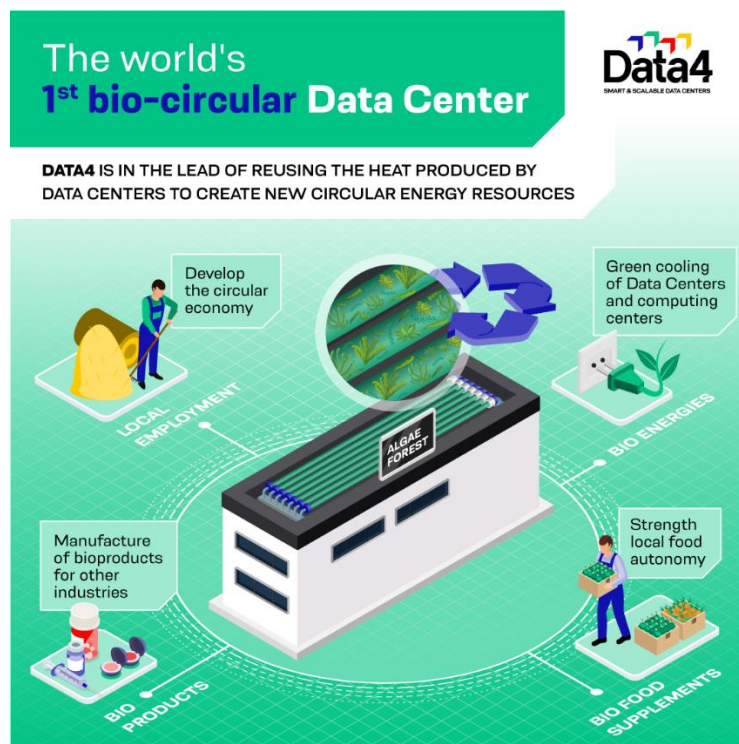


## Algae recycled into energy : Meet the world's first bio circular data centre

***Data4 and Foundation Université Paris Saclay are launching a pilot project near Paris revolutionizing heat reuse and redefining sustainable energy solutions.***

Paris, March 14th 2024 - [Data4](#), a French operator and investor in the data centre market, and the University of Paris-Saclay, Europe's leading university and one of the top 20 in the Shanghai rankings, have signed a partnership agreement to launch a prototyping experiment to reuse some of the heat produced by a data centre. This ground-breaking project will be launched in the Paris Region at the start of 2024.

Driven by the French administration "Conseil Départemental de l'Essonne", which created the [ABIOMAS Innovation Chair within the University](#), and the Foundation Université Paris-Saclay, this project will be led by a multi-disciplinary and multi-skilled team (biomass specialists, digital, AI, physics/chemistry, economics, etc.), digital, AI, physics/chemistry, economics, etc.) bringing together various experts\*.



### The project

Faced with the exponential growth of digital technology and the amount of data stored in data centres (+35% per year worldwide), the environmental efforts of players in the sector must be equal to the challenge.

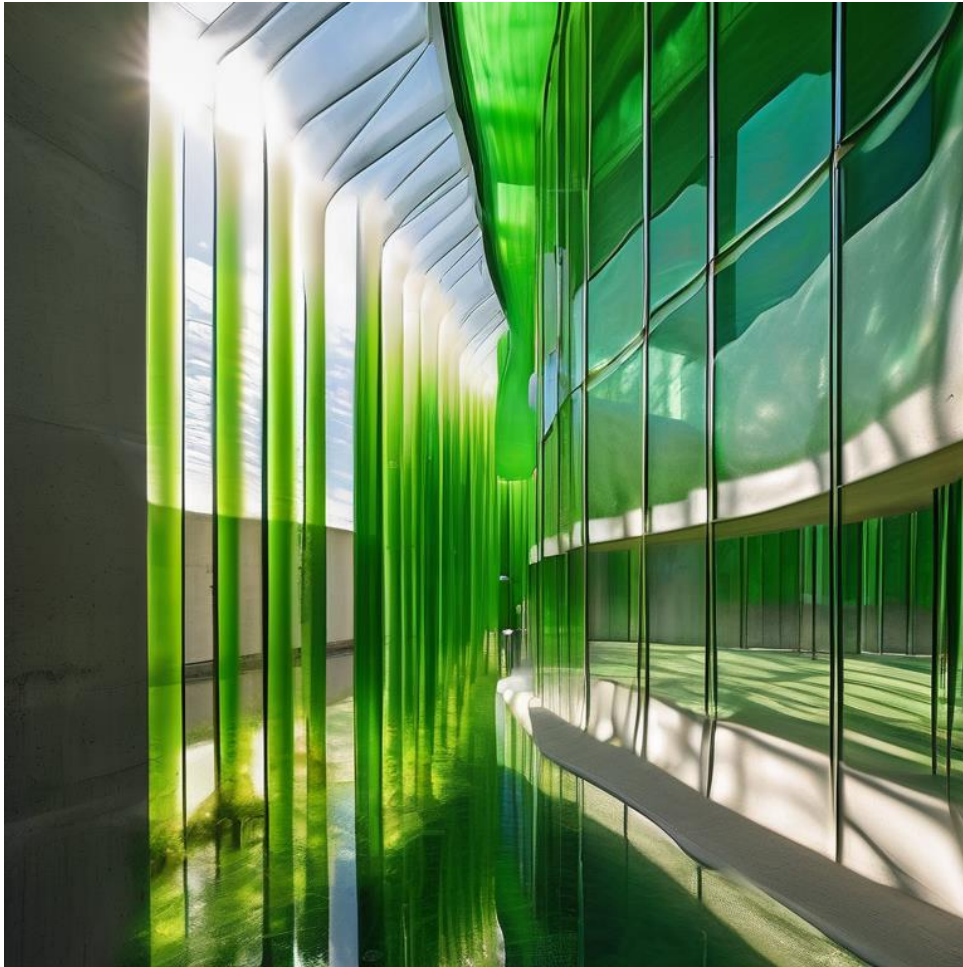
The Data4 group has been tackling this issue for many years and is taking concrete, effective action to reduce its greenhouse gas (GHG) emissions linked to its scopes 1, 2 and 3.

This new R&D project is a response to the strategic challenge of reusing the heat produced by data centres. Indeed, to prevent this heat from being lost, several reuse options are currently being studied, such as the most widespread option of heating nearby homes. However, this solution only exploits 20% of the heat produced.

That's why Data4 is looking at new ways of reusing this heat, such as reproducing a natural photosynthesis mechanism by using some of the captured CO<sub>2</sub> to grow algae, recycling it as biomass to develop new circular energy sources and reusing it in the manufacture of bioproducts for other industries (cosmetics, agri-food, etc.).

*"Thanks to a feasibility study carried out with the start-up Blue Planet Ecosystems, as part of the ABIOMAS chair of the Fondation Université Paris-Saclay, we have been able to calculate the efficiency of this carbon capture, which can be 20 times greater than that of a tree (for an equivalent surface area)",* explains **Patrick Duvaut, Vice-President of the Université Paris-Saclay and President of the Fondation Paris-Saclay.**

*"This augmented biomass project meets two of the major challenges of our time: food security and the energy transition. This requires close collaboration between all the players in the Essonne region, including Data4, to develop a genuine industrial ecology project, aimed at pooling resources and reducing consumption in the region. Thanks to this partnership with the Fondation de l'Université Paris Saclay, we have the opportunity to draw on one of the world's most prestigious scientific communities to work towards a common goal of a circular energy economy,"* adds **Linda Lescuyer, Innovation Manager, Data4.**



*AI image of the future biocircular Data center\_Data4xWPP*

\*with Centrale-Supélec, AgroParisTech, INRAE, the ICMMO Laboratory at the University of Paris-Saclay, the Blue Planet Ecosystems start-up, the Communauté d'Agglomération Paris-Saclay and the Data4 teams

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### **About Data4**

*Data4 is a major European operator and investor in the data centre market. The Group finances, designs, builds and operates its own data centres. The Data4 Group has pioneered an ultra-connected, resilient and sustainable data centre campus model, with the aim of supporting its customers' digital growth over the long term by providing them with scalable and secure hosting solutions for their IT servers, ranging from a single rack to a dedicated building. The Group is committed to a proactive approach to sustainable development through its Data4 Good programme, which is based on 4 main pillars: the environment, people, community and innovation. The Data4 Group operates some of the most powerful data centre campuses in Europe, with land and electricity reserves that are unique on the European market. Data4's data centres in France, Italy, Spain, Poland, Germany and Luxembourg are home to international cloud operators and major telecoms providers, as well as innovative tech companies and multinationals. For more information: [data4group.com](https://data4group.com)*

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