

# BIOCORE

A biorefinery concept for the transformation of biomass into 2nd generation fuels and polymers

CONSORTIUM: 25 partners

EU GRANT: € 13.9 M

GA N°: 241566

COORDINATOR: INRA



## CONCEPT

BIOCORE is a European-funded FP7 project. The overall aim of this project, which mobilizes 25 partners from 13 countries, including an Indian partner, is to devise and demonstrate an advanced biorefinery concept that uses a variety of lignocellulosic biomass feedstocks to produce a portfolio of products, including fuels, chemicals, specialty chemicals and food ingredients.

As part of BIOCORE, project partners have performed case studies, whose aim is to better analyse the feasibility of operating a BIOCORE biorefinery in precise locations in Europe and India.

This summary report addresses the main findings of the case studies, including data related to local biomass availability, logistics, stakeholder opinions and likely acceptance of biorefining in their region.

## 3 TASKFORCES

**An innovative concept to valorize the biomass:** the valorization of a wide variety of biomass; an innovative fractionation; complementarities between Biotechnologies and Chemistry

**Pre-industrial technologies:** BIOCORE also test more mature technologies at an industrial pilot scale. This will provide accurate evaluations of various value chains.

**Sustainable concept:** BIOCORE concept is submitted to a multi-criteria evaluation that determines its overall environmental, social and economic footprints.

## CIMV CONTRIBUTION

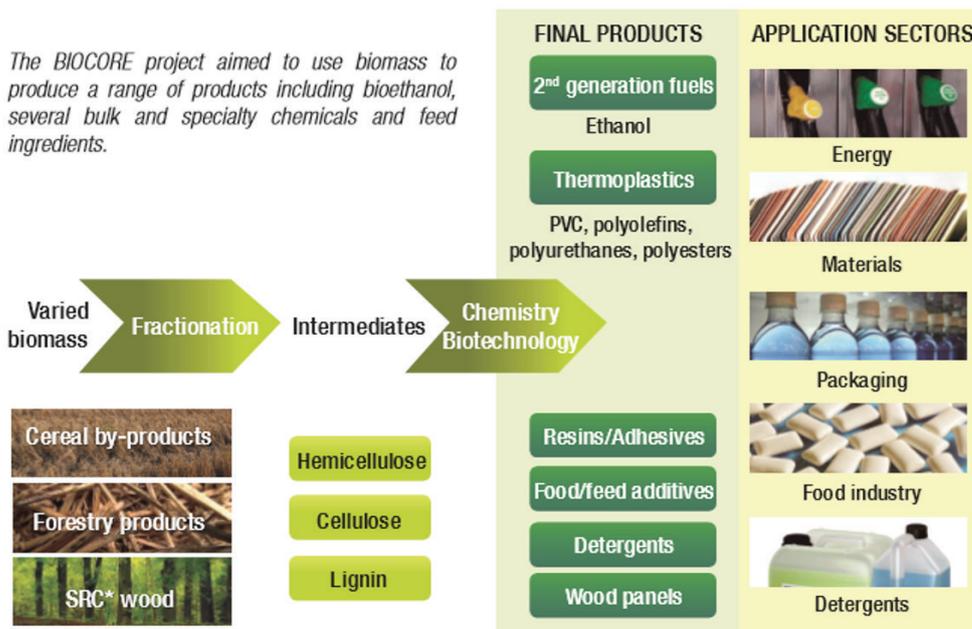
BIOCORE has decided to rely on the CIMV technology to solve the problems involved in separating lignocellulosic biomass components. The patented CIMV technology allows an optimum extraction of the three principal components

of these feedstocks (cellulose, hemicelluloses and lignin) and ensure the promotion of all the incoming raw materials.

A second original feature associated with this technology concerns the flexibility of the process to treat various sources of biomass.

BIOCORE develops the concept of a multi lignocellulosic biomass resources biorefinery, which simultaneously treats residuals from cereal crops (straws, etc.), forestry residuals and short rotation brushwood too.

The BIOCORE project aimed to use biomass to produce a range of products including bioethanol, several bulk and specialty chemicals and feed ingredients.



Contribution to the Bioeconomy



[www.biocore-europe.org](http://www.biocore-europe.org)



## 7th FRAMEWORK PROGRAMME

The complete name of FP7 is 7th Framework Programme for Research and Technological Development. It will last for seven years from 2007 until 2013. The programme has a total budget of over € 50 billion. This represents a substantial increase compared with the previous Framework Programme FP6 (41% at 2004 prices, 63% at current prices), a reflection of the high priority of research in Europe.

Indeed, FP7 is a key tool to respond to Europe's needs in terms of jobs and competitiveness, and to maintain leadership in the global knowledge economy.

This money will (for the most part) be spent on grants to research actors all over Europe and beyond, in order to co-finance research, technological development and demonstration projects. Grants are determined on the basis of calls for proposals and a peer review process, which are highly competitive.

In order to complement national research programmes, activities funded from FP7 must have a "European added value". One key aspect of the European added value is the transnationality of many actions: research projects are carried out by consortia which include participants from different European (and other) countries; fellowships in FP7 require mobility over national borders. Indeed, many research challenges (e.g. fusion research, etc), are so complex that they can only be addressed at European level.

But in FP7 there is also a new action for "individual teams" with no obligation for trans-national cooperation. In this case, the "European added value" lies in raising the competition between scientists in fundamental "frontier" research from the national to the European level.

FP7 is the natural successor to the previous programme, FP6. It is the result of years of consultation with the research community from both the public and private sectors, with economic actors, and with political decision makers in Europe. FP7 is both larger and more comprehensive than its predecessors. It is also more flexible, with simplified procedures.

The Framework Programmes for Research have two main strategic objectives:

To strengthen the scientific and technological base of European industry;

To encourage its international competitiveness, while promoting research that supports EU policies.

