



Pilot for  
**enviRonmEntally FRiendly,**  
**Efficient, SustaInable and**  
**Healthy** products development

**ABInBev**



**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.

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In 2016, AB-InBev has  
been granted approximately  
€ 800.000 for **THE LIFE**  
**REFRESHMENT PROJECT**  
to support its ambitious dream  
to create a better world. These LIFE  
programmes contribute to a  
sustainable development and to  
the achievement of the objectives  
of the Europe 2020 strategy.





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## **BACKGROUND**

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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.



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## PROJECT OBJECTIVES

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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.







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## EXPECTED RESULTS

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With this project we aim to demonstrate the feasibility of the technology for the production of healthy beverages from brewers' spent grains.

In a first phase, a pilot facility in Leuven will transfer the technology from laboratory scale and run a proof of concept.



In a second phase, semi or full industrial scale will be achieved in two breweries in Europe:



aiming to provide capabilities for the on-site reusal of up to 42,000 ton of brewers' spent grains in total,



leading to the consequent reduction of CO<sub>2</sub> emission of 14,472 ton,



providing a solution for the cereal beverage industry with a 50 to 70% higher water efficiency







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