



LA FRENCH TECH GOES GREEN: CRITICAL SITUATION. RADICAL INNOVATIONS.

Photo : Ÿnsect laboratory

introduction

Whether we're looking to travel, buy a refurbished laptop or book a medical appointment, the innovations developed by French startups have become part of our daily lives. Every month, millions of French people and hundreds of thousands of small and medium-sized businesses use their solutions.

In just a few years, **the French Tech has become an integral part of the French economy**. This has led to **hundreds of thousands of jobs** being created across France, new factories and R&D centers opened, and exports towards every corner of the world.

In every sector, French startups are contributing to the country's national sovereignty and are demonstrating an unrivalled ability to offer concrete solutions to major challenges, often on a very large scale.

GreenTech startups provide innovative and effective solutions to tackle environmental challenges. These include achieving carbon neutrality by 2050, pro-actively reducing our greenhouse gas emissions and rehabilitating our biodiversity, mitigating risks, and making our infrastructures and regions less vulnerable to climate change. In all these ways, they contribute to building a more sovereign and resilient nation.

There are already 1,800 startups developing solutions to accelerate the ecological transition, provide alternative ways to produce, store and distribute energy, offer more sustainably transportation solutions, recycle our waste, and design more environment-friendly materials.

Across the country, these startups are building the France and the world of today and tomorrow. **The French GreenTech sector is now embodied by an ever-growing number of startups.** These range from Lhyfe's carbon-free hydrogen production unit in the Vendée region, to Ÿnsect's vertical farm near Amiens, and from Lactips' new plant in Saint-Paul-en-Jarez in the Loire region to Green Technologie's network of solar-power recharging stations in Martinique, Guadeloupe, French Guiana and Réunion Island.

These are just some of the many companies we invite you to discover in this brochure.

Happy reading!

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Becoming the leader in green hydrogen and renewable energy

Green hydrogen is an opportunity to secure access to clean, stable and competitive energy, while also providing a boost to the renewable and decarbonized energy sector.

100% renewable and local

is the ambition of **Lhyfe**, a producer and supplier of hydrogen with a production process that emits zero CO₂. This startup based in Nantes is already involved in nearly 100 projects across Europe, from the Loire region to the north of Denmark,

Thanks to Lhyfe, the town of Carquefou, Loire-Atlantique is now home to the first logistics platform in Europe running on green hydrogen.

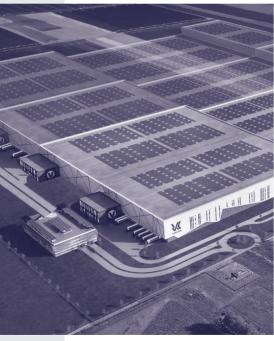
145 GWh of biomethane

were produced in 2021 by **Waga Energy**, saving approximately 24,000 tons of CO_2 equivalent in the year by replacing fossil natural gas. The startup, founded in Meylan (Isère), produces biomethane by recovering biogas from waste storage sites in its 13 units in France.



66 Building a <mark>decarbonized</mark> industry

France has pledged to reduce greenhouse gas emissions in the industrial sector by 35% between 2015 and 2030. The solutions offered by startups provide additional ways to help achieve this goal.



Creating low-carbon batteries

is the challenge taken up by **Verkor**, which will produce high-volume battery cells for the electric vehicle and large-scale stationary storage markets at its plant in Dunkirk (Nord).

80+

companies in the finance, energy, transport and industrial sectors use satellite data from the Paris-based start-up **Kayrros** to decarbonize their operations.



Verkor

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La French Tech goes green

Investing in a more sustainable agriculture

To provide healthy food for a growing population, we need to start a new agricultural revolution. This revolution implies a decarbonization of production, all the more so when biodiversity is increasingly under threat.

300+ patents

are held by **Ÿnsect**, a global pioneer in the manufacture of proteins and natural fertilizers made from insects. The startup is about to open the **world's largest vertical farm** in Amiens in the Somme region. The aim is to create a resilient value chain by saving and sequestering more CO_2 than it emits.

Protecting crops against climate threats

Based in Aix-en-Provence, the startup **Ombrea** develops innovative crop management and protection tools. It is currently deploying its solution on the vineyards of Châteauneuf-le-Rouge in the Bouches-du-Rhône region. By creating a microclimate for the vines, it allows them to keep growing without risk of droughts, extreme heat, hail or frost.





Ÿnsect

66 Supporting recycling and the development of low-impact materials

Every year, France consumes 800 million tons of materials. Of around 350 million tons of waste produced, some 120 million tons are not recycled.



40% to 80% less CO2 emissions...

is what **Matterup's** low-carbon cement can help save, thanks to the use of raw clay and the regionalization of the entire production process.

A polymer without plastic!

Biosourced and completely biodegradable, the material designed and marketed by industrial start-up **Lactips** in Saint-Jean-Bonnefonds (Loire) is an effective and responsible alternative to many conventional plastics.

More than 6 million

customers worldwide have purchased refurbished products on the **Back Market** platform, created in Paris in November 2014. With a refurbished smartphone representing 91% less CO₂ emissions than a new one, that's a significant impact!



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La French Tech goes green

Accelerating the emergence of sustainable and resilient cities

With buildings accounting for 23% of greenhouse gas emissions and 45% of energy consumption in France, it's time to reinvent urban areas.

More than 500 million m²

are analyzed worldwide by **Deepki**, a startup founded in Paris that interprets data from real estate stakeholders to support them in transitioning towards carbon-neutrality.

8,000 SNCF sites use this solution to rationalize their energy and water consumption, making a significant contribution to achieving the group's CSR objectives.

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is the number of cities in France using the services of **Urban Canopee**, a startup based in Noisy-le-Grand (Seine-Saint-Denis), that helps counter the summer heat. Its plant canopies create islands of cool air to enhance the lives of city dwellers. The startup draws on its database of 645 different plants. Urban Canopee



OTHERS TO KEEP AN EYE ON:



The French Tech is an initiative launched in 2013 by the government to support the development of France's 20,000 startups. It brings together founders, investors and communities of entrepreneurs across France and the world. In France, one million people work directly or indirectly in startups.

To discover the directory of ecoinnovative startups and SMEs with the «GreenTech Innovation» label, created for public decision-makers, visit (in



For more information on the review of French GreenTechs carried out by Bpifrance, go to (in French):



For more information on the French Tech's Green20 program, visit:



For more information on the GreenTech Innovation program of the Ministry of Ecological Transition and Territorial Cohesion, visit (in French):



June 2022