

World production and consumption of ceramic tiles



Trend 2011 - 2020

9th Edition Year 2021





ACIMAC

Association of Italian Manufacturers of
Machinery and Equipment for Ceramics



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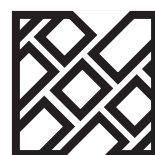
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WORLD PRODUCTION AND CONSUMPTION OF CERAMIC TILES

TREND 2011 - 2020

9TH EDITION YEAR 2021





PRESENTATION

Despite the negative expectations caused by the Covid pandemic and factory lockdowns, **global tile production and consumption figures increased in 2020 after declining in the previous two years**, while trade is affected by the sanitary emergency and the consequent slowdown in international transport and logistics, with a drop in exports and imports of tiles.

However, examining the data in more detail we see that there are many distinctions to be made. This is the reason why also in this ninth edition of our best-selling report we continue to propose a thorough examination of the current situation and of the evolution in the last ten years both at macro-area level and at single country level, with an analysis by volumes in square meters and also by values in euros.

The final figures for 2020 present us an unexpected growth in both **world tile production (+1.6%)** - even higher than the average CAGR of the last decade (+1.1%) - **and consumption (+2.3%)** - still higher than the average growth rate since 2011 (+1.4%). **International trade, instead, registers a decrease (-2.1%** with respect to the previous year, while CAGR 2011-2020 is +1.9%). **Asia continues to be the leading producer and consumer of ceramic tiles, accounting for over 70% of the world market.** But the **most interesting growth rates are in non-EU countries**, with a double-digit increase, over +11% in terms of production, consumption and exports. On the other hand, European Union and the entire American continent suffer.

We must emphasize right away that **the 2020 global volumes as well as the entire historical data set for Chinese and Asian tile production has undergone a substantial revision.** A deeper and more thorough examination of Chinese tile manufacturers (see MECS, "China ceramic tiles & slabs" 2021), recently realized by our study center, allowed us in fact to revise the figures related to the actual installed Chinese production capacity.

It turns out that **China alone is worth 52.7% of global tile production, with 8.47 billion sqm and 3% growth between 2019 and 2020, after two years of production declines** and compared to a CAGR in the last decade of -0.3%. However, **the most interesting producing countries** in terms of dynamism and volumes **are now India (1.3 billion sqm, +8.8% average annual growth), Turkey (+25% in 2020), Iran (+12.8%), Algeria (+32%), Bangladesh (+14.1%).**

If we consider the market in terms of value, European countries stand out in the rankings: **Italy is still the world leading tile exporter, even if it loses 1.8% with respect to 2019**, while Spain is in third place. Germany and France (surpassed only by the United States, whose demand is decreasing) remain on the podium of the main importing countries (in value). **The average price per square meter shows big differences** in the various markets, with price lists ranging from the average 1.1 euros/sqm of exported Ugandan tiles to 13.6 euros of Italian exports. On the other hand, China imports mainly high-end tiles with an average price of 19.5 euros per sqm, against 2.3 euros of tiles imported by Paraguay.

This study sets out the data in a simple and clear way with the aim of providing the reader with a document that can be consulted immediately and simply as a work tool.



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1.1 WORLD TILE PRODUCTION: RECENT HISTORICAL TRENDS BY GEOGRAPHICAL AREA



Analysing tile production from 2011 to 2020 (Table 1.1), we find an increase in production in some Asian countries and at the same time a contraction in the output of EU countries. Yet the ratio of Asia/EU remains quite stable over the decade, with just a little contraction: whereas in 2011 Asia produced 9.5 times the volume of tiles manufactured in the European Union, after a peak of the ratio at 11.1 times in 2014, today this ratio is again under the ten times threshold (Chart 1.1.B).

In Asia, tile production rose at an average annual rate of 0.8% since 2011, though facing an increase in 2020 (up 2.8 on the previous year), accounting for 73.9% of total world production. During the same period, **Europe** registered an average annual increase in output of 0.5% (7.6% of the world total).

In addition to Asia, other continents have seen a considerably increase in output since 2011.

European countries outside the EU produced 638 million sqm in 2020 (an average annual growth rate of 3.2% since 2011), while **Africa** produced 918 million sqm (average annual growth of 11.2%), and the **NAFTA** region, produced 321 million sqm (average annual growth of 1.1%). A negative medium-long time trend is shown by **Latin America**, producing 1,088 million sqm, at a negative average annual growth rate of -0.2% over the period 2011-2020.

Table 1.1 - WORLD TILE PRODUCTION BY GEOGRAPHICAL AREA

Values in million of sqm and Var.% YoY and Var. % YoY



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Shares 2020	Var. 20/19	CAGR 20/11
EU	14,500	15,000	15,500	16,000	16,500	17,000	17,500	18,000	18,500	19,000	73.9%	2.8%	0.8%
Other Europe	1,000	1,100	1,200	1,300	1,400	1,500	1,600	1,700	1,800	1,900	3.2%	3.2%	3.2%
NAFTA	300	310	320	330	340	350	360	370	380	390	1.1%	1.1%	1.1%
South America	1,000	1,100	1,200	1,300	1,400	1,500	1,600	1,700	1,800	1,900	-0.2%	-0.2%	-0.2%
Asia	14,500	15,000	15,500	16,000	16,500	17,000	17,500	18,000	18,500	19,000	73.9%	2.8%	0.8%
Africa	900	1,000	1,100	1,200	1,300	1,400	1,500	1,600	1,700	1,800	11.2%	11.2%	11.2%
Oceania	100	110	120	130	140	150	160	170	180	190	0.5%	0.5%	0.5%
TOTAL	19,500	20,000	20,500	21,000	21,500	22,000	22,500	23,000	23,500	24,000	100%	0.0%	0.0%

Chart 1.1 - WORLD TILE PRODUCTION - TOTAL DATA

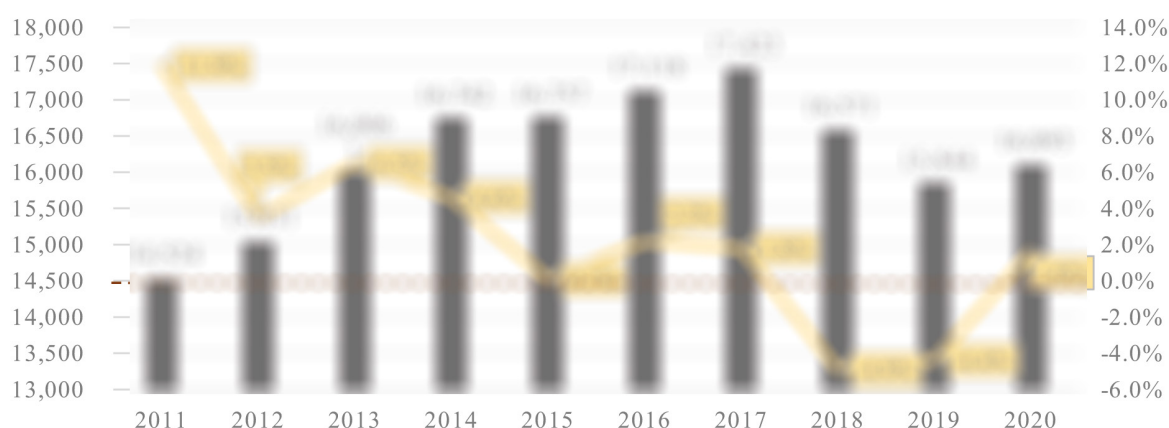


Chart 1.1.A - WORLD TILE PRODUCTION BY GEOGRAPHICAL AREA 2020 - % shares

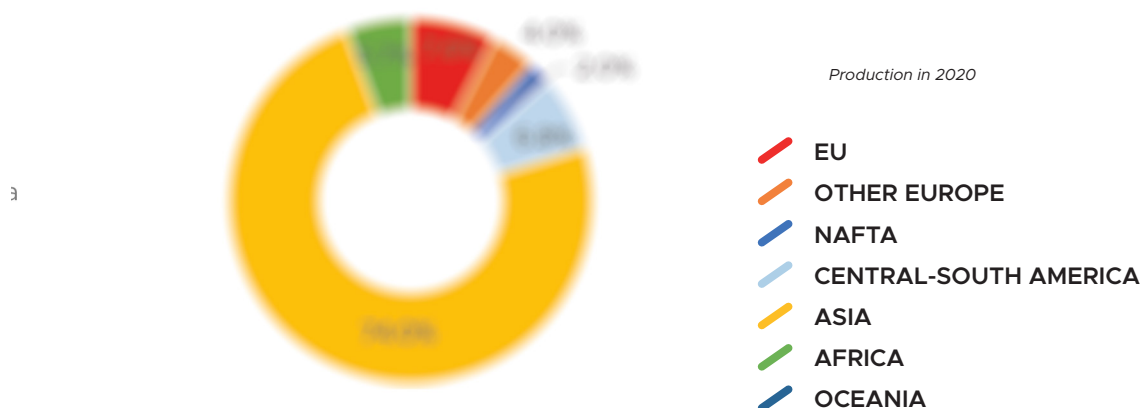


Chart 1.1.B - WORLD TILE PRODUCTION BY GEOGRAPHICAL AREA (2011 - 2020) - % shares

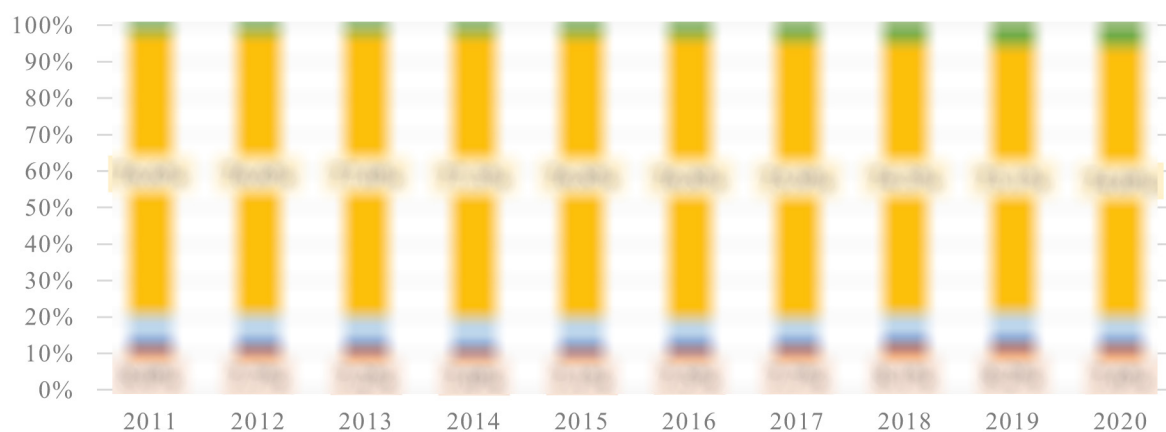
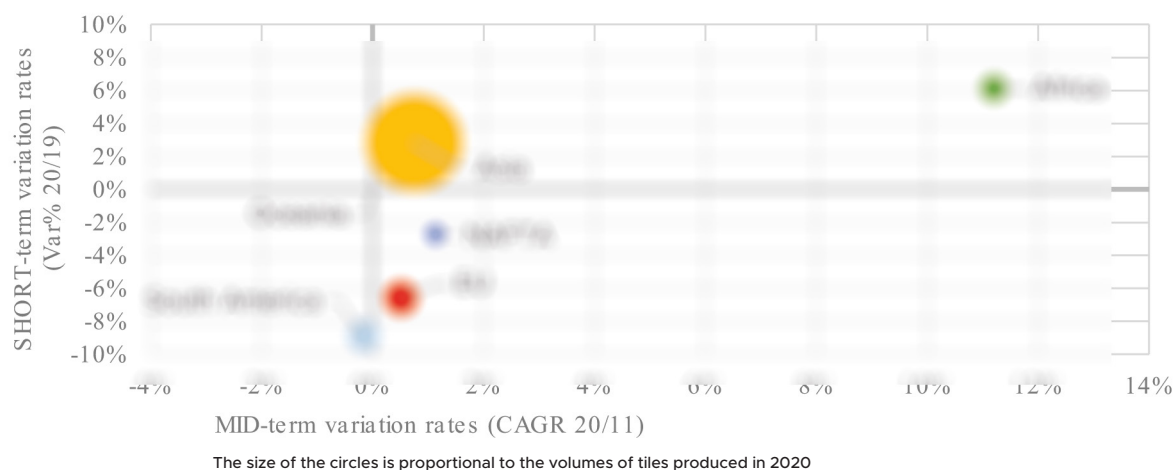


Chart 1.1.C - WORLD TILE PRODUCTION BY AREAS - VAR. IN SHORT AND MEDIUM TERM - Var. %





C2 Latin America BRAZIL



Brazil is the **world's third largest ceramic tile producer and consumer, and the seventh largest exporter**. Exports increased overall by 50% in the last decade, from 60.1 million sqm in 2011 to 95.9 million sqm in 2020, corresponding to an average annual increase of 5.3%, but fell by 5.1% in 2020 with respect to 2019.

-5.1%

Brazilian **exports** have always been focused on the **American continent** (Table 2.2). While the NAFTA region was the top destination for exports until 2006 (41.8% of total exports, now only 26.7%), since then it has gradually been replaced by South American countries.

In 2020 Brazil exported 65.7 million sqm to South America (68.5% of the total) and 25.6 million sqm to the NAFTA region (26.7% of exports).

The fall in exports towards the USA, from 9.3 million sqm in 2011 to 7.4 million sqm in 2014, has been completely recovered thanks to the fact that Chinese import almost disappeared; the current figure is now 25 million sqm (+25.3% with respect to 2019), corresponding to an average annual increase of 11.6% over the period 2011-2020.

Moreover, markets where Brazil achieved positive average annual growth include Paraguay, the second favourite destination for Brazilian exports (3.9% average annual growth but 18.8% year-on-year decrease in 2020), Dominican Republic, second destination (7.1 million sqm, -12.7% YoY in 2020, but +4.2% the annual average growth since 2011) Chile (+11.6% in the medium term, +0.9% year on year) and Uruguay (5.4 million sqm and +1.4% on 2019).

Table and Chart 1 - BRAZIL: KEY INDICATORS

Values in million of sqm and Var.% YoY

sqm

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Var. 20/19	Var. 19/18	Var. 18/17
Production	60.1	65.1	68.1	70.1	72.1	74.1	76.1	78.1	80.1	82.1	+5.3%	+5.3%	+5.3%
Export	60.1	65.1	68.1	70.1	72.1	74.1	76.1	78.1	80.1	82.1	+5.3%	+5.3%	+5.3%
Import	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	-12.7%	-12.7%	-12.7%
Consumption	70.2	75.2	78.2	80.2	82.2	84.2	86.2	88.2	90.2	92.2	+5.3%	+5.3%	+5.3%

Values in million of sqm

Export and Import data on right-hand axis



Table 2 - BRAZIL: TILE EXPORT BY GEOGRAPHICAL AREA - % Values

Values in million of sqm and Var.% YoY

sqm

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Shares	Var. 20/19	CAGR 20/11
Asia	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000%	1000%	1000%
Africa	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000%	1000%	1000%
NAFTA	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000%	1000%	1000%
South America	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000%	1000%	1000%
EU	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000%	1000%	1000%
Other Europe	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000%	1000%	1000%
Oceania	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000%	1000%	1000%
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000%	1000%	1000%

Table 3 - BRAZIL: TILE EXPORT

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Shares	var. 20/19	CAGR 20/11
United States of America	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000%	1000%	1000%
Paraguay	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000%	1000%	1000%
Dominican Republic	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000%	1000%	1000%
Chile	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000%	1000%	1000%
Uruguay	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000%	1000%	1000%
Argentina	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000%	1000%	1000%
Colombia	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000%	1000%	1000%
Haiti	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000%	1000%	1000%
Honduras	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000%	1000%	1000%
Panama	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000%	1000%	1000%
Jamaica	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000%	1000%	1000%
Bolivia	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000%	1000%	1000%
Peru	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000%	1000%	1000%
Trinidad and Tobago	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000%	1000%	1000%
Costa Rica	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000%	1000%	1000%
South Africa	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000%	1000%	1000%
Guatemala	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000%	1000%	1000%
Ecuador	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000%	1000%	1000%
Guyana	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000%	1000%	1000%
Suriname	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000%	1000%	1000%
Other Countries	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000%	1000%	1000%
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000%	1000%	1000%



Chart 2 - BRAZIL: CERAMIC TILE EXPORTS BY GEOGRAPHICAL AREA - Values in millions of sqm and in %

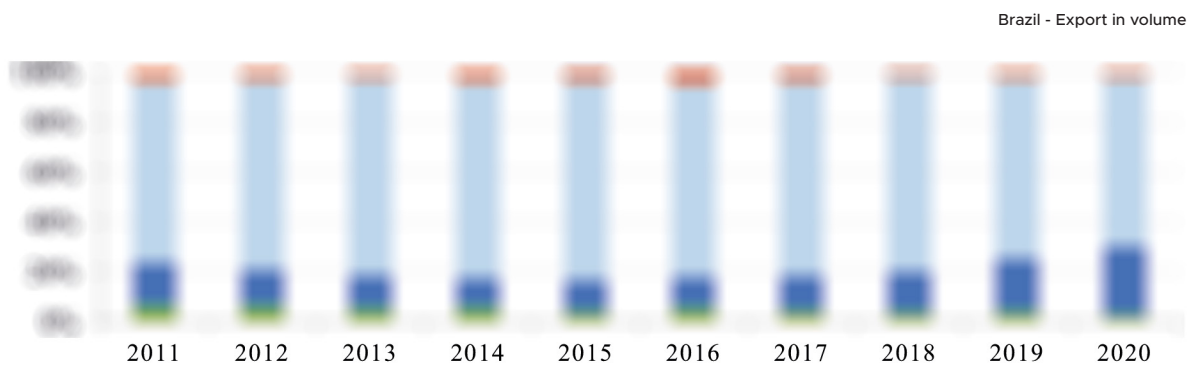
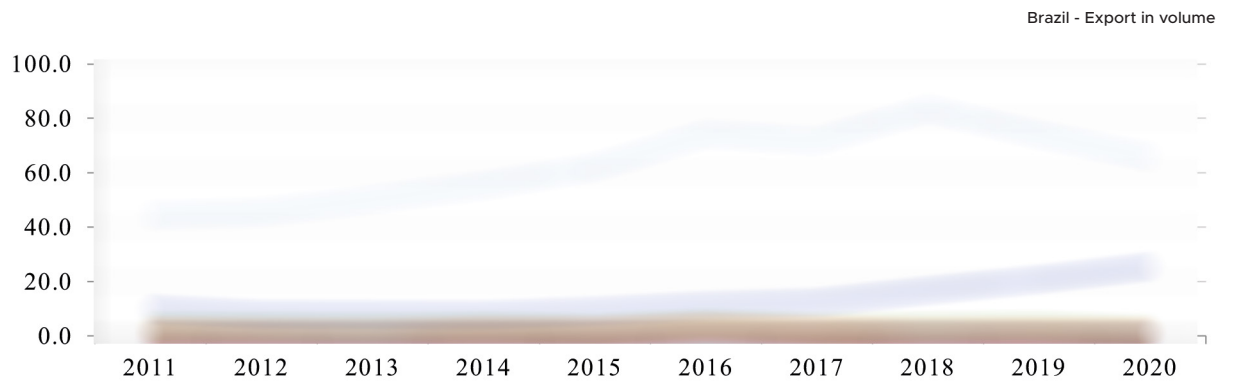


Table 4 - BRAZIL: TILE IMPORT
Values in million of sqm and Var.% YoY

sqm

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Shares	Var. 20/19	CAGR 20/11
India	600	600	600	600	600	600	600	600	600	600	70.00%	20.00%	20.00%
Italy	600	600	600	600	600	600	600	600	600	600	10.00%	20.00%	20.00%
China	600	600	600	600	600	600	600	600	600	600	10.00%	20.00%	20.00%
Spain	600	600	600	600	600	600	600	600	600	600	10.00%	20.00%	20.00%
Portugal	600	600	600	600	600	600	600	600	600	600	10.00%	20.00%	20.00%
Other Countries	600	600	600	600	600	600	600	600	600	600	10.00%	20.00%	20.00%
TOTAL	600	600	600	600	600	600	600	600	600	600	100.00%	20.00%	20.00%

Brazil - Import in %

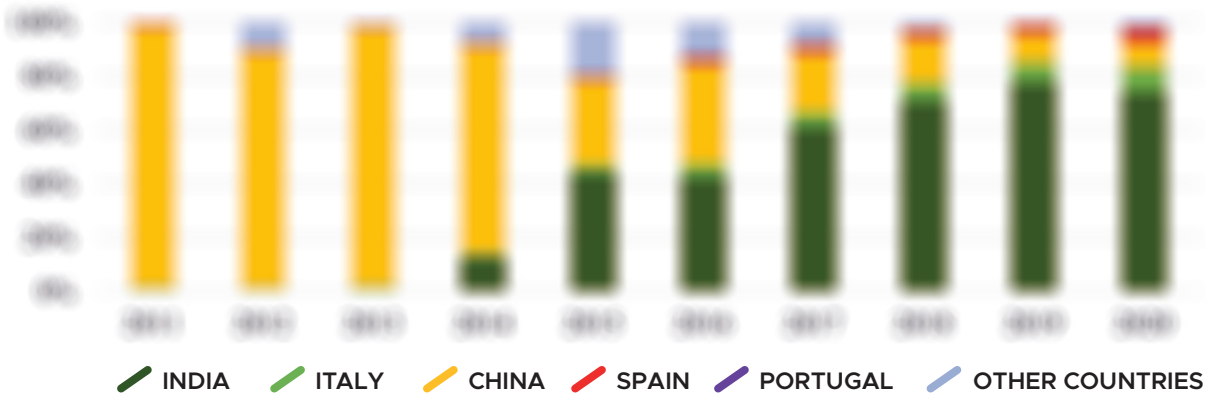




Chart 3 - TILE EXPORT (INDIVIDUAL COUNTRIES). SHORT AND MEDIUM TERM - Var. %

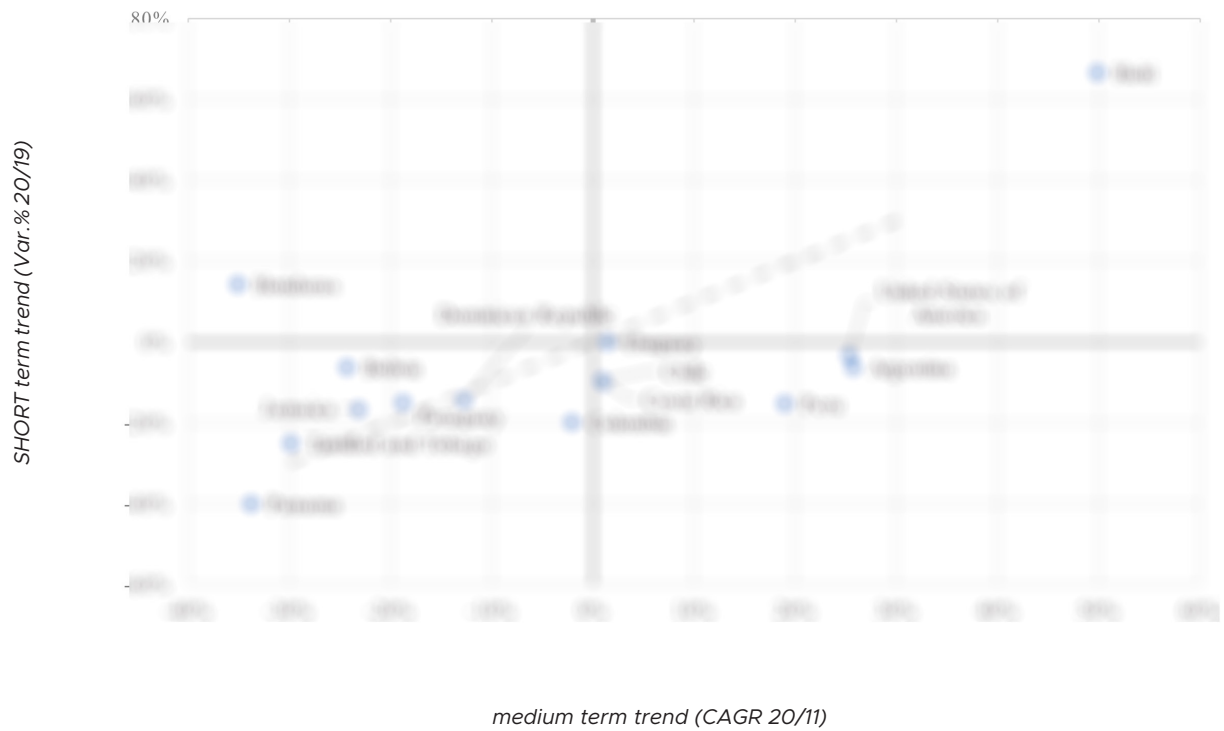


Chart 4 - BRAZILIAN EXPORT AND TILE CONSUMPTION TRENDS, VAR. 20/19 - % Values





BRAZIL AVERAGE PRICES

Brazil is the ninth exporter in terms of revenue, with a total value of 289 million euro (1.8% of the total world export in value).

The Brazilian exports decreased by 6.3% on the last year and the average price slightly decreased at 3.01€/sqm as well.

Brazil exports mainly to other South American countries, which account for 58.5% of the export revenues (167 million euros, experiencing a sharp decrease of 15.3% on 2019, with a 2.55 €/sqm average price). The other export destinations are the NAFTA region (35.7 % market share, increased by 18.6% on the previous year, average price per sqm of 4.03 euros) and EU, 2.8% share, down by 16.4% on the previous year, 5.51 €/sqm average price.

Focusing on the Brazilian export destinations countries, the USA are the largest market, accounting for 34.9% of the total amount (namely 100.8 million euro), registering also a 21.5% increase with respect to 2018, for an average price of 4.02 €/sqm.

In second position Paraguay (12.1% market share, down 13.6% on 2019, 2.30 €/sqm), followed by Argentina (7.2% of Brazilian export revenues, growing by 2.6% on 2019, average selling price of 5.03 €/sqm) and Chile (5.4% market share, down 14.5% on the previous year, 2.75 €/sqm). The UK is the most profitable market for Brazilian export, with an average price of 5.38 €/sqm.

Table 5 - BRAZIL: TILE EXPORT BY GEOGRAPHICAL AREA - % Values



	2018	2019	2020	Var. 20/19	Shares	€/mq 2018	€/mq 2019	€/mq 2020
Asia	100000	100000	100000	0%	100000	100000	100000	100000
Africa	100000	100000	100000	0%	100000	100000	100000	100000
NAFTA	100000	100000	100000	0%	100000	100000	100000	100000
Latin America	300000	300000	300000	0%	300000	300000	300000	300000
EU	100000	100000	100000	0%	100000	100000	100000	100000
Other Europe	100000	100000	100000	0%	100000	100000	100000	100000
Oceania	100000	100000	100000	0%	100000	100000	100000	100000
TOTAL	300000	300000	300000	0%	300000	300000	300000	300000



Table 6 - BRAZIL: TILE EXPORT - % Values
Values in euro thousands and €/sqm

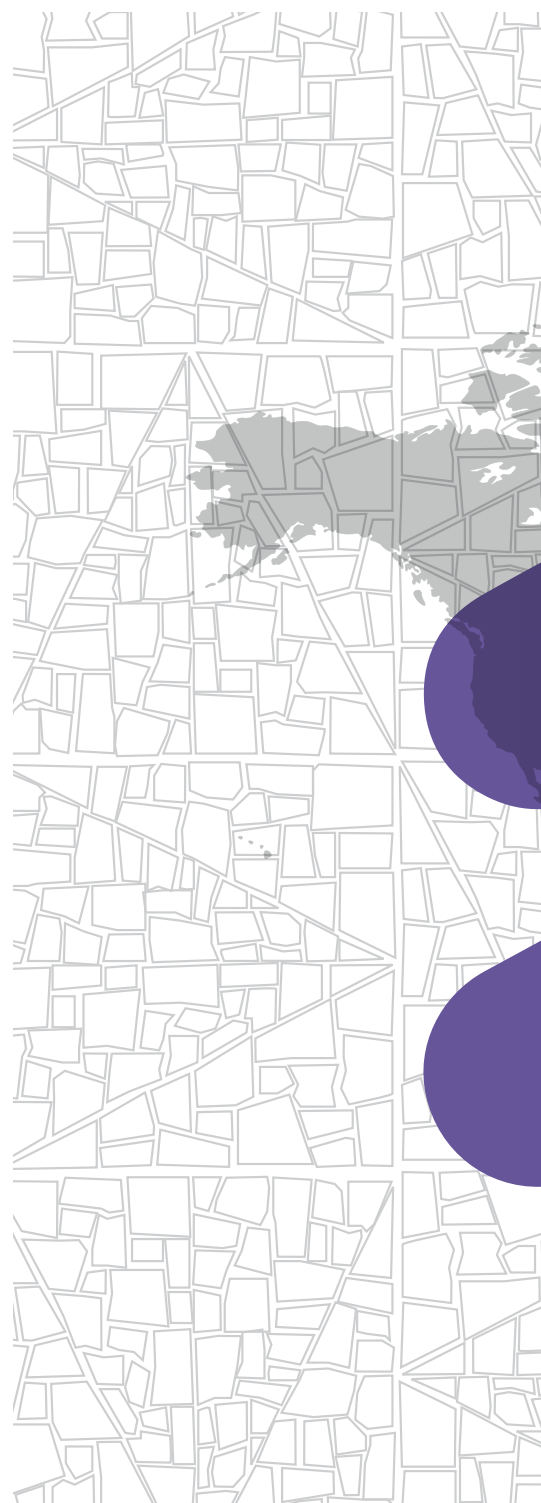


	2018	2019	2020	Var. 20/19	Shares	€/mq 2018	€/mq 2019	€/mq 2020
United States of America	181.100	186.000	188.000	186.000	186.000	10.000	10.000	10.000
Paraguay	181.100	186.000	188.000	186.000	186.000	10.000	10.000	10.000
Argentina	181.100	186.000	188.000	186.000	186.000	10.000	10.000	10.000
Chile	181.100	186.000	188.000	186.000	186.000	10.000	10.000	10.000
Dominican Republic	181.100	186.000	188.000	186.000	186.000	10.000	10.000	10.000
Uruguay	181.100	186.000	188.000	186.000	186.000	10.000	10.000	10.000
Colombia	181.100	186.000	188.000	186.000	186.000	10.000	10.000	10.000
Bolivia	181.100	186.000	188.000	186.000	186.000	10.000	10.000	10.000
Haiti	181.100	186.000	188.000	186.000	186.000	10.000	10.000	10.000
Jamaica	181.100	186.000	188.000	186.000	186.000	10.000	10.000	10.000
Honduras	181.100	186.000	188.000	186.000	186.000	10.000	10.000	10.000
Panama	181.100	186.000	188.000	186.000	186.000	10.000	10.000	10.000
Peru	181.100	186.000	188.000	186.000	186.000	10.000	10.000	10.000
Trinidad and Tobago	181.100	186.000	188.000	186.000	186.000	10.000	10.000	10.000
Costa Rica	181.100	186.000	188.000	186.000	186.000	10.000	10.000	10.000
Ecuador	181.100	186.000	188.000	186.000	186.000	10.000	10.000	10.000
Guatemala	181.100	186.000	188.000	186.000	186.000	10.000	10.000	10.000
South Africa	181.100	186.000	188.000	186.000	186.000	10.000	10.000	10.000
United Kingdom	181.100	186.000	188.000	186.000	186.000	10.000	10.000	10.000
Guyana	181.100	186.000	188.000	186.000	186.000	10.000	10.000	10.000
Other Countries	181.100	186.000	188.000	186.000	186.000	10.000	10.000	10.000
TOTAL	3							



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