



Pilot for

enviRonmEntally FRiendly, Efficient, Sustainable and Healthy products development



THE LIFE PROGRAMME

is the EU's financial instrument supporting environmental, nature conservation and climate action projects throughout the EU. The general objective of LIFE is to contribute to the implementation, updating and development of EU environmental and climate policy and legislation by co-financing projects with European added value. Since 1992, LIFE has co-financed some 4306 projects, contributing approximately € 3.4 billion to the protection of the environment and the climate.



In 2016, AB-InBev has been granted approximately € 800.000 for **THE LIFE RERESHMENT PROJECT** to support its ambitious dream to create a cleaner world. These LIFE programmes contribute to the achievement of the objectives of the Europe 2020 strategy and embed sustainability and social responsibility throughout the entire value chain.



BACKGROUND

During the brewing process, large amounts of by-products are generated. One of the most abundant by-products generated is brewers' spent grain, representing as much as 85% of the total by-product generation. It consists of the residue of malt and grain which remains in the mash-kettle after the mashing and lautering process. Due to its high nutritional value, brewers' spent grain is an attractive resource. However, to date its industrial utilization is very limited and its main application is mainly focused on animal feed. Development of alternative uses of spent grain is hence crucial to create a more sustainable brewing process.



PROJECT OBJECTIVES

In line with the Better World initiative, AB-InBev wants to contribute to a more circular economy, in which the so-called 'waste streams' are turned into a resource and recovery of material occurs at large scale. In order to fully exploit all resources to create a more sustainable brewing process, **THE LIFE REFRESHMENT PROJECT** of AB-InBev aims to:

- explore alternative uses of brewers' spent grains to develop innovative processes and technologies which **increase the resource efficiency** and reduce food waste throughout the food chain,
- produce food beverage products by using the main by-product of brewing, brewers' spent grain.



EXPECTED RESULTS

With this project we first of all will demonstrate the viability of the production process of healthy beverages from brewers' spent grains.

In a second phase, by achieving a full scale industrial scale during the duration of the project:

- the resource efficiency will be increased by reusal of 42,000 ton of brewers' spent grains from 2 breweries,
- the CO2 emission will be reduced with 14,472 ton by re-usal of 42,000 ton of brewers' spent grain on-site,
- the water usage efficiency will be increased in cereal-based beverage industry with 50 to 75%.