# Fibre-based materials for non-clothing applications H2020-NMP-2015-two-stageSub

**Deadline Date Stage 1** 26-03-2015 17:00:00 **Deadline Date Stage 2** 08-09-2015 17:00:00

Project budget 6 − 8 M€

Type of action Innovation action

#### IDEA: 'TRADITIONAL HIGH PERFORMANCE MATERIALS'

There are a lot of traditional materials that have been extensively used in construction and other industrial sectors in the past due to their availability and technical and economical feasibility that, at present, are been replaced by others because high technical performances are demanded more and more extensively in the market. This is the case of, for example, natural stone, wood or traditional ceramics. This kind of materials are still very highly valued by end users because of their aesthetic appearance and traditional nature but, on the other hand, cannot compete with other modern materials in terms of technical performances, such as mechanical strengths, physico – chemical properties or low statistical variation in service properties. This fact is damaging traditional sectors, which are reducing their sales towards the use of new artificial materials that are manufactured by high capacity industrial processes.

The objective of this project is the development of a new generation of materials that, on one hand, preserve their traditional nature and, on the other hand, present high technical performances so they can be considered as engineered materials. These technical properties will be achieved by the inclusion of fibers by a suitable addition industrial process.

The project will cover both the development and optimization of the new materials and the manufacturing processes involved. Proof of concept will be released in the development of the project.

The project will study a wide range of alternatives, combining different inputs:

- Traditional materials (stone, wood, traditional ceramics, etc.)
- Fibers (carbon fiber, glass fiber, etc.)
- Binders (synthetic resins, bio polymers, mineral binders, etc.)
- Industrial technologies for application and curing (UV, IR, microwaves, heat, etc.)

The idea is to create an interdisciplinar and intersectorial partnership that can foster the reindustrialization and value increasing of traditional sectors.

#### **PARTNERS**

We are looking for partners with the capacity of developing technical tasks that can be representative of the mentioned points to be studied:

- Traditional materials that can be fiber reinforced specialists
- Fibers researchers and manufacturers
- Binders researchers and manufactures

- Industrial applications technology developers
- Associations, public bodies or other kind of similar entities that can disseminate the project results to significant clusters interested in results.

### **BUDGET**

The total Project budget will be between EUR 6 and 8 million. The budget will be divided depending on the number of partners and their tasks to be developed in the project.

## **FINANCE CONDITIONS**

H2020 finance conditions: grant with 70% or 100% of reimburshment (depending on the type of entity), including a 25% of indirect costs.