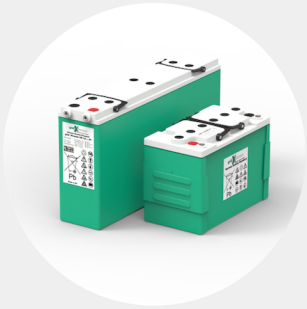
JULY 2023

Co-funded by the European Union

LoCEL Horizons

The LoCEL-H2 website was recently launched.
Visit and bookmark this site, locelh2.org.
LoCEL-H2 is also on Twitter.

HOPPECKE UPDATE



HOPPECKE is Europe's largest privately owned manufacturer of industrial batteries since 1927. With the development of marketable, forward-looking energy storage solutions, HOPPECKE is making an important contribution to solving the social challenges arising from the implementation of global climate protection targets, the energy transition. and increasing digitalisation.

HOPPECKE brings many years of expertise in battery development to the LoCEL-H2 project—from carrying out laboratory tests to the development of commercial Xtreme VR batteries. On this project we are collaborating with Lahore University of Management Sciences (LUMS) by providing agreed input parameters for the development of the LoCEL-H2 energy management system, which is being develop in their laboratories. The close collaboration on the program of work will form the basis of a new category of clean, reliable, and sustainable energy storage for off-grid communities, in Africa and beyond. We are very excited about this development.

UNINA UPDATE

UNINA has noticed an increasing number of energy initiatives. These projects are being created with a collective intent—effectively, systems being developed as public or community goods. We think this activity represents a shift, after decades of mainly private-sector energy activity. European institutions are paying more attention to energy initiatives, globally. A new regulatory framework is emerging that promotes renewable energy communities—citizen-led energy initiatives—to contribute to the energy transition, energy efficiency, and the overlap with society in general.

On Thursday, 22 June, the Department of Social Sciences of the University of Naples Federico II held a study day— "Collective energy initiatives: for a critical sociological analysis"--with a specific focus on energy communities. The event took place both face-to-face and online and proved an important forum where industry operators and leading academic researchers exchanged views. The LoCEL-H2 project was presented at this event, with a focus on innovation, its challenges, and indeed its prospects.

INTERVIEW WITH CBI

Dr. Carl Telford
Senior Research and Innovation Manager, CBI

LoCEL Horizons spoke to Dr. Carl Telford:

As Senior R&I manager at CBI, it's my job to create exciting projects that serve public interest—such as addressing climate change—using the technology and knowhow of our membership. I build concepts and consortia! Indeed, we developed the initial concept for LoCEL-H2, using several technology building blocks developed by our membership. Because we are an energy-storage focused organisation, we started with HOPPECKE's batteries and Loughborough's battolyser.

Tell us in very basic terms – what is CBI's function for the LoCEL-H2 project?

Our primary role is to lead one of the work packages--Communications, Dissemination, and Exploitation. To this end, we have hired a new R&I manager with significant EC experience (Dr. Nansi Tompolidi), created & deployed the LoCEL-H2 website (www.locelh2.org), and developed a number of tools to aid dissemination. In addition, I have been attending courses focusing on Exploitation, to enable concrete steps toward commercialisation for LoCEL-H2- related to an Innovation action. We also support the project's coordinator in terms of project management. Holistically, as the original 'architects' of the project, we provide general advice and guidance about the whole programme.

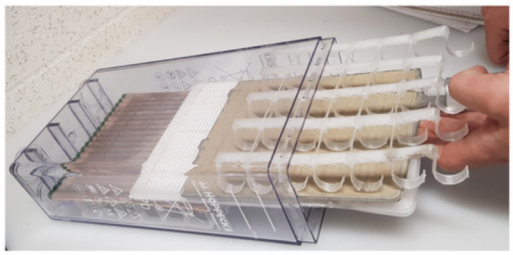
What are the main challenges you face?

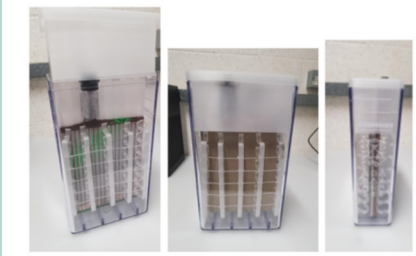
It's a learning curve. This is CBI's first Horizon project (and indeed the lead-battery industry's first for many years), so we have a lot to learn from a procedural standpoint. We are new members of the Horizon community and are looking forward to exploring future Horizon projects. Finally, for this project we are an associate partner, which means that our funding does not come directly from the Commission. We don't see any of these challenges as onerous; we see them as exciting and important.

LOUGHBOROUGH UPDATE

In May, Loughborough manufactured its first full scale Battolyser cell.

A new lid and separator frame with gas flow channels were 3-D printed. The plates were provided by Hoppecke and then soldered to terminal blocks. An H&V separator was located within the new separator frame using spring clips to provide pressure to plates and then printed.





Manufacturing is very straightforward – slide everything in and put the lid on. Testing is now underway to properly characterise the cell which will lead to durability tests next. The bubbles of hydrogen and oxygen are appearing where they are expected. Manufacturing of the second cell is now underway.