

Contract No: IN2-0551I

Title: Innovative Technology for Panel Manufacture from Fiberised Agriculture

Duration: 01/01/1999 – 15/09/2001

Abstract

A novel technology was developed within project BRE2-CT94-1535 concerning the production of composite panels from agricultural waste and annual plant fibres (wheat straw, rice straw, flax, etc.). A chemical, thermal and mechanical process strips straw of the waxy layers surrounding cells and leads to the creation of individual fibres. Conventional urea-formaldehyde (UF) resins can then effectively bond the fibres to produce fibreboards with the required mechanical properties. The specific project involved the scaling up of the technology through testing both at pilot and industrial level and the evaluation of the potential of its exploitation in target markets.

CHIMAR, which acted as the project coordinator, had all the necessary expertise and know-how on the chemistry of adhesives used for panel production, to provide the resins and associated additives needed for board production implementing at the same time both the lab and the pilot testing of the produced boards.