

# HEALING BAT

A stylized orange bat logo with its wings spread, positioned to the right of the word 'BAT'.

ADVANCED SENSING, MONITORING  
AND SELF-HEALING MECHANISMS  
TO SELF-REPAIR BATTERIES

[healingbat.eu](http://healingbat.eu)

## THE PROJECT

HEALING BAT is an EU-funded project that brings together 10 European research centres, leading universities and innovative companies from 6 different countries to investigate the European batteries of the future, which will be smart and more sustainable.

Our main goal is to develop and implement self-healing materials and healing strategies in key battery components, used in the conventional lithium-sulfur (Li-S) battery, and extrapolate the designs and concepts to develop a new class of self-restoring Li-S batteries.

### HOW WILL WE ACHIEVE SO?

1

We will embed new sensor-actuator concepts to allow for implementing self-healing materials and healing strategies in key battery components of the Li-S battery.

2

We will create a toolbox consisting of self-healing materials, relevant sensors and bespoke Battery Management Systems (BMS), to maximise the performance of the developed Li-S battery and avoid occurring damages that could lead to its degradation.

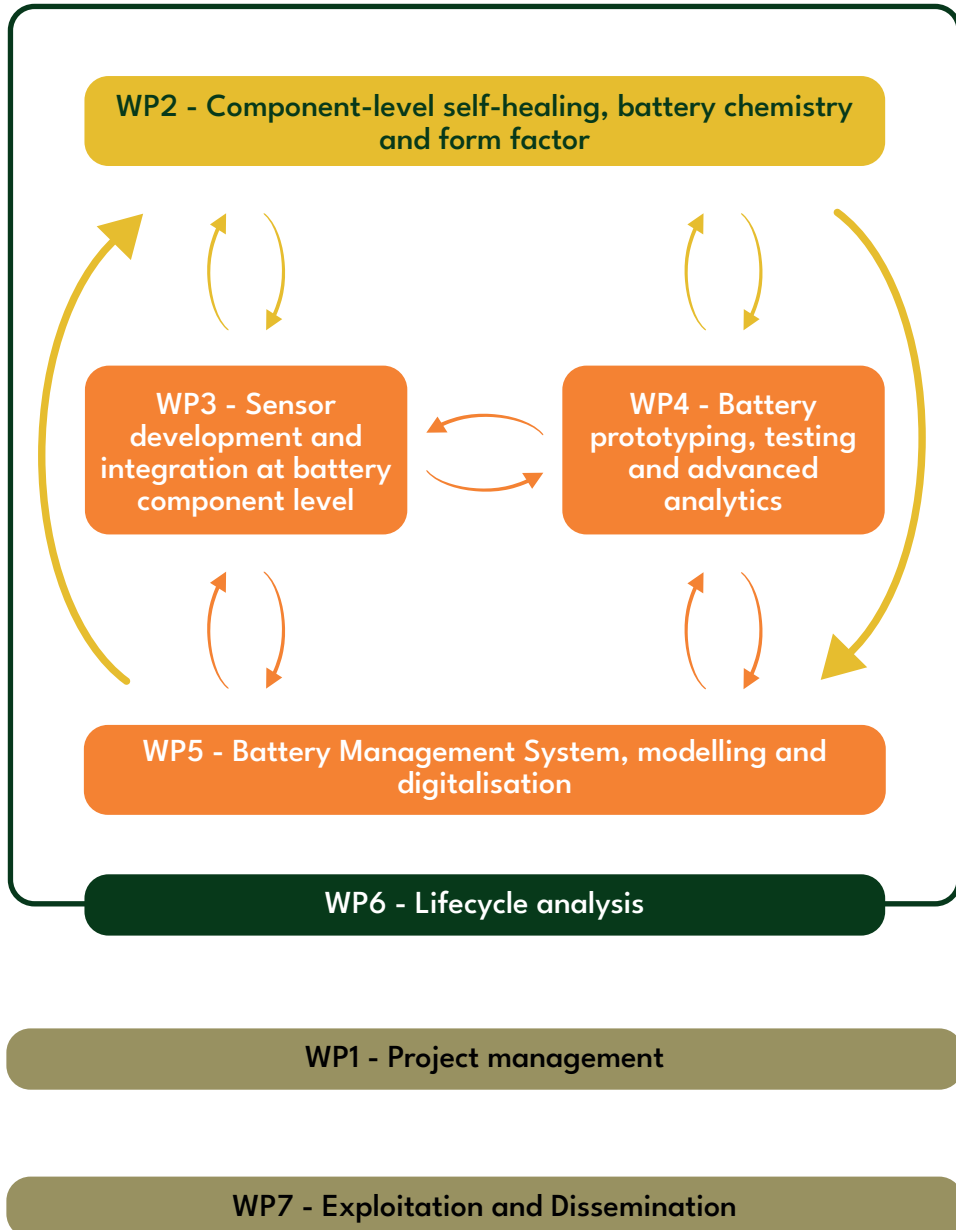
3

The BMS will govern the flow of energy to and from the battery system, monitoring sensor data with computational methods to identify events indicating degradation, as well as initiate self-healing actions.

The resulting solution will revamp the European sector of rechargeable batteries with high round-trip efficiency energy storage for numerous applications. This will lead to innovative ideas needed to develop future sustainable batteries which demand fewer resources and create the groundwork for EU competitiveness.

## WORK PACKAGES

### WHAT IS OUR WORK FLOW?



## DON'T MISS ANYTHING ABOUT THE PROJECT!



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and visit our website!  
[healingbat.eu](https://healingbat.eu)



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## PROJECT PARTNERS



Funded by  
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