



European
Commission

SEVENTH FRAMEWORK PROGRAMME

BRIMEE PROJECT



**COST-EFFECTIVE AND SUSTAINABLE
BIO-RENEWABLE INDOOR MATERIALS
WITH HIGH POTENTIAL FOR
CUSTOMIZATION AND CREATIVE DESIGN
IN ENERGY EFFICIENT BUILDINGS**

Project reference number: 608910

Starting date: 01.07.2013

Duration: 48 months

Call identifier: FP7-2013-NMP-ENV-EeB

Funding scheme: Collaborative project

Contact information:

www.brimee.eu

www.icpe.ro/brimee

Description

The BRIMEE project aims at the development of a novel class of insulating materials, based on renewable porous materials. The raw materials can be derived from non-food biomasses, wood residuals and slurries from wastewater treatment systems as the intended process is flexible in input. However the preferred source will be pulp&paper industry waste with the final purpose to achieving marketable products and industrial production methods based on advanced nanomaterials derived from renewable resources.

The project is based on recent feasibility work on an innovative material based on NCC and functional NCC, combined with bio-based polymer matrices

The basic idea of the project is to develop and standardize the production processes for the extraction of NCC at large scale, with the final purpose of producing high added value, natural based foams, flexible and customizable building block for applications in the construction sector, having tight requirements and standards. The material typical properties, such as mechanical strength, surface chemistry, interfacial properties, thermal behavior, chemical reactivity, density and porosity, can be tuned according to the needs and functionalized with appropriate constituents, making the foam suitable for specific purposes.

Project Partners

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