# INITIATIVE UNDFR CONSTRUCTION

The Anfacer Initiative + Sustainable aims at allowing Brazilian companies to add both environmental and social values to the business, while yielding financial results.

In addition to contributing to improved management, the Initiative agenda is aligned with creating a Green Economy, adopting Circular Economy practices, reducing negative impacts and maximizing positive impacts.

The work involves two major phases. In the first, the focus was on producing knowledge by undertaking the following studies:

- Life Cycle Assessment (LCA)
- Tabela Ambiental<sup>®</sup> (Environmental Table<sup>®</sup>)
- Environmental Legislation

The second phase will be centered on engaging ANFACER member companies and on preparing industry professionals to work on the collaborative development of the program, focusing principally on promoting the sector's sustainable development.

One step taken in this direction was the elaboration of the Greenhouse Gas (GHG) Emissions Inventory.



## AGENDA TO PROMOTE THE SECTOR'S SUSTAINABLE DEVELOPMENT

### See drivers and opportunities offered by the Anfacer Initiative + Sustainable:

- > Positioning the Brazilian ceramic tile industry;
- > Promoting innovation to drive business sustainability;
- > Generating and disseminating content and knowledge to drive this area forward;
- > Promoting a sustainable economy in the Brazilian ceramic tile industry;
- > Promoting local actions in the clusters;
- > Developing content that creates differentials for ceramic tiles in the civil construction industry;
- > Promoting innovation for sustainable cities.

### www.iniciativaanfacer.com.br

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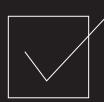
















The Brazilian ceramic tile sector's commitment to incorporating sustainability into business strategy

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# THE VALUE OF BRAZILIAN CERAMIC TILES

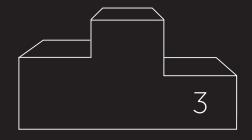
Brazil occupies a leadership position in the global ceramic tile market. Boosting sustainability and driving technology and innovation in Brazilian ceramic tiles is part of this leadership.

This is the mission of the Anfacer Initiative + Sustainable.

790 million m<sup>2</sup>

1.055 million m<sup>2</sup>

USS 344.5 million



Brazil is the third largest

25.000 200.000 93

\* 2017 DATA

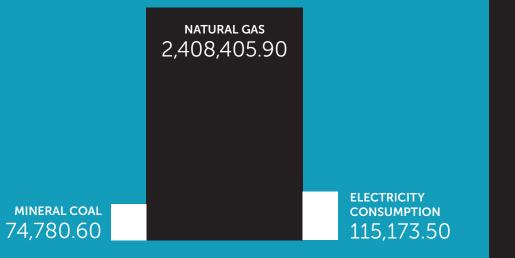
# THE SECTOR'S FOOTPRINT

The Anfacer Initiative + Sustainable will show the Brazilian ceramic tile sector's socioenvironmental impacts.

See the initial results.

## THE EMISSIONS INVENTORY Year: 2016 (tCO2eq)

The Greenhouse Gas (GHG) Emissions Inventory is a management tool that enables measurement of the Brazilian ceramic tile sector's emissions. This will permit manufacturers to develop management plans to reduce their emissions.



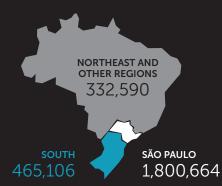
## 4,640,619 tCO<sub>2</sub>e

This was the reduction in emissions the sector achieved between 2006 and 2016, with the adoption of natural gas as its main energy source. This is equivalent to:

stopping **1,000 cars** from driving around the planet 836 times



EMISSIONS BY REGION (tCO<sub>2</sub>e)



 $0.00314 \, tCO_{e}/m^{2}$ 

avoiding felling a

to **8,861 football** 

pitches

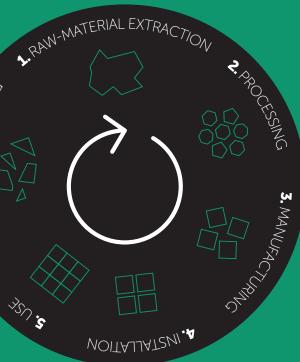
forest area equivalent

The Brazilian ceramic tile sector's environmental footprint was calculated by means of a Life Cycle Assessment (LCA) study, a management tool that enables the compilation of a product's environmental impacts throughout its life cycle.

The study ranges from the extraction of the raw material until the product leaves the factory (cradle-to-gate). The two main national manufacturing routes were inventoried. The inventories were conducted in accordance with the NBR ISO 14040 standard and adopted internationally used premises for the sector.

MORE THAN 70% OF THE TECHNOLOGY EMPLOYED IN THE PRODUCTION IS OF HIGH EFFICIENCY ON WATER AND ENERGY USAGE. See the whole study on the website: www.iniciativaanfacer.com.br

## THE LIFE CYCLE ASSESSMENT



## FROM THE CRADLE TO THE GATE

## **TECHNOLOGY ROUTES**

## Production (millions of m<sup>2</sup>)

227.7		564.3
28.75%		71.25 <sup>%</sup>
WET ROUTE	<b>TOTAL: 792</b> *	DRY ROUTE

\* IN TERMS OF PRODUCTION, THE INVENTORIED AMOUNT WAS EQUIVALENT TO 26% AND 32.1% OF THE DRY ROUTE AND THE WET ROUTE RESPECTIVELY.



## THE ENVIRONMENTAL TABLE®

From now on, the Brazilian ceramic tile sector will have its own "nutritional table". The objective is to communicate the product's technical attributes to the market in a transparent manner. The information is presented in the form of a table.

### Sustainable construction

### **CERAMIC TILES HAVE THE LONGEST LIFETIME**

Ceramic tiles emit zero volatile organic compounds and do not contain formaldehydes or other toxic components, as well as offering other benefits such as durability, energy efficiency, health and hygiene, fire safety, among others. They represent a conscious consumption choice for sustainable construction.