditions (ie, a long rainy season).

Meanwhile, cement exports from Vietnam to the Philippines remained solid in 2022, maintaining the same level as the previous year. This can be explained by the commitment of new Philippines president Ferdinand Marcos Jr to the country's "Build, Build, Build" infrastructure development programme. Given the strong level of public investments, and a recovery in residential and commercial construction activity, cement demand in the Philippines is expected to remain strong.

With low demand from the traditional export market of China in 2022, Vietnamese cement manufacturers diversified cement export destinations to other countries. This included the USA, which accounted for 16 per cent of cement export volumes during the year, reflecting an impressive growth of 75 per cent YoY in 2022.

### Continued capacity investment

There are currently 122 cement manufacturing facilities in Vietnam, owned by 78 companies with a combined production capacity of 138.3Mta.

The Vietnamese cement industry continues to see investments in new capacity and capacity expansion projects. During 2022, FiiGroup recorded the launch of commercial operations by the following producers:

- Long Son Cement Line 4 (1.86Mta of clinker capacity)
- Xuan Thanh Cement Line 3 (3.6Mta of clinker capacity)
- Dai Duong JSC 1 (2.3Mta of cement capacity).

Moreover, Long Thanh Cement completed the construction of its 2.3Mta cement plant in December 2022. However, this facility is yet to begin commercial operations due to current market conditions.

Going forward, many other expansion projects – including Xuan Thanh Cement's Line 3's grinding station, Dai Duong 2 and Thanh Thang Cement's Line 5 – are expected to launch commercial operations in the next three years.

Upon completion, these facilities will boost Vietnam's cement capacity to 141.8Mta by 2026.

Decarbonisation will be the main topic of discussion at Cemtech Asia 2023, to be held in Hanoi on 25-28 June 2023



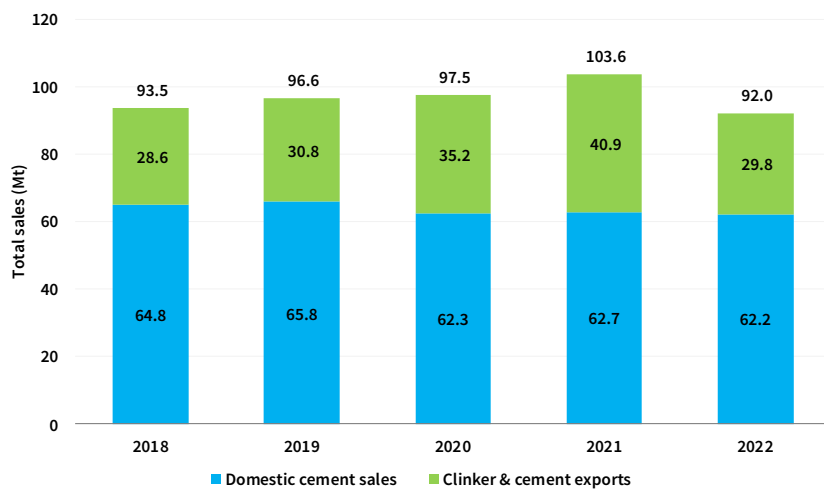
Despite a production capacity of 138.3Mta, the Vietnamese cement industry continues to expand



In 2023 cement exports are expected to remain stable while clinker exports are set to grow

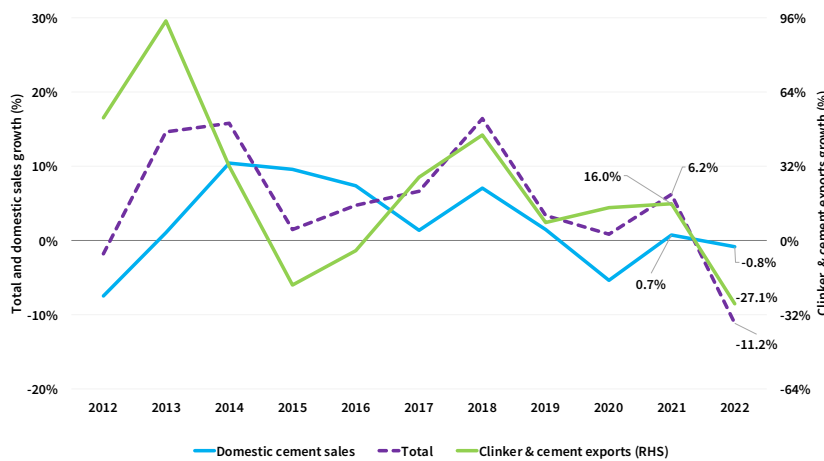


Figure 1: Vietnam domestic and export sales, 2018-2022



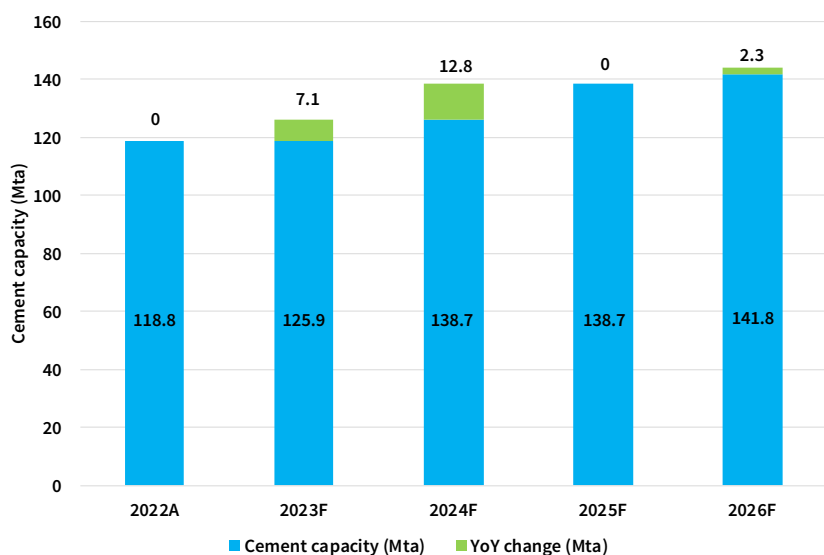
Source: FiinGroup

Figure 2: five-year historical growth of domestic sales and clinker and cement exports



Source: FiinGroup

Figure 3: increases in domestic cement capacity, 2022A-2026F



Source: FiinGroup

## Financial performance

Given the slowdown in domestic demand and the sharp decline in some overseas markets in 2022, listed cement manufacturers in Vietnam recorded a deteriorated average EBITDA margin from approximately 13.8 per cent in 2021 to approximately 11.2 per cent in 2022. This could mainly be explained by a slump in sales revenue due to weakened export demand, especially from China, as well as a surge in production costs (ie, coal prices).

Moreover, given the fierce competition amid low demand, cement manufacturers incurred higher marketing and selling expenses in an attempt to boost sales, which also contributed to the lower EBITDA margins seen in 2022.

## Key cement industry development trends

In recent years, energy efficiency and decarbonisation have been emerging as key development trends in the Vietnamese cement sector. In particular, domestic cement manufacturers have been applying energy efficiency and decarbonisation technologies to optimise production costs and meet ESG standards in export markets. Innovative technologies can save up to 20-30 per cent of energy consumption, thereby strengthening domestic cement manufacturers' competitiveness, especially against the backdrop of challenging market conditions and rising production costs.

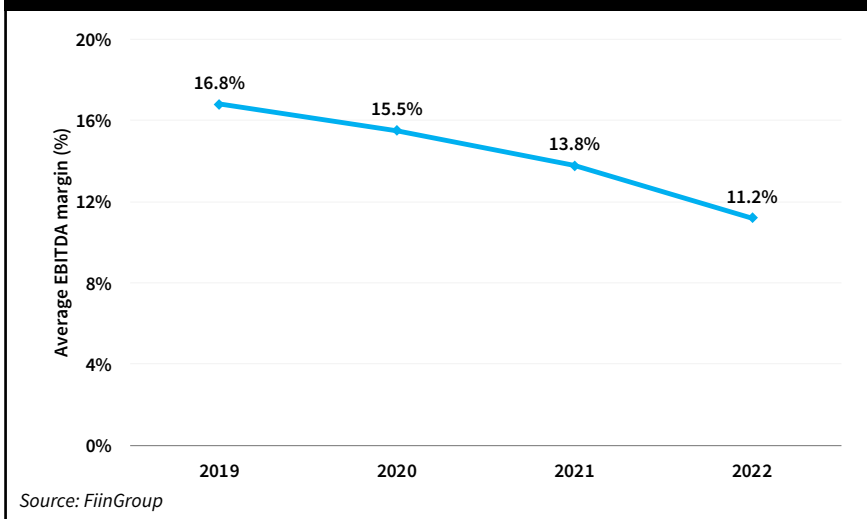
## Waste heat recovery uptake

Since the early 2000s, domestic cement producers (particularly private players) have been gradually installing waste heat recovery (WHR) systems at many cement plants. WHR has proven to be one of the most feasible and fastest-growing decarbonisation technologies available in the cement sector due to its ease of adoption and high financial and operational efficiencies. According to leading private companies, WHR can save up to 30 per cent of a cement plant's total electricity demand. As at April 2023, 24 out of 66 private cement manufacturers had installed WHR systems with a total capacity of 46.9MW, while there is also room for the remaining manufacturers (ie, small- to medium-sized local private facilities) which have not yet installed WHR to-date.

## Co-processing pioneers and practice

Co-processing in the cement industry is crucial for the substitution of fossil

Figure 4: impact of rising fuel costs and market demand on average EBITDA margins



fuel usage. INSEE Vietnam (Siam City Cement), VICEM's But Son Cement and Quang Ninh Construction & Cement Co's Lam Thach cement plant are among the co-processing pioneers within the Vietnamese cement industry. At present,

INSEE is the only cement producer to have obtained a full licence for co-processing and is permitted to process all types of wastes, including hazardous waste. Table 1 shows the co-processing capacity and coal substitution rates of leading producers.

Table 1: co-processing capacity and substitution rates of leading cement producers

Company	Co-processing capacity (tpd)	Coal substitution rate (%)*
INSEE	5000	27
VICEM But Son Cement	4000	20
Lam Thach plant	1500	20
VICEM Ha Tien Cement	4000	5
VICEM Ha Long Cement	5500	3

Source: Fiin Group and Vietnam Cement Association (VNCA)  
\* Refers to the percentage of coal replaced by alternative sources (ie, non-recyclable plastics, rubber, etc) through co-processing

However, it should be noted that co-processing in Vietnam faces a number of headwinds, particularly in terms of feedstock obstacles (ie, availability, lack of waste suppliers and processors), legal framework (licensing), technological challenges and high transportation costs.

### Outlook

Looking ahead, overall total clinker and cement sales (including exports) in Vietnam are forecast to record a slight decline of nine per cent in 2023.

The outlook for the real estate market remains subdued due to key challenges such as mobilising financing sources for real estate developers as well as licensing issues. Meanwhile, in the 1Q23 the government's public investment disbursement was 10.35 per cent, down on the 11.88 per cent seen in the same period a year earlier.

These factors combined are expected to result in a five per cent decline in domestic consumption in 2023, according to forecasts by FiinGroup.

In terms of Vietnam's key overseas markets, cement exports are forecast to remain stable given solid demand from infrastructure development in the Philippines. Moreover, clinker exports are anticipated to decrease by 35 per cent in 2023, due to low demand from China. Import demand from China is forecast to remain low at present due to stagnant domestic construction market activity. However, some recovery may be seen from the third quarter of this year. ■

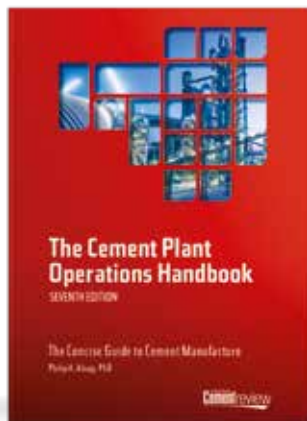


While domestic sales are expected to decline, cement producers can look forward to stable export demand

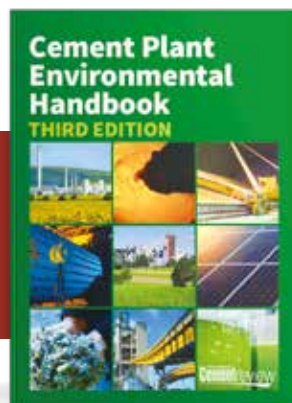
# International Cementreview



Delivering business insight, market knowledge and technical expertise to the global cement industry.



INCLUDES  
**FREE**  
HANDBOOK



## SUBSCRIPTIONS 2023

### SUBSCRIPTION PACKAGE INCLUDES



#### MONTHLY MAGAZINE

12 issues of the cement industry's leading publication, delivered direct to your desk by First Class Airmail with early access to the digital magazine via CemNet.com.



#### FREE HANDBOOK

Choose between *The Cement Plant Operations Handbook, 7th Edition* and *The Cement Plant Environmental Handbook, 3rd Edition*.



#### ICR SUBSCRIBER DISCOUNTS

on all other reference works published by ICR.



#### BUILDING BULLETIN NEWSLETTER

Monthly newsletter covering the latest developments in the building materials sector – complimentary to all ICR subscribers.



#### FULL SUBSCRIBER ACCESS

to CemNet.com the industry leading website.



#### ICR SUBSCRIBER APP

via App Store or Google Play.

A COMBINED PRINT AND DIGITAL

## ANNUAL SUBSCRIPTION TO ICR

GBP 220 / USD 315 / EUR 260



Subscribe online at  
[www.CemNet.com/subscribe](http://www.CemNet.com/subscribe)

#### READ

ICR magazine  
anywhere, anytime

#### SEARCH

the ICR archive of  
digital back issues

#### ACCESS

premium articles

#### WATCH

video presentations  
in high-definition