

LoCEL Horizons

We are pleased to present the June 2025 edition of the LoCEL-H₂ newsletter. This issue features many key milestones, including the start of the system build at Loughborough, a featured article in the BBC News and a review of the General Assembly that brought our international partners together. We also share updates from recent international conferences & events, and upcoming opportunities to learn more about this transformative project.

IN THE SPOTLIGHT

The LoCEL-H₂ General Assembly

In May 2025, the LoCEL-H₂ team gathered from all over the world in Loughborough for two days of practical demonstrations of the system build, in-depth learning and face-to-face knowledge exchange, networking, and reflection on the remarkable progress that has been achieved.

Highlights of the assembly included a series of focused **technical presentations**, showcasing the latest progress across the consortium. Partners took part in specialised **breakout sessions**, where live discussions shaped future direction of the project. A tour of the labs and showcase of the container build provided a first-hand look at the technology in development, a key moment that brought the project's engineering work to life. The day also featured exchanges with the advisory board during a dedicated feedback session, offering strategic guidance for the next phase.



With partners attending from around the world, face-to-face discussions and networking were a vital part of the meeting. Continuing over lunch and into the evening, the opportunity to meet the team helped to strengthen the **collaborative spirit** of the LoCEL-H₂ project.

Dr. Carl Telford, CBI's Research & Innovation Director, reflected on the event : 'With fantastic attendance and great energy from all partners, the General Assembly has proven to be one of the most important and productive meetings so far. Special thanks to the Loughborough team and to H&V for the fantastic hosting. Looking forward to progress in the months ahead!'

Stay connected through our upcoming newsletters, website and social media channels for the latest news, milestones, and stories from the LoCEL-H₂ project team!

LOCEL-H₂ IN THE NEWS



In April 2025, the work of Prof Dani Strickland's team at the University of Loughborough, the key research team responsible for LoCEL-H₂ and sister project MESCH, featured on BBC News.

The spotlight was on the latest stage of deployment: containerised LoCEL-H₂ units featuring the battery electrolyser system heading to Côte d'Ivoire and Zambia.

The article also acknowledges the LoCEL-H₂ team's part in the wider **Zero Carbon Innovation Centre** and **East Midlands Clean Tech Cluster**. National recognition that helps drive momentum as we scale up towards the next phase of the project.



[Click here to read the article](#)

MAKING AN IMPACT: OUR 2025 SO FAR



30+

Stakeholders
at the General Assembly



100+

Stakeholders reached
in Côte d'Ivoire & Zambia



520+

Followers
on our social media



6,000+

Visits to our website
from 80 countries

SYSTEM BUILD PROGRESS

LoCEL-H₂ System Container Build Underway

Following the planning and building commissioning, the construction of two containerised units of the LoCEL-H₂ system is now well underway. In the run-up to the **LoCEL-H₂ General Assembly**, the first of the two containers began to be outfitted with the battery electrolyser systems, which form a core part of the system and incorporate Hoppecke plates.

Dr. Lizzie Ashton, Senior Research Associate at **Loughborough University Green Hydrogen Research Group** (pictured), took this opportunity to demonstrate the system and showcase its functionality.

Dr. Ashton summarised the event 'It was great to showcase the technology we've been developing at Loughborough to the wider consortium. Key challenges we have faced so far include optimising the water top-up system during electrolysis, maintaining stable hydrogen generation at $400 \pm \text{Pa}$ to avoid back pressure to the cells; and designing a separator to prevent H₂ and O₂ crossover.'

'Support from Götz at **Hoppecke** and Nicolas at **H&V** has been invaluable, particularly regarding gas separation and cell performance during high-temperature conditions.'



PROJECT PARTNERS



CONFERENCES AND PRESENTATIONS

European Forum for Manufacturing at the European Parliament

Dr. Carl Telford, Research & Innovation Director at CBI, addressed members of the European Parliament (MEPs) and others at a recent roundtable debate at the European Forum for Manufacturing.

The session, titled '**Building a Genuine Energy Union**', took place 9th April 2025, and brought together several manufacturers in the renewable energy sector, including Siemens, BEUC (The European Consumer Organisation) and REScoop, amongst MEPs from Luxembourg and Estonia.

Dr. Telford discussed the European energy storage landscape, covering energy security, decarbonisation, affordable energy provision, and highlighted the fact that Europe possesses a multi-gigawatt production capability.

He highlighted that the market for energy storage systems in Europe will hit **200 GWh by the year 2035**, and introduced the innovative battery electrolyser used in the LoCEL-H₂ project as a good example of European innovation.

The key message of Dr. Telford's talk was to embrace the **full ecosystem** of battery technologies, support a flexible energy grid which welcomes innovation, and to create the best possible conditions for battery manufacturers to innovate, invest and grow.



Hydrogen Tech Expo and Battery Tech Expo



Dr. Lizzie Ashton, Senior Research Associate at the University of Loughborough, delivered a fascinating presentation at the joint Hydrogen Tech Expo and Battery Tech Expo event, which took place at the Silverstone International Circuit UK in April 2025.



The presentation, titled '**Rethinking Lead-Acid Batteries: A Low-Cost method of Green Hydrogen production**', focused on the battery electrolyser and its development used in the LoCEL-H₂ project.

First covering the challenges with renewable energy generation and storage, the presentation introduced **green hydrogen** and the operation of the electrolyser units.



A deep-dive into the materials used, durability and testing and project timeline then followed, concluding with an overview of the current projects and development partners.

UPCOMING EVENTS

All-Party Parliamentary Group on Hydrogen

Together with the UK MP for Loughborough, showcasing the University's expertise in hydrogen technology.

15 July 2025

[Click here to learn more](#)



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25-27 June 2025

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