

2G BIOPIC

2nd Generation Bioethanol production
based on Organosolv Process at
atmospheric Conditions



CONSORTIUM: 7 partners

EU GRANT: € 20M

GA N°: 657867

COORDINATOR: CIMV



CONCEPT

Demonstrate the performance, the reliability, the environmental and socio-economic sustainability, of the transformation of lignocellulosic biomass from various feedstocks into biofuel: Bioethanol 2G.

OBJECTIVES

Design and build a 2G BIOPIC demonstration plant to produce bioethanol 2G.

Optimisation and scale-up of bioethanol production with dedicated enzyme and yeast production.

Optimisation of the demonstration plant process parameters: yield, consumption, and product quality.

Validation of Biolignin™ process co-product, use as high value building block.

PROJECT TASKFORCES

The technology promotes various non-food feedstock sources from agro and forest residues and uses a soft biomass pre-treatment (atmospheric pressure, 100°C).

High value given to all components of the biomass: cellulose, hemicellulose, lignin (Biolignin™).

All the sugar sources are converted by hydrolysis: C₆ and C₅ sugars.

The 2G BIOPIC process operates with dedicated enzymes and yeast technologies for bioethanol production.

The 2G BIOPIC technology provides a high value pure co-product: Biolignin™.

CIMV CONTRIBUTION

The role of CIMV in 2G BIOPIC will be the implementation of its biorefining technology, as well as the construction and operation of the demonstration plant, and participation in products developments.

CIMV will design and build the demonstration plant with the support of its subcontractor.

In fact, CIMV has already designed and built its pilot plant and has worked with an engineering company on the design of a demonstration plant.

CIMV will operate the demonstration plant.

Finally, as technology owner, CIMV will coordinate the project and would be the project initiator of future industrial projects.



Contribution to the Bioeconomy



www.2GBIOPIC.eu



HORIZON 2020

Horizon 2020 is the financial instrument implementing the Innovation Union, a Europe 2020 flagship initiative aimed at securing Europe's global competitiveness.

Seen as a mean to drive economic growth and create jobs, Horizon 2020 has the political backing of Europe's leaders and the Members of the European Parliament. They agreed that research is an investment in our future and so put it at the heart of the EU's blueprint for smart, sustainable and inclusive growth and jobs.

By coupling research and innovation, Horizon 2020 is helping to achieve this with its emphasis on excellent science, industrial leadership and tackling societal challenges. The goal is to ensure Europe produces world-class science, removes barriers to innovation and makes it easier for the public and private sectors to work together in delivering innovation.

Horizon 2020 is open to everyone, with a simple structure that reduces red tape and time so participants can focus on what is really important. This approach makes sure new projects get off the ground quickly – and achieve results faster.

The EU Framework Programme for Research and Innovation will be complemented by further measures to complete and further develop the European Research Area. These measures will aim at breaking down barriers to create a genuine single market for knowledge, research and innovation.