

Irmãos Fredi's Contribution to Sustainable Development Goals

3 - GOOD HEALTH AND WELL-BEING



4 - QUALITY EDUCATION



7 - AFFORDABLE AND CLEAN ENERGY



8 - DECENT WORK AND ECONOMIC GROWTH



13 - CLIMATE ACTION



Project Description

Irmãos Fredi ceramic factory, located in Presidente Epitácio municipality, São Paulo state, produces bricks and blocks for the local civil construction market. Up until 2006, the factory used firewood from the surrounding Cerrado biome to feed the kilns which produce one million ceramic pieces per month. As of 2006, the ceramic factory opted for more sustainable production methods, investing in equipment for fuel switching. Since then, the kilns have been fuelled with renewable biomass, which allows the factory to reduce its greenhouse gas emissions and generate carbon credits. The factory's carries out **sustainable development and social investment actions**, which benefit working conditions for its employees as well as improving quality of life for the surrounding community.



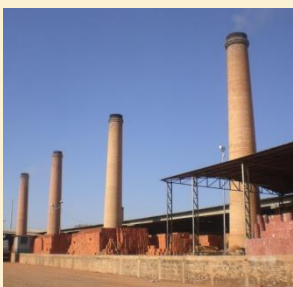
Social Benefits

- **Social responsibility:** Financial contributions, renovation and expansion of two education centres: “*Associação Espírita, Fé e Caridade*” and “*Associação Alpha & Omega*”.
- **Improvements in the factory's facilities:** Construction of bathrooms, cloakrooms, and a covered garage for employees to park cars, motorbikes and bicycles.



Environmental Benefits

- **Exclusive use of renewable biomasses** as fuel, specifically sugarcane bagasse and sawdust. The factory avoids using an average of 20,000 tonnes per year of native firewood from the Cerrado, the second biggest Brazilian biome.
- **Creation of a plan to recover degraded areas** in the area where clay is extracted.



Economic Benefits

- **Modernization:** Laboratory construction in ceramics for analysis of product quality;
- Creation of new markets for local biomass suppliers.
- **Technological progress:** Acquisition of dryer and biomass injector to improve the energy efficiency of furnaces.



Irmãos Fredi's Contribution to Sustainable Development Goals (SDG) by ONU

Project Highlight

COMMUNITY SUPPORT



Under the direction of Mr. José Ettore Fredi, the company recognized that the present **carbon project represented an opportunity to transform its municipality**. *“Using the income generated by carbon credit sales, the ceramic factory is able to engage in community projects. Previously, only small initiatives were possible, today our action generate more social benefits”*, Mr. Fredi comments. The entrepreneur got involved with renovating and expanding two education centers, which cater to the municipality's children and adolescents in need. As well as the construction work, the ceramic factory provided computers and made monthly financial contributions to assist with the two centers' daily expenses. According to Rosa, the president of one of the centers, *“We are very happy with the renovation work, this project brings comfort and security to children and adolescents who live locally, and who are certainly in need of a secure and welcoming environment.”*

ODS 3: Good Health and Well-Being



- The ceramic offers Personal Protective Equipment (PPEs) and its rigid about the use of the PPEs.
- The factory meets all mandatory legal requirements of safety at work and has an internal commission for accident prevention (CIPA) and a technician responsible for the implementation of health and safety procedures;
- Irmãos Fredi ceramic factory gives financial assistance and donates milk every month to Association “Alfa e Ômega Lar Doce Lar”, which helps children of ex convicted and drug users parents by giving food and education. Also, the factory helps financially the APAE - Association of parents with mental disorders children) and a Nursing Home.

ODS 4: Quality Education



- Financial contributions and expansion of two education centers;
- In addition, Irmãos Fredi offers a room in the factory to give lectures and courses to its employees and for the community.



ODS 7: Affordable and Clean Energy

- The factory uses Biomass as fuel to produce ceramic pieces instead of native wood
- High efficient Kilns in the production process



ODS 8: Decent Work and Economic Growth

- Improvement of working conditions for the employees and the strong health and safety practices in the factory



ODS 13: Climate Action

- By changing the fuel from native wood to biomass Irmãos Fredi ceramic became a Carbon Neutral Project
- Protection against deforestation of Cerrado Biome



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THIS PROJECT WILL AVOID THE
EMISSION OF

289.903 tCO₂e

ON THE COURSE
OF 10 YEARS

Location

Presidente Epitácio/ SP,
Brasil

Project Type

Renewable Biomass

Ecosystem

Cerrado

Project Status

Verified
(5th monitoring period)

DOE

Bureau Veritas

Vídeo

Registry

[Markit™ Enviromental](#)

Standards

VCS + SOCIALCARBON®

