

## Developing of alternative technology to Asbestos use in Brazil

### **The thematic area is recycling and substitution**

- Asbestos is now a widely used raw material in Brazil to produce Fibre cement. The reference market are building and water containers
- The impact of this material on human health and environment are unfortunately tragic and many time lethal in the long period
- The project is focused on two main scope:
  - Production of an alternative material able to have similar characteristics on mechanical; heat resistance, and durability of the Fibre Cement and with a comparable cost
  - A process of informing and raising awareness of both political decision-makers and public opinion
- At present, the Brazilian partners involved have already developed extremely promising prototype materials that could indeed be a viable alternative and replace Fibre Cement products

### **Expected synergies and complementarities:**

The project aims to combine skills both in technology and in the social sphere, to implement the solution of the problem described

### **Outcomes:**

Technical data sheet. Definition of a production process. Final demonstrator development to be tested in aging processes. Evaluation of mass production costs. Prepare information actions that support technology change

- **Kic return:**

5% of the royalties on the revenues for the next 10 years and in maximum limit of 600.000€

- **Market & Business opportunities:**

The present market for Fibre cement application is huge. A new solution based only on the price will be not suitable. It has to be mainly based on opportunity to avoid health and environmental negative impact

- **Partners already identified:**

FBK, Tn Italia (<https://www.fbk.eu>) Analytical capabilities and specific competences on asbestos

UniTN ([www.unitn.it/](http://www.unitn.it/)) Polymeric laboratory, expertise and competences on polymeric fibres and testing

Unochapecò , Santa Catarina (<https://www.unochapeco.edu.br/>) competences on polymeric materials

Università di San Carlos, San Paolo (<http://www.dema.ufscar.br/portal/>) competence in development and integration of advanced materials

- **Wanted additional partners :**

Scientific partner for functional tests

Partners for process cost analysis of industrialization

Partners in social sciences for the historic social impact of the asbestos