

As part of the H2UB accelerator program, Capgemini supported the startup ReCatalyst in successfully developing a licensing business model for its hydrogen technology catalysts to increase investor attractiveness and drive energy transition.

A pioneer in catalyst technology

The hydrogen market is in a critical phase in 2025. On the one hand, demand for industrial applications is increasing. On the other hand, many projects for hydrogen production based on renewable energy have been abandoned due to lack of profitability. Many of the hydrogen technologies used, such as PEM (Proton Exchange Membrane) and AEM (Anion Exchange Membrane) electrolyzers and fuel cells, still consume large quantities of precious metals such as platinum as catalysts. This leads to high investments and thus slows market growth.

ReCatalyst, a startup founded in Slovenia in 2021, is working on a breakthrough solution. With its innovative catalyst technologies, it can lower overall costs and offers a greener alternative to the resource-intensive mining of precious metals. Finding itself at a crossroads and looking to secure Series A funding, ReCatalyst decided to join H2UB's accelerator program.

Client: ReCatalyst

Region: Europe

Industry: High-Tech and Manufacturing

Client Challenge: ReCatalyst has been aligning its business model and manufacturing approach to support longterm growth.

Solution: As part of H2UB's SPRINT program, Capgemini worked with ReCatalyst to develop a new licensing business model for its hydrogen nanotechnology.

Benefits

- The future-proof business model ensures growth in the coming years
- Licensing of the catalyst technology creates a new revenue stream
- ReCatalyst can target new customer groups in the field of electrolysis
- A sharpened elevator pitch builds investor confidence during Series A funding rounds

Mentorship based on shared values

H2UB is Europe's leading open innovation platform for the entire hydrogen value chain. The hub collaborates with renowned entrepreneurs, innovators, and investors to achieve a common goal: Net Zero. During the hub's accelerator programs, hydrogen startups benefit from compact and focused one-on-one coaching sessions with mentors and selected industry experts, as well as group workshops. The "H2UB SPRINT" is a 10-week program specifically for seed and Series A startups from across Europe. The program's track record counts 34 teams from eleven different European countries, who have been funded in seven batches. These teams have raised over €192 million in external funding and achieved a market value of over €496 million. As a leading business and technology partner with a mission for sustainable growth, Capgemini was selected as one of the industry mentors for ReCatalyst. The ensuing H2UB SPRINT focused on two potential choices: ReCatalyst was considering manufacturing large-scale catalysts by building its own industrial facility or outsourcing the large-scale manufacturing temporarily. Doing so would enable the company to focus more on developing new catalysts and increasing product efficiency through research. ReCatalyst therefore needed to raise capital for either large-scale manufacturing or, in the case of outsourcing, create a new business model to secure resources for a successful Series A.

Developing a licensing business model

During the first mentoring session at the beginning of the H2UB SPRINT, it became clear that ReCatalyst's challenges related to scaling manufacturing capacity and deciding on its future business model were closely connected. Together, the mentors and the startup broke down two core scenarios that clearly outlined all options. Capgemini's role as an industry mentor was to ask critical questions, grasp complex relationships quickly and comprehensively, and provide recommendations on a proactive way forward.

The first option would be to focus on in-house catalyst manufacturing with PEM fuel cell manufacturers as end clients. To accomplish this, ReCatalyst would need to accelerate its sales efforts and face competition from huge global players from the chemical industry. Although its developed catalyst technology for PEM fuel cells offers huge technological advantages, focus on this currently challenging market could be seen as a disadvantage by investors.

Building upon the foundations set by ReCatalyst's advisory board, the mentors and ReCatalyst brainstormed a second option: developing a new business model based on technology licensing. By doing so, companies would pay a fee per gram of produced catalyst based on ReCatalyst's technology. Using this revenue, the startup could focus more on

new applications for its technology, such as the PEM and AEM electrolyzers, which has undergone initial experiments that have already showed promising results, and open it up to more attractive markets.

After several discussions, ReCatalyst chose the second option and outlined the new business model in more detail together with its industry mentors.

A viable strategy for the future

ReCatalyst took the leap and officially switched from catalyst selling to the newly developed licensing model. The target group has been expanded to include electrolyzer OEMs and will be further expanded depending on future research results. ReCatalyst leaders adapted their pitch storytelling and prepared for potential critical investor questions during the H2UB SPRINT.

The accelerator program culminated in the investor pitch at the HYDROVERSE CONVENTION in Essen, Europe's leading hydrogen start-up innovation event. The team presented the newly developed licensing business model as a revenue accelerator for the upcoming years, addressing both the fuel cell and electrolyzer market, leading to very positive feedback from the auditorium.

Building on the expert support from Capgemini and the other H2UB mentors, ReCatalyst will focus now on finishing Series A funding rounds on various European platforms. In addition, the developed catalyst technology will be tested in various pilot projects for PEM and AEM electrolyzers in order to clearly quantify and validate the additional value of the startup's technology in this application. Looking ahead to the next few years, ReCatalyst will scale up catalyst production in Slovenia with intelligent technologies.



"Our innovative catalysts for hydrogen technologies have the potential to fuel the energy transition and decrease reliance on precious metals, but we needed to define our strategy for the future. Thanks to Capgemini's expert mentoring as part of the H2UB program, we have developed a robust business model that unlocks a new revenue stream for target markets."

Matija Gatalo

Co-founder and Managing Director at ReCatalyst

About Capgemini

Capgemini is a global business and technology transformation partner, helping organizations to accelerate their dual transition to a digital and sustainable world, while creating tangible impact for enterprises and society. It is a responsible and diverse group of 340,000 team members in more than 50 countries. With its strong over 55-year heritage, Capgemini is trusted by its clients to unlock the value of technology to address the entire breadth of their business needs. It delivers end-to-end services and solutions leveraging strengths from strategy and design to engineering, all fueled by its market leading capabilities in AI, generative AI, cloud and data, combined with its deep industry expertise and partner ecosystem. The Group reported 2024 global revenues of €22.1 billion.

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