



# HYLIKO POWERS FREIGHT TRANSPORT WITH HYDROGEN

**Kouros and Capgemini work together to take Hyliko from concept to company in order to provide freight transportation companies with a more sustainable, carbon-negative alternative.**

As efforts to limit the effects of climate change expand throughout a variety of industries, it has become essential to identify the greatest origins of pollution in order to take proper action. One of the largest and fastest-growing sources of greenhouse gas emissions is unsurprisingly transportation, within which freight transport in particular is a major contributing factor.

Knowing this, Kouros, an emerging leader in sustainable energy transitions, set out to dramatically reimagine road freight transport. To do so, the organization envisioned the creation of a company that would use a circular business model to make hydrogen-powered trucks a viable option for transportation businesses. This new organization would need to leverage key technologies to fulfill two primary capabilities. First, the business would need to be able to produce hydrogen from biomass thermolysis, which would provide the opportunity to create a powerful carbon sink and contribute to soil and biodiversity preservation. And secondly, the organization would aspire to become an industry leader in the assembly of a first-of-its kind hydrogen truck.

**Client:** Kouros

**Region:** France

**Industry:** Automotive

**Client Challenge:** Kouros wanted to push the use of hydrogen-powered vehicles in freight transport as part of its broader sustainability energy efforts.

**Solution:** Working with various Capgemini teams, Kouros set up Hyliko, a world-class heavy mobility platform that offers hydrogen and trucks as a service for freight transportation companies.

Considering the ambition of the vision and potential impact of the business, Kouros engaged frog and the broader Capgemini Group to take the project from ambition into reality through the launch of Hyliko, an innovative mobility service platform for decarbonizing heavy-duty mobility with hydrogen.

## **BUILDING A BUSINESS FROM CONCEPT TO LAUNCH**

As the partners began their collaborative effort to build up the new company and its platform, they needed to provide affirmative answers to two critical questions. Could a transition to hydrogen be executed quickly and efficiently? And could hydrogen trucks be priced competitively?

Kouros worked with a diverse team of experts, including frog, a part of Capgemini Invent, to further develop the existing concept. During this process, a core group of strategists and designers functioned as an acceleration team that helped to refine the venture's circular business model, investment case, and go-to-market strategy before finally assisting with the launch. Through this collaboration, Kouros and Capgemini teams rapidly advanced the status of Hyliko from an idea to a developed concept and then to a fully realized company. This represented the first zero-emissions, carbon-negative mobility venture focused on heavy freight transportation.

## **DEVELOPING A GREENER TRUCK**

In the aftermath of Hyliko's launch, the Capgemini Engineering team has worked with the company's experts on the design and construction of the hydrogen-powered trucks that will form a key pillar of the organization's business model. Since such a truck was not yet available and agreements with the OEM's weren't done yet, the partners needed an intermediate step, which took the form

of an existing Battery Electric Vehicle (BEV) truck. This was realized by converting newer, used diesel trucks that were then converted to electric-powered vehicles.

This initiative included Human Machine Interface design for mechanical, software, and interface implementation, and cabin controller decoding. Throughout this effort, Hyliko and Capgemini Engineering collaborated on software engineering, system tests for CAN Library deduction, translate control unit development, vehicle situation tests and error message identification, electrical hardware engineering, and function adaption and integration.

## **HYLIKO BEGINS TO ENGAGE WITH TRANSPORTATION COMPANIES**

With the introduction of Hyliko into the market, Kouros and Capgemini have developed a world-class mobility platform that is uniquely positioned and prepared to contribute to efforts to curb climate change. By offering hydrogen and trucks as a service, Hyliko brings together carbon-negative technology and helpful features such as truck leasing and maintenance support. In doing so, the company makes it easier for clients to transition from carbon-powered freight vehicles while simultaneously making a positive impact on biodiversity.

Within a year of its establishment, Hyliko had already signed its first contracts to deliver hydrogen-powered trucks by the end of 2023. As the company continues its journey into the future with support from Capgemini, further innovation and growing visibility will serve to expand the impact of zero emission action within the automotive industry.





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