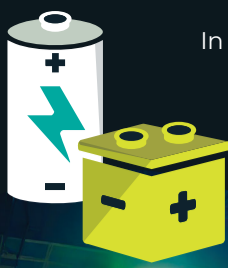


Batteries are the silent driving force behind our daily life activities.



In some conditions, however, the use of traditional batteries is not possible.

Harsh operating environments and high temperatures require new portable battery solutions.

PORTABLE BATTERIES OPERATING RANGE



400°C
200°C
60°C
-20°C

HIGH-TEMPERATURE BATTERY MARKET

LI-BASED BATTERY MARKET

BATTERY GLOBAL MARKET

10%

+\$442 Million by 2028
CAGR 6,4% from 2022 to 2028



90%

+\$64,84 Billion in 2023
CAGR 23,33% from 2024 to 2032

HIGH-TEMPERATURE LIMITATIONS FOR BATTERIES



SIZE

Current high-temperature batteries require **bulky casings** for protection and cooling.



HIGH COSTS

The operation of batteries at high temperature causes frequent **need for replacement**, increasing the maintenance costs.



SHORT BATTERY LIFE

High temperatures cause reduced battery performance and **early degradation of the components**.



SAFETY

Exposing batteries to high temperatures can pose **safety risks**, including explosions and fires.

These limitations prevent the use of batteries in energy-intensive industries.

+100K factories around the world need to implement predictive maintenance systems.

Nowadays, over 100k factories globally are not able to adopt tools for predictive maintenance and process monitoring due to the lack of sensing solutions capable to withstand harsh environments with high temperatures. These processes include manufacturing of iron, steel and cement, chemical and petrochemical products, etc.

Additional application scenarios



Aeronautics and aerospace



Automotive



Oil and gas drilling



Smart piping

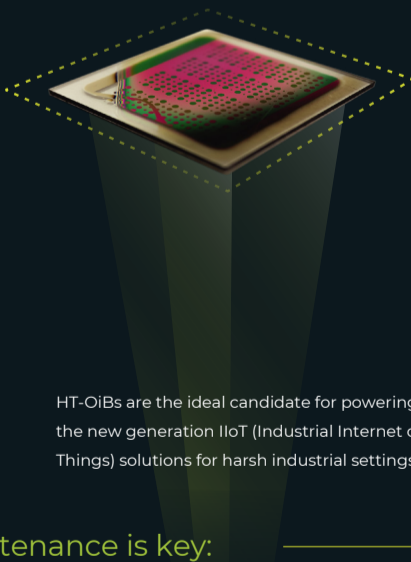


OXYBATT

We develop unique high-temperature batteries designed for the Industrial Internet of Things

OxyBatt is a EU funded project that aims at the development of a rechargeable high-temperature oxygen-ion battery (HT-OiB) that operates safely and continuously between 200°C and 400°C.

The battery is portable and will be able to operate under vibrations and moisture.



HT-OiBs are the ideal candidate for powering the new generation IIoT (Industrial Internet of Things) solutions for harsh industrial settings.

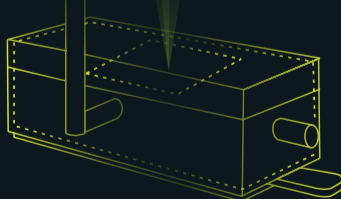
Predictive Maintenance is key:

-30% maintenance costs

-70% breakdowns

-40% downtimes

OxyBatt's HT-OiB will enable process monitoring in harsh industrial environments, offering a safe and sustainable solution for the important market of predictive maintenance based on modern IIoT (Industrial Internet of Things).



Partners



Get in touch

www.oxybatt.com



European Innovation Council Funded by the European Union

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