THE ITALIAN CERAMIC TILE INDUSTRY

82% of the production in the Sassuolo Ceramic District
92% of the production in the Emilia Romagna Region
## THE ITALIAN CERAMIC INDUSTRY - 2017

<table>
<thead>
<tr>
<th>Product</th>
<th>Companies (unit)</th>
<th>Employees (unit)</th>
<th>Turnover (million €)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ceramic Tile</td>
<td>145</td>
<td>19,515</td>
<td>5,546</td>
</tr>
<tr>
<td>Sanitaryware</td>
<td>33</td>
<td>3,118</td>
<td>353</td>
</tr>
<tr>
<td>Tableware</td>
<td>10</td>
<td>705</td>
<td>51</td>
</tr>
<tr>
<td>Refractory</td>
<td>34</td>
<td>1,808</td>
<td>-0.4%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>222</strong></td>
<td><strong>25,146</strong></td>
<td><strong>-</strong></td>
</tr>
</tbody>
</table>

### A sustainable production

Form More than 40 years the ceramic tiles district have face sustainability.

Which results and levels of performances did we reach?

How sustainability have change our product and production?
Contribution of Italian ceramic tiles toward sustainability

A sustainable production

The investments done by Italian ceramic tiles industries have been recognised and taken as a reference from the European Commission to define the European Best Available Techniques (BAT)
A SUSTAINABLE PRODUCT for the GREEN BUILDING

Italian ceramic tiles has anticipate and understand the needs of the green building community having sustainability as a milestone of product and production's innovation processes.

A SUSTAINABLE PRODUCTION

99.3% of production and purification waste is reused in the production cycle.

Average recycle rate > 129%
A SUSTAINABLE PRODUCTION

Unlike other industrial sectors, the ceramic tile industry is capable of reabsorbing the majority of its production and purification waste.
A SUSTAINABLE PRODUCTION

Between the 1980s and the year 2000, Italian tile production almost doubled while CO2 emissions more than halved.
INVESTMENTS: innovation and efficiency for a global competition

In 2017 investments equal to 515 M€ (9.3% of total turnover)

A SUSTAINABLE PRODUCT for the GREEN BUILDING

In the last years we italian ceramic tiles have reached new caracteristics and functionality.

Quality, beauty, design and sustainability deem italian ceramic tiles.
LIFE CYCLE THINKING

LCA Total flooring
(Overall environmental impact)

- porcelain stoneware tiles made in Italy: 10.4
- parquet: 15.3
- moquette: 23.7
- marble: 53.4
- resin: 66.5
- linoleum: 92.2
ENVIRONMENTAL PRODUCT DECLARATION

The LCA data were collected in 2014 within the members companies of the association.

This study has involved, as primary data 76 companies and 84 plants, that represent 82,6% of the Italian ceramic tiles production.

The final results are representative of Confindustria Ceramica's member companies.
A1-A3 are the modules with the majority of the impacts. Overall, most of the impact categories are dominated by energy processes and raw materials consumption for ceramic mixtures.

Global warming potential (GWP), into A1-A3 modules, is generated by energy process for 70% and by raw materials for 18%.

Energetic consumption impact also on abiotic fossil depletion (ADPEf) for about 61%.

The ozone layer depletion (ODP) is driven by the raw materials extraction for 37%, 33% by energy (mainly electricity) and 16% by the glazes.
MUTUAL AGREEMENTS

Italian Ceramic Tiles EPD
ISO TC189 WG7: sustainability issues for ceramic tiling systems

Scope:
- Sustainability indicators (LCA based)
- Measurement and calculation methods
- Requirements and reference assessment values
- Assessment schemes

Objective:
- Quantitatively identify, assess and compare sustainable materials

Main criteria for sustainable products:
- Environmental criteria
- Economic and functional criteria
- Social criteria
THANK YOU!

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