

## BIOMITECH TO SHOWCASE INNOVATIVE CO2 CAPTURE SOLUTIONS AT GITEX 2025

# Awarded as Honoree for Sustainability and energy/power at CES 2025



BiomiTech, a leader in sustainable air purification solutions, will join the ZEBOX delegation at GITEX 2025, the world's leading technology event, to showcase its groundbreaking CO<sub>2</sub> capture technologies.

At the beginning of this year, BiomiTech, recognized as a CES 2025 Honoree in Sustainability & Energy/Power for its High Impact BioFilter (HIB), is committed to fight pollution in both urban environments and industrial settings.

BiomiTech utilizes the natural power of microalgae, microscopic organisms that, just like trees, absorb CO<sub>2</sub> and transform it into oxygen as part of their growth process (photosynthesis). This innovative approach forms the foundation of their diverse air purification systems designed for urban, indoor, and industrial applications. Their solutions target various pollutants, including carbon monoxide, nitrogen oxides, and fine particles, transforming them into clean air and valuable biomass.

BiomiTech carefully selects and cultivates highly efficient microalgae strains, up to five times more effective than traditional species at capturing CO<sub>2</sub>. These CO<sub>2</sub>-absorbing microalgae are then placed in specialized columns where they efficiently filter the air. This innovative process decarbonizes the surrounding air, helping to mitigate greenhouse gas emissions and combat climate change.

With the success of BiomiTech's urban air purification solutions, the company is now poised to accelerate the development and deployment of its technology for industrial air treatment. Leveraging the rich entrepreneurial, academic, and industrial ecosystem of the South of France, BiomiTech is well-positioned to tackle the challenges of industrial pollution.



**OCES**Innovation

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### BIOMITECH OFFERS 3 SIZES OF CARBON SINKS AND POLLUTION CONTROL SYSTEMS FOR DIFFERENT MARKETS:

BioUrban is designed for urban environments.

BiomiTech's BioUrban air purification system is a green technology that leverages the power of microalgae to transform pollutants like carbon monoxide and nitrogen oxides into clean oxygen and valuable biomass. This innovative 4-meter-high, 2-meter-diameter tower can absorb up to 80% of CO<sub>2</sub> from the surrounding air, equivalent to the capacity of 300 to 3,000 trees. BioUrban is particularly well-suited for highly polluted urban environments, such as highways and city centers.



BioUrban 2

BiomiTech's BioUrban 2.0 air purification system has already been successfully deployed in South America and is poised for further expansion.







BioUrban 1

#### BioCov to reduce volatile organic compounds.



BiomiTech's BioCov solution targets volatile organic compounds (VOCs) emitted from car fuel tanks, storage facilities, and gas stations. VOCs react with nitrogen oxides in the atmosphere, forming harmful ground-level ozone, which contributes to respiratory illnesses and increased mortality rates. Ozone also negatively impacts plant life and agriculture. BioCov prototypes have been successfully deployed in Mexico and the United States, where regulations mandate the capture and treatment of VOCs, a practice not yet widely adopted in Europe.

#### The High Impact BioFilter is designed for manufacturers.

BiomiTech's High Impact BioFilter (HIB), recognized as an Honoree for Sustainability and Energy/Power at CES Las Vegas 2025, directly captures emissions from large-scale industrial processes that generate significant pollution. In line with a circular economy approach, BiomiTech aims to eliminate pollution entirely.

By 2025, the company plans to produce green hydrogen from the biomass generated by industrial decarbonization processes.

On-site production of biogas and bio-hydrogen offers a sustainable solution to utilize captured CO<sub>2</sub>. Instead of burying or transporting CO<sub>2</sub>, BiomiTech focuses on immediate on-site utilization.

The modular design of the HIB technology ensures scalability and adaptability to various industries, offering cost-effective CO₂ capture and additional revenue from biomass production. Each HIB module is designed to treat one ton of smoke per hour.





During the initial deployment of the HIB prototype, BiomiTech measured its impressive efficiency. The High Impact BioFilter captured 80% of CO<sub>2</sub>, 45% of NOx, 80% of SO<sub>2</sub>, and 90% of fine particles. These results were independently verified by Socotec.

#### **NEW PARTNERSHIPS AND INNOVATIVE PROJECTS**

#### BiomiTech Joins Zebox Startup Incubator by CMA CGM

BiomiTech is proud to announce its integration into Zebox, the CMA CGM-backed global startup incubator. This strategic move will enable BiomiTech to expand its reach, collaborate with leading experts, and accelerate the deployment of its innovative air purification technologies across diverse markets.





BioAds 2 with Cocktail Vision

#### Collaboration with Cocktail Vision for BioAds in 2025

BiomiTech is partnering with Cocktail Vision to launch the cutting-edge BioAds project. This revolutionary urban air purification solution combines BiomiTech's expertise in air depollution with Cocktail Vision's innovative digital display technology to create sustainable and interactive street furniture.

BioAds integrates advanced air purification technology with dynamic digital displays, sustainable energy solutions, and a functional design to create an innovative urban solution. This smart carbon sink effectively filters pollutants such as CO<sub>2</sub>, CO, NOx, PM2.5, and PM10, ensuring cleaner air in urban areas. Equipped with Cocktail Vision's LED screens, it broadcasts real-time information and advertising, merging environmental sustainability with communication. Powered by integrated solar panels for energy autonomy and featuring 5G connectivity for remote management and content updates, BioUrban 3 continuously monitors and displays air quality and purification data to raise public awareness. Its sleek and functional design establishes it as an eco-friendly urban landmark, exemplifying BiomiTech's commitment to developing intelligent, multifunctional solutions that address air quality challenges while promoting urban sustainability.

BiomiTech has set up in the southern region of France at the Technopôle de l'Arbois to further develop its High Impact BioFilter.

To develop the HIB (High Impact BioFilter), BiomiTech selected Aix-en-Provence's Technopole de l'Arbois. "We considered various European locations, but the strong academic and business ecosystem around the University of Aix-Marseille was the most compelling factor," explains Franck Schenaerts, CEO and partner of BiomiTech.

The company's proximity to the Etang de Berre industrial basin, home to numerous chemical and petrochemical companies, further solidified the decision. The warm welcome and support from the Technopole de l'Arbois were instrumental in BiomiTech's decision to establish its presence in the Southern Region.

#### **About BiomiTech**

BiomiTech (Aix), develops intelligent air pollution control and decarbonization technologies, using microalgae and photosynthesis.

For further information, please visit our website:

https://www.biomitech.fr/

#### **Press contact BiomiTech:**

Tel: (+33) 04 86 91 45 45

info@biomitech.fr

