



AXENS *EXCLUSIVE INTERVIEW*

Olivier Callebert
Project manager

AXENS

AT A GLANCE

Axens is a **French technology provider for the conversion of petroleum into fuels or petrochemical intermediates**. In 2025, Axens chose Valenciennes Métropole for the creation of a new **active cathode material production site** for electric vehicle batteries. This will be the largest investment the company has ever made to date¹. Olivier Callebert, Project Manager, gives us his exclusive insights into why they chose Hauts-de-France.



¹ Axens has its largest plant in Salindres in the Gard department on a site with an industrial history that goes back over 160 years. The investment in Hauts-de-France is the largest ever made by the Axens group.



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What does **Axens** do ?

We are a technology supplier, with a long history in the conversion of petroleum into fuels and petrochemical intermediates². For several years now, we have been producing fuels and chemical intermediates from biomass, as well as developing technologies for smoke and water treatment and plastic recycling. We are also interested in hydrogen transportation. We employ 2,200 people worldwide, with operations in the USA, Canada, Bahrain, Malaysia, Korea,

Brazil, India and China, including 1,300 employees in France. We are a subsidiary, almost 100% owned by IFPEN, a major stakeholder in research and training in the energy, transportation, and environmental sectors in France. Our solutions are generally based on the use of catalysts, which we formulate or select and, in most cases, produce ourselves.

² This is the first stage in the processing of crude oil and is considered the main separation process, as it performs the initial coarse separation of the different fuels.

³ More precisely, 99%, with the remaining 1% held by Axens employees.

These processes and catalysts ensure the transformation, separation, and purification of petroleum into different bases, which are then combined to produce the fuels we use in land vehicles, aircraft, and boats. Our R&D team, which works on catalysts that often use metals such as nickel, cobalt, palladium, and platinum, has developed a value-added project to produce cathode materials that are essential for manufacturing electric vehicle batteries. Up until now, these materials have been produced mainly in Asia. By producing locally, Axens aims to contribute to the creation of a competitive national supply chain, as these components account for around 35% of battery costs.



You are in charge of setting up a factory in Saint-Saulve near Valenciennes.

Please tell us about this project.

This is an ambitious project with a substantial budget of around €500 million and up to 400 direct jobs at stake.

This project will be carried out in partnership with the Chinese company MinMetals New Energy Materials, formerly known as Changyuan LICO.

As announced in May 2024 at the Choose France Summit, Axens is making significant progress on its project to build a plant for the production of active cathode materials for electric vehicle batteries. This is why we have purchased a plot of land in Saint-Saulve, near

Valenciennes, on a site that was formerly operated by Vallourec and is located right next to the Escaut-Valenciennes river terminal.

Why did you choose this partner ?

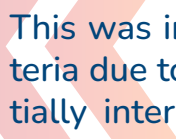
We are talking here about a factory whose operations will involve a particularly complex technology. Therefore, even though we are continuing to conduct our own R&D research, we felt it was essential to rely on a stakeholder with expertise in cathode materials (CAM) in order to be able to quickly ramp up production. We could have simply purchased a license to use their technology, but we preferred to offer them the opportunity to become a fully-fledged partner. MinMetals New Energy Materials sees this as an opportunity. This group, which is owned by a Chinese government-owned company, is known for its high level of scientific expertise. They know how to design and manufacture CAMs that meet market expectations, but they have never conducted industrial operations outside China. They therefore see an advantage in our proposal.

We looked into setting up in Le Havre, Bordeaux, and Marseille, but ultimately ruled out these sites. The presence of gigafactories in the “battery valley,” as it is known here, influenced our decision to choose this region.

What made you decide to set up in France first, and then in the Hauts-de-France region?

Our intention is to develop a value chain in France, so there was no debate about our choice of country. We looked into setting up sites in Le Havre, Bordeaux, and Marseille, which could have offered advantages but they were ruled out for various reasons. We then analyzed the pros and cons of various sites in the Hauts-de-France region until we found Vallourec in the Valenciennes area, which met many of our criteria. The choice of setting up a new site is determined by material factors such as the price, available land, the location, communication infrastructure, etc., as well as human factors. Knowing that we will be welcome and that we will have access to local labor is a decisive factor. In terms of employment, we will be recruiting operators and technicians with vocational qualifications in automation, electronics, instrumentation, and maintenance from 2027 onwards.

Why was proximity to a port a prerequisite?



This was indeed one of our primary criteria due to our supply chain and potentially international customer base. The production of cathode materials for electric vehicles requires the import of raw materials, pCAM and lithium, from China (for pCAM) during the initial phase, hence the need to be located close to a port. Although Valenciennes is not a coastal city, it is crossed by the Escaut Canal and has the advantage of a terminal that allows for large-scale river freight with daily connections to Antwerp. There is also a connection to Dunkirk, of course. The use of the river will greatly reduce road traffic, which is in line with our goal of reducing our carbon footprint. This location also opens up potential commercial opportunities for gigafactories in Germany and Hungary.

What are the next steps for the project?

Our project will be subject to public consultation in the first half of 2025, a mandatory step before administrative permit applications can be filed in the third quarter. At the same time, we will continue and conduct further technical studies that will allow us to be confident about the project's profitability. We therefore hope to be able to make a final decision on the investment at the very end of 2025. Towards mid-2026, we will then move into a more visible phase on the ground, which should lead to the plant's delivery in 2028. We will then need to complete the final certification stage for our active cathode materials before starting production in Hauts-de-France at a rate of 25,000 to 30,000 tons per year. This schedule has yet to be finalized, but our commitment to opening this plant, which will be the only one of its kind in the world for Axens, stands firm.

In the first phase, this site will produce cathode active materials (CAM). It will then be used to house a battery recycling facility, which will ultimately fuel a plant that will produce precursors for cathode active materials (pCAM), thus creating a virtuous cycle for the use of our planet's resources. The site's development and long-term viability are part of a long-term strategy.

What is your view on the support you received from economic and institutional stakeholders for this project, and more broadly, on the industrial spirit of the Hauts-de-France region?

I studied at the Arts et Métiers campus in Lille for two years. So I am familiar with the region's friendly atmosphere, its history and industrial culture, as well as the commitment and availability of its workforce. These are real advantages. The North loves to build and manufacture, and behind this desire, I sense a demand for technical excellence, as well as service. As such, we received support from a large number of regional and local political and economic stakeholders who understood that our activity would strengthen the gigafactory strategy in France and the Hauts-de-France region, with the added bonus of creating a virtuous ecosystem with our future recycling activity. This collective effort is necessary because you can't organize a project like this overnight. I really appreciated the coordination between the national government, regional government, and Valenciennes metropolitan

area services. This unit, which is dedicated to regional economic growth, is truly exceptional. We also really appreciate the support from Business France and Nord France Invest, because setting up something like this is new for us, especially in a region where we don't have any connections yet. The networking, project follow-up and ability to rely on a structure like yours, which is connected to all the other stakeholders, is valuable and particularly useful.

We appreciated NFI's role as a facilitator, making it easier for manufacturers to set up by putting project managers in touch with the right people, both technically and institutionally. You can really sense that industry is an important part of the North's identity.



A DEVELOPMENT PROJECT IN HAUTS-DE-FRANCE?

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