# Being Green doesn't have to be complicated. Immersion cooling for a more sustainable cloud.

## Introduction

This Case Study details how DataCampus, a provider of more sustainable, smarter data storage and business operations have harnessed the power of Immersion cooling to offer its customers an easy solution to the challenge of **lowering their $CO_2$ footprint**. DataCampus is leading the way in the **green cloud** space for France and the European Union (EU) as a whole, by offering a real greener solution that both enables its customers to meet its **ESG (Environmental Social Governance)** goals and ensure the impact on the environment is considerably more positive than other cloud storage solutions.
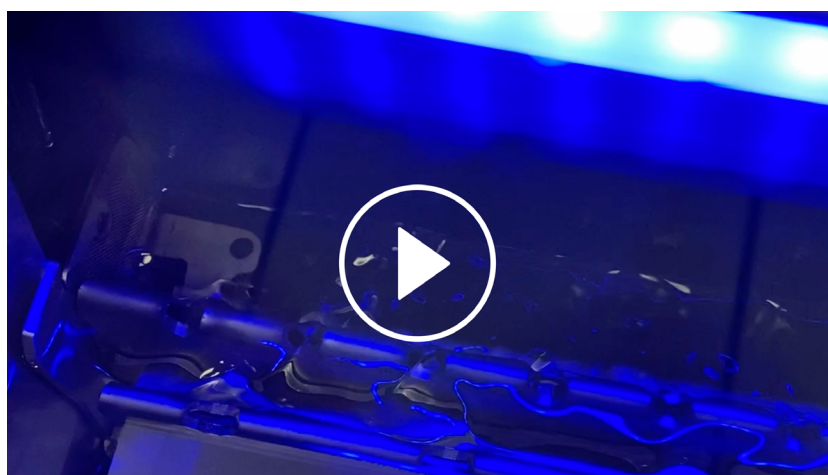


## The DataCampus and Submer Solution

DataCampus previously attempted to launch an Immersion cooling system to host their HPC (High Performance Computing) cloud but ran into several obstacles. Other providers did not have the expertise of infrastructure or reputation to be able to reliably host Immersion cooling for the cloud. After an introduction to the team from Fujitsu, DataCampus were confident Submer could deliver the solution needed to support the company's **innovative and forward-thinking approach to sustainability**. By partnering with Submer, DataCampus are also able to take advantage of Submer's proprietary biodegradable and environmentally friendly **SmartCoolant**, adding an extra layer of sustainability to DataCampus's offering. The **SmartPodX** turns the green cloud into a reality; the SmartPodX enables **higher efficiency and better sustainability** were users and customers can **reduce their overall power and water usage and reduce their overall carbon emissions**.

Using Submer's solutions has enabled DataCampus to:

- Offer the Cloud and Hosting industry the chance to reduce their impact on the environment, in particular $CO_2$ emissions.
- Successfully equip companies with the necessary technology to meet the current and future standards and regulations imposed by the EU in relation to sustainability and ESG accounting.
- Build infrastructure that is passionate about sustainability. From the technology offered to the building itself, which utilizes heat-reuse technology.

## Rating Index

| | |
|---|---|
| Sustainability | ★★★★★ |
| Efficiency | ★★★ |
| Innovation | ★★★★ |
| Cost-saving | ★★★ |

The combination of Submer's Immersion technology and DataCampus's IP provides businesses access to next-generation technologies.

DataCampus takes the idea of being green **one step further** than most other cloud and hosting providers. Today, not only is the technology inside of the building green, the materials used to construct the building itself is also made from sustainable materials like wood and concrete. **DataCampus ensure they themselves are setting an example of ESG responsibility as well as offering it as a service to others.**

## Type of Solution

SmartPodX + DataCampus IP + Fujitsu systems

## Highlight

A truly green cloud solution powered by Immersion cooling

## Availability

Europe, France

## Industry

Cloud and Hosting, with a focus on local businesses including Online Retail, and Media

## The challenge

Founded in 2018, DataCampus harness the power of **sustainable energy and materials** to provide a **colocation datacenter** that is truly green. In recent years, the world has become increasingly aware of the harm that certain industries are having on the environment and demanding that action be taken to reduce carbon emissions and energy usage, automotive industries are good examples of this. Until recently the datacenter industry has remained under the radar of both the public and policy makers, this is changing.

As a society, every individual created **1.7 mb of data every second in 2020.** This is the same as **307 billion emails sent, the equivalent of over 1.2 trillion grams of $CO_2$ every day**. With the amount of data expected to increase to over **200 Zettabytes by 2025**, the spotlight is now well and truly turned on for datacenters. Both businesses and the end user are now increasingly more conscious of the role they play in contributing to these numbers. This has brought about a paradigm shift in the way people think about sustainability and the actions needed by whom to address it successfully.

*While the growth in cloud storage continues to remain strong, the amount of environmentally friendly options remains limited.*

This halts the potential growth of the industry for the future

towards greater sustainability.
With solutions like the one **DataCampus, Fujitsu and Submer** offer, businesses now can be aware of the impact of their environmental impact and make a **conscious decision** to store their data in a more sustainable manner.

## The impact on the industry

The industry and its users are at a crossroads fighting against two major conflicting issues; the ever-increasing amount of data and having the space to store it, in a responsible and sustainable way. However, time is running out. Governments across Europe are declaring climate emergencies and net-zero drives and this new legislation is coming sooner than most people might imagine. The European Union already has its own **Code of Conduct for Energy Efficiency in Data Centres, one of several voluntary initiatives** with the main incentive for participants the chance to win an award for reducing their energy consumption. Companies that adopt services like the one offered by DataCampus and Submer are afforded the opportunity to be a role model within the industry and help set **future standards**.

Companies must now consider what is good for them **now** and what will be good for them **in the future**; carbon taxes, tougher regulations, policy changes, etc. Companies that choose to invest in green technologies now can rest assured it is not only a **profitable one**, given the cost of our green energy but also from a longer-term perspective you are future-proofing your business by ensuring its already got major sustainable credentials. Coupled with this is the ever-increasing pressure consumers are placing on companies to demand greener options, by adopting greener technology now, companies are already **meeting future customer demands**.

DataCampus, Fujitsu and Submer have created a solution that **empowers its customers** to have access to innovative, forward-thinking technology that has a truly p**ositive impact on the environment** while also solving other major industry challenges such as, **power density, efficiency, and heat reuse**.

## What next?

***Pierre wants to prove to the industry that being green does not have to be complicated.***

DataCampus have plans to set up a live 'Immersion Café' experience where members of the public, potential clients and employees can experience the true innovation of Immersion cooling for themselves. The journey towards total datacenter sustainability is far from complete. However, projects like this that help to make big steps towards its advancement. One thing is clear, if you are looking for datacenters that are green and powered by advanced renewable technologies, they are out there.

DataCampus will continue to work with Submer on a joint mission to disrupt the datacenter industry and change the way it thinks and uses green technology and provide truly sustainable solutions.

## About DataCampus

With more than 400 high profile clients, Datacampus is the first (and to date the only) French cloud service provider to become a Mission-Driven Company. This legal framework allows to fulfil both business and sustainability goals at the same time and demonstrates Datacampus's commitment toward a greener internet and a positive impact on society. The Company's action tends to re-think, develop and offer data hosting solutions that are more respectful of the environment.

"

*Sustainability is a buzz word that has been batted around over the past few years and a company's commitment to reducing their environmental footprint is sometimes questionable. For DataCampus, it is at the heart of everything we do. We believe Submer's offering is best in class and can truly change the way the datacenter and hosting industry operates. We are delighted to be working with Submer, its technology is a key part of helping us achieve our goal and serve our customers with a real green alternative."*

"

**Pierre Pluviaud**
CEO and Founder of DataCampus



Collaboration between:

submer

DATACAMPUS
HÉBERGEMENT DURABLE
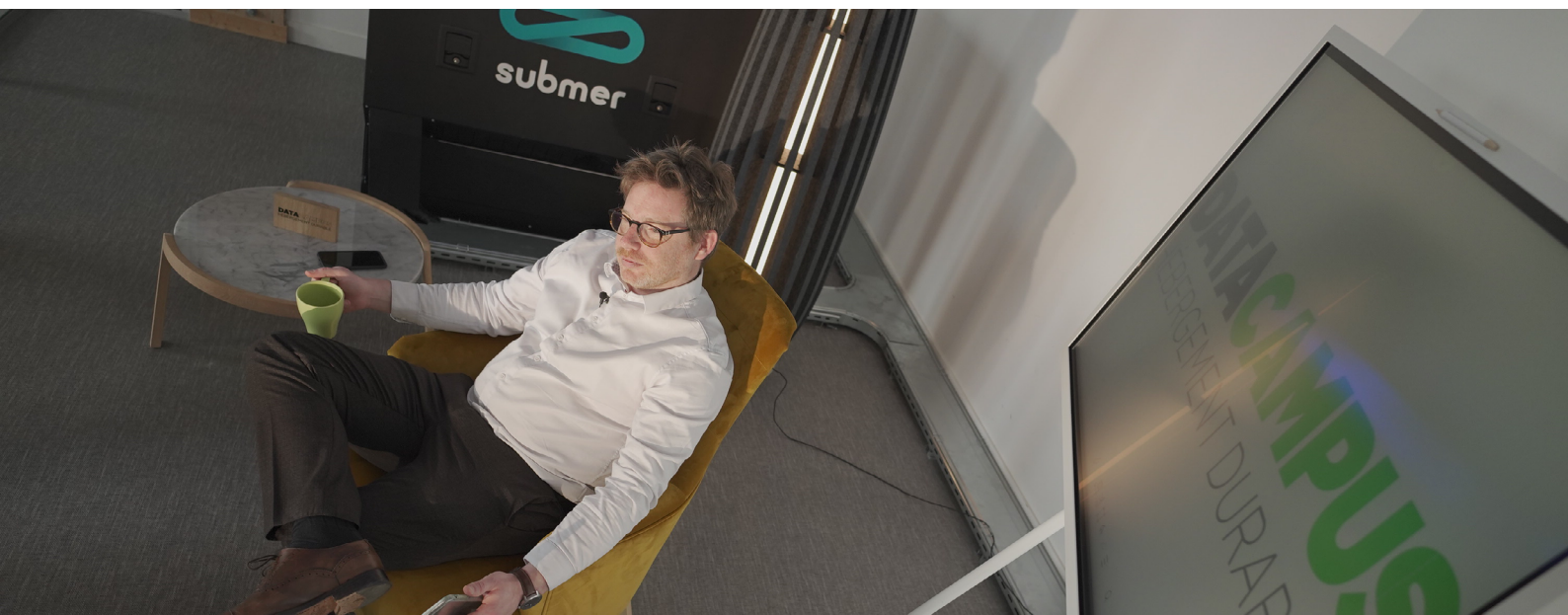
## About Submer

Founded in 2015, Submer provides best-in-class technology that enables data centers around the world to leverage the power of immersion cooling for HPC, hyperscale, data centers, Edge, AI, DL and blockchain applications. Headquartered in Barcelona, with offices in Virginia and Palo Alto, California, Submer consists of an international team of engineering, technological and business experts. For more information, visit submer.com.

"

*Submer was founded with sustainability at its core. It influences every aspect of our business from our technology to the partners we choose to work with, and our daily business operations. The importance of the cloud is growing with no sign of stopping. We are very proud to work with Pierre on his mission to offer a real green solution to the cloud industry."*

**Daniel Pope**
CEO and Co-founder of Submer

"
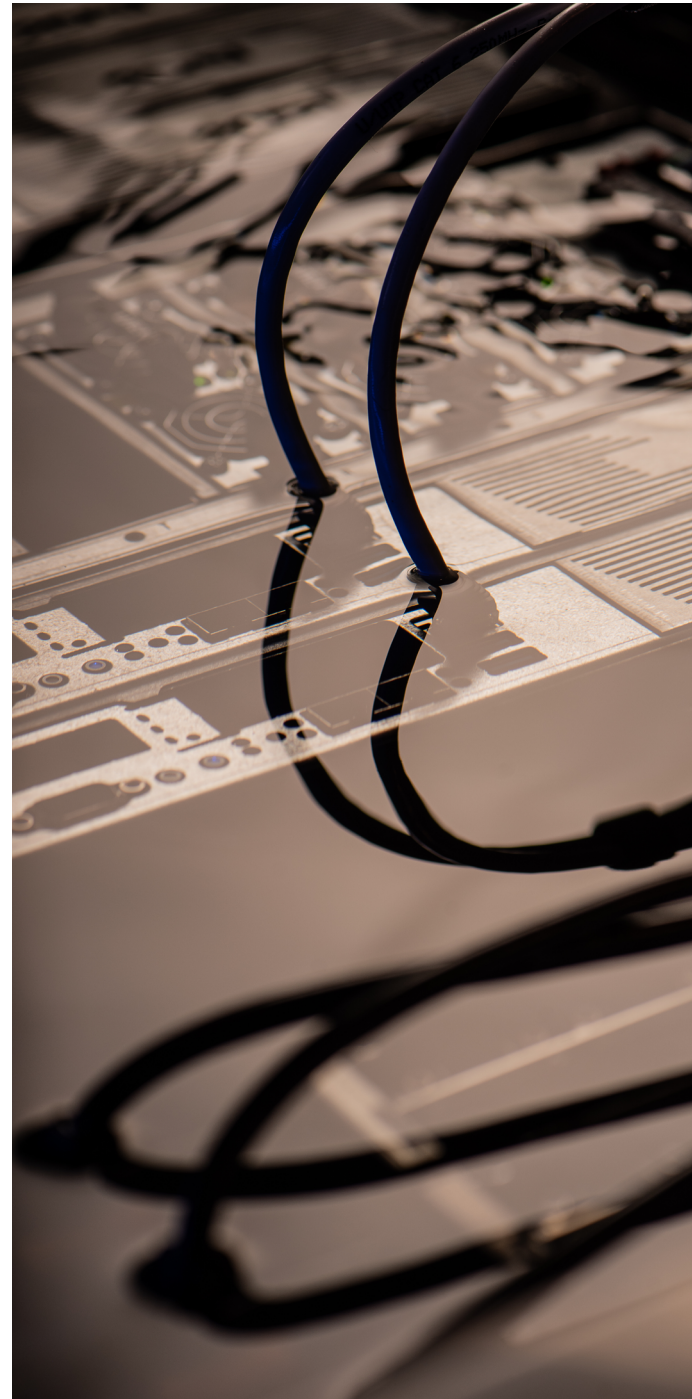
## Know more

Want to know more about how we can help?
Visit: **submer.com**
Want to know more about DataCampus?
Visit: **datacampus.fr**