

ADMIT BIO-SucclInnovate

Adaptation and Mitigation through Bio-Succinate Innovation

CONSORTIUM: 11 partners

EIT GRANT: €1,98 M



CONCEPT

ADMIT Bio-SucclInnovate encompasses a holistic, integrative approach to drive innovations that enable dedicated non-food crops and agricultural residues to be refined into a range of sustainable added-value products and markets.

In order to maximise the economic and environmental sustainability of the lignocellulosic sugar platform, the majority of the biomass components need to be utilised and commercially exploited.

A key project objective is to demonstrate the production of bio-succinic acid from the C6 sugar fraction and assess the impact on GHG emissions.

Furthermore, development of novel, multifunctional enzymes will be conducted to simplify the bio-refining of complex (toxic) C5 streams derived from hemicellulose processing, thus provide commercial uplift for SME's and a lignocellulose driven supply chain.

For the valorisation of the C5 stream, biotechnological tools will be developed to produce natural sweeteners e.g. xylitol at a commercially relevant scale.

The lignin stream will be purified to enhance its value added application (e.g polymer building blocks, green chemicals, fibre) thus ensuring the complete utilisation of biomass.

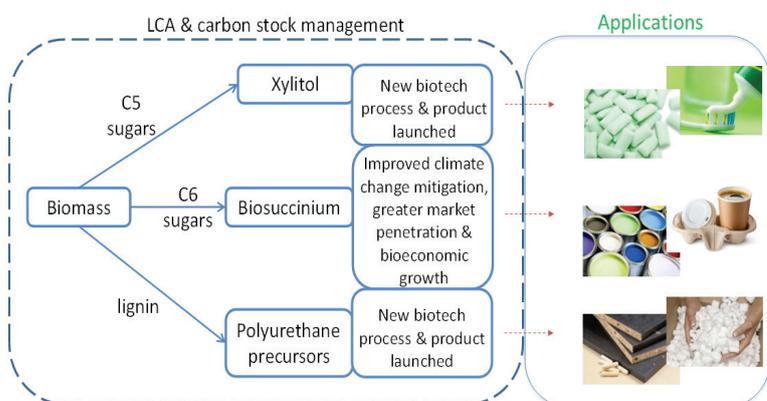
In addition to the technical and commercial outputs, the project findings will be of strategic importance to the Bio-economy platform, industrial biorefineries and policy makers.

OBJECTIVES

ADMIT BIO-SucclInnovate will provide solutions that are environmentally friendly and techno-economically viable:

- To demonstrate the production of bio-succinic acid from lignocellulosic sugars
- To determine the reduction of GHG emissions compared to Reverdias current process.
- To determine the techno-economic feasibility.
- Demonstrate the applicability of the CIMV biorefining process and provide commercial uplift.

PROJECT ECOSYSTEM



CIMV CONTRIBUTION

CIMV was in charge of supplying raw materials (lignin, C5 and C6 sugars) to the partners in the consortium.

COMPLETER CONTRIBUTION CIMV AU PROJET

Contribution to the Bioeconomy



www.bio-succinnovate.com

EIT- EUROPEAN INSTITUTE OF INNOVATION & TECHNOLOGY

Innovation is the key to growth, competitiveness and social well-being in the 21st century. The capacity of a society to innovate is crucial in an ever more knowledge-intensive economy.

The EIT (European Institute of Innovation & Technology) aims to enhance Europe's ability to innovate, which translates into adapting quickly to the fast pace of development, being one step ahead in providing solutions to rapidly emerging societal problems and developing products that meet the demands and desires of consumers.

Europe is facing a significant innovation challenge, where despite an excellence research base, dynamic companies and creative talent, good ideas are too rarely turned into new products or services. Europe needs a real change of mindset towards the promotion of a more innovative and entrepreneurial culture.

The EIT strongly contributes to the objectives set out in Horizon 2020, in particular by addressing societal challenges in a manner that is complementary to other initiatives in these areas.

MISSIONS

Created in 2008, the EIT's mission is to:

- Increase European sustainable growth and competitiveness; > reinforce the innovation capacity of the EU Member States;
- Create the entrepreneurs of tomorrow and prepare for the next innovative breakthroughs.

The EIT creates an unprecedented level of collaboration between innovation and excellence centres with the aim of boosting the innovation process:

- From idea to product;
- From student to entrepreneur;
- From lab to market.

EIT CLIMATE-KIC

Climate-KIC is a world class European network, consisting of dynamic companies, the best academic institutions and the public sector.

Climate-KIC integrates education, entrepreneurship and innovation resulting in connected, creative transformation of knowledge and ideas into economically viable products or services that help to mitigate climate change.

Creating opportunities for innovators to address climate change and shape the world's next economy is Climate-KIC's mission.

Climate-KIC has five national centres in Paris, London, Zurich, Berlin and the Netherlands. Additionally, its centre in Brussels co-ordinates six regional implementation and innovation communities: Central Hungary, Lower Silesia in Poland, West Midlands in the UK, Hessen in Germany, Emilia Romagna in Italy and the Valencian region in Spain.

