

# 2019 World Ceramic Tiles Forum

November, 6 – 9, 2019

Westin Grand Hotel Berlin  
Berlin, Germany



# 2019 World Ceramic Tiles Forum

## National Context Brazil



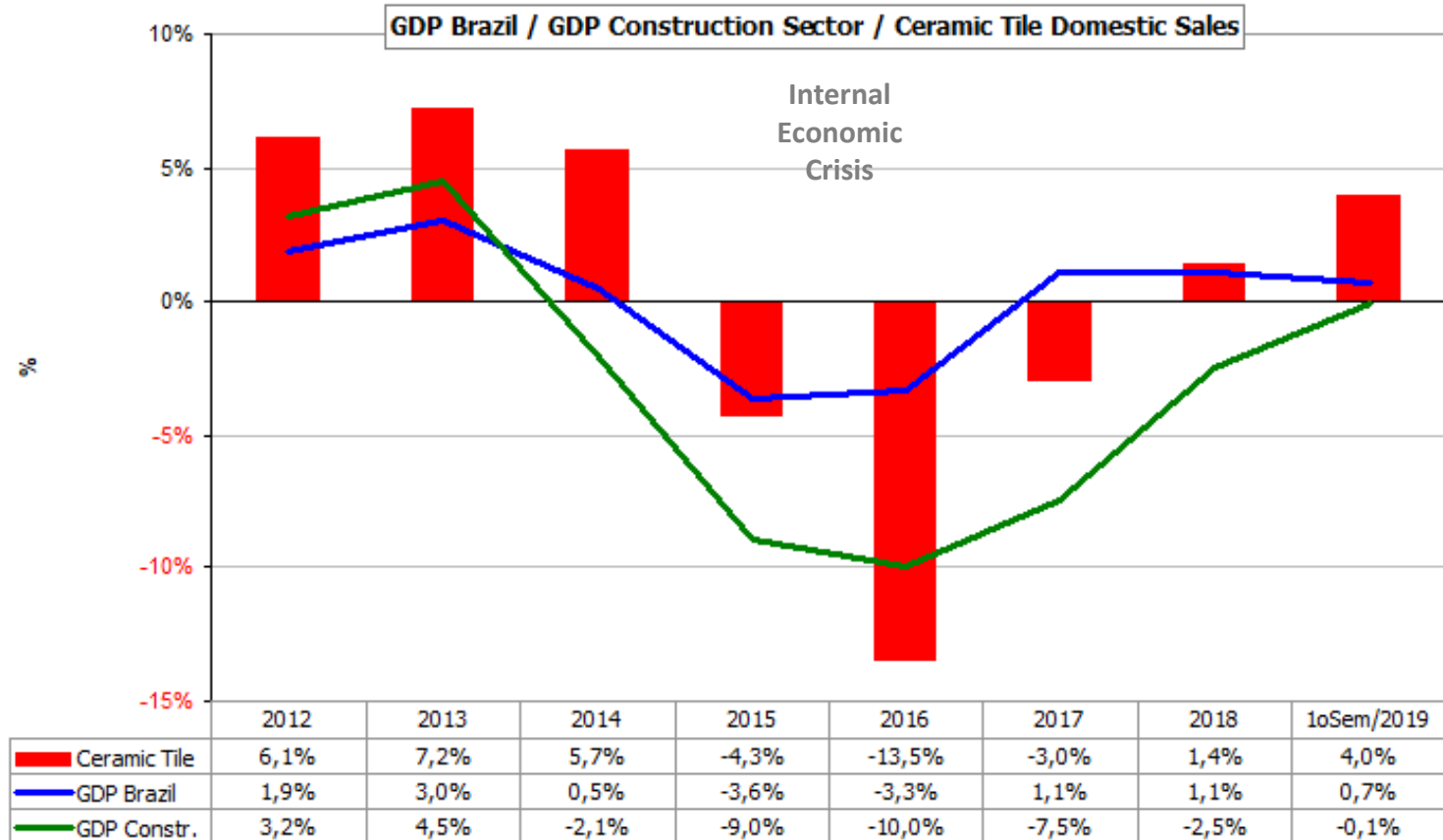
## National Context - Brazil

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- I. Trend in the construction sector/demand
- II. Trend in production, consumption and trade in ceramic tiles
- III. Latest developments at national level in energy supply regulation and taxation
- IV. Development in standardisation at national level
- V. Development in regulations at national level affecting ceramic tiles (notably environmental or health & safety regulation (e.g. silica))
- VI. Other national developments

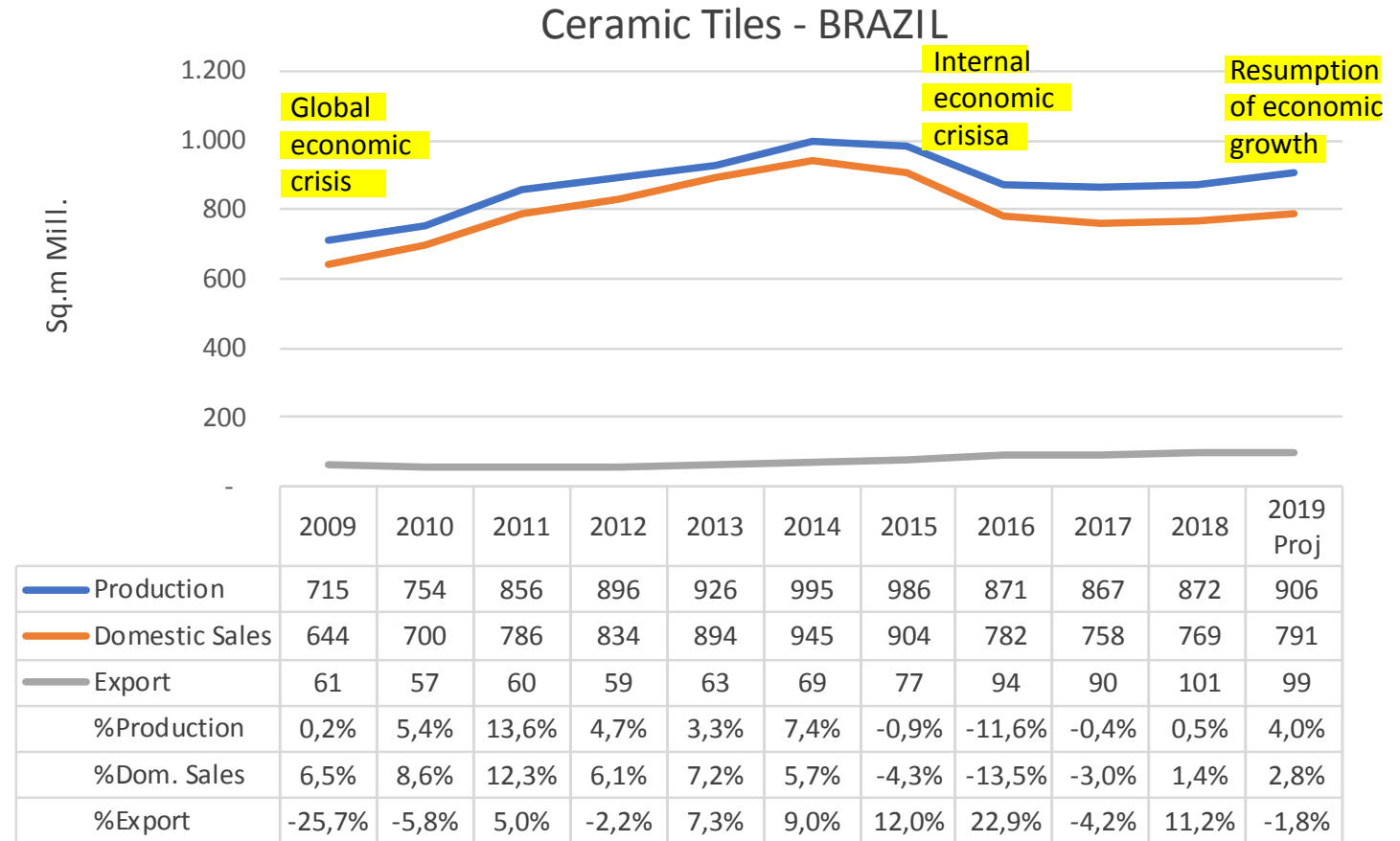
## National Context - Brazil

### I. Trend in the construction sector/demand



## National Context - Brazil

### II. Trend in production, consumption and trade in ceramic tiles



## National Context - Brazil

III.

Latest developments at national level in energy supply regulation and taxation

### (Non) Evolution of Natural Gas Industrial Demand



Fonte: Abegás.

### III.

Latest developments at national level in energy supply regulation and taxation

Petrobras signs agreement with Cade (Economic Defense Administrative Council) in July / 2019 with the following determinations:

- end of the distribution and transportation monopoly of Petrobras;
- Release of capacity in the system of transport;
- New third party access format for your logistics infrastructures;
- Prohibition to buy gas from third parties.

### III.

Latest developments at national level in energy supply regulation and taxation

### Pillars of the New Gas Market - Brazil

- Competition Promotion;
- Harmonization of state and federal regulations;
- Gas sector integration with the electricity sector;
- Removal of Tax Barriers.



### III.

Latest developments at national level in energy supply regulation and taxation

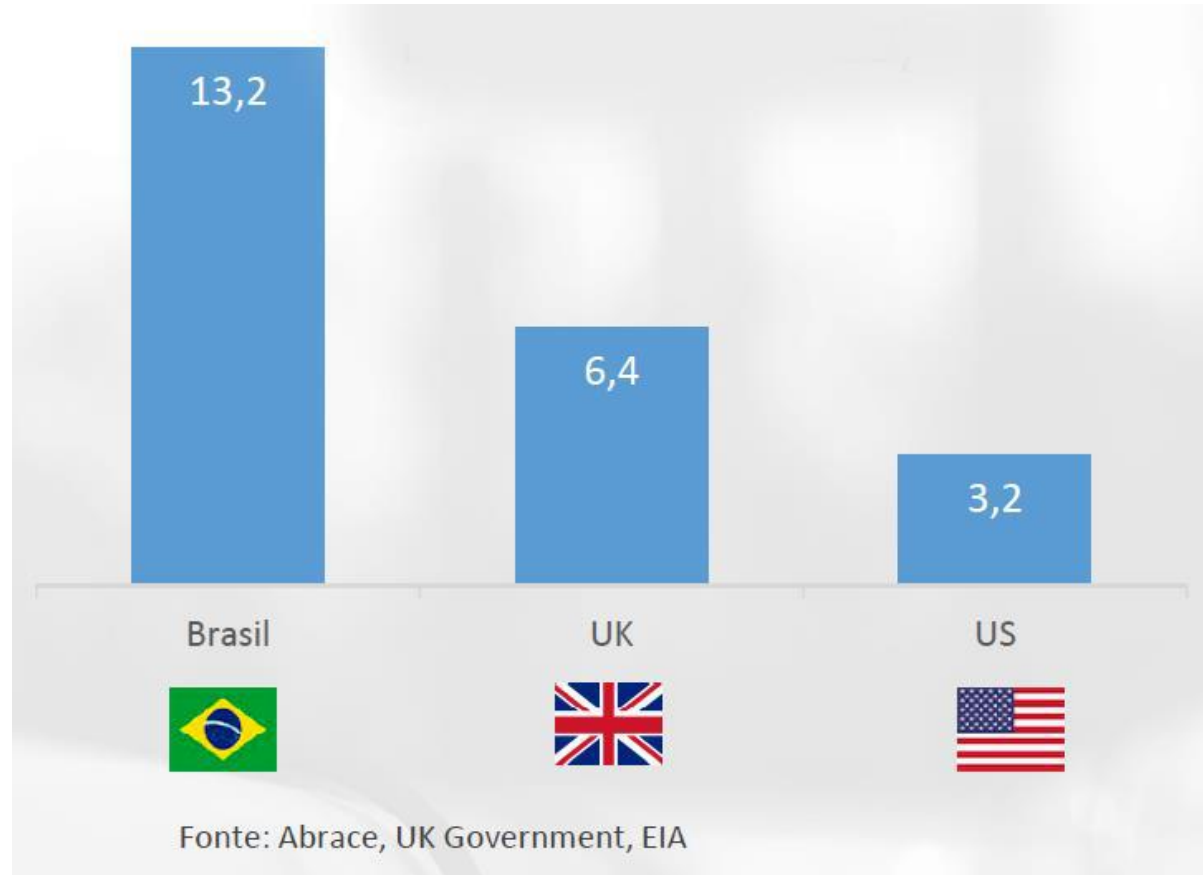
### Expected results

- Improve the use of pre-salt from the Alagoas / Sergipe basin;
- Expand investments in natural gas flow, processing, transportation and distribution infrastructure;
- Increase competition in gas thermoelectric generation Restore the industry's competitiveness in its various segments, such as pulp, fertilizers, petrochemicals, steel, glass, ceramics and others.

## National Context - Brazil

### III. Latest developments at national level in energy supply regulation and taxation

How much does the  
industry pay in Brazil  
and worldwide ...  
Final cost of gas for  
industry – US\$  
million/btu



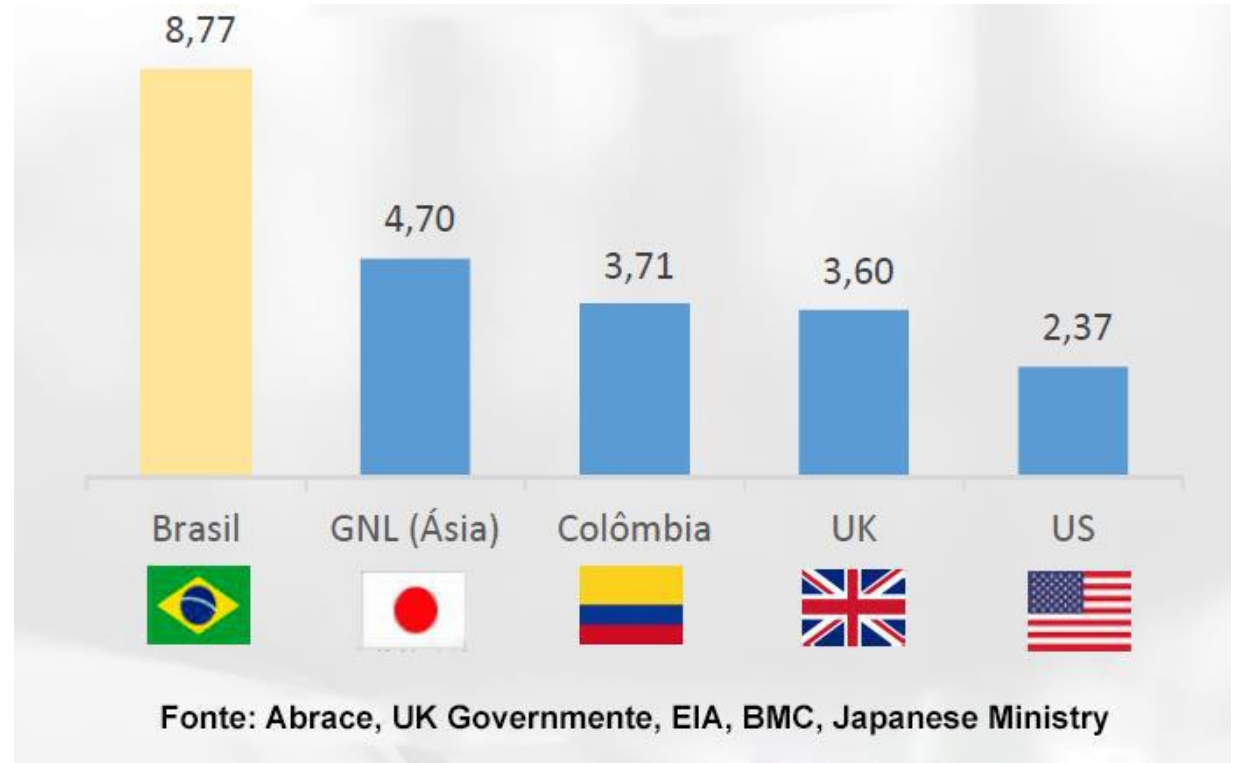
## National Context - Brazil

III.

Latest developments at national level in energy supply regulation and taxation

How is it in countries with more developed market?

Gas x Gas Competition  
- US\$ million/btu





### IV. Development in standardisation at national level

#### CB189 – TC189 Mirror:

- Full adoption of ISO: 10545 - Parts 1 to 16
- Full adoption of ISO 13006:2018
- Cancellation of ABNT Porcelain Standard
- Performance Standard (NBR 15575): NBR Friction Coefficient - Test Method: Tortus dynamic civolozimetro
- Creation of ABNT Mosaic Tile's Standard

#### WG07: Sustainability

Study Committee for the creation of NBR based on ISO 17889.



V.  
Development in regulations at national level affecting ceramic tiles (notably environmental or health & safety regulation (e.g. silica))

### 1. Current legislation applicable to respirable crystalline silica (RCS)

#### 1.1 - Emissions limit in force

- Regulation 3214/78 by Ministry of Labor and Employment: Uses and controls of individual protection equipment
- NR 15 Anex 12- Breathable Silica (under 10  $\mu$  m) - max. 0.10 mg / m<sup>3</sup> (48h weekly exposure).



V.  
Development in regulations at national level affecting ceramic tiles (notably environmental or health & safety regulation (e.g. silica))

### 1. Current legislation applicable to respirable crystalline silica (RCS)

#### 1.2 - Labelling requirements

- Brasil: National Program for the Elimination of Silicosis - PNES ([www.fundacentro.gov.br](http://www.fundacentro.gov.br)) registered at ILO.
- National Air Quality Control Program: State Environmental Companies control air quality with meters near ceramic poles - Particular MP10.



V.  
Development in regulations at national level affecting ceramic tiles (notably environmental or health & safety regulation (e.g. silica))

### 1. Current legislation applicable to respirable crystalline silica (RCS)

#### 1.2 - Labelling requirements

- Dust Control Manual for the ceramic tile sector:  
(<http://www.fundacentro.gov.br/arquivos/projetos/silica-e-silicose/publicacoes-videos/manual-controle-da-poeira.pdf>)
- Environmental Technical Guide for the Ceramic Tile Industry (Cleaner Production (P + L), Good Practice Guide - <https://cetesb.sp.gov.br/consumosustentavel/wp-content/uploads/sites/20/2013/11/ceramica.pdf>).



V.

Development in regulations at national level affecting ceramic tiles (notably environmental or health & safety regulation (e.g. silica))

### 2. Current legislation affecting other raw materials (e.g. TiO<sub>2</sub>)

### 3. Other legislation on environment, health or safety

- Brazil has a broad framework of environmental, social, health and safety legislation.
- Industries use software to control federal, state and local laws.
- Anfacer conducted a mapping of the main environmental legislation

Available at [www.iniciativaanfacer.com.br](http://www.iniciativaanfacer.com.br)





VI.  
Other National  
developments

## The Initiative



**The Anfacer Initiative + Sustainable represents the Brazilian Ceramic Tile Sector's commitment to placing sustainability at the heart of business strategy.**

In addition to contributing towards improved management for Brazilian manufacturers, the Initiative is aimed at creating a Green Economy, adopting Circular Economy practices, reducing negative impacts and maximizing positive impacts.





### VI. Other National developments



#### What the Initiative has already done:

- Life Cycle Assessment (LCA)
- Tabela Ambiental (Environmental Table)
- Environmental Legislation
- Greenhouse Gas Emissions
- Guia para Sustentabilidade (Guide for Sustainability)

#### What is coming:

- Promote the sustainable development of the sector
- Promote innovation and sustainability in the Brazilian ceramic tile industry
- Generate content and knowledge about the subject
- Create solutions for sustainable cities

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Thank you for your attention!



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