Contract No: FP7-ENERGY-2011-282873

Title: Biomass based energy intermediates boosting biofuel production **(BioBoost)**

Duration: 01/01/2012 – 30/06/2015

Abstract:

The overall objective of BioBoost is to pave the way for de-central conversion of residual biomass to optimised, high energy density carriers, which can be utilised in large scale applications for the synthesis of transportation fuel and chemicals or directly in small-scale combined heat and power (CHP) plants.

Increasing the share of biomass for renewable energy in Europe demands conversion pathways which are economic, flexible in feedstock and energy efficient.

The BioBoost project concentrates on dry and wet residual biomass and wastes as feedstock for de-central conversion by fast pyrolysis, catalytic pyrolysis and hydrothermal carbonisation to the intermediate energy carriers oil, coal or slurry.

Major activities include the analysis of economic efficiency of the complete production pathways, the optimization of logistic chains and the investigation of environmental compatibility. BioBoost aims at making a substantial improvement towards increasing the efficiency of the use of biomass and residues in the future.

Seven industrial companies, three of which SME and six R&D institutions from 7 European countries cover expertise along the complete chain: Feedstock, conversion processes, separation and upgrading, transport & logistics, end usage and value chain assessment. Conversion plants in demonstration size will enable the proof of concept and further up-scaling to commercial size.

CHIMAR task will be to develop adhesive systems for the production of wood composites using as starting materials chemicals derived from the energy carriers.