

Contract No: BRE2-CT94-1535

Title: Advanced Environmentally Friendly Composite Materials for the Furniture and Construction Industries

Duration: 01/01/1995 – 31/12/1996

Abstract

The main objective of this project was the use of plant residues and annual plant fibres (wheat straw, rice straw, rice husks, flax, bagasse, miscanthus) as an alternative to wood chips in the production of composite panels (particleboards, fibreboards), by developing a pre-treatment process of the raw material and/or a new urea-formaldehyde resin. These approaches were chosen to improve the bondability between the UF polymer and the plant fibre cell wall.

CHIMAR was the project coordinator, with input into all tasks. Among these tasks were the laboratory scale production of particleboards and fibreboards, the screening of new hardeners and in conjunction with the former sister company SAPEMUS, the production of novel hardeners and adhesives on a pilot scale.

The project resulted in PCT application (International Publication No. WO 97/38833)