The cement markets of the Mediterranean rim

Trends to 2020 and 2020-2025 projections

September 2021

INTERCEM





LIVE AND IN PERSON

MEDITERRANEAN RIM CEMENT FORUM

PARKLANE RESORT & SPA, LIMASSOL, CYPRUS

28TH-29TH SEPTEMBER, 2021

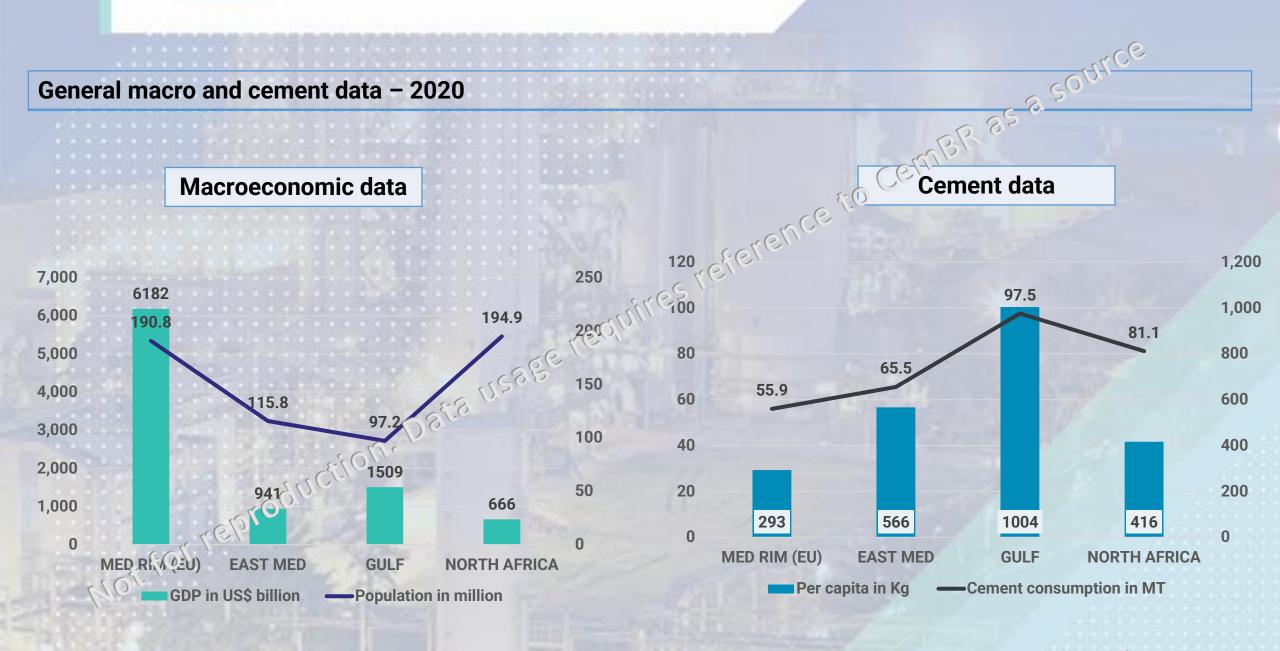
Mediterranean rim

NORTH AFRICA MED RIM - EU EAST MED GULF Algeria Croatia Albania Iraq France Cyprus Kuwait Egypt Italy Morocco Greece Oman Portugal Jordan Qatar Tunisia Saudi Arabia Slovenia Lebanon Spain Turkey UAE

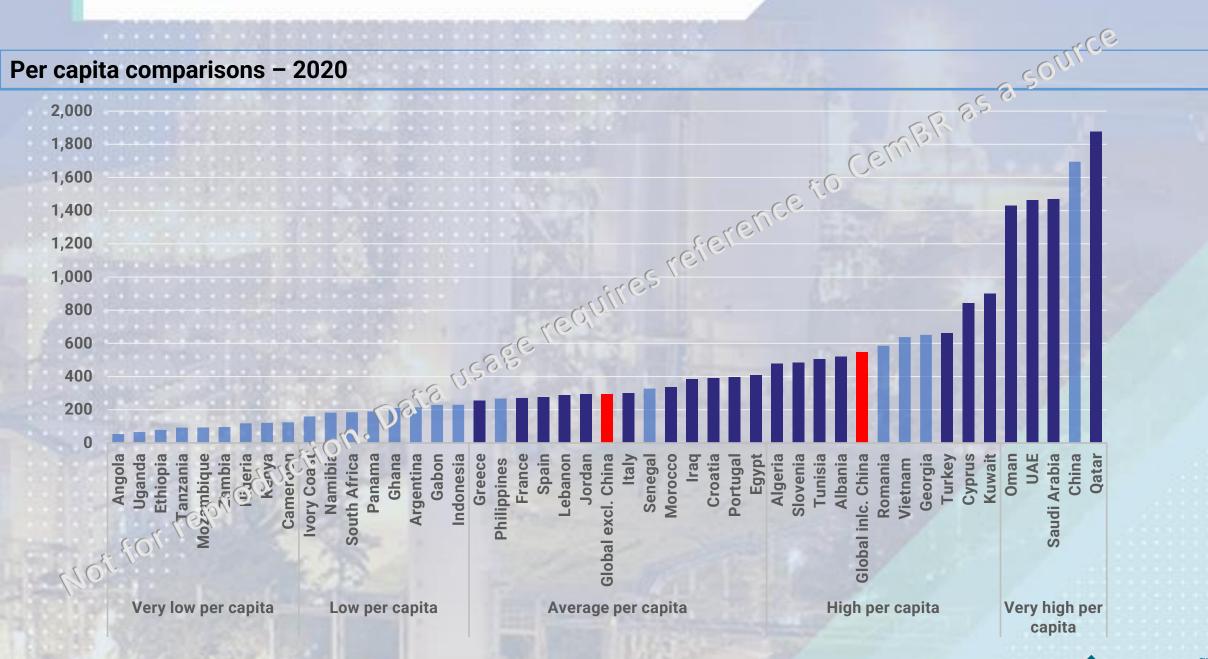
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CGC[™] < CemBR FORECASTS

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Source: CGC



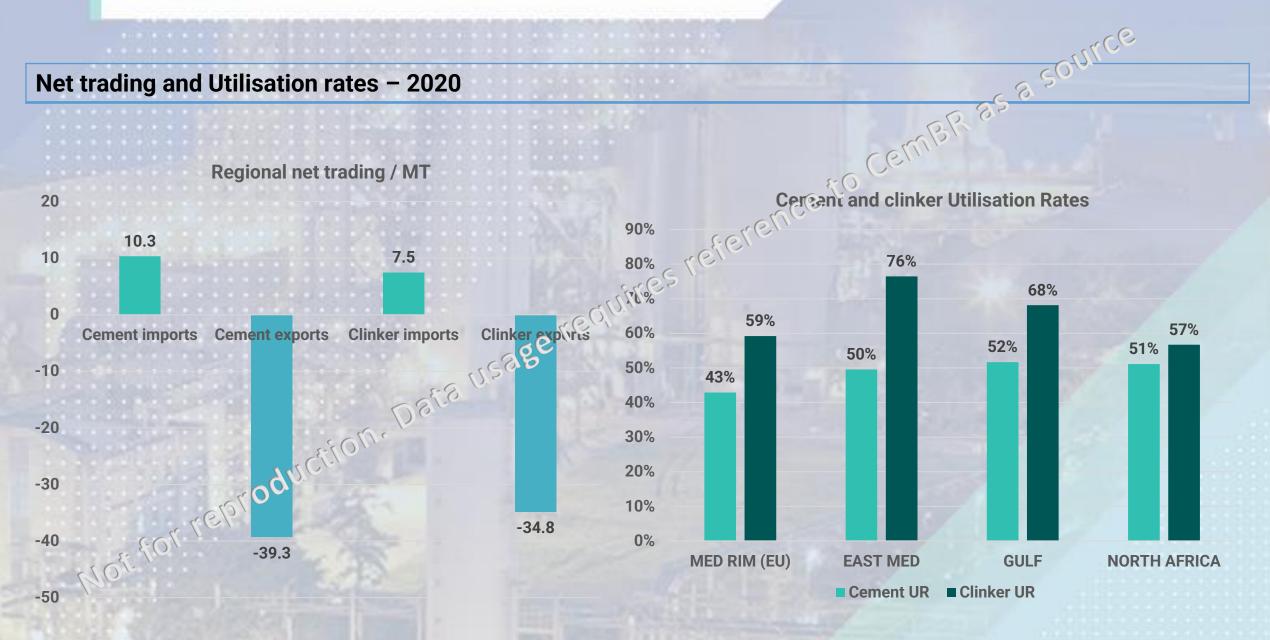
Source:

to cembras as a source Clinker Moduction, imports, exports / MT Cement production, imports, exports / MT res referei 120 120 101.3 99.3 100 100 regrefin 85.6 86.7 83.1 74.0 80 USAGE 58.1 60 60 47.3 40 40 20 20 4.2 2.6 6.5 3.6 0.4 0.2 0.3 0.0 0 0 MED RIM (EU) EAST MED **GULF NORTH AFRICA GULF** -7.3 EAST MO NORTH AFRICA -1.9 MED RIM (EU) -9.5 -20 -15.3 -4.6 -20 -5.4 -8.6 -21.4 -40 -40 Clinker production Clinker imports Clinker exports Cement production Imports Exports

Cement and clinker production data & imports and exports - 2020

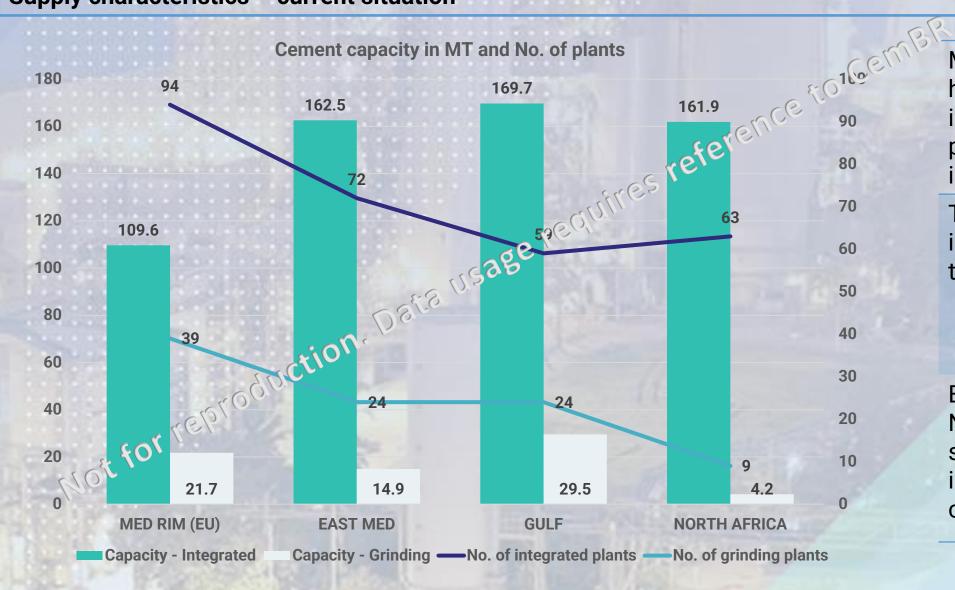
Source:

Net trading and Utilisation rates - 2020



Source:

Supply characteristics – current situation



Med rim (EU) has the highest number of both integrated and grinding plants, but the lowest integrated capacity.

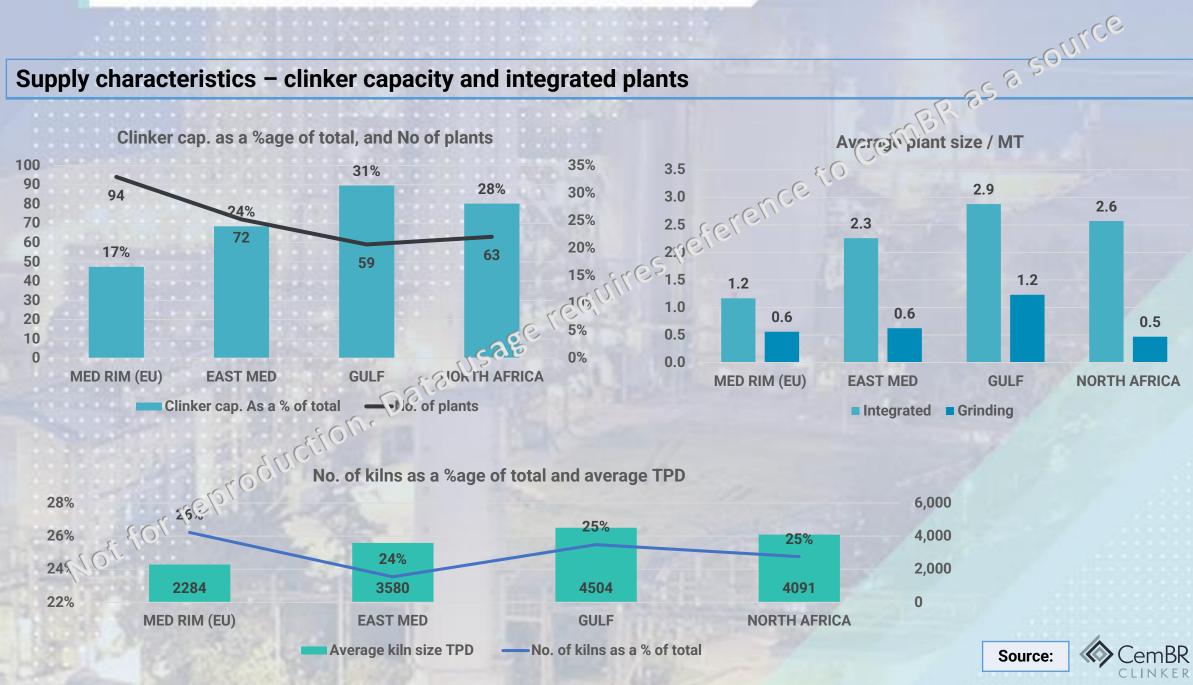
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The Gulf has the highest integrated capacity with the fewer plants.

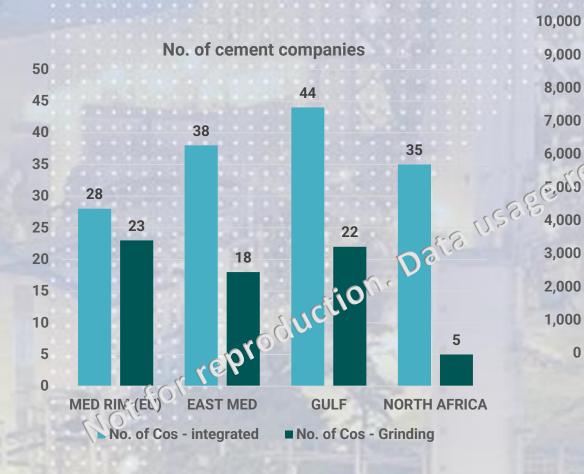
East Med., the Gulf, and North Africa have very similar levels of integrated cement capacity.

Source: OCGC

Supply characteristics – clinker capacity and integrated plants

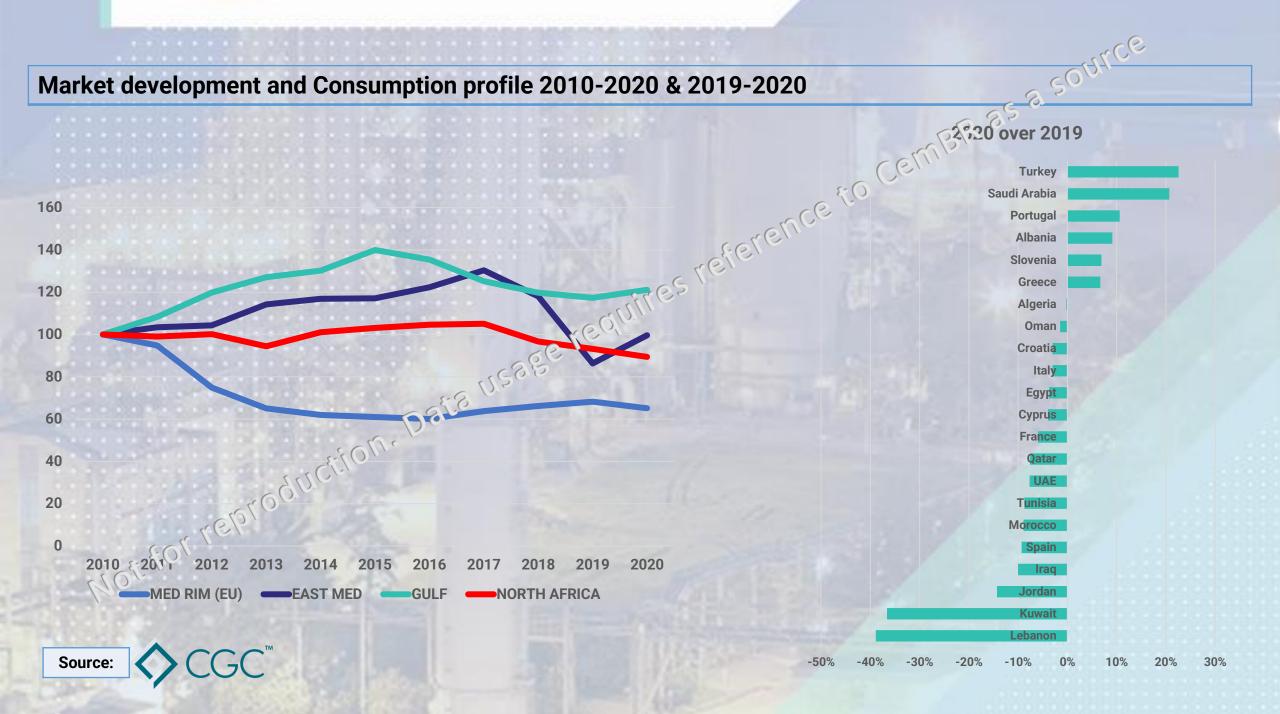


Industry structure and dynamics





Source:

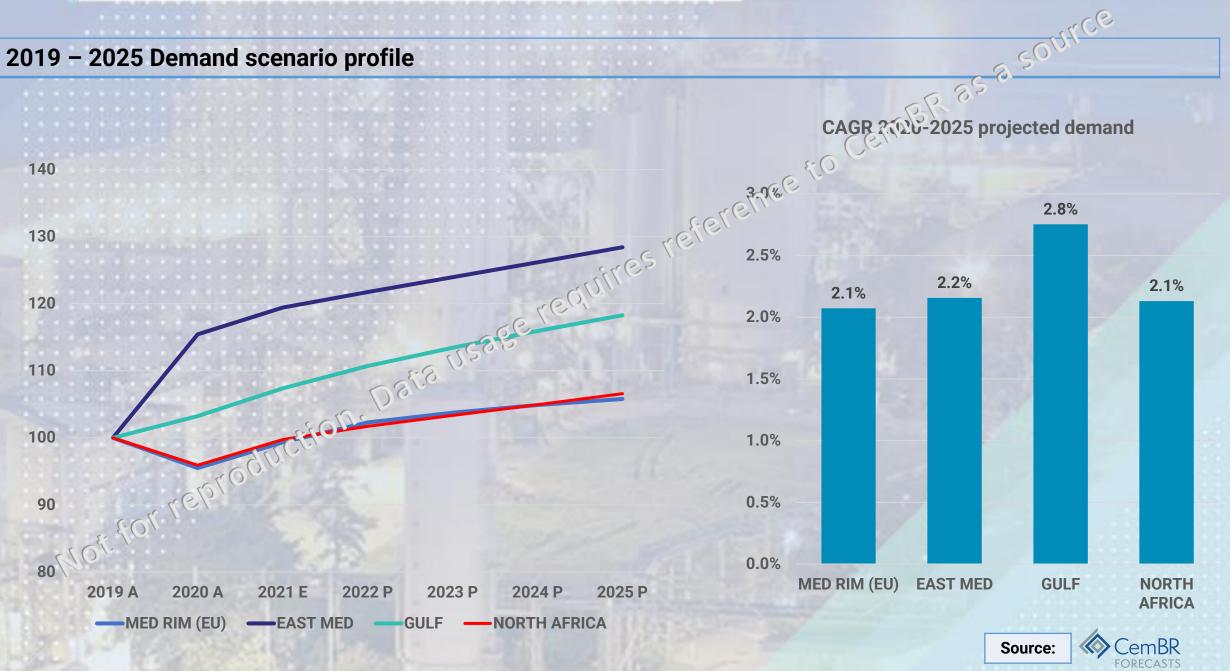


2021 Expectations for consumption

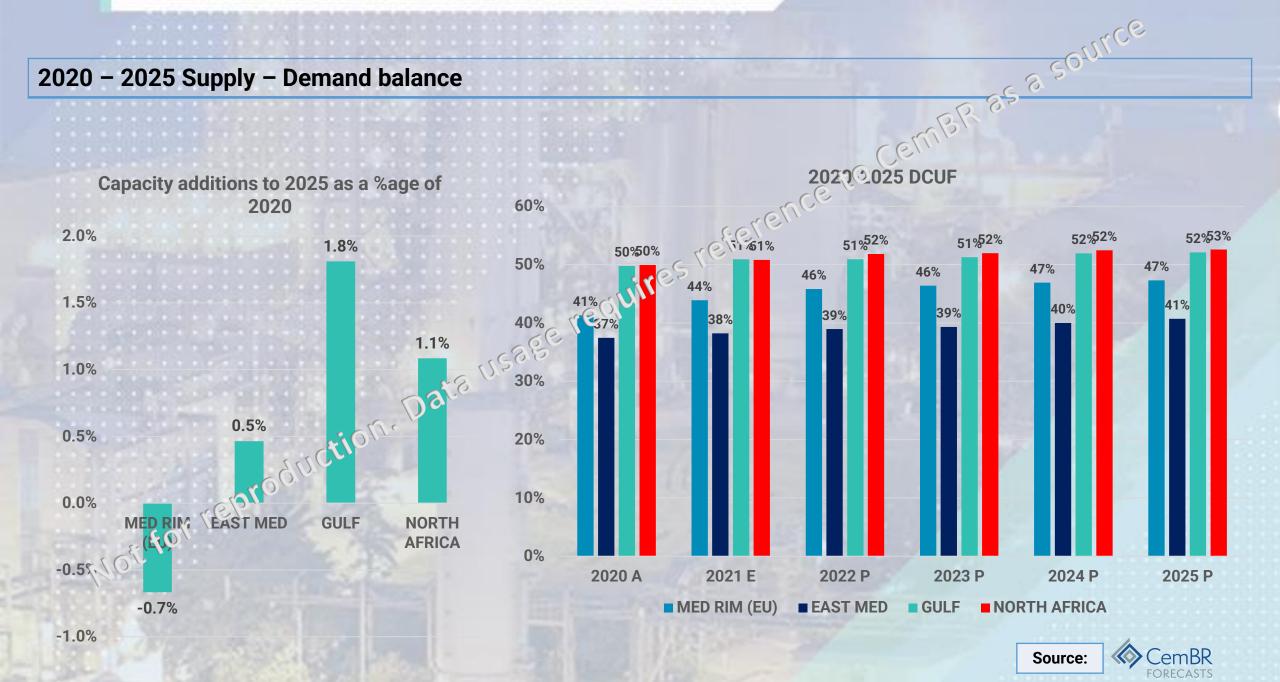
BRASSSOUTCE Sub-regio al growth 2021 over 2020 **Consumption growth expectations - 2021/2020** CE EO Data USage requires references Cyprus Iraq Oman 3.5% Italy Algeria Albania Slovenia UAE 4.0% Egypt France Croatia Turkey Greece GULF 4.0% Saudi Arabia Portugal 9137 Qatar Tunisia Spain Morocco MED RIM (EU) 4.0% Lebanon Jordan Kuwait 3.0% 3.2% 3.4% 3.6% 3.8% 4.0% 4.2% 0.0% 2.0% 4.0% 6.0% 8.0% 10.0% 14.0% 12.0%



2019 – 2025 Demand scenario profile



2020 – 2025 Supply – Demand balance



Current trading conditions and trends



Latest anecdotal information: Clinker FOB at US\$ 40-42 Cement CEM I FOB at US\$ 48-50, but why?

Industry taken by surprice – 2020 and 2021 demand Carbon costs beginte bite (Portugal to the UK at € 55-60 FOB) USA keeps asking for cement

regu

Some inclustries have not got their exporting act together, yet Fossil fuels significant price increases

Exports Strategy formulation and delivery: It is an individual game!

- Should I consider long term agreements?
- Should I think about investing abroad?
- What could keep FOB prices high or increasing?
- Are my target markets saturating?

eto cembrasas

- Are there others that might have a better handle on my exporting destinations?
- Who might come in unexpectedly and "steal" my markets?

Conclusions

There are several patterns regarding the cement industries of the Med. rim.

The European part of the Med rim has the largest number of integrated plants and kilns, but the lowest level of clinker capacity. Small plants and small kilns.

The Gulf is the opposite, with the largest volume of clinker produced in the smaller number of plants and kilns. Large plants and large kilns.

858.501

All markets in the Med rim have average of above per capita consumption. The Gulf has the highest per capita in the world.

The whole region is a net exporter of both cement and clinker. Particularly in East Med. cement and clinker exports support utilisation rates in a meaningful way. Can this level of exports be sustained?

In the last decade only the Gulf has seen some significant growth. The other three sub-regions have experienced demand reversals, with the Med rim (EU) Copping by almost 40% from 2010 to 2020.

2020 was a mixed beg but not universally bad. Some markets experienced significant growth in 2020.

The 2020 – 2025 forecasts show a subdued recovery across all sub-regions. Only the Gulf is expected to reach a construction growth of close to 3% CAGR. The others remain at the low 2.0s%.

Small capacity additions anticipated between 2020 and 2025 coupled with similar levels of demand growth will not impact utilisation rates significantly. Cement utilisation rates are expected to be subdued over the forecasting period.

Welcome to CemBR – Cement Business Research

CemBR is the ultimate provider of data, insights, intelligence and communications in the global cement and related sectors

CemBR



Services & Products:

Reports - Multi client:

- Individual cement and clinker country reports for most markets – globally
- Regional and thematic reports (Carbon & Cement, White cement, Green cements, Cement substitutes etc.)

Bespoke Research:

Client defined scope and requirements

CemBR Intelligence Platforms:

- The CGC[™] and
- The CemBR FORECASTS
- The CemBR CLINKER

Coming soon:

- Carbon database and intelligence platform
- Integrated plant benchmarking tool

Communication platforms:

Knowledge Hub

¢CGC		a based	Filling Carlosing	- Performance and other	- ingen
		Carry Belland) (•••	desiring better date
Number of a	emont plants	Corrent	teresty (MT)	C inter cap	acity (MT)
the	8	2.75	10.4	<u>A</u>	6.2
Cernint core	umption (MT)	Certant p	(TM) mittubor	Net correct 1	nating (MF)
	6.4	4	7.5	-	1.2
DOW	(W) **	Cervent att	isation rate (%)	Construction	(% of 60P)
0	61%	2	73%	0	5.4%

Country dashboard

A snapshot of the market with twelve cement related indicators. Downloadable in PDF.



Market and economic data

Macroeconomic and cement data in tabular and graphical form. Compare markets and download in Excel.



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Colombia

Gene	ral data 2020	Cen
0	CemBR region	Cen
3	Americas	Con
Ткм	Area in square KM	Con
1	1,142,000	Cem
	Population	Cerr
****	50.9 million	-
1-m	Comparative economy size	Rec
L	44/193	Some
150	GDP per capita in US\$	depen consu
nînî	5,336	period

ment market data 2020 ment consumption (MT) 11.3 sumption per capita (Kg) 222 sumption growth rate (CAGR 10yr) 2.4% ment trading net (MT) 0.5 ment production (MT) 11.8

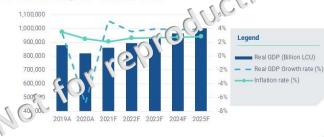
overy in 2021

wnside risks for the economy given its ence on commodity pricing. Cement ption steady growth to the end of forecasting

Macroeconomic considerations

Colombia's economy contracted by 6.8% YoY in 2020. This was the largest recession on record. The economy relies on services and manufacturing sectors and on commodity exports, such as oil, coffee and coal. In 2021 it is expected to grow by 5.2% while recovery to 2019 levels is expected after 2022. For the period 2020 to 2025, growth is expected to average 4.1% p.a., higher than the realized 3.6% CAGR between 2010 and 2019. In the short run, the direction of the economy will depend on vaccination rates, with support from a fiscal package of COP 31 trillion. Lower interest rates are (expected to boost consumption growth and encourage investments. A short-term risk for the echom is social unrest, which began earlier this year as protests to proposed tax reforms, but then esca ate after alleged excessive use of force by the authorities. A medium-term risk is the dep idence of in economy on commodity price fluctuations.

> Real GDP and growth rate 2019A - 2025F



Construction

Between 2010 and 2020, nominal construction GVA increased by 5.7% CAGR. In 2020, construction GVA dropped by around 22.1% YoY. In 2021, construction GVA is expected to grow by around 17%. In the next five years, construction GVA is expected to rise to 7.1% of total GVA. Construction growth is expected to be driven by infrastructure investments and housing. Housing credits are expected to boost residential building construction. Concessions programmes and recovery funds of USD30bn are expected to spur investment in transportation, such as roads and airports, and in energy infrastructure. Public-private partnerships with international participation are an additional growth driver. Potential risks a project delays and inefficiencies in sector works.

Ductoring data 2020

Cement capacity growth rate (CAGR 10yr)

> Grey cement projected supply

9.5 19.5 19.5 19.5 19.5 19.5 19.5

2019A 2020E 2021F 2022F 2023F 2024F 2025F

EXISTING CAPACITY (MT) NEW CAPACITY (MT)

Number of cement plants

Cement utilisation rate (%)

2019A - 2025F

Cement capacity (MT)

DCUFTM

24

Legend



Cement supply

20 19.5 1.9% 61% 58%

There were twenty grey cement plants in Colombia in 2020, fourteen integrated and six grinding, operated by twelve companies or groups. There was also one white cement plant. Grey cement milling capacity was estimated at 19.5 million tonnes at the end of 2020. Around 80% of cement capacity was operated by international groups. Clinker capacity increased by 0.2% CAGR between 2010 and 2020 and was at 10.4 million tonnes at the end of 2020. Between 2020 and 2025, cement milling capacity is expected to increase by around 6.7%. An integrated grey cement plant, with estimated capacity of 1.3 million tonnes, is under construction in Maceo. The plant is expected to be commissioned in 2023

as a source Cement de 10 no recast and supply-demand considerations

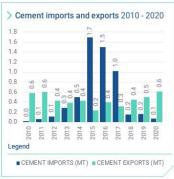
Cement end to dropped by around 10.8% YoY in 2020. In the first four months of 2021, domestic en in h a h creased by around 44% YoY to 4.3 million tonnes. For the full year it is estimated that dem, ad will recover by around 8.8% YoY with a long-term trend of +4.5% CAGR between 2020 and 2025. ombia's cement consumption per capita is considered low according to global comparisons. It is lower than both the regional and South American averages. As shown in the regional section. Colombia is below the trend line of the Cement Economic Curve (CEC) indicating that significant growth in cement consumption per capita in the current development phase of the economy is possible. The forecasts reflect this partly, as per capita consumption is expected to rise to its highest level since 2016 by 2025.

Indicator	2019A	2020A	2021E	2022F	2023F	2024F	2025F
Cement consumption (MT)	12.7	11.3	12.3	12.7	13.2	13.6	14.1
Consumption growth rate (%)	4.2%	-10.8%	8.8%	3.3%	3.6%	3.5%	3.5%
Consumption per capita (KG)	252	222	240	247	255	263	271
Cement supply (MT)	19.5	19.5	19.5	19.5	20.8	20.8	20.8
DCUF (%)	65.0%	58.0%	63.1%	65.2%	63.3%	65.5%	67.7%
Excess supply (MT)	6.8	8.2	7.2	6.8	7.6	7.2	6.7

The DCUF dropped significantly to around 58% in 2020, which is the lowest level since 2011. It is estimated that the cement market will overcome the effects of the COVID-19 pandemic by 2024. During the forecasting period, the DCUF is expected to rise to near 68%, with excess cement capacity dropping significantly.

Trade

Colombia turned from a net exporter of cement in the early 2010s to a net importer between 2014 and 2017. Imports increased significantly to a peak of 1.7 million tonnes in 2015. After 2018, imports dropped significantly and exports resumed, turning Colombia to a net exporter of cement again. In 2020, cement imports dropped to the lowest level since 2011, while exports increased to the highest level of the decade. Looking forward to 2025, with DCUF levels near 68% and significant excess cement capacity, Colombian cement companies may consider increasing cement exports further to raise utilisation rates to previous peak levels of 72%-75% achieved in 2014/2015. However, clinker availability may be an issue.



Colombia

Colombia

General data 2020	Current clinker asset of	verview
CemBR region	Number of integrated plants	14
Americas	Clinker capacity (MT)	10.4
Area in square KM 1,142,000	Number of kilns	20
	Average kiln size (TPD)	1,631
Population 50.9 million	Cement market data 20	20
Comparative economy size	Cement consumption (MT)	11.3
44/193	Consumption per capita (Kg)	222
GDP per capita in USS 5,336	Cement trading net (MT)	0.5
	Cement production (MT)	11.8

Current clinker asset configuration

Colombia is the 7th largest clinker industry out of the 13 countries that make up the Americas region. The industry represents 3.9% and 5.6% of the regional totals for clinker capacity and number of kilns. The age of the assets in the industry is above the average for the region. Colombia has 57% of its kilns installed before 1990 whereas the region has almost 50% of its kilns installed at the same time. In terms of kiln size, Colombia's average is much smaller than the regional average (2,368 TPD). Around 65% of kilns are preheater/precalcine (5 stages).

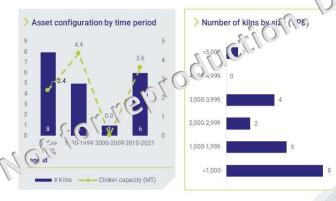
10.4

1,631

11.3

11.8

0



Current clinker statistics

2020 Clinker utilization rate 85% Last 5Y clinker utilization rate 94%

In 2020, clinker production stood at 8.9 million tonnes resulting in a 85% clinker utilisation rate. Colombia's cement consumption

experienced a spectacular growth in the first part of 2010s. Since that time, the country has experienced significant net clinker inflows culminating at 520,000 tonnes in 2017. In 2020, cement consumption saw a significant decline of around 11%, easing the pressurg 🍙 industry to produce clinker.

Clinker s

The i a wy plant expected to be commissioned in 2023 in Colombia. This will add around 1.1 million 10 nes of clinker to the market. There was another integrated plant announced recently, but it has been put on hold at this time.

Clinker balance 2020

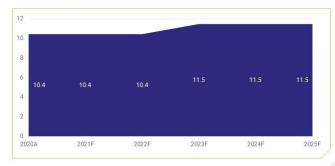
Net clinker inflows/outflows (+ve = inflows) = Net

clinker trading + clinker for exported cement = 0.1

Net clinker Clinker Clinker for Clinker for duction trading used for exported domestic

(+ve = cement cement cement

Clinker supply curve 2020A-2025F





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mbb.'s domestic cement consumption is expected to recover in 2021 and beyond returning to the 2015 gis at the end of the forecasting period. This will necessitate a growing net clinker inflows trajectory going forward. By 2025 the industry is expected to have reached net clinker inflows of the order of 600,000 tonnes.

Clinker production forecasts in MT 2020A – 2025F



NB: Net clinker inflows/outflows is the sum of net clinker trading and clinker for exported cement.

Clinker supply-demand balance and trading 2020A - 2025F

Net clinker inflows are projected to increase over the forecasting period to cover increasing domestic demand growth. Despite this and the expected new clinker capacity coming on stream in 2023, the industry will continue to experience clinker utilisation rates around the 90% mark.

This may encourage local players to reinvigorate their investment plans for new clinker capacity to ease the industry's high utilisation rates. Given the nature of the existing clinker manufacturing facilities, a new plant will assume the competitive high ground and thus be able to capture the growth in the market in an efficient way.







The ultimate "intelligence" provider in the global cement sector

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